

PTE PREDICTION FILE

Aug-Sep 2025

Why pay in 1 payment?

Pay now with **afterpay** ↗

Join any of our PTE/NAATI/IELTS
courses and pay in 4 instalments
starting \$49.75/payment via AFTERPAY

FILE INCLUSIONS

- READ ALOUD
- REPEAT SENTENCE
- DESCRIBE IMAGE
- RETELL LECTURE
- ANSWER SHORT QUESTIONS
- WRITE ESSAY
- SUMMARIZE WRITTEN TEXT
- READING AND WRITING FIBS
- REORDER PARAGRAPHS
- READING FIBS
- SUMMARIZE SPOKEN TEXT
- LISTENING FIBS
- WRITE FROM DICTATION



MOCKMASTER.AI



ONE AUSTRALIA

AI-POWERED PTE MOCK TEST
AND FREE PTE PRACTICE TEST
WITH SCORES

Google X ↴ ↵ ↷

All Images Videos Shopping News 1 More Tools

About 10,500 results (0.27 seconds)

mockmaster.ai
<https://mockmaster.ai> 1

Mock Master: Best Free PTE Practice Mock test
AI-Powered PTE Mock Test and Free PTE Practice Test with Scores. Mock Master is committed to delivering best PTE mock test practice materials that are readily ...

Log in to your account
Boost your PTE preparation with the best PTE Full Mock Test with ...

Reading
Are you preparing for the PTE exam and looking for effective ...

Get Free Online PTE Listening ...
... Facebook-1 YouTube-1 Instagram-1 Light Tiktok-1 Privacy ...

PTE Speaking Practice test ...
Get an overview of the PTE speaking mock test section. Tips ...

PTE Writing
Get PTE writing mock test essential components. Find ...

More results from mockmaster.ai >



Mock Master is committed to delivering best PTE mock test practice materials that are readily accessible for taking PTE tests and practice exams. To guarantee the greatest results, these resources are created with the needs of the student in mind.

Get ready with our new-format of PTE full mock test consisting of 2 hours and section-specific practice tests to reach your target score, receiving instant results. Our PTE full mock test with answers help you concentrate on specific sections to target areas where you need improvement.

SERVICES WE OFFER

PTE | NAATI | IELTS
PROFESSIONAL YEAR
(IN ALL AUSTRALIAN STATES)



a_one_australia_education



+61466466603/+61466466609



AONEAUSTRALIAEDUCATIONGROUP



Dear friends,

This latest PTE Prediction File is our latest attempt to help you with the best preparation source to ace your PTE-A test in your next attempt!

We are not only the best PTE Institute in Melbourne, but we are also the #1 PTE, NAATI, and IELTS Institute, bringing students one step closer to accomplishing their Australian/Canadian PR dream.

If you want to make your next **PTE/NAATI/IELTS** attempt your last attempt, simply leave us a WhatsApp message with your name and message on +61466466603/+61466466609.

We will make sure that we get the job done!
Link: <https://oneaustraliagroup.com/prediction-file/>

Note: For best results, also go through our previous 2 PTE Prediction files.



Table of Contents

Tasks	Page Number
<u>Read Aloud</u>	7
<u>Repeat Sentence</u>	25
<u>Describe Image</u>	34
<u>Retell Lecture</u>	93
<u>Answer Short Questions</u>	111
<u>Summarize Written Text</u>	122
<u>Write Essay</u>	133
<u>Fill in the Blanks R/W</u>	139
<u>Reorder Paragraph</u>	158
<u>Fill in the Blanks R</u>	169
<u>Summarize Spoken Text</u>	186
<u>Fill in the Blanks L</u>	193
<u>Write from Dictation</u>	204

SPEAKING



READ ALOUD

1. Parent Teacher Conferences

Schools host parent teacher conferences four times a year and it is important for families to attend. This is your chance to meet with teachers and ask questions about your child's progress. It can be helpful to write down questions ahead of time.

2. Diapers

In Germany, over 100,000 tons of diapers are discarded each year, resulting in the wastage of valuable resources. Diaper liners, which contain special polymers known as super absorbers, are among the materials that end up in landfills. However, researchers have made significant progress in enhancing the recycling process for these liners, leading to substantial improvements.

3. Reptiles

Around 250 million years ago, 700 species of reptiles closely related to the modern-day crocodile roamed the earth, now new research reveals how a complex interplay between climate change, species competition and habitat can help explain why just 23 species of crocodile survive today.

4. Extracting Carbon Dioxide

Across the globe, there is a widespread effort to explore methods for extracting carbon dioxide from the atmosphere or power plant emissions and transforming it into a valuable resource. Among the various ideas being explored, the concept of converting carbon dioxide into a stable fuel shows significant promise.

5. Blood Pressure

The correlation between elevated blood pressure levels and a multitude of health complications is widely acknowledged. However, recent studies have shed light on an equally concerning aspect. Researchers have discovered that these fluctuations in blood pressure cannot only be detrimental to overall health but also act as a potential precursor to the development of dementia and vascular disease.

6. Telescopes

Astronomers have conducted an impressive observation campaign using a total of 12 telescopes, both on land and in space, including three facilities belonging to the European Southern Observatory (ESO). The study has revealed the peculiar behaviour of a pulsar, which is a dead star that spins at an incredibly fast rate.

7. Vocal Learning

The European starling is known for its impressive vocal abilities. These versatile songbirds have the ability to learn a wide range of warbles, whistles, calls, and songs throughout their lives, making



them one of the most advanced avian vocal learners. A recent study published in *Science* has discovered that starlings also excel in problem-solving tasks.

8. Vulnerable Group

The second group that is particularly vulnerable are night shift workers, and the third group that is particularly vulnerable are people with sleep disorders, particularly sleep apnea. One out of three men and one out of six women have sleep apnea. And yet, 85 percent are undiagnosed and untreated. And it more than doubles the risk of cancers.

9. Food Waste

One of the complex agricultural problems is the issue of food waste. Food waste refers to the discarding of edible food at various stages of the food supply chain, from production to consumption. This not only represents a significant loss of resources but also has environmental implications, such as greenhouse gas emissions from decomposing food waste in landfills.

10. Novel Composite

A team of researchers has announced the creation of a novel composite material with the ability to alter its properties based on temperature changes, allowing it to execute specific tasks. These materials are expected to be incorporated into the next wave of self-governing robotics that can engage with the surrounding environment.

11. Struggling With Computers

An endlessly rotating beach ball, a program that crashes without saving data or systems that require illogical procedures or simply do not work. Unfortunately, struggling with computers is still a familiar situation for most of us. Tearing your hair out over computers that do not work remains very common among users, according to new Danish research.

12. Work and Play

The study across three countries led by the Department of Psychology discovered people who prioritized achievement over enjoyment were less happy on the next day. Whereas those who aimed for freedom said they had a 13% increase in well-being, recording better sleep quality and life satisfaction.

13. Light-driven Machinery

Chemists have developed a new approach to convert photo-switchable molecules from their stable state into metastable one with low-energy red light. Their work enables fast, highly selective, and efficient switching, providing new tools for energy storage, activation of drugs with light, and sensing applications.

14. Black Death

The Second Plague Pandemic of the mid-14th century, also known as the Black Death, killed 30-60 percent of the European population and profoundly changed the course of European history. New



research suggests that this plague, potentially through resulting changes in diet and hygiene, may also be associated with a shift in the composition of the human oral microbiome toward one that contributes to chronic diseases in modern-day humans.

15. Grey Zone

The researchers concluded that millions of people around the world may have inhabited a "grey zone" between living and dying, in which they have had an out-of-body experience. People often wake up profoundly changed, no longer fearing death and resolved to live a better life.

16. Nervous System

Your nervous system allows you to think, move and feel. But there's a whole other part of the nervous system that is largely outside of your control, operating automatically and quite independently from your conscious mind—and it keeps you alive.

17. Excessive Job Hours

Research has shown that excessive job hours, such as working long hours or overtime, can lead to negative outcomes, including increased stress levels, fatigue, and decreased job satisfaction. Additionally, long work hours have been associated with adverse health effects, such as increased risk of cardiovascular disease and mental health issues.

18. Introvert and Extrovert (B)

Although introvert and extrovert personality types differ from one another on various grounds, the major difference between the two is their source of rejuvenation. While for extroverts, this may mean interaction or excursions with friends and family, the same may mean reading a book or listening to music for introverts.

19. Underground Networks

Plants possess an intricate system of roots that extends far beyond what meets the eye. These underground networks serve a crucial purpose in absorbing water and nutrients from the soil. This remarkable feature enables plants to thrive in demanding environments like deserts. Mesquite trees, for example, have tap roots that can delve over 50 yards deep in search of water.

20. Bacteria

A novel approach has been developed that enables researchers to track gene expression during the development of bacterial communities over time and space. Using this cutting-edge technique, scientists have demonstrated for the first time that bacteria collaborate and exchange nutrients across generations when they form communities.

21. Strawberries

A recent study demonstrates that strawberries, consumed daily for 12 weeks, can improve memory and reduce depressive symptoms in middle-aged, overweight adults. This improvement is



attributed to the anti-inflammatory effects of anthocyanins in strawberries, highlighting the fruit's role in cognitive health.

22. Earthquake Strikes

When an earthquake strikes, smaller quakes known as aftershocks can continue to shake the area for days to years after the original earthquake occurred. These smaller quakes decrease over time and are part of the fault's readjustment process following the original quake. While aftershocks are smaller in magnitude than the main shock, they can still damage infrastructure and impede recovery from the original earthquake.

23. Changing Temperatures

Changing temperatures shift the energy balance of ecosystems – from plants that produce energy from sunlight to the animals that consume plants and other animals – subsequently altering the sensory worlds that animals experience. It is likely that climate change will challenge all of their senses, from sight and taste to smell and touch.

24. Flu in Children

Although it is unclear how often neuropsychiatric events occur in children in the United States as a result of influenza, the use of a commonly prescribed antiviral medication for treating flu in children has become a subject of controversy that has raised concerns among parents and medical professionals alike.

25. 8,000 Steps

An international study led by the University of Granada (UGR) has provided the first scientific proof for how many steps you need to take per day to significantly reduce the risk of premature death: 8,000. Given the average length of a human stride (76 centimeters for men and 67 centimeters for women), taking 8,000 steps is equivalent to walking approximately 6.4 kilometers a day.

26. Unwritten Rules

When we talk about unwritten rules, we refer to the informal norms and expectations that guide social interactions. They are not explicitly stated but are understood by members of a particular group or community. Unwritten rules can relate to behavior, communication, dress, and other aspects of social interaction. They are often learned through observation and experience rather than formal instruction.

27. Deaf Children

Deaf children learning a sign language could certainly pursue the development of listening and spoken language skills if desired, and doing so would carry much less risk knowing the child would have mastery in at least one language. If a child does not succeed in mastering either a spoken language or a sign language, we must then ask how much benefit the child derived from



interventions in each language relative to the amount of time and resources dedicated to those interventions.

28. Spanish and French

Spanish is known for its phonetic pronunciation, with consistent spelling and pronunciation rules. It has a relatively simple verb conjugation system compared to French. On the other hand, French is renowned for its complex verb conjugations and intricate pronunciation, with many silent letters and liaisons. French also has a rich literary tradition and is widely spoken in various parts of the world, particularly in Europe and Africa.

29. Prevalence of Depression

The prevalence of depression has increased significantly in recent years, with rates ranging from 10% to 20% in the general population. Adolescents and children are also affected by this disorder. Various factors, including genetic predisposition, neurochemical imbalances, and psychosocial stressors, contribute to the development of depression.

30. Tutors

Tutors play a crucial role in education by providing personalized instruction tailored to the needs of each student. They can help students with homework, test preparation, and clarifying difficult concepts. Tutors often employ various teaching strategies and techniques to engage students and enhance their learning experience.

31. Stone Tools

Stone tools have been essential tools for human survival throughout history. These primitive implements, crafted from rocks and shaped by skilled hands, enabled early humans to hunt, gather, and build shelters. Stone tools served as a testament to our ancestors' resourcefulness and adaptability in the face of challenges.

32. Pollution Reduction

Pollution reduction is a pressing issue that requires immediate attention. The increase in greenhouse gas emissions and other pollutants has led to a range of environmental problems, including global warming, air pollution, and water contamination. To address this issue, it is essential to take a proactive approach towards pollution reduction.

33. Coevolution

Based on a recent study, it is believed that the initial louse species to inhabit a mammalian host originally evolved as parasites of birds. This transition, which occurred tens of millions of years ago,



marked the beginning of the enduring relationship between mammals and lice. This coevolutionary process provided ample opportunities for lice to expand their presence to other mammalian species.

34. Soft Robotics

Researchers have used fossil evidence to engineer a soft robotic replica of pleurocystitids, a marine organism that existed nearly 450 million years ago and is believed to be one of the first echinoderms capable of movement using a muscular stem. This groundbreaking achievement in soft robotics provides insights into the ancient marine organism's locomotion.

35. AI Use

Similar to how chatbots may sometimes generate false information or fabricate responses, machine learning models developed for scientific purposes can also produce misleading or inaccurate results. However, researchers have recently introduced a novel statistical method that enables the safe utilization of AI predictions to evaluate scientific hypotheses.

36. Lunar Observation

To observe the rare lunar event on Wednesday night, find a location with an unobstructed view of the sky. The optimal time to view the super blue moon is just after sunset when it is on the horizon and takes on a deep orange color. Binoculars or a telescope can enhance the viewing experience. Don't miss this chance to witness a rare and awe-inspiring display of celestial beauty.

37. Happy Sounds

Research published in the *Journal of Neuroscience* suggests that happy sounds, such as laughter, are infectious. When people hear these sounds, their brains activate the premotor cortical region, which prepares facial muscles to move. This may explain why laughter and other happy sounds can spread so easily from person to person.

38. Science of Smiling

Smiling is a universal sign of happiness and positivity, but did you know that it also has a physiological effect on the body? When you smile, your brain releases endorphins, which are natural painkillers and mood boosters. This may be why smiling is so contagious and can have a positive impact on those around you.

39. Rice Cultivation

A potentially more sustainable choice in rice cultivation could be the development of a new rice breed that combines the traits of an annual Asian rice variety and a perennial African rice variety. This hybrid rice has demonstrated impressive performance, producing grain continuously for eight consecutive harvests over a span of four years.



40. Power of Artistic Expression

Artistic expression has been a powerful form of communication throughout history. From the Romantic movement to the present day, artists have sought to convey emotions and connect with their audience. Whether through visual art, music, or performance, artists aim to evoke a range of responses, from joy and inspiration to introspection and contemplation.

41. Cultural Identity

Cultural identity is shaped by a variety of factors, including social norms and values. To maintain cultural integrity and function, members must conform to these norms and values. However, conformity can also limit individual expression and creativity. Balancing cultural conformity with personal identity and autonomy is a complex process that requires ongoing negotiation and reflection.

42. Public Art

Public art has the power to transform communities and enhance economic stability. Art installations, murals, and sculptures can attract tourists and visitors, creating a vibrant and culturally rich atmosphere. Additionally, public art can increase foot traffic in commercial areas, leading to increased sales for local businesses.

43. Baby Formula Shortage

Shortages of certain products, like meat or toilet paper, are certainly annoying and inconvenient. That said, people can live without them, so it's not such a big deal in the grand scheme of things. However, the baby formula shortage of 2022 is pretty scary stuff for parents of infants, not to mention adults who have medical conditions that require such products to survive.

44. Our Ears

Our ears are highly sensitive to loud noise. Even very short exposures to high-level sounds – that's anything above 132 decibels – can cause permanent hearing loss for some people. That's true even if it's just a brief blast; a single gunshot or fireworks explosion can cause immediate damage to the ear.

45. Old English

The earliest speakers of English spoke Old English. It developed in a turbulent period of British history. This was just after the Romans had left Britain, around 1,600 years ago. The Romans had colonized Britain, but they abandoned the country in the fifth century because the Roman Empire was collapsing all around them.

46. Hitting a Deer



The risk of hitting a deer varies by time of day, day of the week, the monthly lunar cycle, and seasons of the year. These accident cycles are partly a function of driver behavior – they are highest when traffic is heavy, drivers are least alert, and driving conditions are poorest for spotting animals. They are also affected by deer behavior.

47. White Smoke

White smoke from the exhaust is typically caused by water vapor, coolant leaks, and other engine-related issues. When temperatures inside the engine rise, steam may form, which could be an indication of a cracked cylinder head. A malfunctioning head gasket or other engine component can also result in white exhaust smoke, which can be a serious cause for concern if left unaddressed.

48. Bubbles

People love bubbles—they love to blow them, pop them, and fit inside them. Bubbles aren't just for entertainment; they are the crisp effervescence in our sodas and sparkling water, and some doctors are even using microscopic bubbles to deliver medicine more effectively. Whether for entertainment or scientific study, scientists have been turning their attention to why bubbles pop.

49. Dictaphones

During the early to mid-1900s, dictaphones continued to evolve with advancements in recording technology. The introduction of magnetic tape in the 1950s brought a more affordable and reliable storage medium for sound data. This innovation led to the production of speech recording devices with improved recording capacity, including the popular cassette tapes.

50. Wildfire Prevention

Although forest thinning and controlled burning remove carbon in the short term, living trees are more likely to survive a subsequent wildfire. In the long term, that's a good outcome for carbon and climate. Living trees continue to absorb and store carbon from the atmosphere, as well as provide critical seeds and shade for seedlings to regenerate, grow, and recover the carbon lost to fires.

51. Tiny Bot

Humanity took a step forward into that future recently, when Israeli scientists revealed that they've developed a new type of brain-machine interface, which for the first time has allowed a human operator to control a nanobot implanted inside the body of a living creature (in this case, a cockroach), simply by using his thoughts.

52. Rotation

The Earth, our celestial home, is in perpetual motion, gracefully rotating through space. This continuous rotation gives us the cycle of day and night, shapes our seasons, and influences our



climate. Over geological timespans, it's gradually slowing down, which has led to speculation about what would happen if the Earth stopped rotating altogether.

53. Number 1

Number 1 represents strong leadership qualities, innovation, and unexplored potential. Individuals associated with this number possess a unique set of skills and abilities that set them apart. They have a natural inclination toward taking charge and initiating new projects. While they may have a tendency toward self-centeredness, they are generally righteous and kind-hearted leaders.

54. Arabian Desert

The Arabian Desert, not to be confused with the Syrian Desert or North Arabian Desert, is the fourth-largest desert in the world. It is second in total land mass for subtropical deserts, with an expansive surface area of 1 million square miles scattered across the Arabian Peninsula. The Arabian Desert is also home to 102 endemic species of mammals and 310 various species of birds.

55. Black Bears

Whereas black bears climb trees throughout their lives, brown bears stop doing this when they grow up. The two species are crafty omnivores who'll eat a wide range of plant and animal matter. Sometimes this means competing for the same resources; British Columbian salmon are hunted by black and brown bears alike.

56. Lionfish

A lionfish can expand its stomach more than 30 times in volume when eating a large meal. It's also capable of long-term fasting and can go without food for more than 12 weeks without dying. It doesn't help matters that lionfish start reproducing when they are less than 1 year old, can lay up to 30,000 eggs every four days, and have very few natural predators.

57. Storing Bottled Water

If you plan to keep a supply of bottled water at home, you should store it at room temperature or colder, out of direct sunlight and far from any chemicals or solvents. For instance, don't put it near any gasoline or paint thinners. Your garage is probably not a good storage place for bottled water.

58. Eco-anxiety

Eco-anxiety refers to a fear of environmental damage or ecological disaster. This sense of anxiety is largely based on the current and predicted future state of the environment and human-induced climate change. Anxiety around environmental issues may stem from the awareness of a rising risk of extreme weather events, losses of livelihood or housing, fears for future generations, and feelings of helplessness.



59. Effective Healers

Effective healers accompany sufferers on a journey toward wellness. Healing tools include the deft use of suggestion, confession, memory, ritual, and medicines. Healers find ways to provide consolation and hope, enabling their wounded charges to engage with meaningful work and find purpose in life.

60. Dreams

Dreaming happens mostly (though not always exclusively) during rapid eye movement (REM) sleep. During this sleep stage, brain activity looks similar to that in a waking brain, with some very important differences. Key among them: during REM sleep, the areas of the brain that transfer memories into long-term storage—as well as the long-term storage areas themselves—are relatively deactivated.

61. Yoga

But like other low-impact exercises, yoga reliably improves fitness and flexibility in healthy populations. The practice has also been shown to be a potentially powerful therapeutic tool. In studies involving patients with a variety of skeletal disorders, yoga was more helpful at reducing pain and improving mobility than other forms of low-impact exercise.

62. Wine's True Origins

Early farmers, the revised story goes, migrated from western Asia toward Iberia and brought table vines with them. Along the way, the farmers crossbred the table vines with local wild grapevines. The earliest crossbreeding probably happened in what is now Israel and Turkey, creating muscat grapes, which are high in sugar—good for eating and fermenting.

63. Moderate Drinking

Now a growing body of research says any alcohol raises the chance of premature death from a variety of causes. About half of cases of liver disease are attributed to drinking. Alcohol is also a potent carcinogen. It can cause cancer because it breaks down in the body to form a compound called acetaldehyde, which damages DNA. That damage can lead to at least seven types of cancer.

64. AI anxiety

It's logical for humans to feel anxious about artificial intelligence. After all, the news is constantly reeling off job after job at which the technology seems to outperform us. But humans aren't yet headed for all-out replacement. And if you do suffer from so-called AI anxiety, there are ways to alleviate your fears and even reframe them into a motivating force for good.

65. 6G Networks

High-speed Internet access has become crucial in a world where school, business, personal life, and emergency communications increasingly take place through a handheld device. But surprisingly large



swaths of the U.S. still lack a speedy-enough broadband or cellular connection. One potential solution could be a sixth-generation cellular network, which experts say will add a space-based system to ground-based coverage options.

1. Extreme Heat

Extreme heat is a major public health threat, especially when it is unseasonable and where people are less acclimated to higher temperatures. Among the most vulnerable populations are the very young, the elderly, those with existing health conditions such as heart disease and those without access to air-conditioning. People who work outdoors are also particularly susceptible to heat illness and heat stroke.

2. Unicorn

Unicorns roam free in fantasy novels and children's stories, not so much in the real world—much less the cold, analytical ones of math and philosophy. But it turns out that these logical disciplines are only one misstep away from proving the existence of the long-adored mythic creatures—or proving any absurdity.

3. Valley Fever

Valley fever's mortality rate is about one death per 1,000 infections, according to infectious disease physician John Galgiani, director of the University of Arizona's Valley Fever Center for Excellence. It doesn't need to be so high. There are medications to treat it, but patients often receive incorrect diagnoses.

4. Precarious Employment Conditions

Those who switched from precarious to secure employment had a 20 percent lower risk of death, regardless of what happened afterward, compared to those who remained in precarious employment. If they remained in secure employment for 12 years, the risk of death decreased by 30 percent.

5. Protein Songs

Likewise, several of the proteins in the study were chosen for their similarities to the key attributes of the Fantasy-Impromptu style. Most of the 18 proteins tested regulate functions including human emotion, cognition, sensation, or performance, which the authors say connect to the emotional and expressive nature of the genre.

6. Large Marimo

Large marimo are now thought to be exclusively found in Lake Akan, and as seen from the data, even there they have become threatened. Therefore, it is necessary to propose measures to protect



marimo from global warming, such as utilizing the cooler river water that flows into the marimo colony.

7. AI

There are alien minds among us. Not the little green men of science fiction, but the alien minds that power the facial recognition in your smartphone, determine your creditworthiness, and write poetry and computer code. These alien minds are artificial intelligence systems—the ghost in the machine that you encounter daily.

8. Tropical Crops

The tropics were identified as having a heightened vulnerability to the interaction of climate change and land use, meaning crops such as coffee, cocoa, mango, and watermelon—which all rely on insect pollination—are at the greatest risk. These crops play vital roles in both local economies and global trade, and their reduction could cause increased income insecurity for millions of small-scale farmers in these regions.

9. Grey Whale

Eastern North Pacific gray whales are one of the few populations of large whales that have recovered to what may be similar numbers that existed prior to commercial whaling. As the population has approached levels close to what their Arctic feeding areas can support, they have likely become more sensitive to environmental conditions due to competition for limited resources.

10. Alexander Fleming

The legendary Alexander Fleming, who famously discovered penicillin, once said, "Never to neglect an extraordinary appearance or happening." And the path of science often leads to just that. New research is turning the page in our understanding of harmful bacteria and how they turn on certain genes, causing disease in our bodies.

11. Heat Shock Response

This "heat shock response" of cells is a classic model of biological adaptation, part of the fundamental processes of life—conserved in creatures from single-celled yeast to humans—that allow our cells to adjust to changing conditions in their environment. For years, scientists have focused on how different genes respond to heat stress to understand this survival technique.

12. Nitrogen Fertilizer

The growing global population needs sufficient food. Its production causes overfertilization and increased nitrogen concentration in agriculture, which negatively affects the population, climate, and ecosystems. According to new models, however, today's crop production might be maintained with a



far smaller global fertilizer consumption if nitrogen fertilizer were used more homogeneously across global croplands.

13. Counting Seals

Counting seals is harder than it may appear. Surveys typically assess numbers at seal breeding beaches, but these figures are skewed because most male fur seals at South Georgia don't usually breed until they are ten years old, and then only for two to three years. That means some 80% of the male population is missing from surveys, and how researchers account for this can overstate the overall count.

14. Hydrogen Stations

Stations shutting down for unscheduled maintenance reduces hydrogen fuelling availability to consumers and may slow the adoption of these types of fuel cell electric vehicles, researchers noted. The use of what is known as a prognostic health monitoring model would allow hydrogen stations to reduce these unscheduled events.

15. Ancient Diamonds

Formed millions to billions of years ago, diamonds can shine light into the darkest and oldest parts of the Earth's mantle. The analysis of ancient, super-deep diamonds dug up from mines in Brazil and Western Africa has exposed new processes of how continents evolved and moved during the early evolution of complex life on Earth.

16. ATP

Adenosine triphosphate, or ATP, is the molecule that provides energy for most biological processes in living cells. It is often referred to as the "molecular unit of currency" within the cell. ATP is formed through a process called cellular respiration, which occurs in the mitochondria of cells.

17. Croatian Coast

I stood at the edge of the cliff, feeling the wind whip through my hair as I looked out at the vast sea below. The colours of the water ranged from a deep navy blue to a sparkling turquoise. I took a deep breath of the salty sea air and felt a sense of peace wash over me. This was the beauty of the Croatian coast.

18. Beach Vacation

The sun beats down on the golden sands of the beach, as waves crash rhythmically against the shore. The salty air fills your lungs as you kick off your shoes and feel the cool sand between your toes. You spread out your towel and relax, as the gentle hum of beach-goers and seagulls drowns out the stresses of everyday life.



19. Adult Coral

Recent research suggests that adult fragments of a coral species exhibit improved tolerance to bleaching and a faster recovery when exposed to symbionts that have evolved to withstand higher temperatures. Interestingly, the study also found that the treatment with these heat-evolved symbionts did not negatively impact the coral's growth.

20. Dog Training

Training your dog can provide a number of benefits, such as improving their temperament and obedience, and increasing their overall happiness and well-being. It is important to begin training early on, using positive reinforcement techniques such as treats and praise. Consistency is key in training, and it's important to establish clear rules and boundaries for your dog to follow.

21. Art

The canvas came alive with vibrant strokes of color. The painting captured fleeting moments frozen in time, evoking a myriad of feelings within its viewers. Artistic expression transcended words, allowing the soul to speak through strokes and shades. In this masterpiece, the artist poured their heart onto the canvas, inviting others to glimpse their inner world.

22. Water on Mars

A meteorite that originated from Mars billions of years ago provides insights into past impact events on the Red Planet. The presence of oxidized minerals from the Martian crust within the meteorite suggests the involvement of water during the impact that formed it. This discovery contributes to a better understanding of the role of water in the formation of planets, bridging some gaps in our knowledge.

23. Cell Maps

An international team of scientists has charted the genetic, cellular, and structural composition of both the human brain and the brains of non-human primates. This comprehension of brain structure facilitates a more profound understanding of the cellular underpinnings of brain functions and malfunctions, which can help to create more precise therapeutic treatments for individuals with mental illnesses and other brain disorders.

24. Secondary Health Effects

According to a recent study, the occurrence of non-communicable diseases such as hypertension, hyperlipidaemia, diabetes, and mental illnesses has risen following the Fukushima disaster and the COVID-19 pandemic. This highlights the need to enhance health promotion strategies and recommendations in the aftermath of such disasters.



25. Sushi

The origins of sushi can be traced back to ancient China, where the preservation of fish was a necessity. During the second century A.D., the Chinese began fermenting fish by wrapping it in rice and allowing it to ferment overtime. The rice was discarded, and the fish was consumed. Sushi made its way to Japan in the 8th century, introduced by Buddhist monks who used fermentation techniques to preserve fish.

26. Bees

Bees are more than just buzzing insects; they play an essential role in our ecosystem. Bees pollinate flowers, fruits, and vegetables, resulting in the production of food. Without them, the world's food supply would be severely affected. Sadly, bees have been in danger due to the use of pesticides, changes in land use, and global warming.

27. Travel

As the plane soared above the clouds, memories of the journey flooded the traveler's mind. The sights, sounds, and scents of distant lands lingered like treasures in their heart. Each adventure was a lesson learned, an experience that enriched their soul and broadened their perspective. It was a reminder that in travel, we discover not just new places but also ourselves.

28. Kepler-452b

The discovery of a new exoplanet has ignited excitement among astronomers worldwide. Dubbed Kepler-452b, this Earth-like planet orbits a star similar to our Sun in the habitable zone. With a radius 1.5 times that of Earth, it offers the potential for liquid water and a stable atmosphere.

29. Milky Way's Warp

Observational data has revealed that the Milky Way is warped and has flared edges, but scientists have been unable to explain why—until now. Astronomers have conducted calculations that provide a complete explanation for this phenomenon, and there is strong evidence suggesting that the Milky Way is surrounded by a halo of dark matter that is not aligned with its centre.

30. 3D Printing Method

Scientists have used 3D printing technology to create specialized brain tissue that mimics the cerebral cortex. By utilizing human stem cells, they were able to implant these engineered structures into mouse brain slices, where they seamlessly integrated with the existing tissue. This groundbreaking technique shows promise for future applications in treating brain injuries.

31. Speech Production

Speech production is a complex neural phenomenon that has left researchers explaining it tongue-tied. Separating out the intricate web of neural regions controlling precise muscle movement in the



mouth, jaw, and tongue from the regions processing the auditory feedback of hearing your own voice is a complex problem.

32. Molecular Crystals

A team of researchers has discovered molecular crystals capable of capturing iodine—one of the most common radioactive fission products—and other pollutants. The versatile crystals could be used for nuclear waste management and other energy-related applications, bringing the world closer to a net-zero future.

33. Air Taxi

The air taxi market is almost ready for take-off, with companies such as Boeing, Hyundai, Airbus, and Toyota building fleets to have commuters flitting through the sky. Europe and the U.S. have both drafted new rules to pave the way for air taxis to begin operations within the decade, with Australia's Civil Aviation Safety Authority (CASA) to follow suit.

34. Nature

The sun dipped below the horizon, casting a warm golden glow over the tranquil meadow. The gentle breeze whispered through the tall grass, creating a soothing melody. The scent of wildflowers filled the air, as butterflies danced from petal to petal. Birds chirped their evening lullabies, while a stream trickled nearby.

100. Amazon Forest

A very unexpected discovery has surprised the world. The Amazon Forest, thought to be a reservoir of wildlife and primitive indigenous settlements, was also the seat of advanced civilizations. By advanced, we mean that they were large urban societies with civic and ritualistic activities, in contrast with nomadic small tribes.

101. Culinary Arts

Culinary arts is the art of preparing and cooking food. It encompasses a wide range of skills and techniques, from knife skills and flavour balancing to plating and presentation. The culinary industry includes many different types of establishments, such as restaurants, cafes, bakeries, and catering companies, and offers a variety of career paths for aspiring chefs and food professionals.

102. Learning from Others

People are constantly learning from others without even being aware of it. Social learning avoids laborious trial and error; the wheel does not have to be reinvented each time. But where does this ability come from, which forms the basis of cultural learning and, consequently, the evolutionary success of the human species?



103. Jellyfish

Even without a central brain, jellyfish can learn from past experiences like humans, mice, and flies, scientists report for the first time. They trained Caribbean box jellyfish (*Tripedalia cystophora*) to learn to spot and dodge obstacles. The study challenges previous notions that advanced learning requires a centralized brain and sheds light on the evolutionary roots of learning and memory.

104. Line Engraving

Line engraving on metal, which, to a great extent, was a development of the goldsmith's craft of ornamenting armor and precious metals, did not emerge as a print-making technique until well into the 15th century. Copper, the metal mainly used for engraving, was expensive, and engraving itself was laborious and took a long time.

105. Mona Lisa

Mona Lisa depicts a woman with a mysterious smile and has become one of the most famous and iconic works of art in history. The painting's enigmatic expression and subtle details have captivated viewers for centuries and inspired countless interpretations and analyses by art historians and critics.

106. Ultrafast World

Glimpses of the ultrafast world of electrons are changing scientists' vision of the inner workings of atoms and molecules. The 2023 Nobel Prize in Physics goes to three physicists who illuminated this realm with ultrashort pulses of light, the Royal Swedish Academy of Sciences announced on October 3.

107. Charitable Giving

Charitable giving has the power to transform lives and communities, providing support for those in need and promoting social justice. Donating time, money, or resources to charitable organizations can make a significant difference in the lives of others, while also promoting a sense of purpose and fulfilment.

108. Extraterrestrial Life

The search for extraterrestrial life has fascinated scientists and the public alike for decades. With advances in technology and the discovery of exoplanets, the possibility of finding life beyond Earth is becoming increasingly likely. However, the search remains challenging, requiring innovative approaches and sophisticated instruments.

109. STEM Education

STEM education is essential for preparing students for the technological and scientific challenges of the future. It provides students with the skills and knowledge needed to pursue careers in science, technology, engineering, and mathematics. STEM education also promotes critical thinking and problem-solving skills.



110. Planetary Rings

Planetary rings are some of the most spectacular features in our solar system, consisting of countless particles orbiting around a planet. They are formed by a variety of processes, including collisions between moons and gravitational interactions with nearby planets. Studying planetary rings can provide insights into the formation and evolution of planetary systems.

111. Aging Infrastructure

Aging infrastructure presents unique challenges for societies around the world, requiring investment in maintenance and upgrades to ensure safe and reliable transportation, communication, and energy systems. Failure to address these challenges can lead to economic stagnation and reduced quality of life for communities.

112. Lifelong Learning

Lifelong learning is essential for personal growth, career development, and staying up-to-date with new technologies and trends. It helps individuals develop new skills, pursue new interests, and adapt to changing circumstances. Lifelong learning opportunities are available through formal education programs, online courses, workshops, and other learning resources.

113. Bilingual Education

Bilingual education is a valuable tool for preparing students for a globalized world. It helps students develop language proficiency in two or more languages, enhances cognitive skills, and promotes cultural understanding. Bilingual education programs can provide students with a competitive advantage in the job market and help them become more effective communicators.

114. World Heritage Sites

World Heritage Sites are places of outstanding cultural or natural significance that are recognized by UNESCO. They represent the shared heritage of humanity and serve as reminders of our cultural and natural diversity. By protecting these sites, we can ensure that they remain accessible to future generations.

115. College Application Process

The college application process can be daunting, but with careful planning, research, and preparation, students can maximize their chances of getting accepted to their top-choice schools. This process typically involves researching colleges and universities that match one's interests and qualifications, preparing for standardized tests like the SAT or ACT, and crafting a compelling personal statement or essay that highlights one's strengths and achievements.



REPEAT SENTENCES

1. The corporation did not work well and gained no profits.
2. The professor would be available for the lecture soon.
3. You should arrive at the bus stop a few minutes early.
4. Dr. Smith's lecture will be held at the art centre.
5. The professor predicts that biotechnology is the future of traditional biology.
6. Medical books and journals have been moved to the second floor.
7. You must satisfy the listed requirements to get the qualifications.
8. A public telephone is available in the shop.
9. The art museum is located across the street and near the theatre.
10. You can get the books for this course in the library.
11. If you give me your phone number, I can text you the address.
12. Students will complete the project by September.
13. By attending meetings, you can ask questions and meet new people.
14. The weather has been lovely since this time of the year.
15. The old building in the university is still being used.
16. Passengers on the train should take their seats.
17. If you wish to be a good student, you should attend every class.
18. You can register your card at the university student center or the library.
19. The bus for London will be scheduled once a week.
20. The library will be closed except on holidays.
21. You can add a salad to your meal.
22. You have fulfilled the enrolment requirements.
23. The manager will have a meeting in this room today.
24. An effective business manager is always open to new ideas.
25. Show your passport and boarding pass at the gate.
26. Different entrances to the program get the same qualification.
27. You must call your doctor to make an appointment.
28. You can get coffee and tea in the lunchroom.
29. Please close the door behind you when you leave the room.
30. You can keep your bag in the back room.
31. There has been a delay in processing the enrollment due to the computer problems.
32. Employees go around the park at lunchtime.



33. The bus for the airport will arrive soon.

34. Your wages will be put into your bank account on Thursday.

35. The grocery store is around the corner down the street.

36. Your son has a bad cold and is in the nurse's room.

37. If the doctor calls while I'm out, please leave a message.

38. Line up in a row, we will enter the library from the left side.

39. You need to pass the written exam before you can apply for the driver's license.

40. The test shows that you know a lot about Canada.

41. The restaurant is located next to the theatre.

42. You must wear a hard hat on the construction site.

43. This semester will be from October to January.

44. The investigation aims to find the stand of the problem.

45. There are various approaches for plagiarism across different university departments.

46. The competency of language in the assignment is to use more formal words.

47. Students are allowed to bring dictionaries to the exam.

48. If finance is a cause of concern, scholarships may be available.

49. Higher education means higher pay and more opportunities you will get.

50. Control systems in manufacturing require a high level of accuracy.

51. Students from various backgrounds can achieve a variety of qualifications.

52. You are not sure that you can skip the sessions for Wednesday.

53. The students are supposed to assemble in the seminar hall before the announcement.

54. The bus by the building goes directly to the central bus station.

55. The buildings looked extraordinarily beautiful in the brilliant sunshine of the day.

56. Find the bookstore situated on the main campus's northern side.

57. Cities are ranked based on the important measure of quality of life.

58. Physics explores the properties and interactions of matter and energy.

59. The agricultural industry of that country receives significant financial support from the government.

60. Utilize online materials before attending the upcoming lecture sessions.

61. Living close to your workplace significantly reduces daily commuting time.

62. For this project, collaboration in trios will be a necessary requirement.

63. Alternatively, you have the option to receive your academic grades through email.

64. It can be a challenge to precisely define this specific word.

65. The sky remains blue and clear, even with the cold.



66. My fascination has long been drawn to the fields of biology and physics.

67. I aim to significantly cut down my house cleaning time.

68. Truly, I believe it's among the best actions I've ever taken.

69. It's unfortunate some language teachers graduate without native speaker training.

70. Despite using English, I failed to communicate with him effectively.

71. I can fix the issue but was told to keep it from you.

72. Students generally succeed in biology with little difficulty each year.

73. Books in the reserve section are only loaned for a limited time.

74. Our company's software saw significant changes over the past year.

75. Late books at the library will have a daily fine added.

76. To find the library, walk straight ahead, then turn left.

77. Nowadays, most believe in wind power as a strong energy source.

78. Chapter 9 focuses on recent significant developments in the field.

79. The course looks at tough ethical questions in our society.

80. Smoke played a big role in making air pollution worse.

81. Jonathan is often late when he goes to different places or events.

82. Psychology looks at how we think and act in different situations.

83. Making workplace changes can often bring significant challenges to the forefront.

84. Email is fast and easy for talking in today's world.

85. We should not disrupt the delicate balance and harmony of nature.

86. At a significant moment, the global population reached a major milestone.

87. Population growth has been slow, gradually rising over many centuries.

88. In social psychology, they study how people convince each other.

89. Learning how to persuade people is helpful for talking to others.

90. We consistently receive high grades in all of our classes without fail.

91. Eating too much unhealthy fast food makes people sick often.

92. The university does things to help the environment, like planting trees.

93. Getting interpreters may not be easy within this department's resources.

94. Unfortunately, my schedule conflicts with several interesting economics classes this semester.

95. The study's results will be published in the upcoming month.

96. Overeating can lead to numerous health problems and should be avoided.

97. Remember to sign the attendance sheet before leaving the lecture hall.

98. To earn the best grade, you must achieve a high score.

99. I'm glad you discovered what you were looking for and feel satisfied.



100. Research shows that early detection methods are very important and significant.

101. Information on the internet becomes more reliable as time passes and influences it.

102. Early findings are interesting but not very important in our study.

103. To meet the requirement, multiple copies need to be given to the department.

104. If you want to sell your book, it must have a bibliography.

105. Even without someone to converse with, Mary doesn't experience loneliness.

106. Student services help with housing and transportation when students need it.

107. If you need a part-time job, it should not interfere with your studies.

108. Companies may have quite different break and lunchtime rules and regulations.

109. We must let clients know about upcoming price increases in advance.

110. This program is running in partnership with a number of departments.

111. Meteorology involves a comprehensive analysis of the Earth's atmospheric conditions.

112. You can obtain the application form from the administrative office.

113. European political dynamics encounter similar challenges in the context of globalization.

114. The hotel is not far away from my apartment.

115. Your car can park in the building behind the medical centre.

116. Would you pass me the textbook on that table?

117. They have enough work to keep them going.

118. Students are not allowed to speak when they are in the examination hall.

119. At any given time, the laboratory allows a maximum of four individuals inside.

120. Bigger corporations frequently assimilate smaller privately held businesses in the market.

121. Before reaching final conclusions, it's imperative to verify underlying assumptions.

122. In the analysis of statistical data, considering gender is fundamentally important.

123. At present, I brim with a newfound sense of confidence and optimism.

124. I am acutely aware of my personal shortcomings and limitations, you know.

125. Regrettably, Professor Jones possessed limited tolerance for foolish behavior in class.

126. I missed the lecture yesterday; may I use your notes?

127. Now, universities compete for excellence in environmental conservation and sustainability efforts.

128. Electric vehicles signify the future of transportation, promising an eco-friendlier world.

129. Are energy production activities primarily held responsible for environmental problems, experts wonder?

130. Australia's economy relies a lot on money from visitors and education institutions.

131. There are on-going problems with over-consumption of junk food.

132. One solution is a system of electric cars available for hire on demand.



133. Absolutely. I believe scientific development can be a positive thing.

134. Here in this area, you shouldn't find any huge social problems nowadays.

135. It's important that people with responsible jobs get plenty of sleep.

136. In most cases, quality products don't need much advertising.

137. Some people suggest a levy on junk food to discourage its consumption.

138. Robots are able to communicate with humans around them.

139. Anyone who feels ill should visit our medical center.

140. People get product information from advertisements, friends, family and product reviews.

141. It's difficult for us to control our feelings of disgust.

142. My parents didn't have a good education so they were determined that I would.

143. The university is working towards being more environmentally sustainable.

144. There are several reasons for population growth, such as better education.

145. The But overall, surely scientific development is a positive thing.

146. financial report for the last quarter will be available this afternoon.

147. The impact of climate change could result in floods.

148. Even during leisure time you can hear attempts to persuade or influence.

149. Street lighting allows people to walk home safely at night.

150. There is plenty of cheap accommodation off-campus.

151. The atmosphere is very important to our lives, and we can not live without it.

152. First of all, a lot of students don't even know how to type very fast.

153. So, what do the lungfish do in order to survive?

154. The supplementary energy sources are needed after exertion.

155. Conformity involves acting or thinking like other group members.

156. He needs to talk to you about your industrial architecture class.

157. Most adults need around eight hours of sleep every night.

158. It's my opinion that technological advances will begin to slow.

159. 2000 years ago, there were few people in the world.

160. Copying from the internet threatens to damage your chances of success.

161. The students' union governs the use of the sports center.

162. I hope I can take early retirement before I'm sixty.

163. I'd like to start a family when I'm about thirty years old.

164. Next year I'm planning to take a sabbatical so that I can travel to South America.

165. Some teenagers in my school are not very well-behaved but fortunately all my friends are.

166. Some people think that having a child is not a major responsibility but obviously it is.



167. Not everyone wants to keep in touch with their old school friends when they leave school, but I would like to.

168. Absolutely, I don't think anyone should try to interfere with nature.

169. Most people dislike advertisements but appear to be influenced by them anyway.

170. He studied for many years with an expert painter.

171. London evolved into a powerful, prosperous city over several centuries.

172. Is the professor available at the office on a regular schedule?

173. This matter is significant in this and other respects too.

174. Fear of essay writing stems from not learning it properly.

175. Trade finance helps businesses a lot by managing money for their operations.

176. We don't have enough evidence to be absolutely sure of anything.

177. Making workplace changes can often bring significant challenges to the forefront.

178. Email usage raises the risk of miscommunication significantly in correspondence.

179. Please turn in your essays on white paper with double-spacing throughout.

180. We offer a variety of courses catering to our students' diverse needs.

181. This short summary will take us to a time long ago.

182. Early next year there's a major auction of his work.

183. Even during leisure time, you can hear attempts to persuade or influence.

184. We should attempt to lower the amount of traffic on the roads.

185. Long before children are able to speak or understand a language, they communicate through facial expressions and by making noises.

186. Conformity to the wrong group can be rather dangerous.

187. To begin, let me quickly outline the rich history of our museum for you.

188. Some species of birds can sleep while they are flying.

189. This short line on the painting represents life.

190. He has a strong interest in exploring new and exciting art movements.

191. More patients were infected in this outbreak than in any prior ones.

192. Politicians and marketing professionals have a good understanding of persuasion.

193. The gap between the rich and the poor did not decrease rapidly as expected.

194. Scientists still aren't sure why we need to sleep.

195. Some of the worst accidents in history have been linked to sleep deprivation.

196. In the end, it's what people like to eat that's important.

197. The conference is predicted to draw greater numbers than last year.

198. Most visitors are drawn to Mt. Field when they visit the National Park.



199. Personally, I opt for a strategic approach by choosing judicial review.
200. Our assignments are all founded upon classroom discussions as their basis.
201. The program operates solely on financial contributions from private benefactors.
202. His research fascinates due to his natural curiosity and inquisitiveness.
203. Doctor Green's new office location is on the building's second floor.
204. People don't study crimes by companies as much as other crimes.
205. Sailors in the Mediterranean often spot the fiery night glow from volcanoes.
206. We've confirmed the dates and have organized some additional optional activities.
207. Proper disposal of waste is of the utmost importance for human well-being.
208. Disgust often relates to the stomach and digestive reactions in our bodies.
209. If she doesn't speak the language, she's not going to sit around and wait for a translator.
210. We are also going to be more prescriptive about what you focus on in your presentation.
211. The generic biology technology lab is located at the North Wing of the library.
212. The university is willing to join the joint research efforts of the local council.
213. She has been collecting material for her latest novel for more than a month.
214. One of the hardest things about starting university is finding your way around.
215. The context is basically the background of framework surrounding the act of communication.
216. I'd like to get a place of my own as soon as I can.
217. Animal science can be applied to a wide variety of careers and industries.
218. The English word 'typhoon' comes from the Chinese word meaning 'big wind.'
219. Research has found that there is no correlation between diet and intelligence.
220. I've had a very happy childhood so I sometimes forget that others haven't.
221. Larger numbers of city residents mean greater car ownership.
222. Nowadays, persuasion is an important area of research within social psychology.
223. My profession had an important influence on the formation of my character.
224. Advertisements need to appeal to people of different ages, socioeconomic backgrounds, and genders.
225. The government must deal with this issue as a matter of urgency.
226. When we talk, we use tones and expressions to understand each other.
227. Usually, but not always, reviews provide an unbiased source of information.
228. The research looked at neighborhood cooperative schemes, such as community gardens.
229. There has been a growing need for qualified teachers of English literature.
230. Feelings of nervousness are common among all university freshers.
231. Children, for example, are often exposed to negative role models due to peer pressure.



232. One theory suggests that dreams help with long-term memory.

233. We have already succeeded in working out ground rules with the department.

234. The university can help connect you to local cultural groups and organizations.

235. Conforming to the wrong group can lead to dangerous and harmful outcomes.

236. The technology they introduced meant that metal and leather goods were produced there for the first time.

237. Care needs to be taken for vulnerable groups during the periods of turmoil.

238. The discussion covers business principles and practices in the context of everyday business events.

239. This textbook teaches data science and machine learning methods for control of complex systems.

240. It was decided by a unanimous vote that this school should be closed.

241. Higher numbers of patients were infected than in previous outbreaks of the illness.

242. Expertise in particular areas distinguishes you from other graduates in a job interview.

243. Teenagers more than most age groups feel strong pressure to conform.

244. Statistics indicate that depressed patients are more likely to become ill than others.

245. Your aim is to recognize the impact of gender in all academic disciplines.

246. This short line in the artwork symbolizes the essence and vitality of life.

247. It's a difficult one. If you start prohibiting some researches, where do you draw the line?

248. Governments can help reverse this economic trend by offering technical and financial aid.

249. The media are to blame for excessive promotion of unhealthy food.

250. He would yearn for the chance to learn from the well-known artist.

251. People often conform during their leisure time as well as in their work hours.

252. We are constantly seeking competitive advantages that allow us to make more profits.

253. An understanding of persuasive techniques should help you recognise their use.

254. Generally, consumers trust friends more than commercial information, such as advertisements.

255. Adverts might use humor, drama or catchy slogans to grab people's attention.

256. Levels of pollution present in the atmosphere are increasing, which is rather concerning.

257. Ads often use funny stories, exciting scenes, or catchy words to get noticed.

258. An important factor that separates ordinary photographs from good ones is the lighting.

259. Transport has always been the key to developing international trade in this century.

260. Do you think new developments in science often cause more problems than they solve?

261. They can tutor other students who need help for the preparation of the course and the test.

262. The teacher tried to gain her student's attention by clapping her hands loudly.

263. I can't afford to take a gap year unless I can get a job and save up.

264. Marketing involves many activities, including doing research, developing products and promoting them.

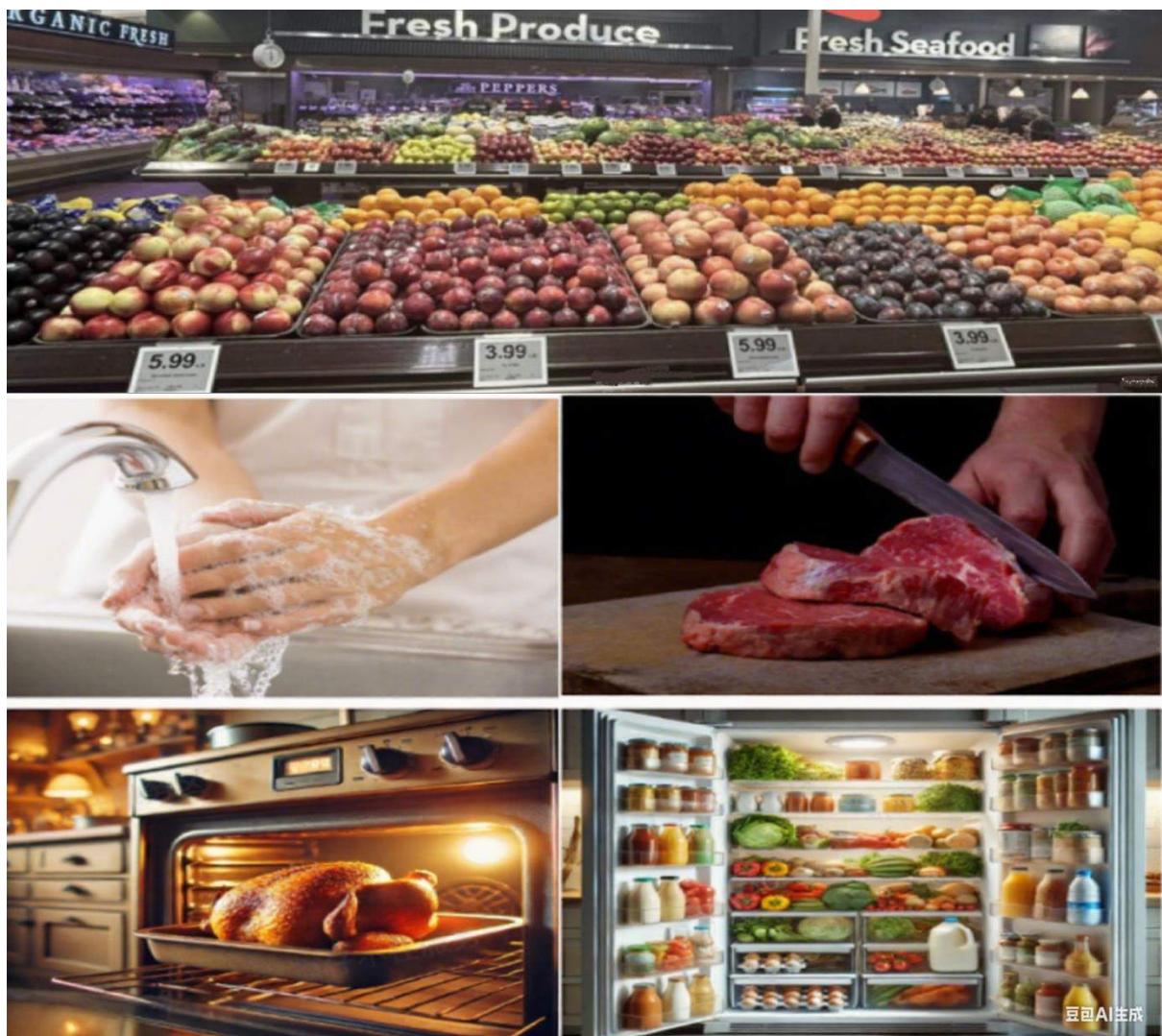


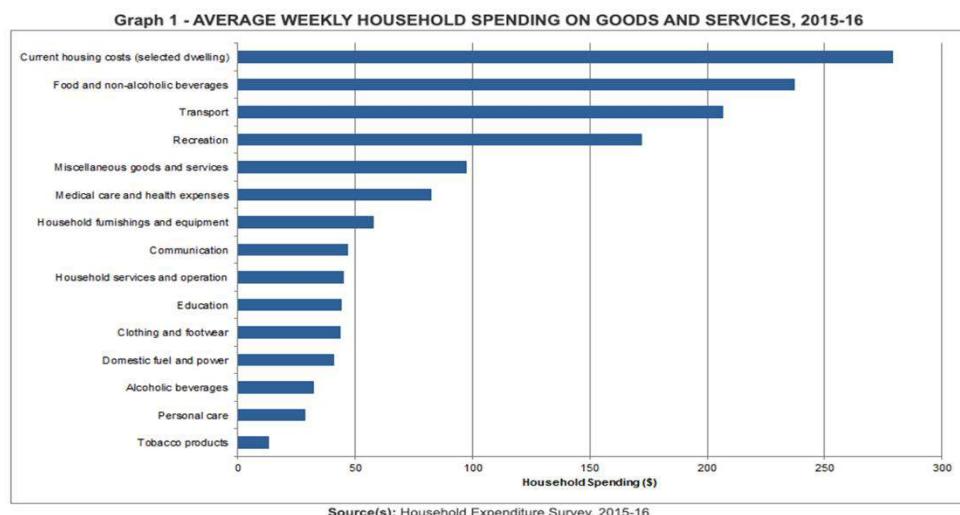
- 265. A new report outlines ways in which cities should address transport issues.
- 266. They're discussing the most efficient strategy to manage the risks facing the business.
- 267. The problems that science solves far outweigh the problems that it may bring.
- 268. The job encompasses a wide range of responsibilities, so it is very challenging.
- 269. The field of internet security is growing and evolving at a rapid pace.
- 270. We often ask our students to get access to all sorts of services.



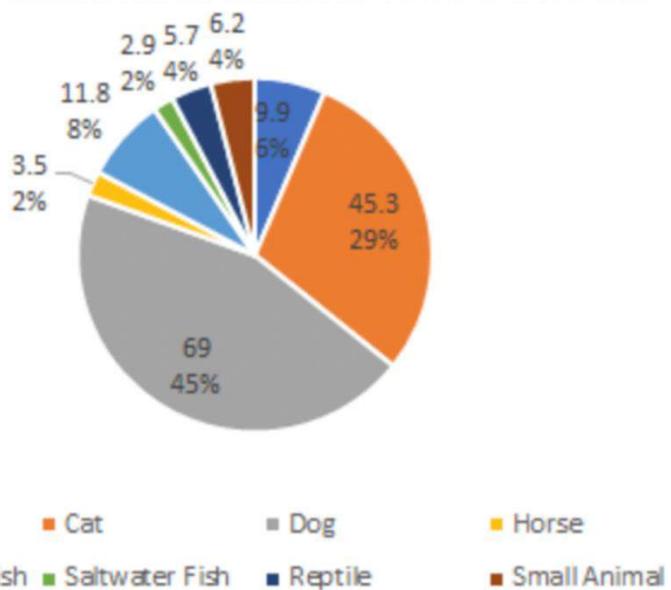
DESCRIBE IMAGE



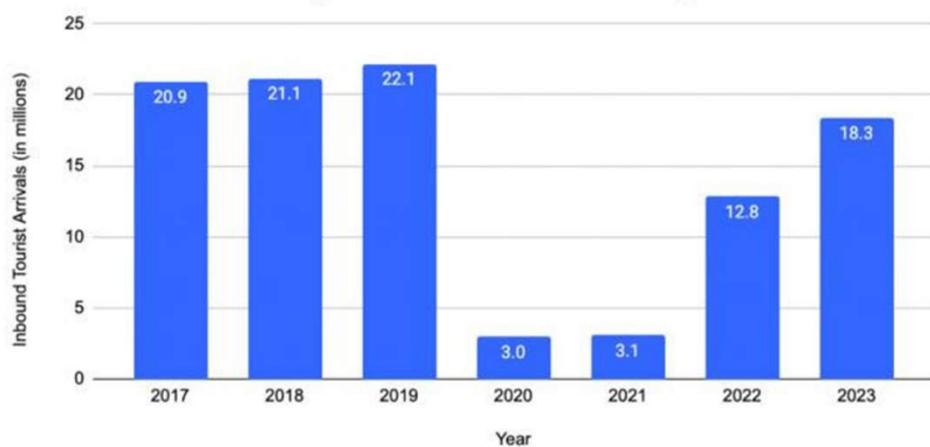




Of Households in Millions Who Own Pets



How many tourists visit Canada each year?

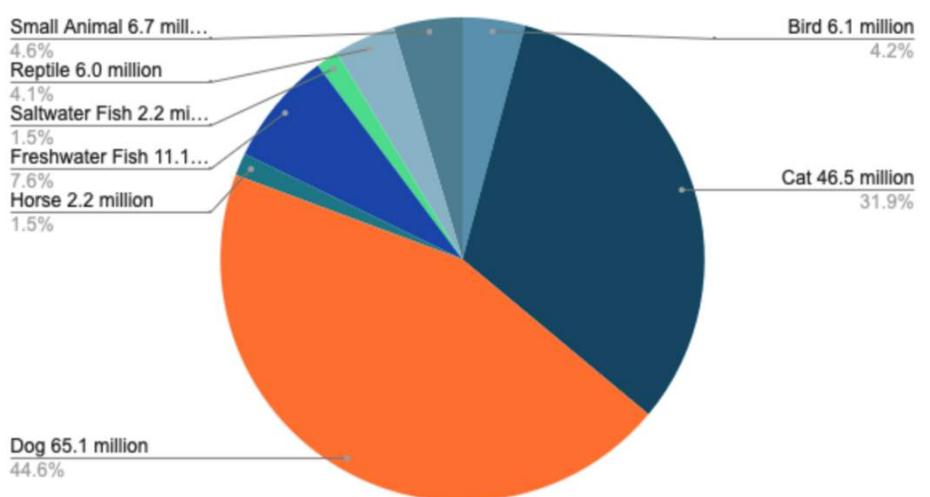


Tab. 2. Share of foods, beverages and tobacco in consumer spending.

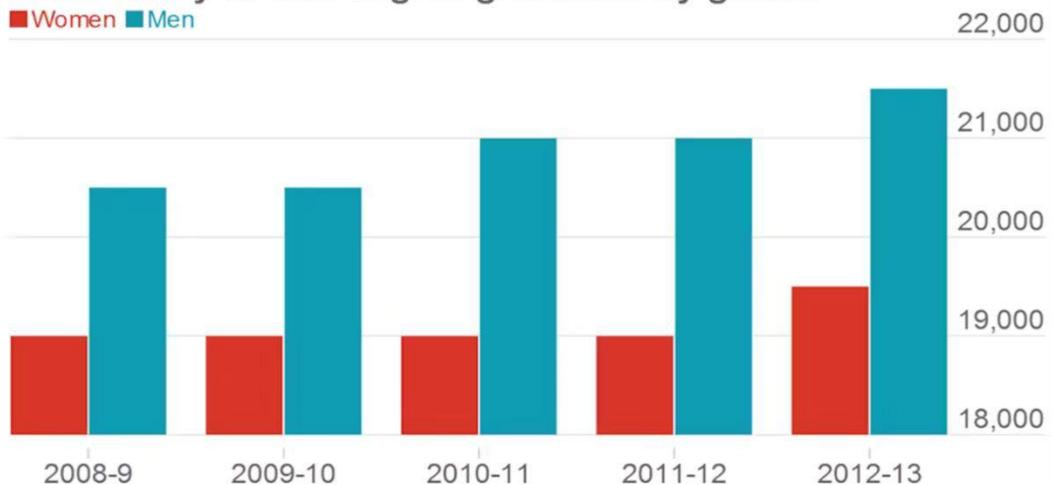
Share of food, beverages and tobacco in consumer spending [%]	2009	2010	2011	2012
Food and non-alcoholic beverages	24.2	24.8	24.4	24.8
Alcoholic beverages and tobacco	3.0	3.4	3.3	3.3
Food, beverages, tobacco	27.2	28.2	27.7	28.1

Source: Statistical Office of the Slovak Republic [10], RIAFE calculations [16].

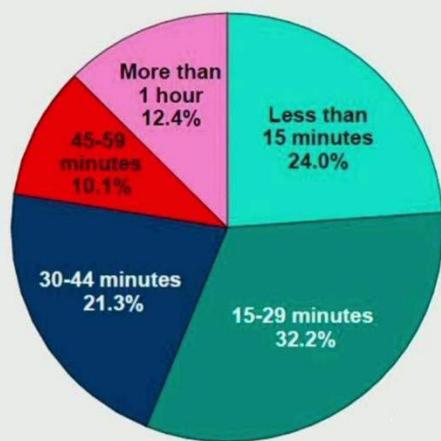
Estimated Number of U.S. Households that Own a Pet



Mean salary of first-degree graduates by gender

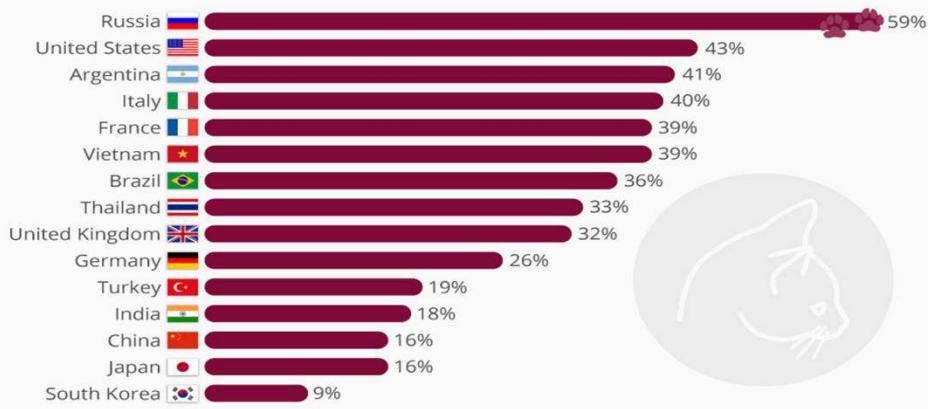


Travel Time to Work, Ontario, 2016



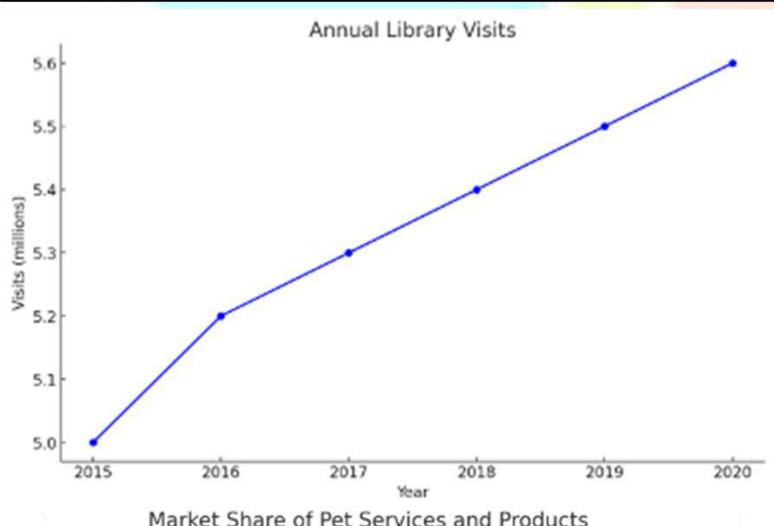
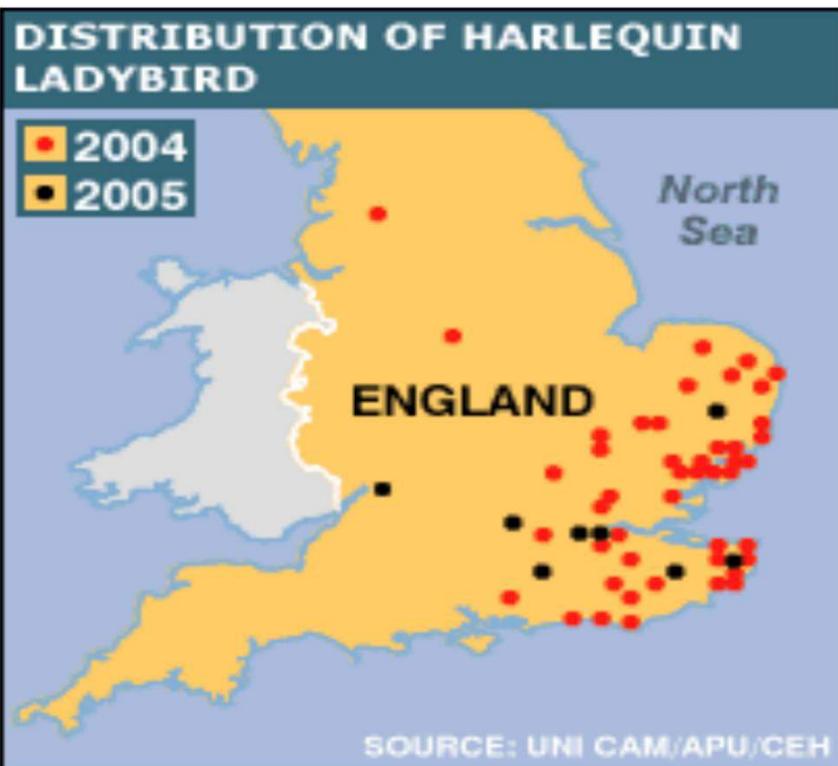
Which Countries Have The Most Cat Owners?

Share of people who own a cat in selected countries in 2017

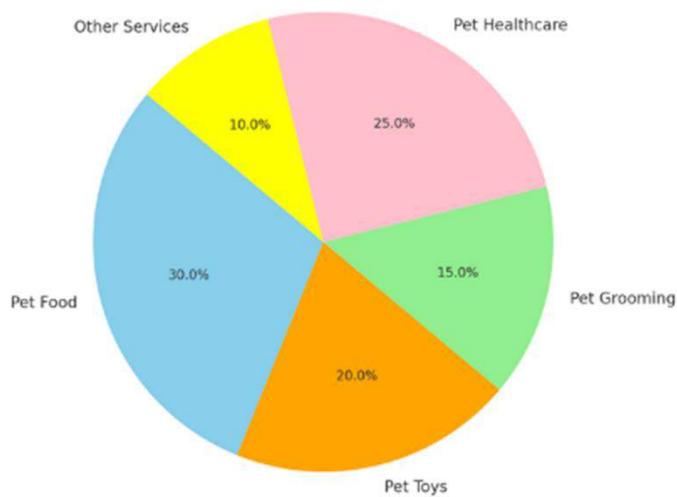


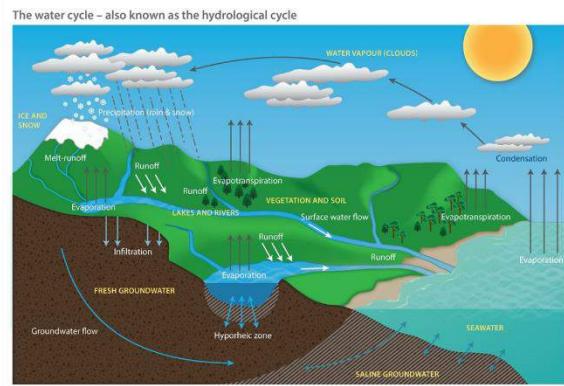
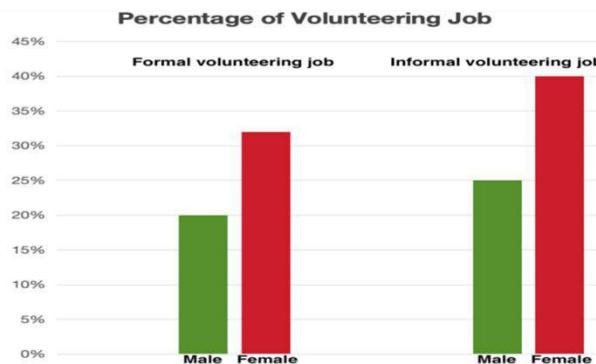
n=43,034
©StatistaCharts Source: Dalia Research

statista

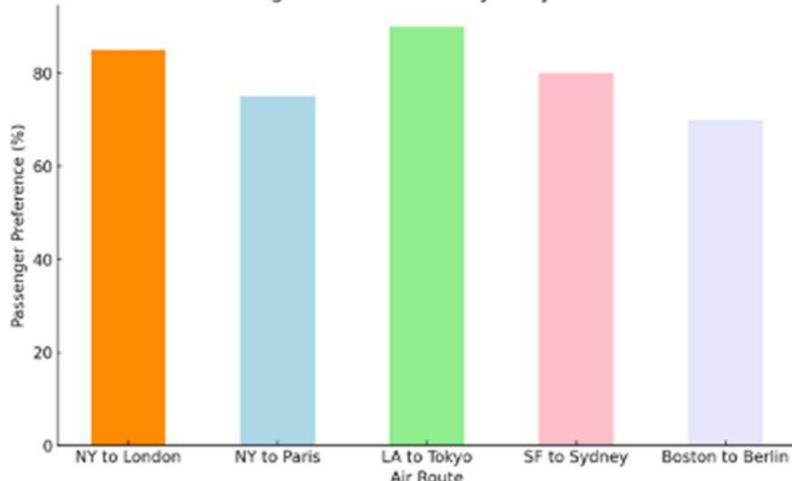


Market Share of Pet Services and Products

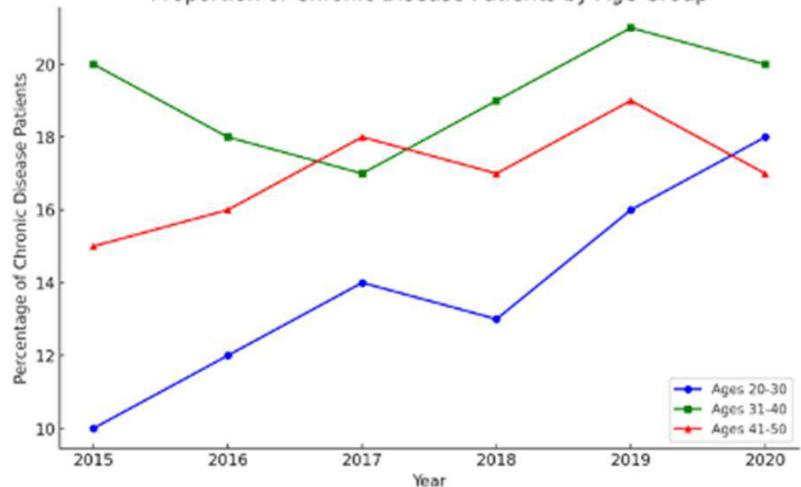




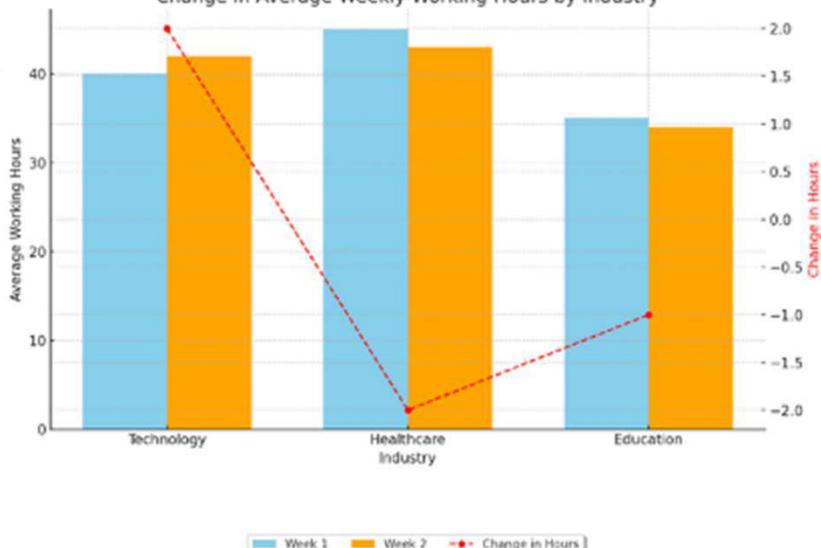
Passenger Preference Analysis by Air Route



Proportion of Chronic Disease Patients by Age Group



Change in Average Weekly Working Hours by Industry



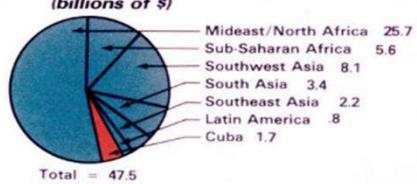
South Africa's nine provinces – land area



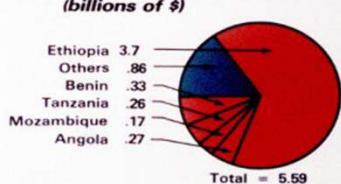
Major Soviet Equipment Delivered to the Third World 1977-1982

	Total	Near East and South Asia	Sub-Saharan Africa	Latin America	East Asia and Pacific
Tanks/Self-propelled guns	7,065	5,205	1,140	80	640
Light Armor	8,660	6,500	1,590	175	395
Artillery (100-mm and over)	9,590	5,115	3,510	420	545
Major Surface Combatants	32	19	5	1	7
Minor Surface Combatants	126	10	45	27	44
Missile Patrol Boats	53	33	4	11	8
Submarines	6	3	—	3	—
Supersonic Combat Aircraft	2,235	1,635	220	130	250
Subsonic Combat Aircraft	290	150	80	5	55
Helicopters	910	620	125	35	130
Other Military Aircraft	345	100	70	65	110
Surface-to-Air Missiles	11,680	9,495	1,575	435	175

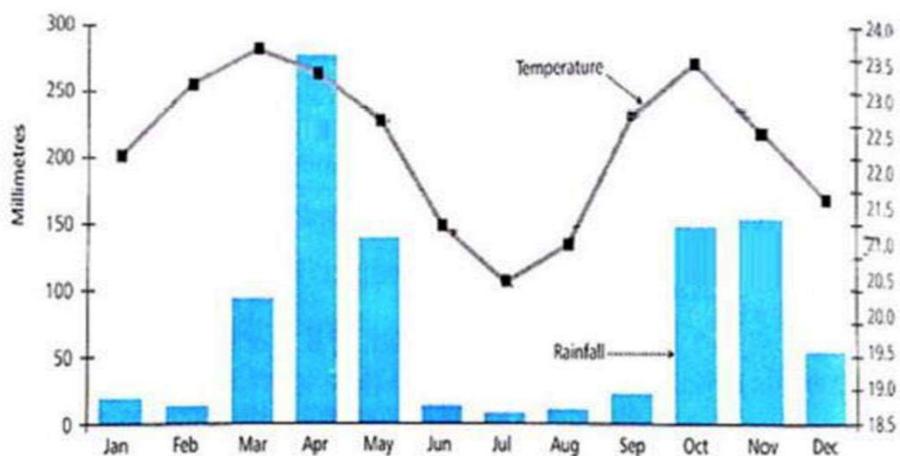
Military Sales Agreements 1977-1982 (billions of \$)



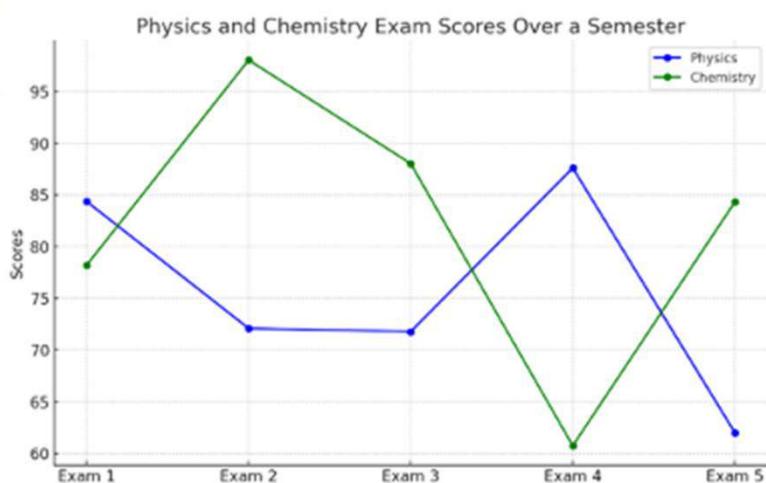
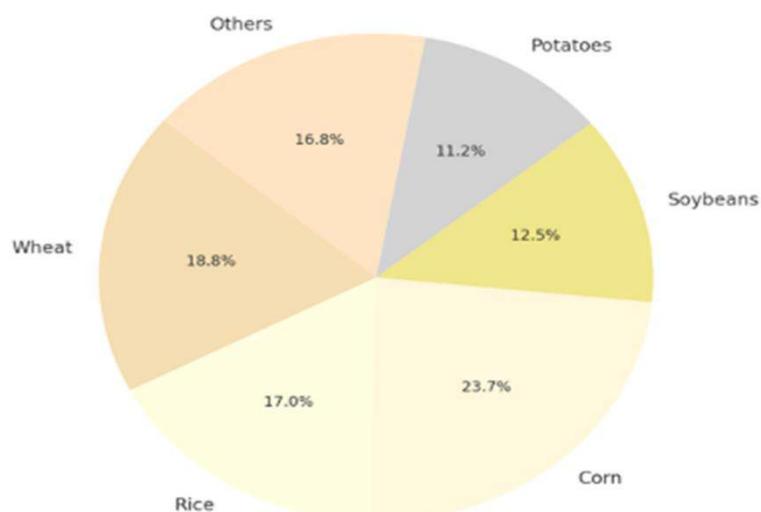
Arms Sales Agreements with Select Countries 1977-1982 (billions of \$)



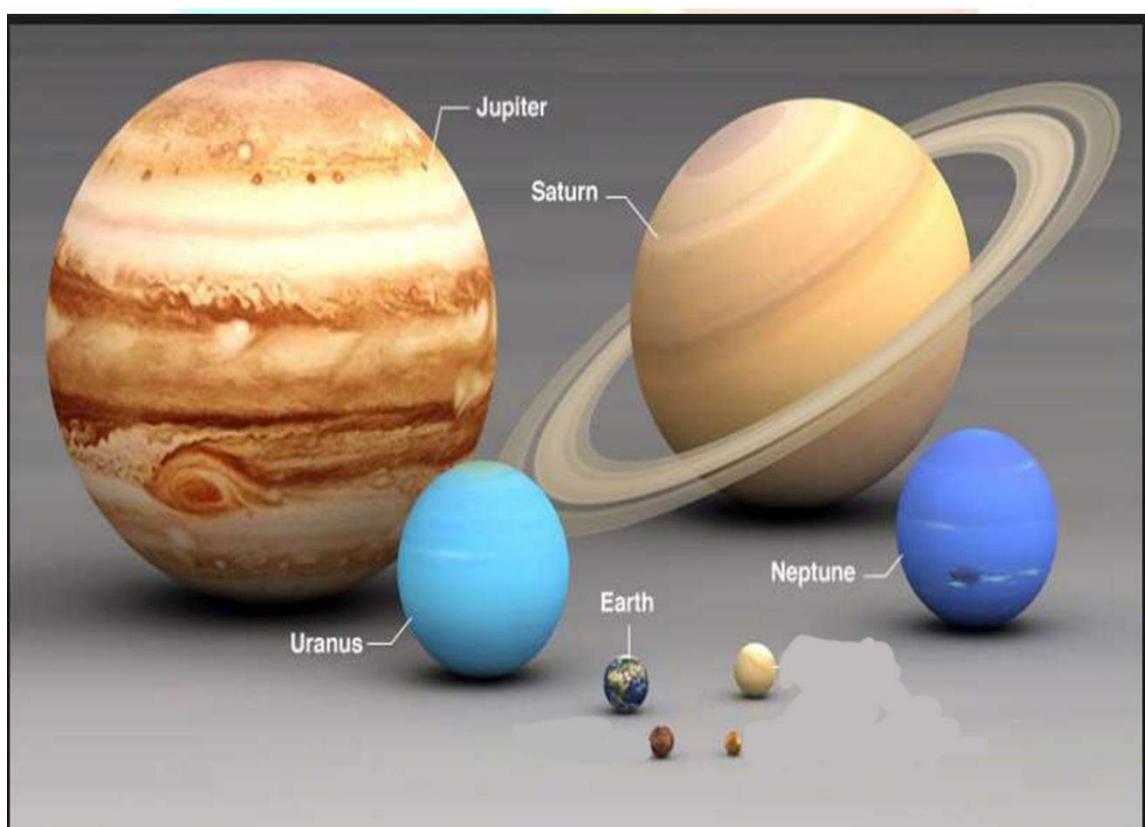
Average monthly rainfall and temperature

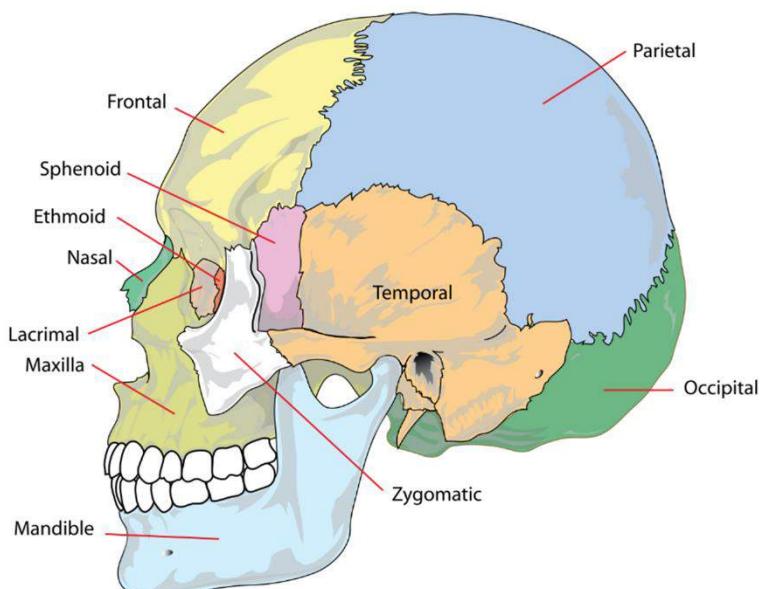
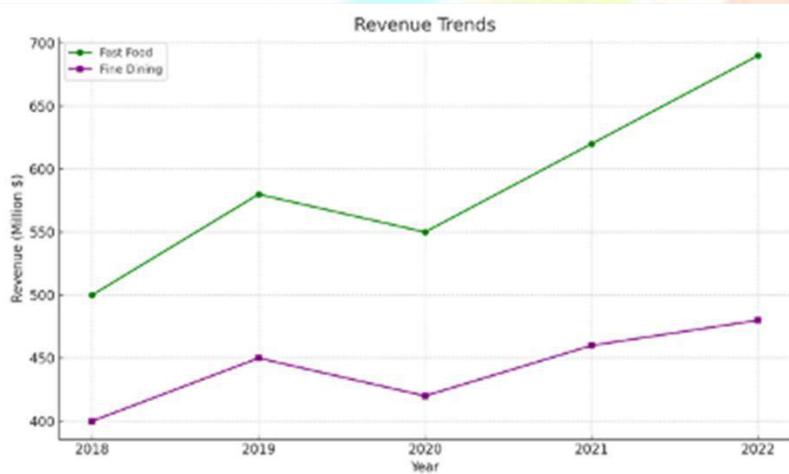
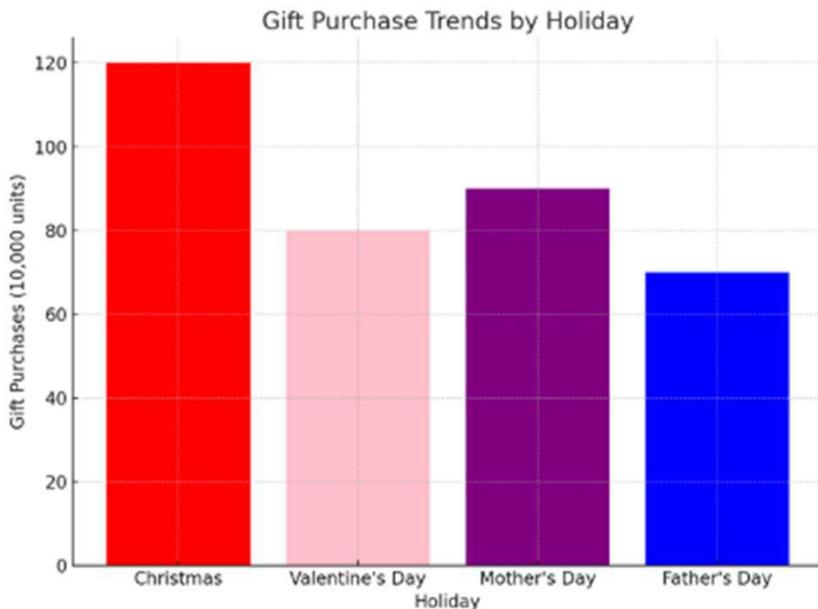


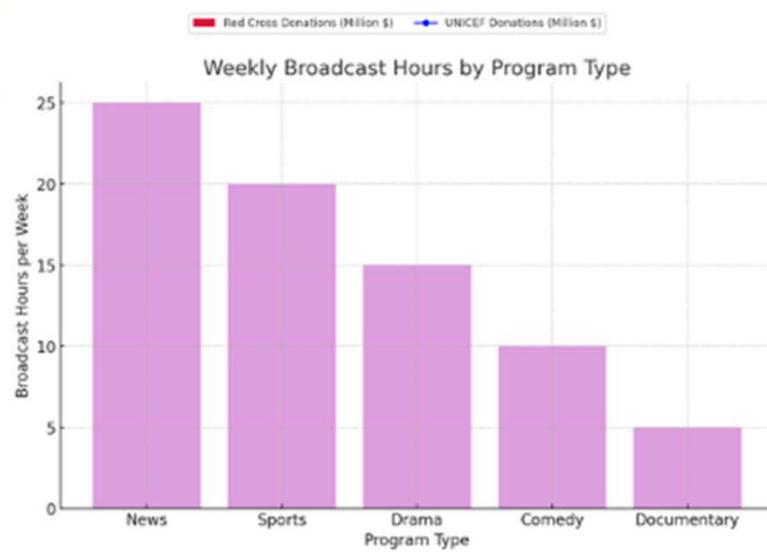
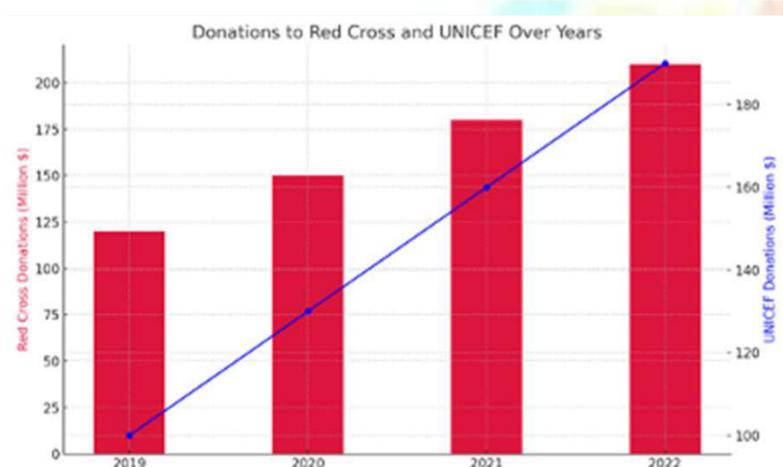
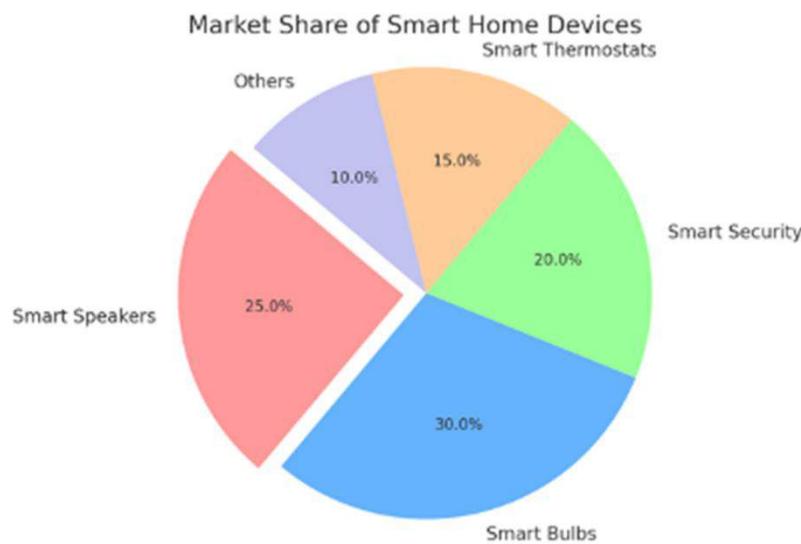
Annual Crop Production Distribution

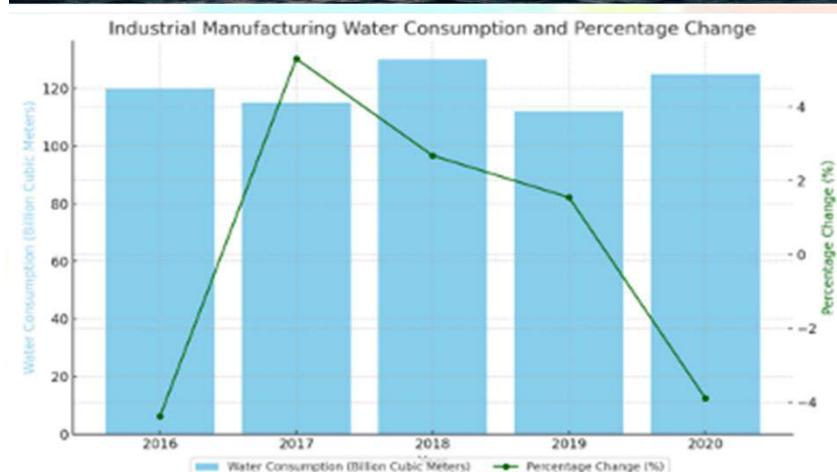


Apple: Revenue and Gross Margin since iPhone Launch





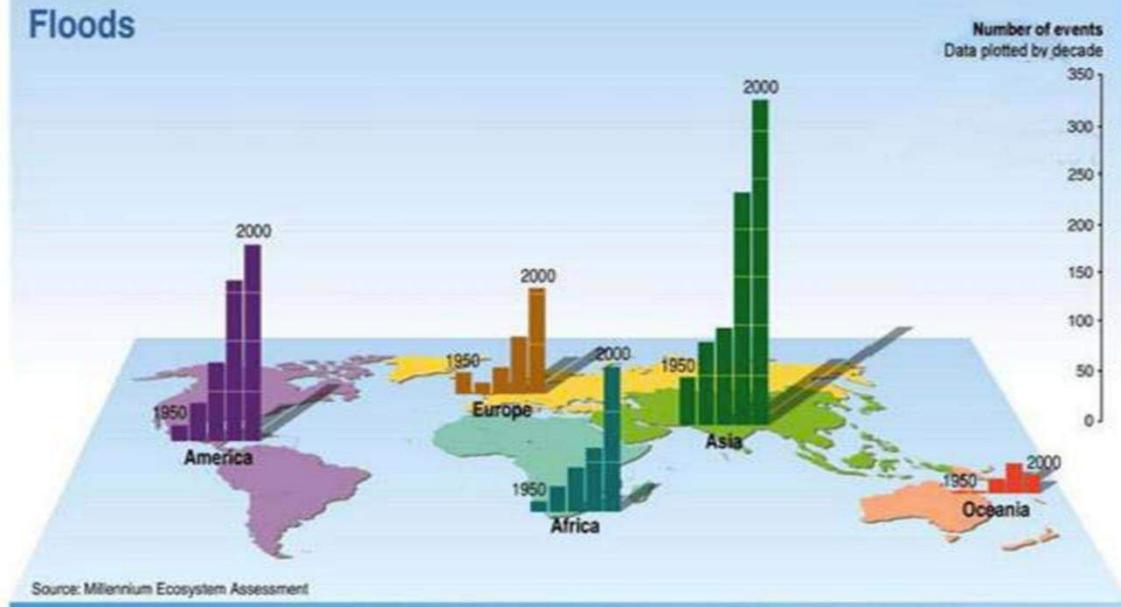


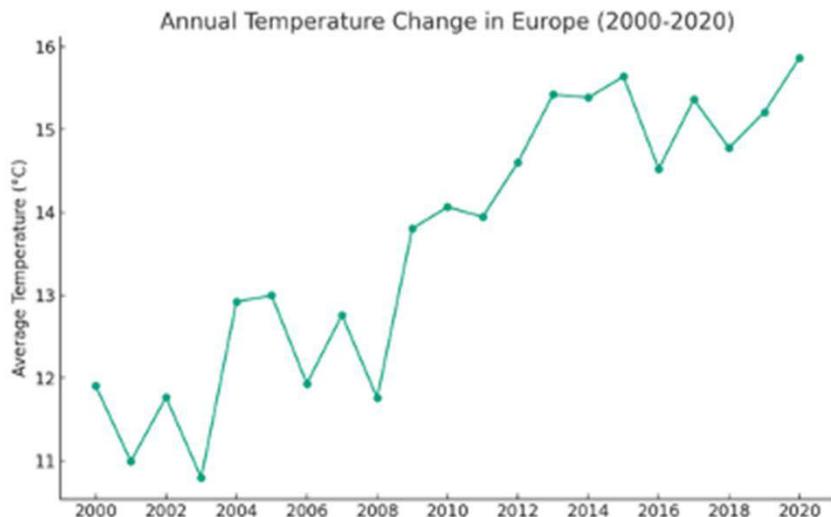


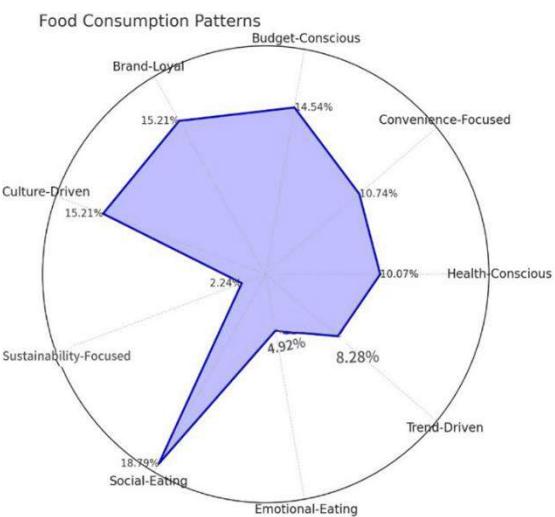


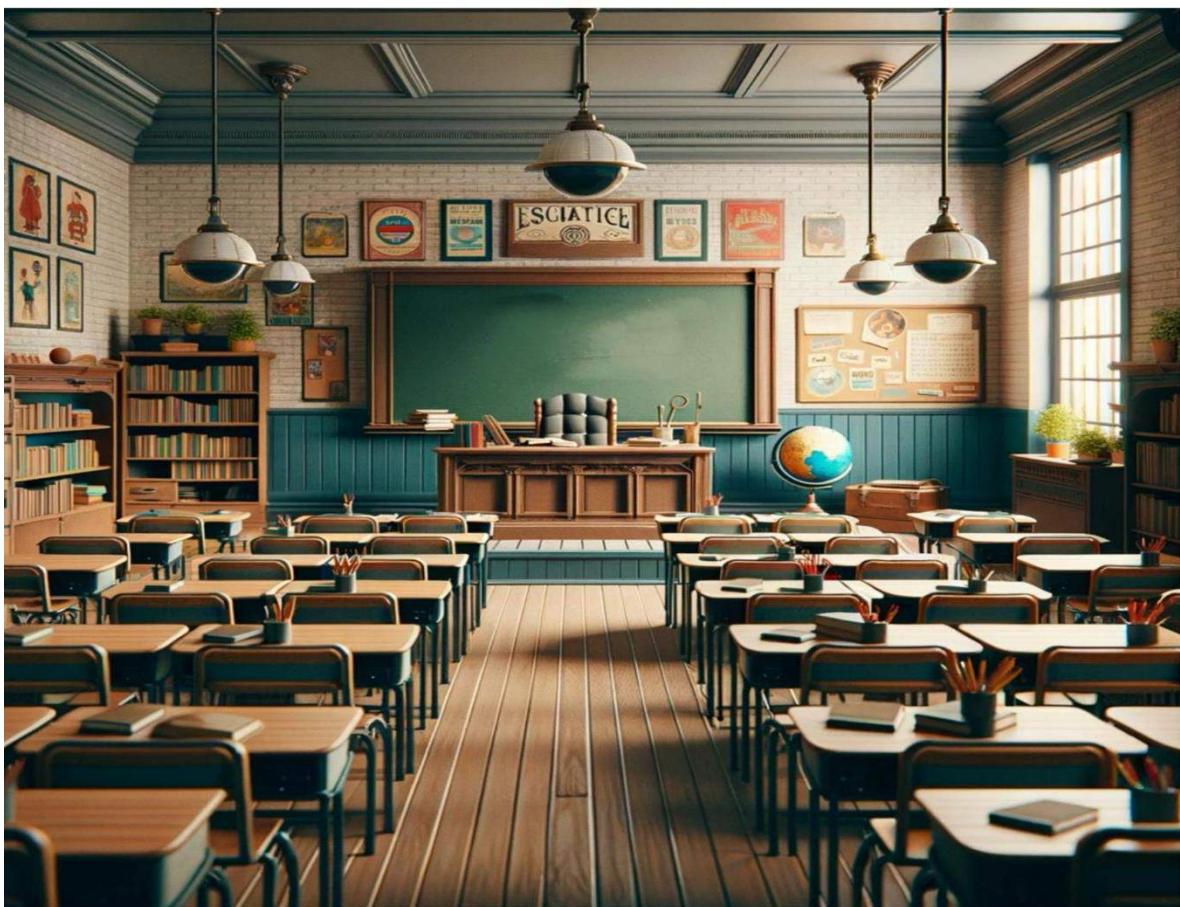
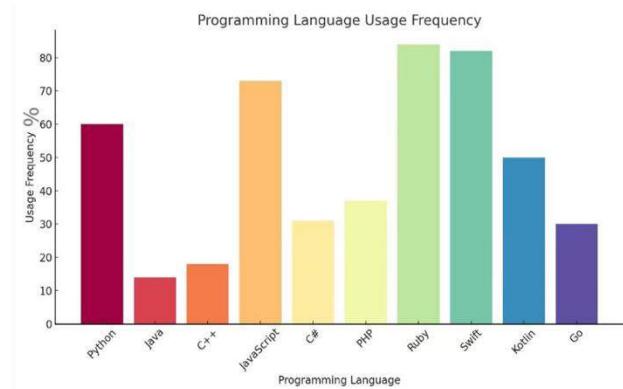
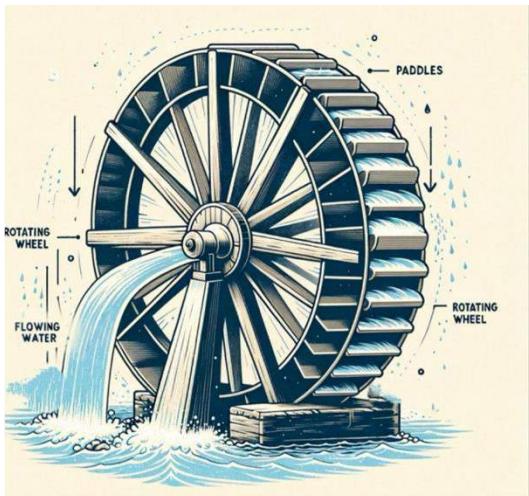
	2020 GDP Share	2020 GERD Share	2021 GDP Share	2021 GERD Share	2022 GDP Share	2022 GERD Share
North America	20.0%	29.1%	20.1%	29.2%	20.1%	29.2%
South America	4.9%	2.0%	5.0%	2.0%	4.8%	1.9%
Asia	42.0%	41.3%	42.3%	41.3%	42.7%	41.8%
Europe	20.2%	21.7%	20.2%	21.7%	20.1%	21.6%
Middle East	3.9%	2.3%	3.7%	2.2%	3.7%	2.2%
Russia	4.3%	2.3%	4.3%	2.3%	4.2%	2.3%
Africa	4.5%	1.2%	4.4%	1.2%	4.3%	1.1%

Floods



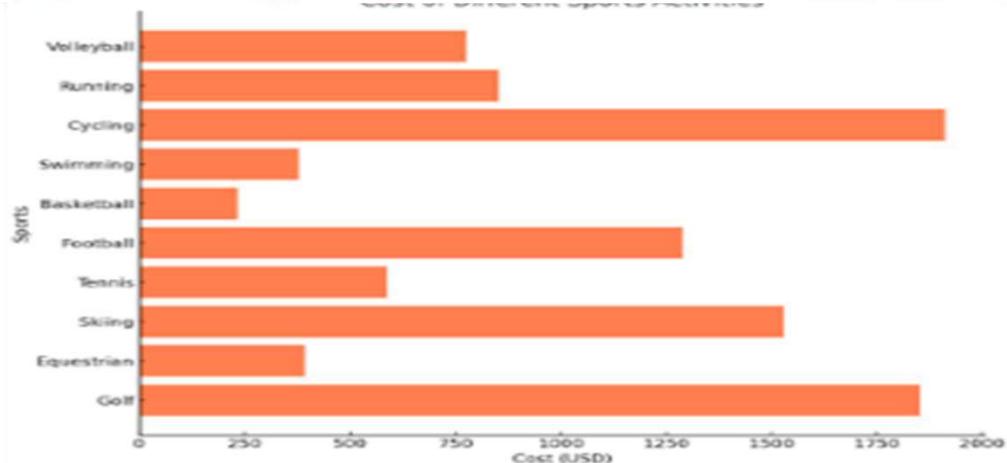






Increase in the number of dwellings over past 10 years

Region	Dwelling stock			
	Year		Increase number	Percentage increase
	1994	2004		
Sydney city	45,040	76,833	31,793	71

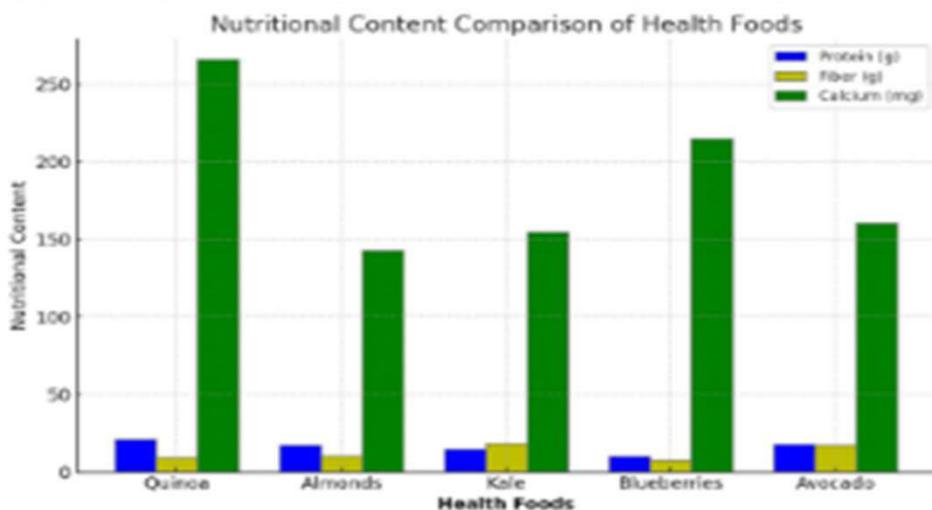


Capital gains tax rates for 2022

Long-term capital gains rate	Taxable Income
Single filers	
0%	\$0 to \$41,675
15%	\$41,676 to \$459,750
20%	\$459,751 or more
Married filing jointly	
0%	\$0 to \$83,350
15%	\$83,351 to \$517,200
20%	\$517,201 or more





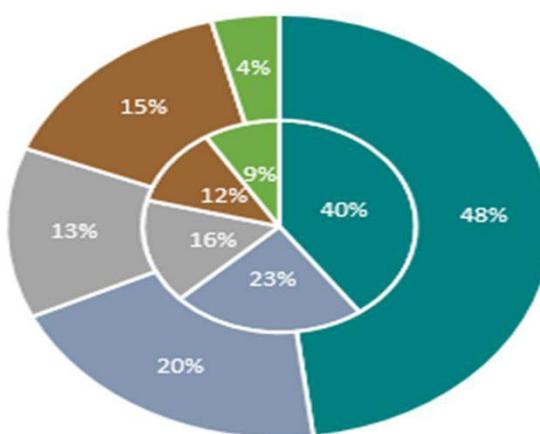


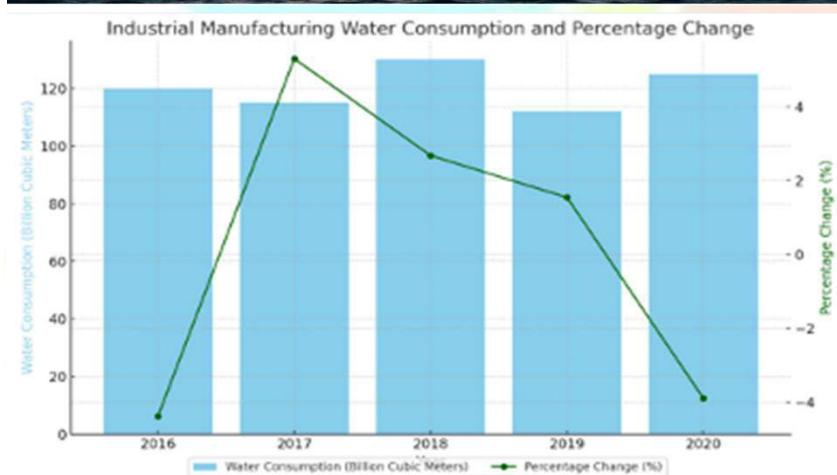
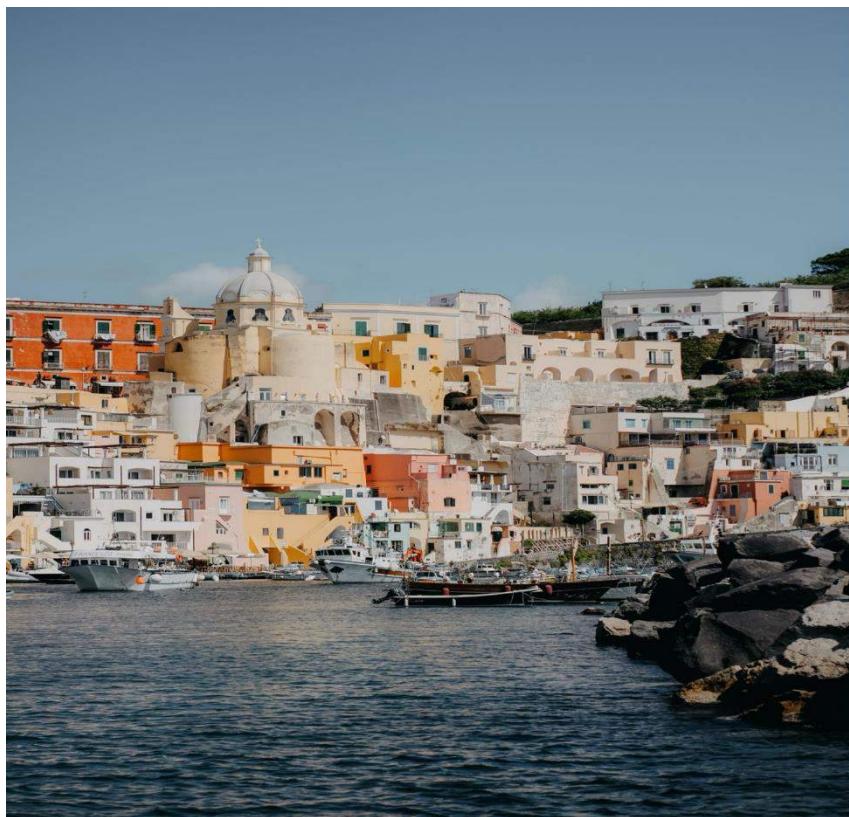
Segment A now accounts for nearly half of sales

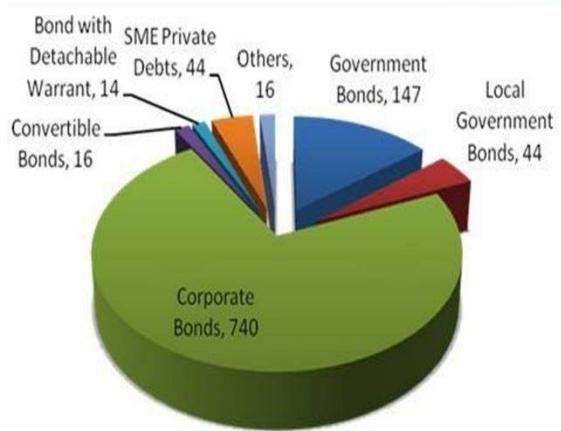
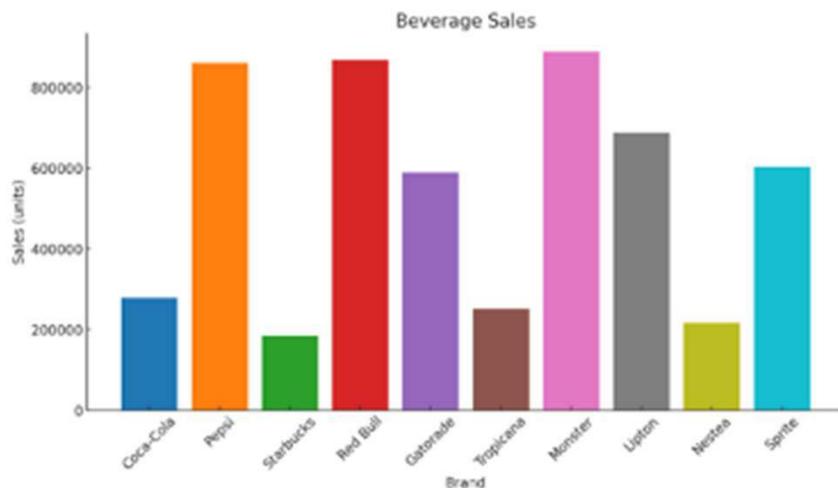
Proportion of sales by segment.

Inner circle 2014, Outer circle 2015

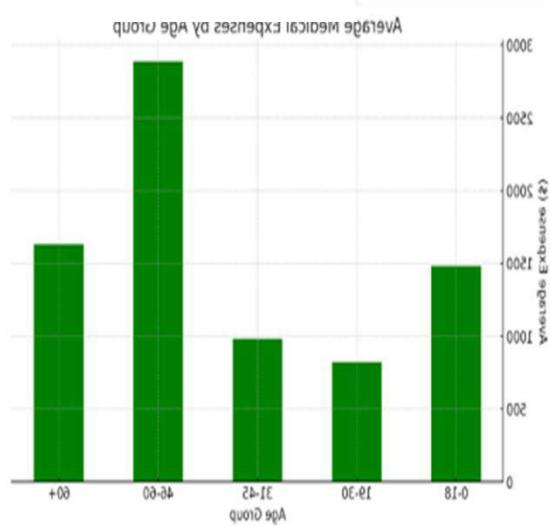
■ Segment A ■ Segment B ■ Segment C ■ Segment D ■ Segment E



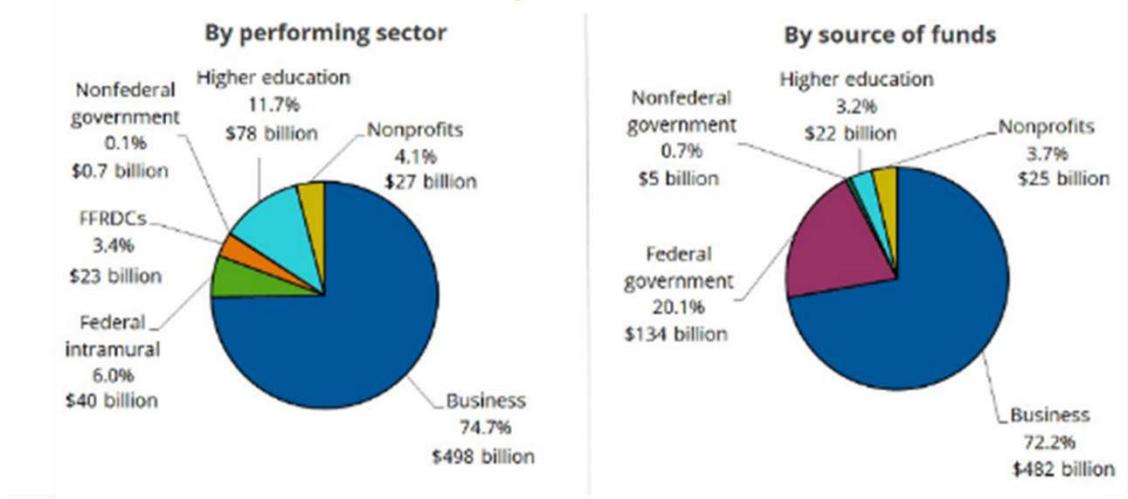




The number of bonds listed at the end of 2012

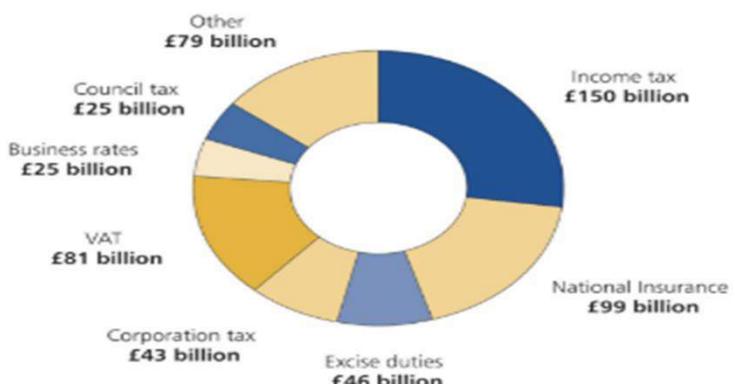


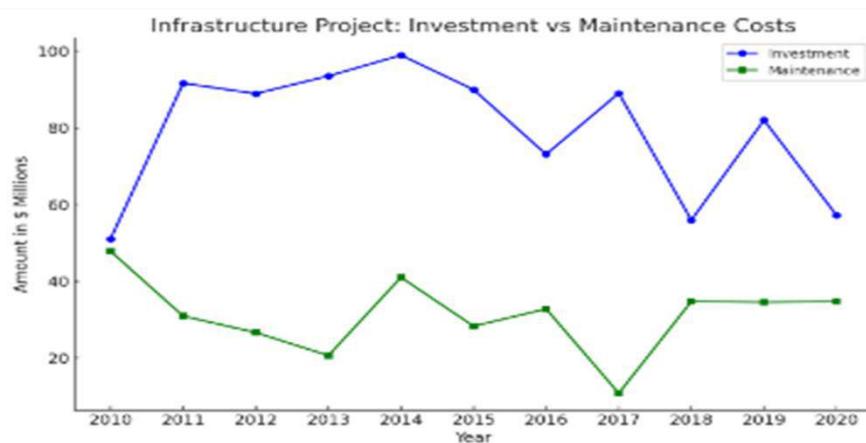
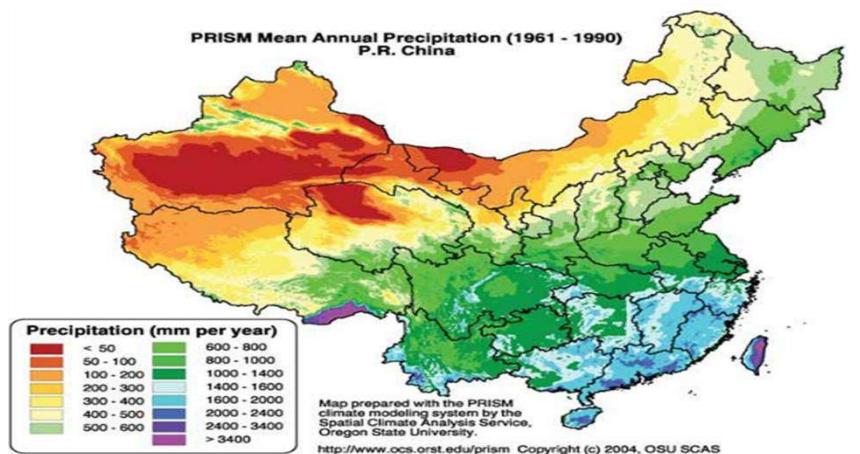
U.S. total of R&D expenditures in 2019: \$667 billion



Government receipts

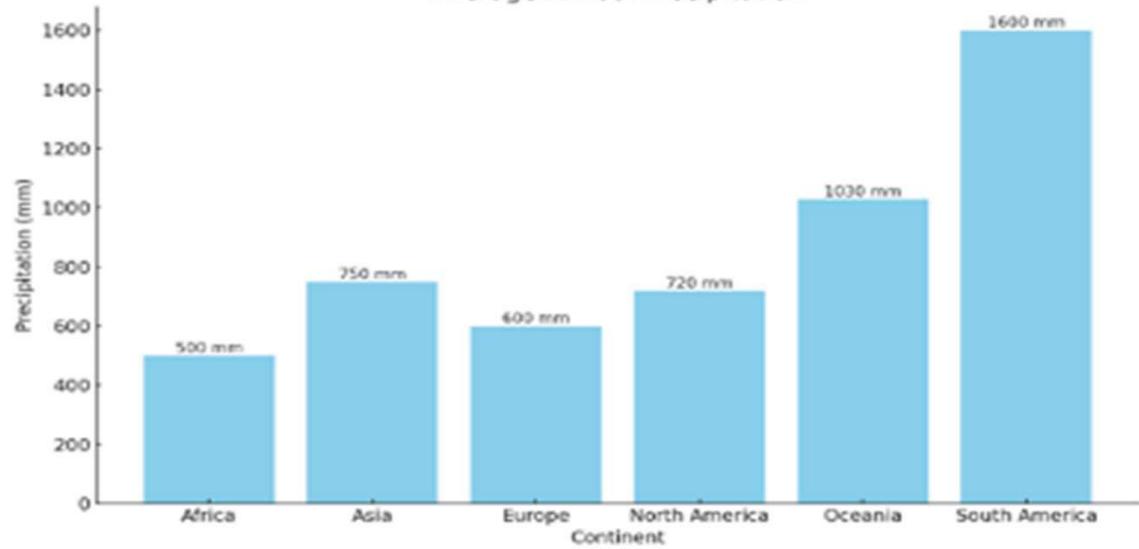
Total receipts – £548 billion

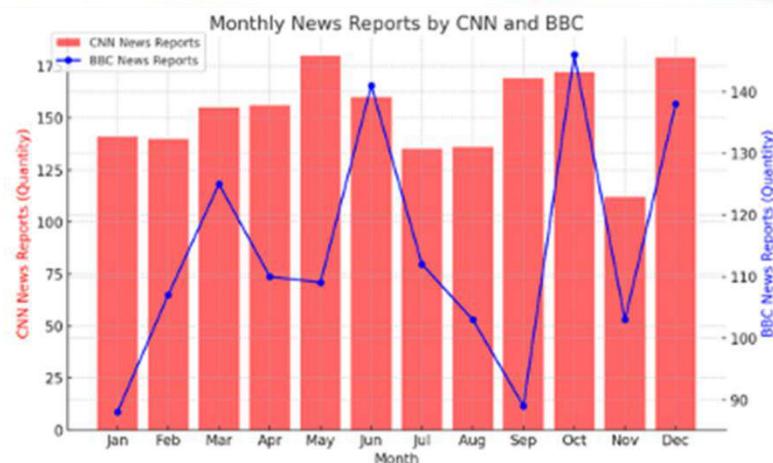
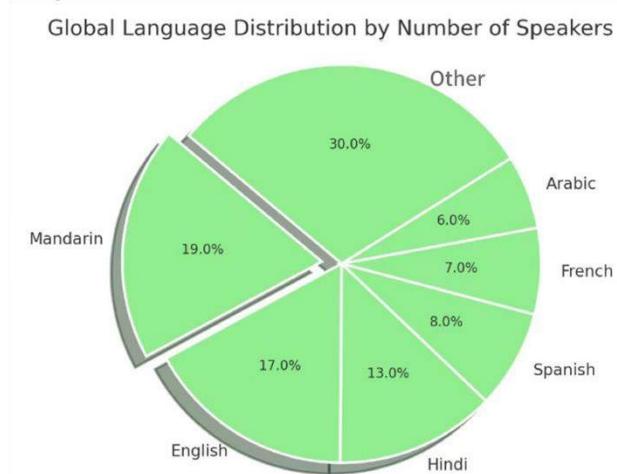
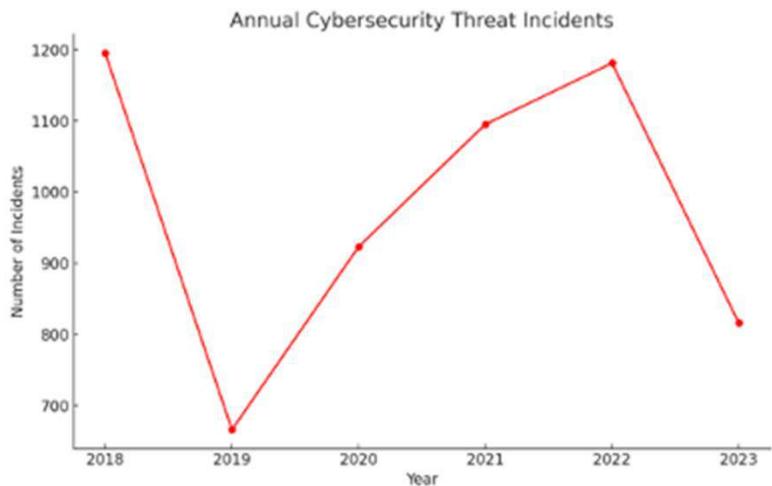


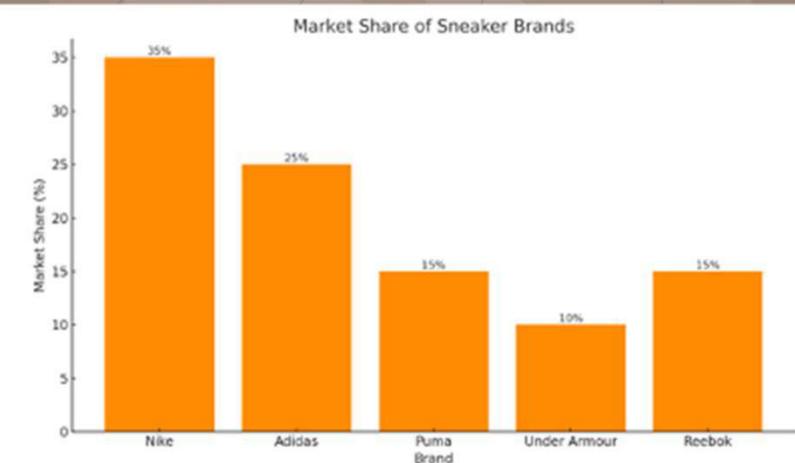




Average Annual Precipitation

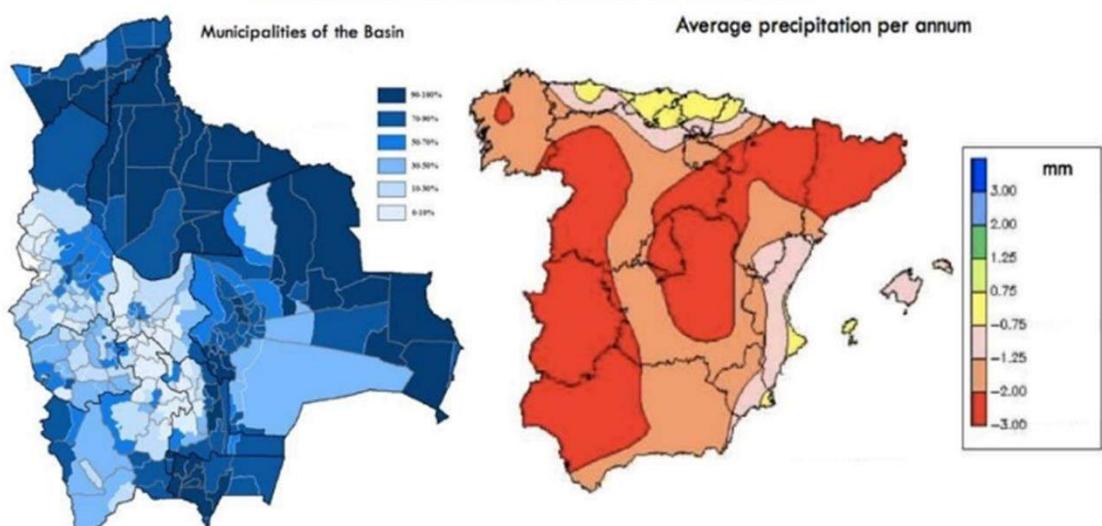






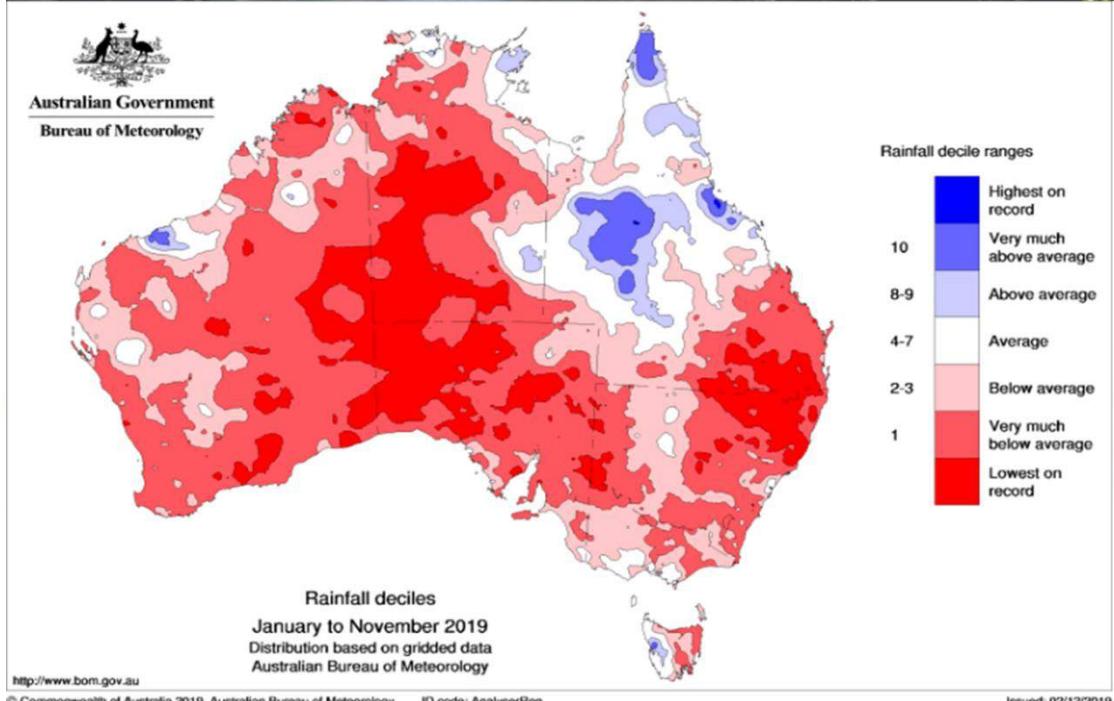
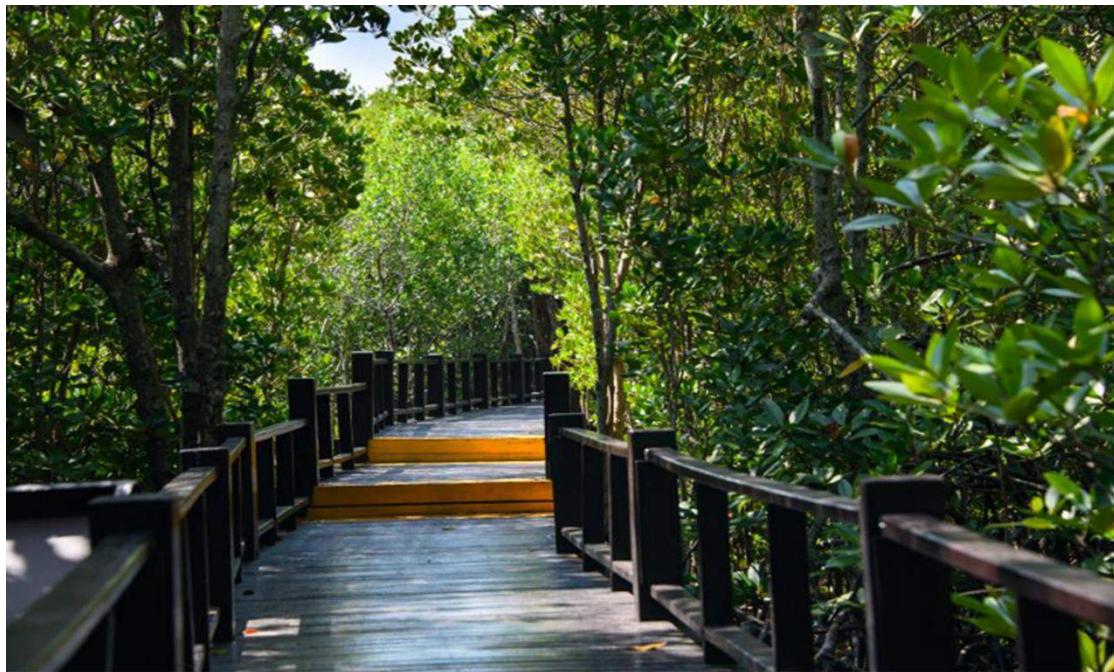


Municipalities and Precipitation of Gariep Basin

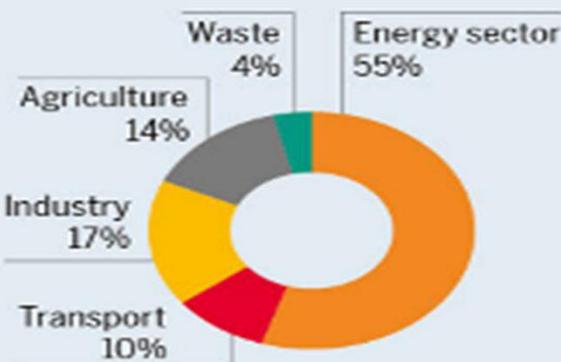


The biggest fires in California history

FIRE NAME	YEAR	DEATHS	ACREAGE
Mendocino Complex	2018	1	459K
Thomas	2017	2	282K
Cedar	2003	15	273K
Rush	2012	0	272K
Rim	2013	0	257K
Zaca	2007	0	240K
Carr	2018	8	230K
Matilija	1932	0	220K
Witch	2007	2	198K
Klamath Theater Complex	2008	2	192K
Marble Cone	1977	0	178K
Laguna	1970	5	175K
Day	2006	0	163K



Fossil fuels and nuclear undermine energy security



Graph 1: Ukraine's greenhouse gas (GHG) emissions by sector, 2015

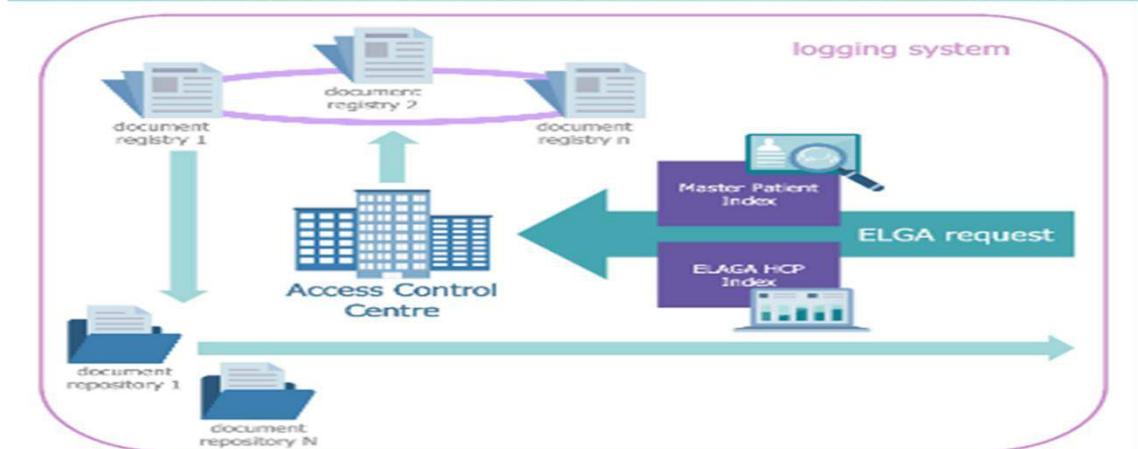
Geographical distribution of the languages of Switzerland (2000)

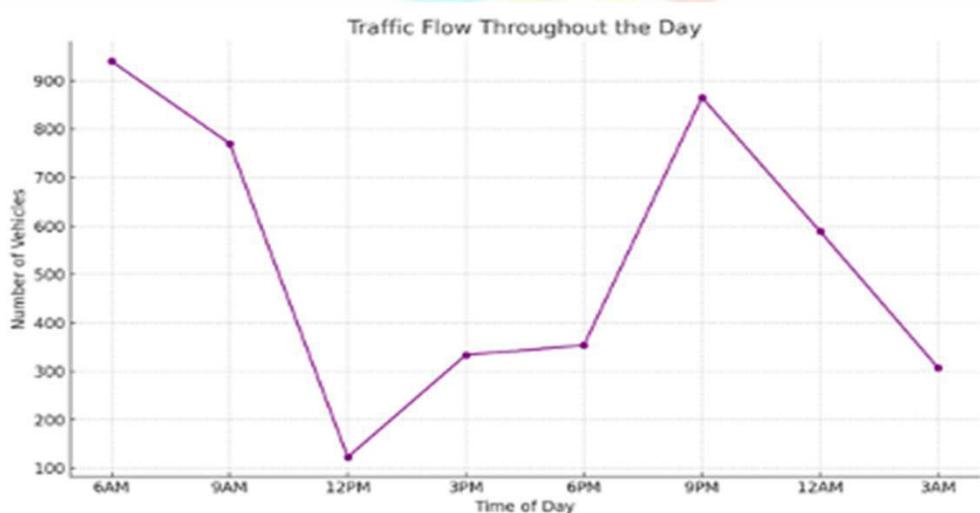
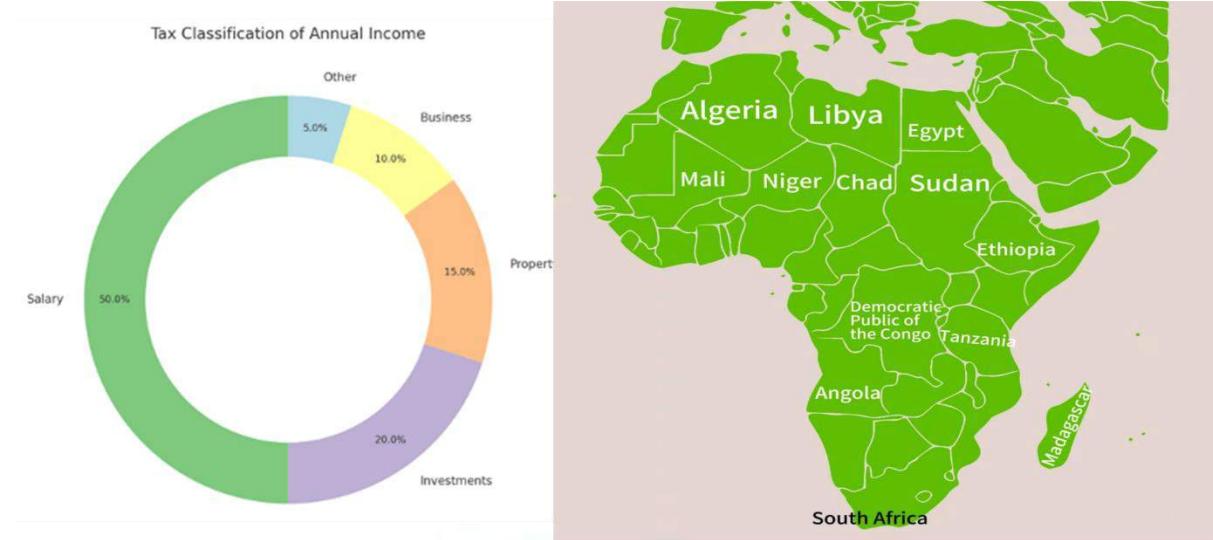


HAND TOOL MANUFACTURER RESULTS

(All figures are in \$ millions)

Item	Jan-Sept 2002 (Actual)	Jan-Sept 2003 (Projected)	Jan-Sept 2003 (Actual)
Net Sales	18.661	19.221	20.661
Cost of Goods Sold	12.969	13.262	13.223
Gross Margin	5.961	5.843	7.438
SG&A Expenses	5.411	5.381	5.371
Net Income	0.279	0.467	2.06

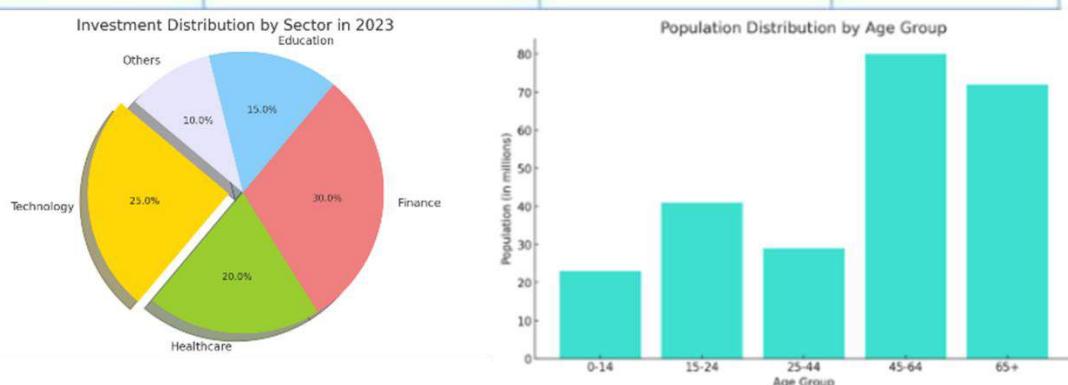








Country	Number of People using rail transport (not including metro) (in million)	Passenger kilometres per head of population	Cargo carried (billions of tons)
Malaysia	5.9	770	22.2
Canada	0.3	80	28.20
China	27	1980	23.01
UAE	5.5	780	21.9

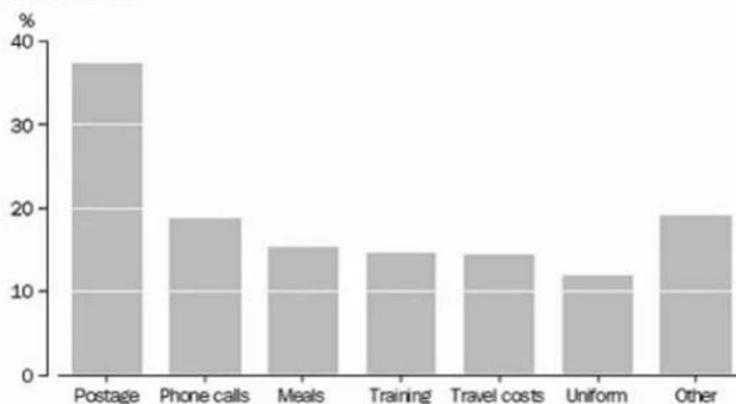




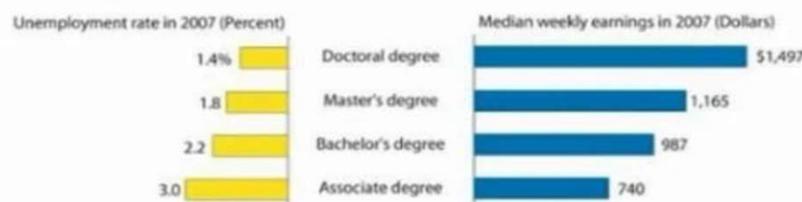
Mobile Anti-Malware Market - Growth Rate by Region (2019 - 2024)



VOLUNTEERS WHO INCURRED EXPENSES: REIMBURSEMENT AVAILABLE

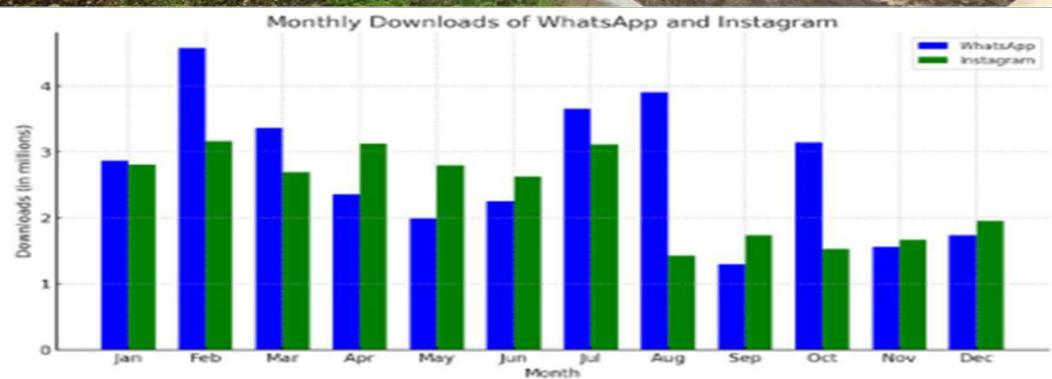


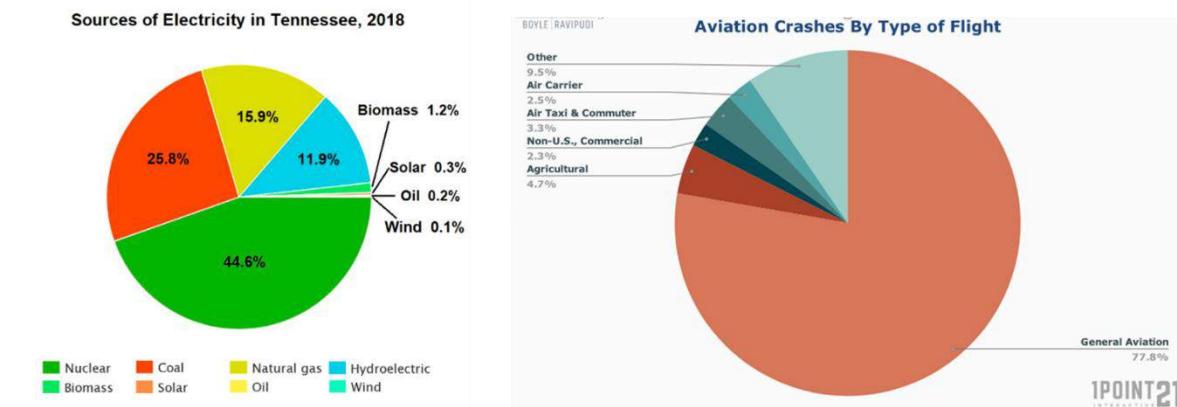
Education Pays



Source: Bureau of Labor Statistics, Current Population Survey





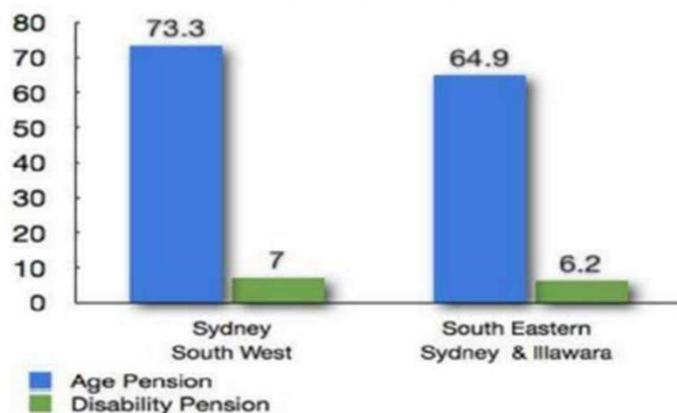


Generation name	Birth years, Ages in 2010	% of total adult population*	% of internet-using population*
Millennials	Born 1977-1992, Ages 18-33	30	35
Gen X	Born 1965-1976, Ages 34-45	19	21
Younger Boomers	Born 1955-1964, Ages 46-55	20	20
Older Boomers	Born 1946-1954, Ages 56-64	14	13
Silent Generation	Born 1937-1945, Ages 65-73	7	5
G.I. Generation	Born -1936, Age 74+	9	3

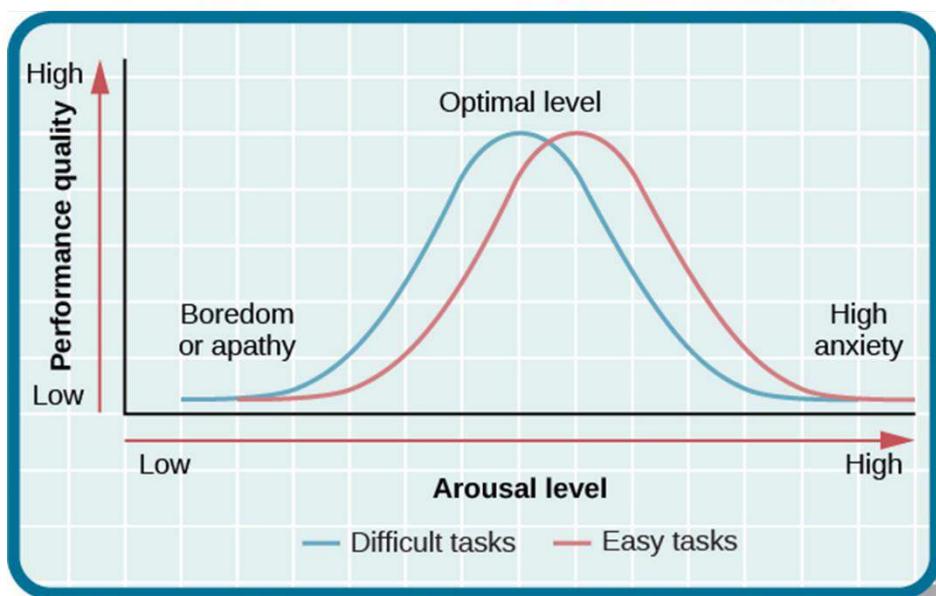
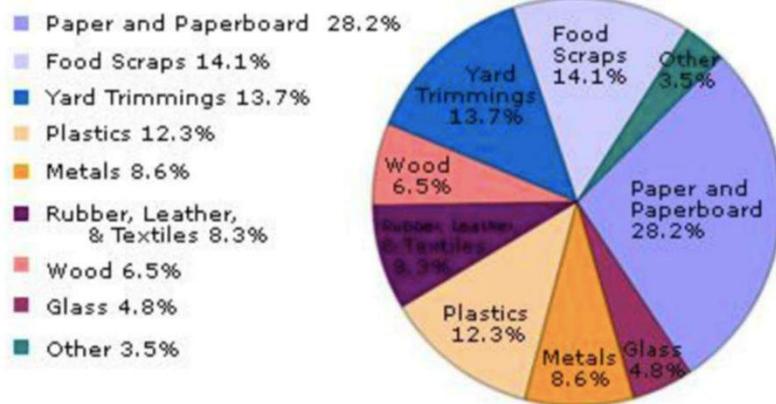
ONE AUSTRALIA



Benefit Recipient by Health Area in Sydney, 2004
 (Per cent of eligible population)



Total MSW Generation (by Material), 2009
 243 Million Tons (Before Recycling)



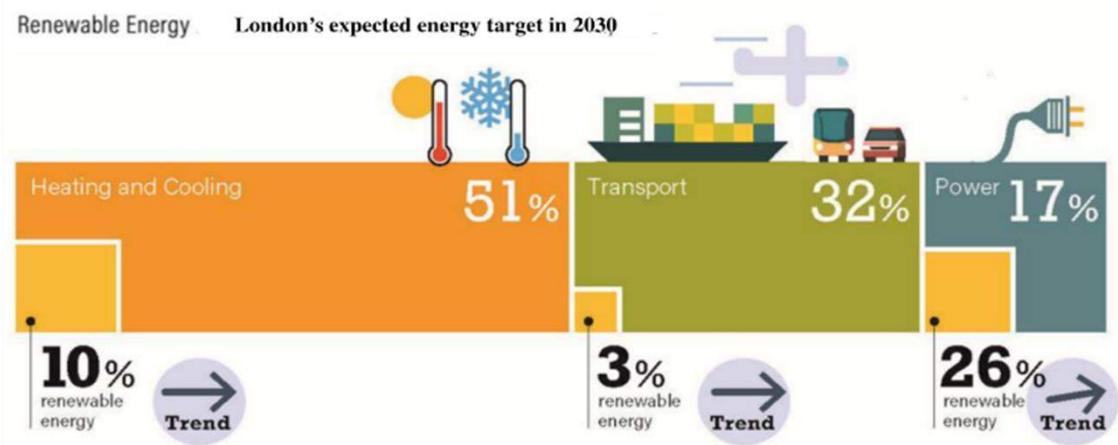
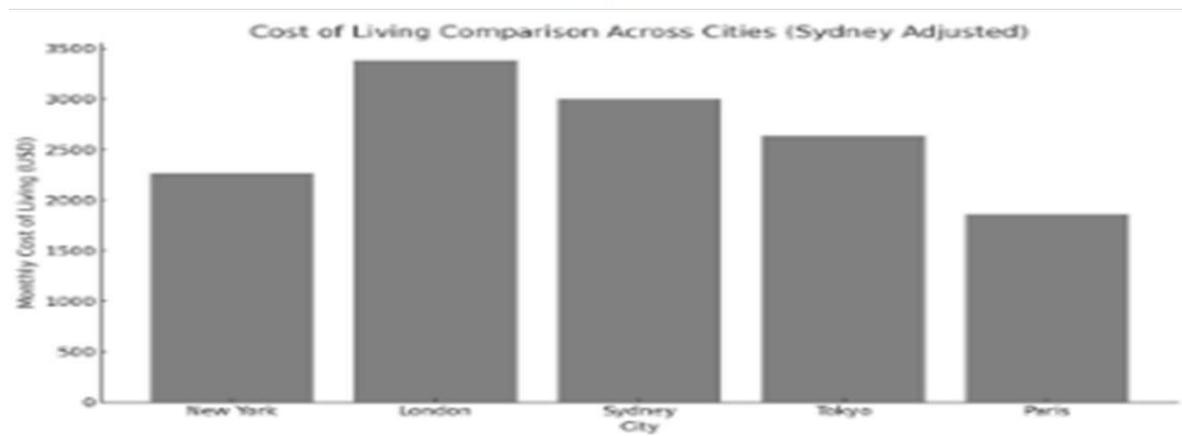
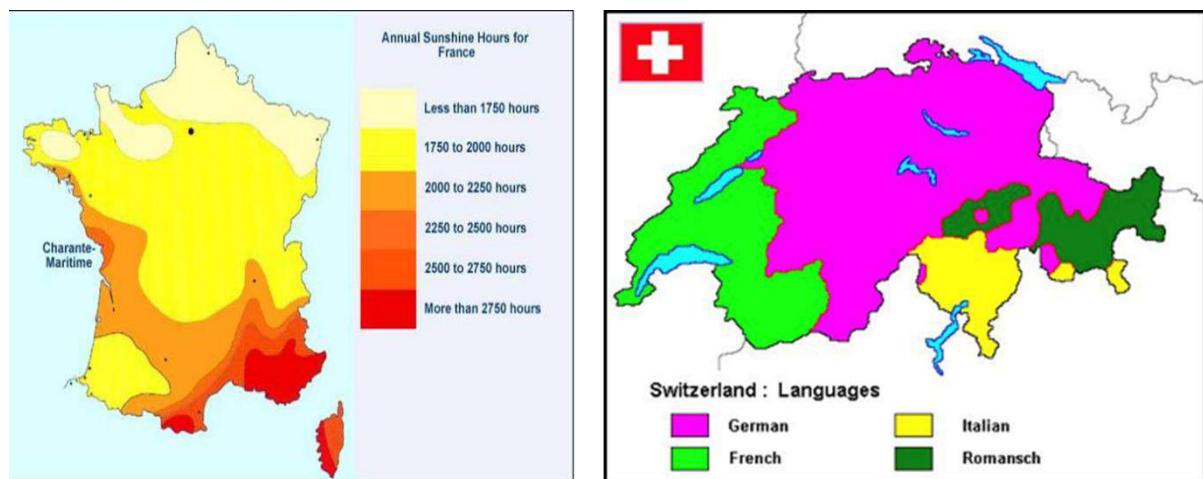
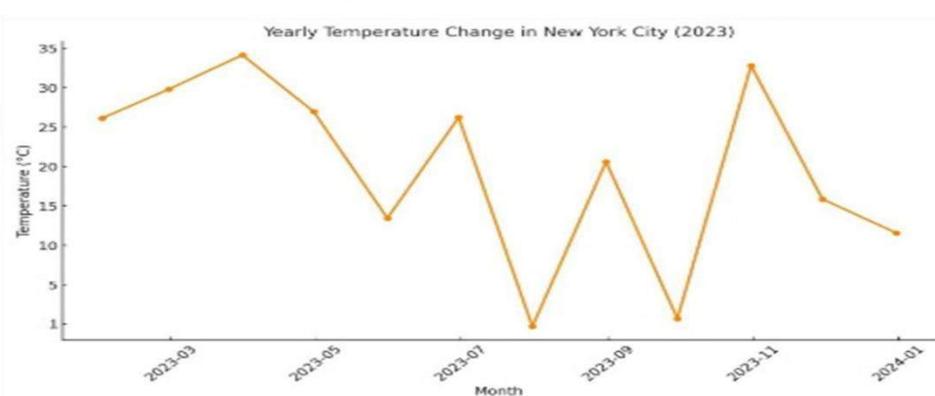
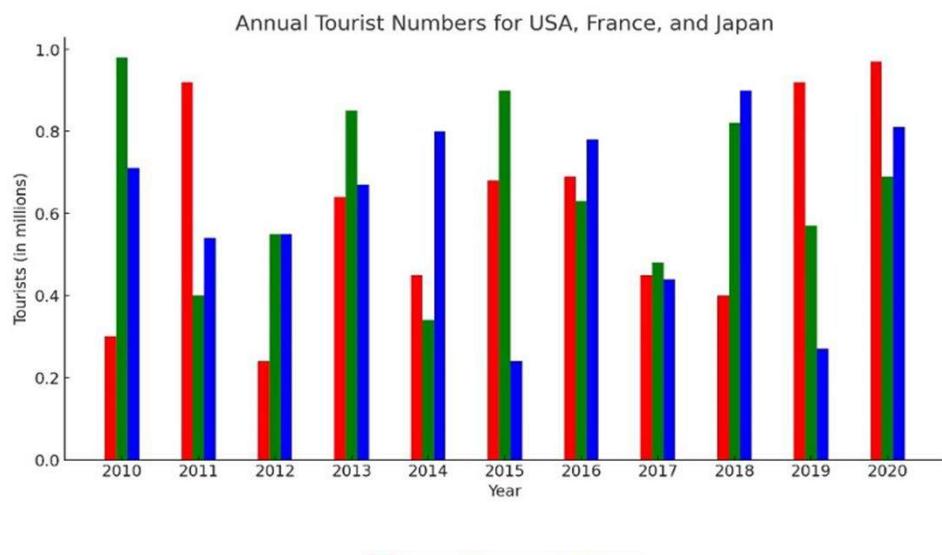
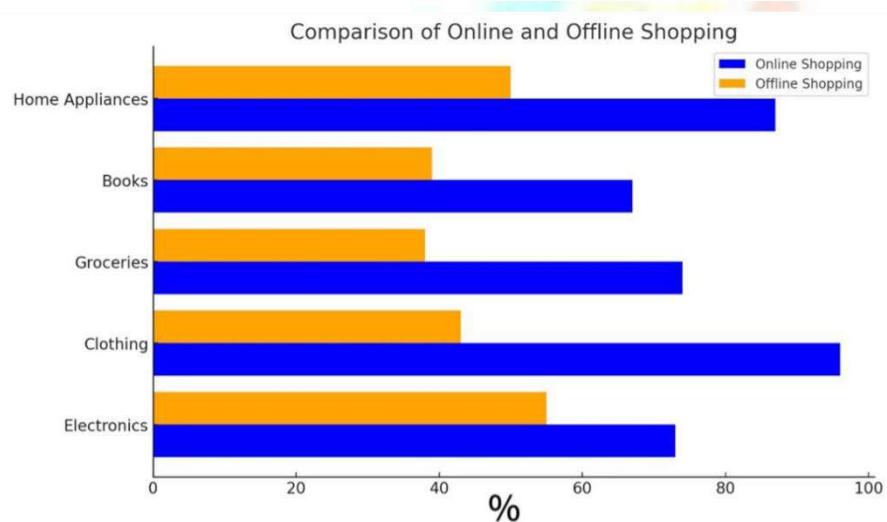
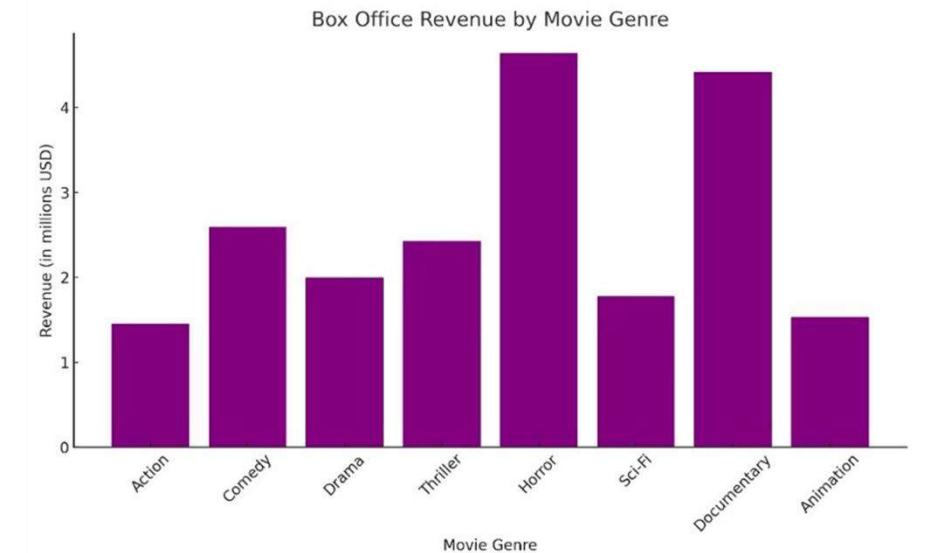


Table 1 Economic inactivity through the generations

Birth cohorts	Average work expectancy at age 15 years	Average life expectancy	Average inactivity
	years	years	years
1901 Federation	44.2	53.6	9.4
1925–1946 War	42.6	62.8	20.2
1946–1964 Baby Boomers	43.3	67.1	23.7
1965–1979 Gen X	43.1	68.8	25.7
1980–2003 Gen Y	42.3	69.9	27.6
2004–2025 Gen Z	42.5	70.6	28.1

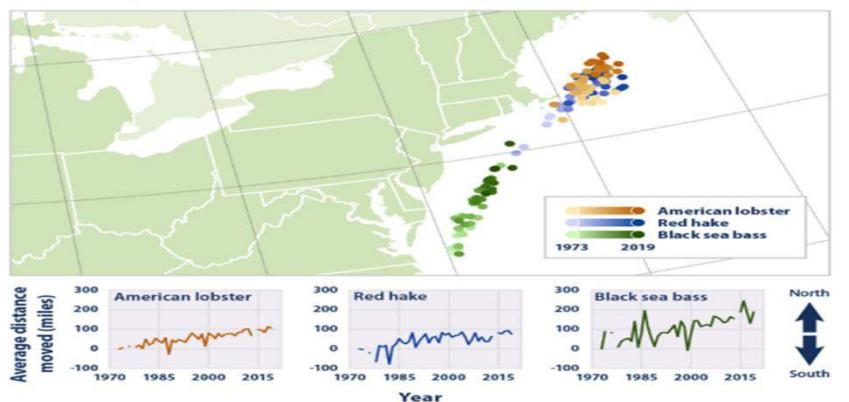




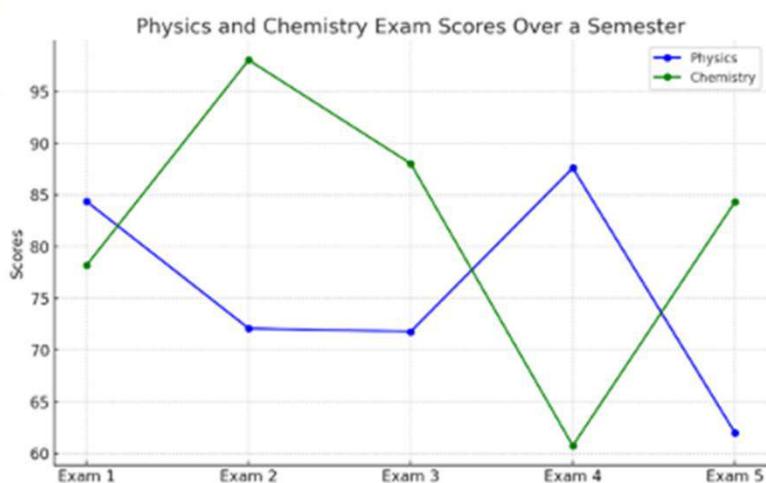
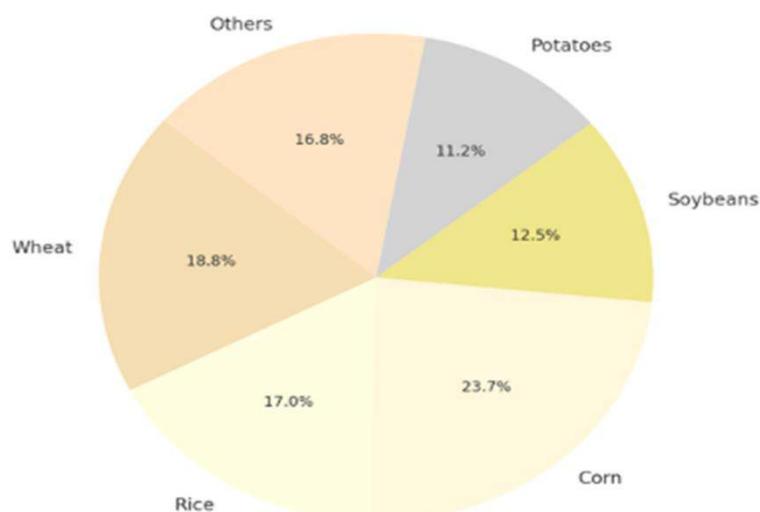
Marine Species Distribution

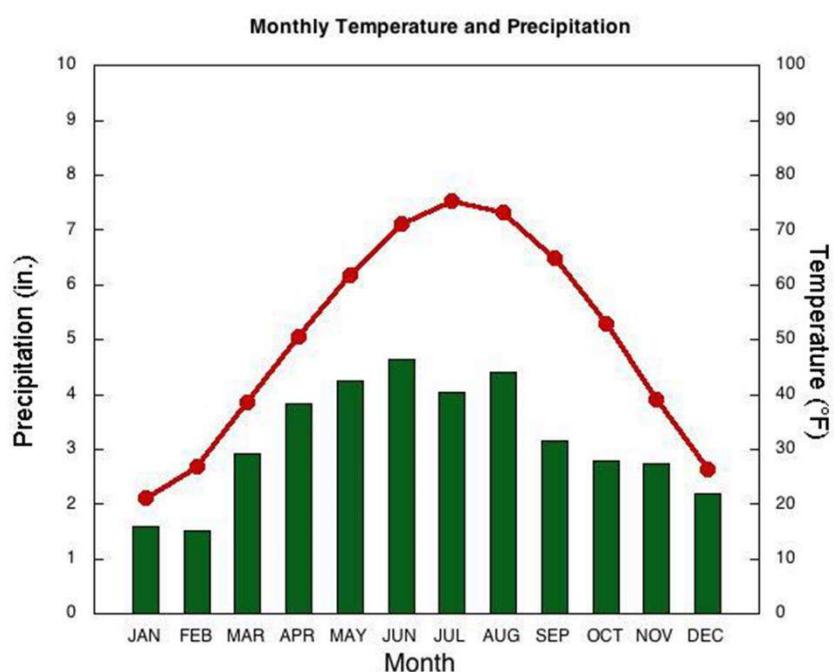
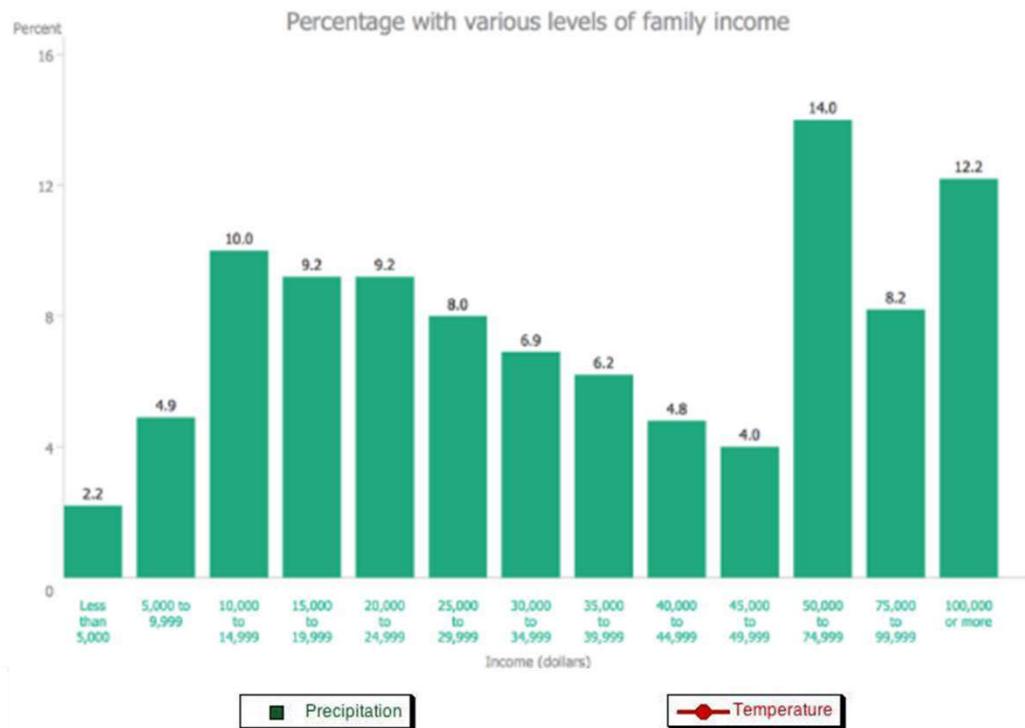
This indicator examines changes in the location of fish, shellfish, and other marine species along U.S. coasts.

Figure 2. Average Location of Three Fish and Shellfish Species in the Northeast, 1973–2019

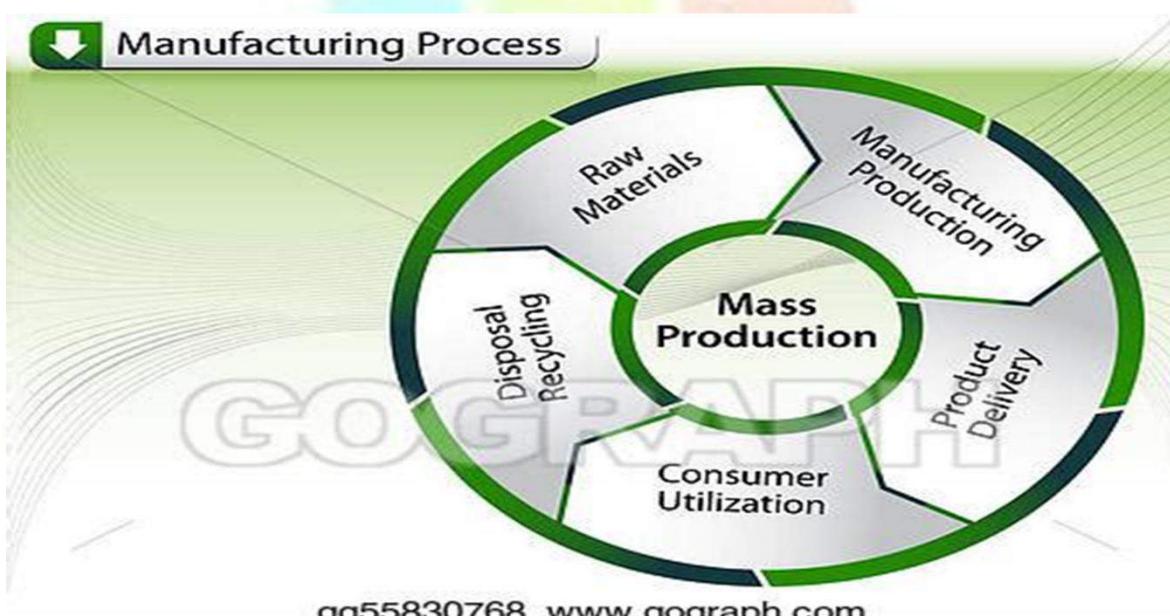
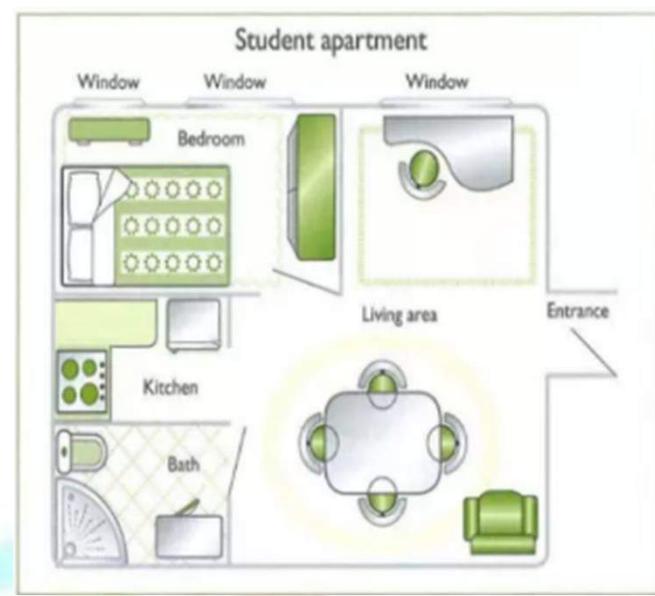


Annual Crop Production Distribution

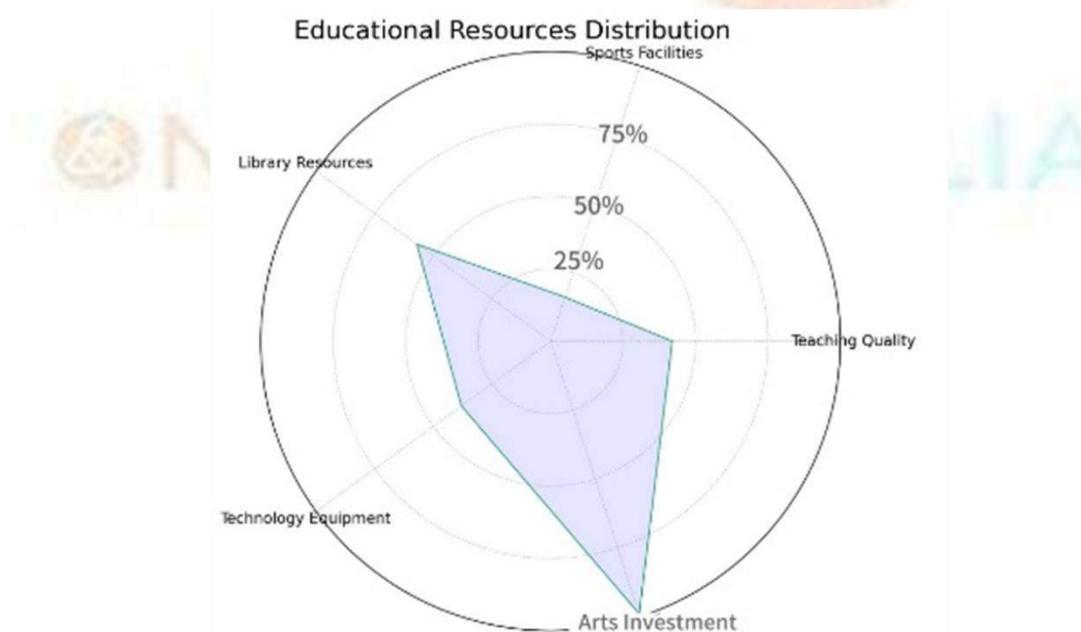
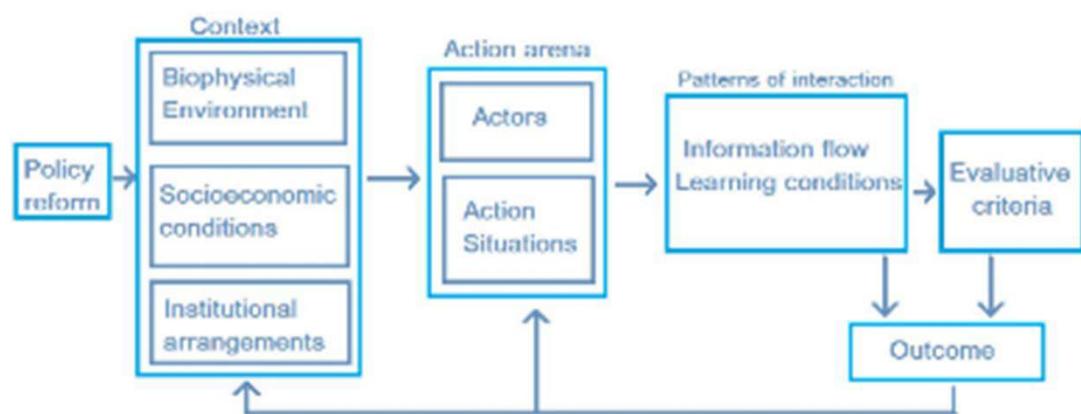


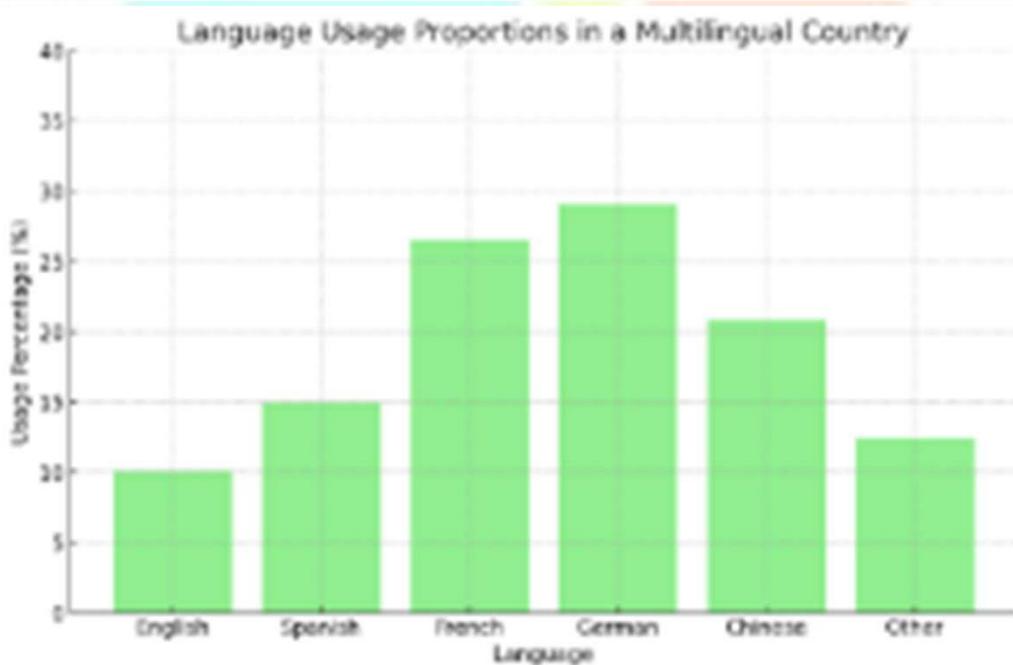
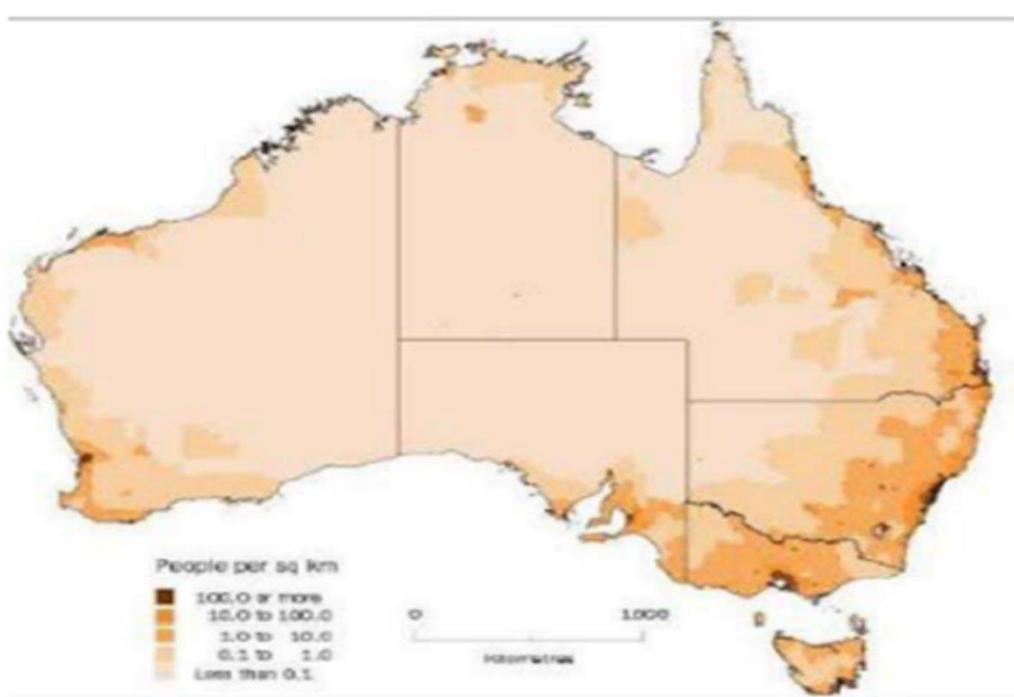


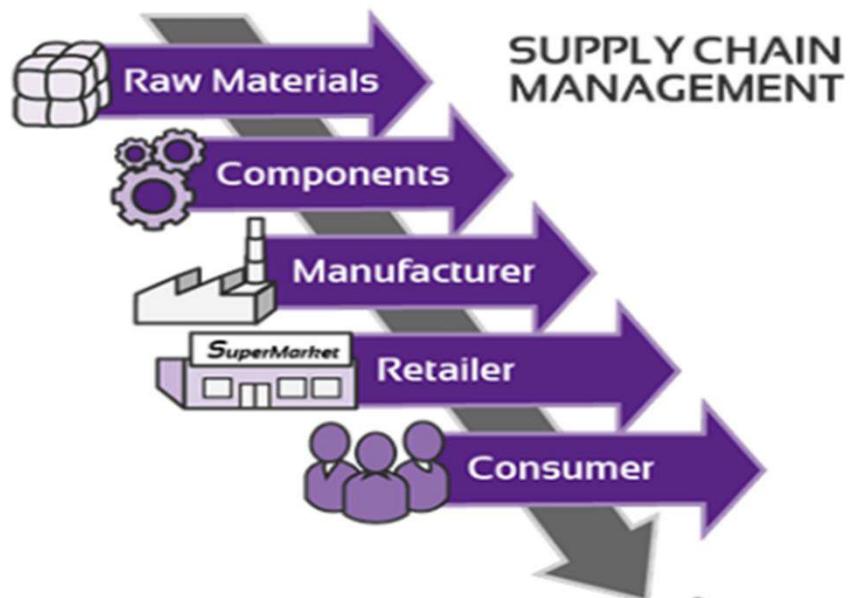
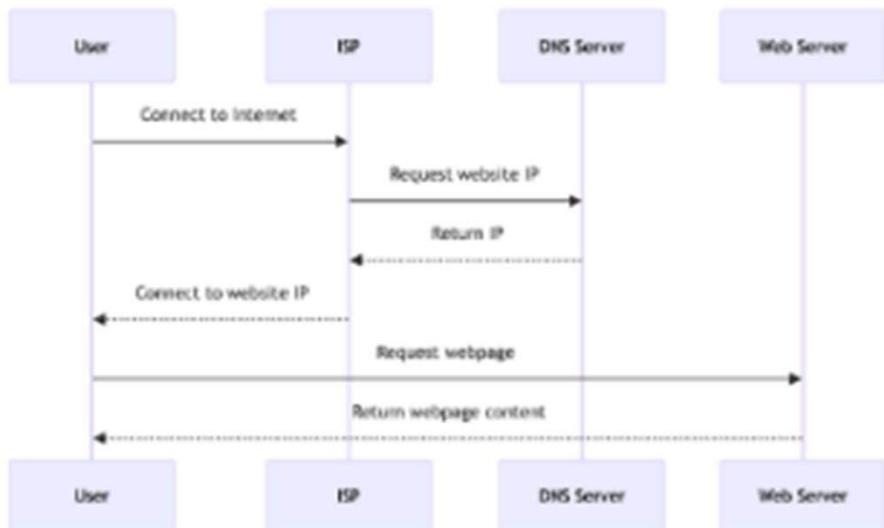




The Institutional analysis and development framework



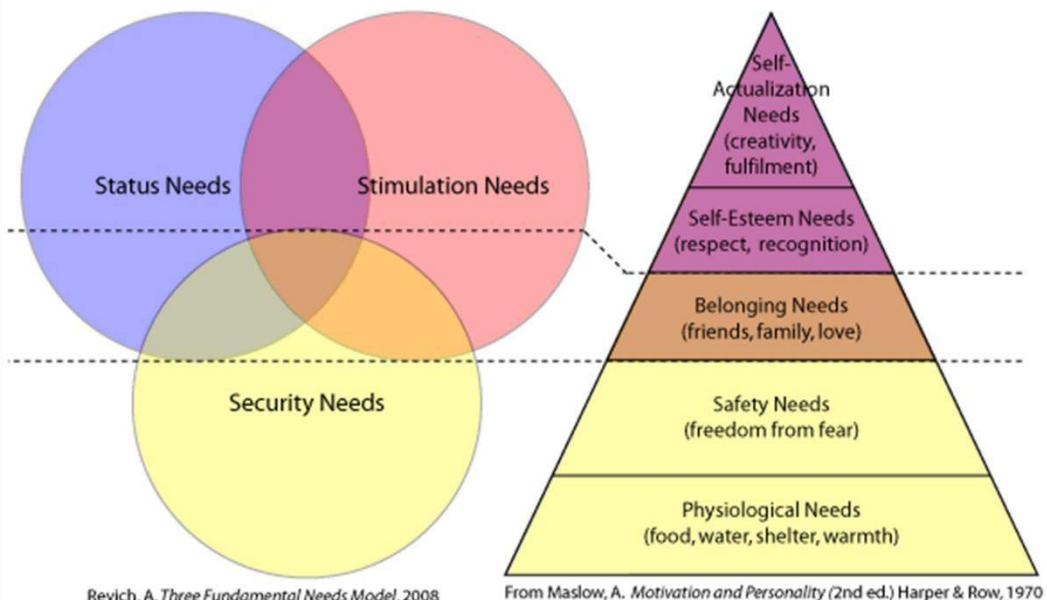




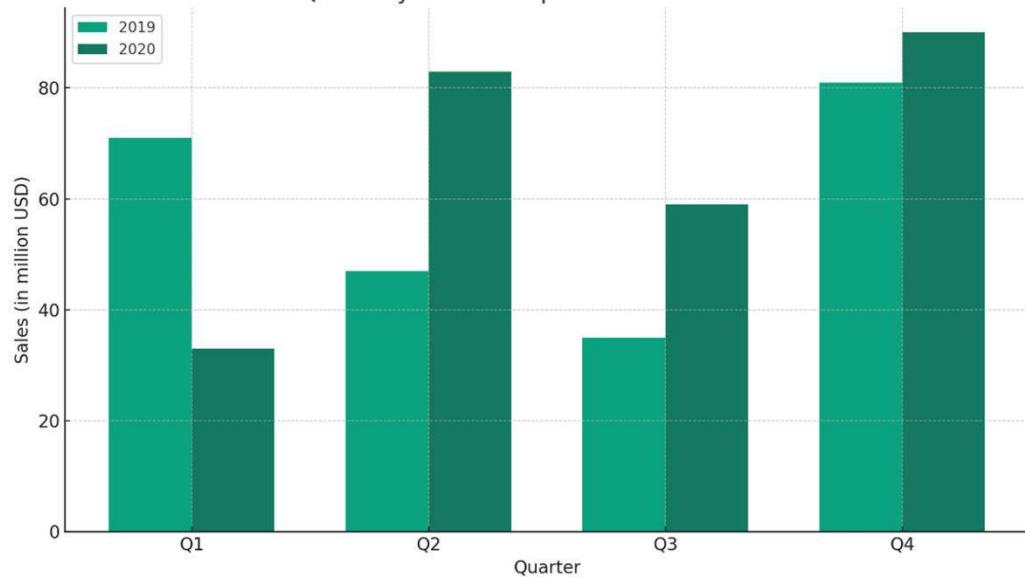


Comparison of the *Fundamental Needs Model* with Abraham Maslow's *Hierarchy of Needs*

© 2008 - Allan Revich



Quarterly Sales Comparison 2019 vs 2020



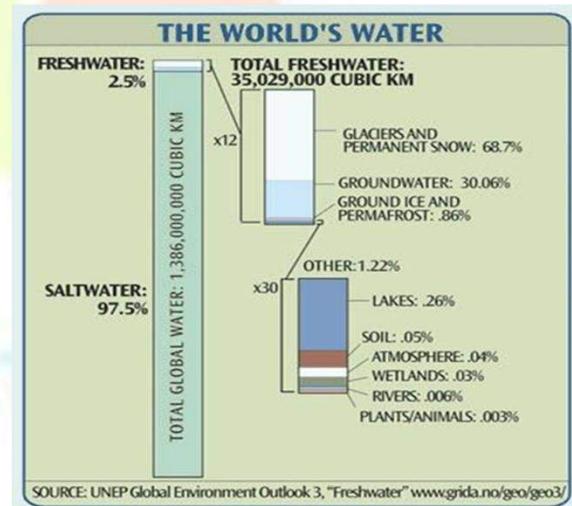
My sales

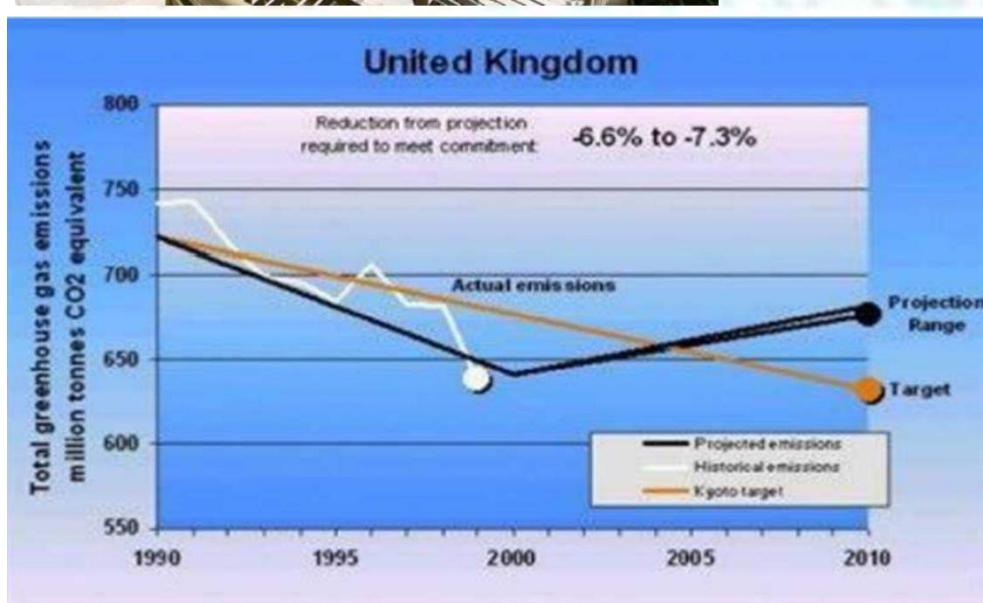
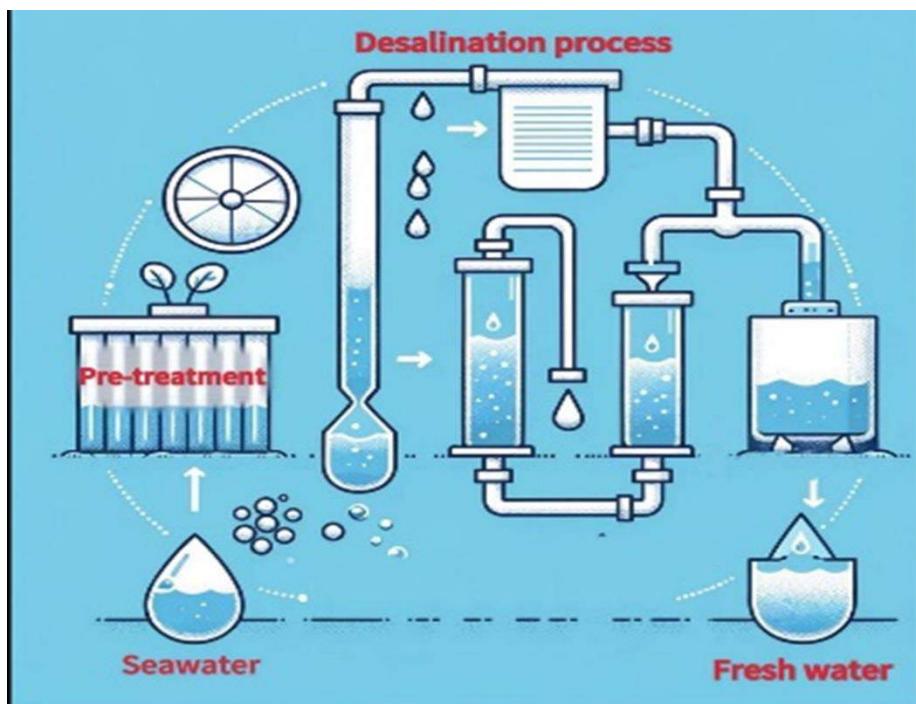


Business development to success



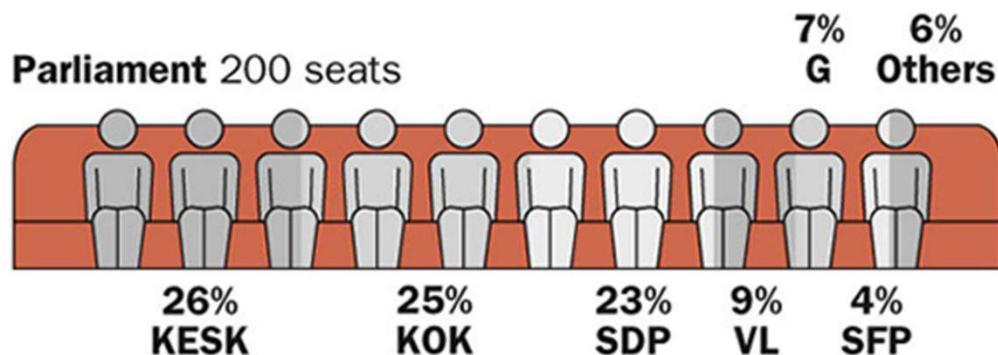








Composition of the Finnish Parliament



KESK = Center Party

SDP = Social Democratic Party

G = Green League

KOK = National Coalition Party

VL = Left Alliance

SFP = Swedish People's Party

RETELL LECTURE

Unhealthy Food

Small changes can add up to big shifts in the environment. We know this from decades of research on addictive substances. I understand we really would like to believe that we're in charge, that we have complete freedom over what we eat. But how free can we be? Living in a saturated environment, one that continuously surrounds us with food products carefully engineered to get us hooked and keep us coming back for more. Those kids in the Tenderloin, they apparently live in what's called a food desert. They don't even have access to a grocery store, really. What's a grocery store when it's stuffed with junk food—74% of it loaded with added sugar? All the health experts will tell you, shop around the perimeter of this grocery store—that way you can steer your way around all the junk that's in the middle. But how different is that from a strategy that steers children around drug dealers in the Tenderloin? We can do so much better than this. We don't have to live in an environment that is ready to get us fat, and then blames us for the health consequences in the medical bills. We don't have to sit by and watch our children suffer from diseases of adulthood. We can re-arrange this environment to make it safe. It's not about personal choice anymore. It's about our public choice.

Walls

Walls and fences are often built with the intention of security—security from another group of people, from crime, from illegal trades. But walls and fences only provide us with a feeling of security, which is different from real security. Even though they might make us feel safe, the structures themselves can't protect us. Instead, they do something else: they separate. They create an "us" and a "them." They establish an enemy. Walls make us build a second wall in our head—a mental wall. And those mental walls slowly make us lose sight of all the things we have in common with the people on the other side. The other way around, mental walls can grow so strong that they encourage us to build, keep, or strengthen physical walls. Physical and mental walls are closely interlinked, and one almost always comes with the other. It's a constant cycle: physical walls empower mental walls, and mental walls empower physical walls—until at one point, one part falls away, and the cycle is disrupted.

Data Sharing

Organizations are far more likely to keep information on that attack to themselves. Why? Because they're worried about competitive advantage, litigation, or regulation. We need to effectively democratize threat intelligence data. We need to get all of these organizations to open up and share what is in their private arsenal of information. The bad guys are moving fast; we've got to move faster. And the best way to do that is to open up and share data on what's happening. Let's think about this in the construct of security professionals. Remember, they're programmed right into their DNA to keep secrets. We've got to turn that thinking on its head. We've got to get governments, private institutions, and security companies willing to share information at speed. And here's why: because if you share the information, it's equivalent to inoculation. And if you're



not sharing, you're actually part of the problem, because you're increasing the odds that other people could be impacted by the same attack techniques.

Language Structure

The structure of a language forces us to attend to certain aspects of language at the moment of using that language. It's known as the thinking-for-speaking hypothesis. There's evidence that language involves some kind of image simulation, and that has a consequence for how we perceive certain events. Color is quite a complex property of the visual world. Your brain is decoding color in quite a complicated way. Many languages have a term to denote both green and blue, and typically we call this a 'grue' term. You find this in languages like the Himba, for example, in the Namibian plains. In this experiment, we asked participants to look at the color tile, and then after 30 seconds, we showed them the full array of colors and said, "Now, pick the one that you just saw." It's a very difficult task if you're an English speaker, but a Himba speaker can do it like child's play because that color is central to them. You simply cannot recognize colors that are not easily encoded in your native language.

Awe

The idea is that you experience awe in situations where it's important to be acquiring information that you can use later. It makes sense: if something is awe-inspiring because it doesn't fit with your understanding of the world, that's probably something that you should know more about if you want to survive. The feeling of awe directs your attention away from yourself and toward your environment, so you can acquire more information about this new, possibly life-changing thing—whether it's positive or negative. So, awe might have given us a social advantage or an intellectual advantage, or maybe some combination of both. But no matter why the emotion evolved, we know that it's incredibly powerful—to the point that it can, like, totally hack your brain and body. For one thing, it can improve your physical health. It's been linked to lower levels of inflammation, which plays a role in all sorts of illnesses. Awe can also change your perception of what's causing events to unfold. Studies have found that it makes people more likely to interpret a series of events as the consequence of something intentional, as opposed to random chance. It's all part of the search for an explanation for something your brain is struggling to comprehend, which could help us explain why religion is a thing.

Spaced Repetition

One evidence-based way to better remember what you've learned is through Spaced Repetition, or spacing out your learning and practice of new knowledge or skills. Although this might seem novel, this is hardly a new concept; it was first described in 1885 by a German psychologist named Herman Ebbinghaus. Here's how it works. Say you plot your retention, or how much you remember of something, vs. time. Now you learn that something on day 0. Without reviewing it, the "forgetting curve" will look like an exponentially decaying curve, which is kind of scary! If you review (or better yet actively retrieve) the material at increasingly spaced intervals after learning it, then the forgetting curve starts to flatten out and you'll get a lot better longer-term retention. Now, the goal here is to review the material at the right time. It turns out that the best time to revisit information that you are trying to learn is right around the time you would naturally forget it. Since



forgetting typically follows this exponential curve, the trick becomes timing your study sessions around it. Practically, this means having more widely spaced intervals between study times for the material that you are more familiar with, and shorter intervals between study sessions for material that you are less familiar with.

Jackson Pollock

The group of artists who are considered Abstract Expressionists includes Barnett Newman with his existential zips, Willem de Kooning, famous for his travestied women, Helen Frankenthaler, who created soak-stains, and others. But perhaps the most famous, influential, and head-scratching one was Jackson Pollock. Most of his paintings are immediately recognizable. They feature tangled messes of lines of paint bouncing around in every direction on the canvas. And sure, these fields of chaos are big and impressive, but what's so great about them? Didn't he just drip the paint at random? Can't anyone do that? Well, the answer to these questions is both yes and no. While Pollock implemented a technique anyone is technically capable of regardless of artistic training, only he could have made his paintings. This paradox relates to his work's roots in the Surrealist automatic drawings of André Masson and others. These Surrealists supposedly drew directly from the unconscious to reveal truths hidden within their minds. Occasionally, instead of picturing something and then drawing it, they let their hands move automatically and would later tease out familiar figures that appeared in the scribbles.

Corn History

Nearly 9,000 years ago, corn, also called maize, was first domesticated from teosinte, a grass native to Mesoamerica. Teosinte's rock-hard seeds were barely edible, but its fibrous husk could be turned into a versatile material. Over the next 4,700 years, farmers bred the plant into a staple crop, with larger cobs and edible kernels. As maize spread throughout the Americas, it took on an important role, with multiple indigenous societies revering a "Corn Mother" as the goddess who created agriculture. When Europeans first arrived in America, they shunned the strange plant. Many even believed it was the source of physical and cultural differences between them and the Mesoamericans. However, their attempts to cultivate European crops in American soil quickly failed, and the settlers were forced to expand their diet. Finding the crop to their taste, maize soon crossed the Atlantic, where its ability to grow in diverse climates made it a popular grain in many European countries. But the newly established United States was still the corn capital of the world.

Penicillin Allergy

Many patients acquire the allergy label as children, when a rash appears after they're treated for an infection with penicillin or closely related drugs. The rash is often blamed on penicillin, while the more likely culprit is the original infection, or a reaction between the infection and the antibiotic. However, genuine penicillin allergies, where our immune systems mistake penicillin for an attacker, do occur rarely and can be very dangerous. So if you think you're allergic but don't know for sure, your best bet is to visit an allergist. They'll complete an evaluation that'll confirm whether or not you have the allergy. Even if you do have a penicillin allergy, your immune cells that react to the drug may lose their ability to recognize it. In fact, about 80% of people who are allergic to penicillin outgrow their allergy within



ten years. This is great news for people who currently identify as allergic to penicillin; the drug may one day save their lives, as it has done for so many others.

Left-handers

The benefits of being left-handed are clearest in activities involving an opponent, like combat or competitive sports. For example, about 50% of top hitters in baseball have been left-handed. Why? Think of it as a surprise advantage. Because lefties are a minority to begin with, both right-handed and left-handed competitors will spend most of their time encountering and practicing against righties. So when the two face each other, the left-hander will be better prepared against this right-handed opponent, while the righty will be thrown off. This fighting hypothesis, where an imbalance in the population results in an advantage for left-handed fighters or athletes, is an example of negative frequency-dependent selection. But according to the principles of evolution, groups that have a relative advantage tend to grow until that advantage disappears. If people were only fighting and competing throughout human evolution, natural selection would lead to more lefties being the ones that made it until there were so many of them, that it was no longer a rare asset. So in a purely competitive world, 50% of the population would be left-handed.

Endowment Effect

Light up the world, after witnessing the violent rage shown by babies whenever deprived of an item they considered their own, Jean Piaget, a founding father of child psychology, observed something profound about human nature. Our sense of ownership emerges incredibly early. Why are we so clingy? There's a well-established phenomenon in psychology known as the endowment effect. Although feelings of ownership emerge early in life, culture also plays a part. For example, it was recently discovered that Hadza people of northern Tanzania who are isolated from modern culture don't exhibit the endowment effect. That's possibly because they live in an egalitarian society where almost everything is shared. At the other extreme, sometimes our attachment to our things can go too far. Part of the cause of hoarding disorder is an exaggerated sense of responsibility and protectiveness toward one's belongings. That's why people with this condition find it so difficult to throw anything away.

Being Curious

The process of writing a book forces you to be curious. And no, contrary to popular belief, curiosity didn't kill the cat. In fact, it made the cat happier. Studies have shown that there is a link between curiosity and dopamine. So that means that people who are curious tend to have lower levels of anxiety, lower levels of depression and have a better overall psychological well-being. Furthermore, being curious helps expand our knowledge. When we learn new things, explore new ideas and pursue knowledge, we end up having a better understanding of the world around us. When I was doing the research for my book, I, you know, looked at hundreds and hundreds of articles, books, blog posts, everything. And it was great because I ended up absorbing all this information, kind of like a sponge. And now I have a tiny little box back my brain filled with fun facts and tidbits of information that I can pull out, one, when a conversation gets dull, but two, to help use as context when I'm learning new things, and so you end up having a self-fulfilling cycle of knowledge where the more you learn, the more you can learn more.



Power of Simple Word

We all know the scene: Dorothy closes her eyes and repeats the Good Witch's mantra, "No coordinates exist like one's domicile, no coordinates exist like one's domicile, no coordinates exist like one's domicile." Only Dorothy doesn't say that. She says five one-syllable words: "There's no place like home." Each a word you probably learned in your first year of speaking, each perfectly concise. It's not that L. Frank Baum didn't have a thesaurus. It's that in most cases, \$10 words fail. When it comes to words, bigger isn't always better. Ten-dollar words are rendered worthless if they're not understood. That's not to say every piece of literature should be written at a fourth-grade reading level, but it is important to know your audience. If you're a novelist, your audience is probably expecting 300 pages of vivid descriptors. At the very least, they're expecting you won't use the same 50 words to fill those pages. But most of us don't have the luxury of a captive audience. We're competing against a whole world of distractions, and we're fighting for space in an attention span that continues to shrink across generations. So get to the point already.

Aphasia

Language is an essential part of our lives that we often take for granted. With it, we can communicate our thoughts and feelings, lose ourselves in novels, send text messages, and greet friends. It's hard to imagine being unable to turn thoughts into words. But if the delicate web of language networks in your brain became disrupted by stroke, illness, or trauma, you could find yourself truly at a loss for words. This disorder, called aphasia, can impair all aspects of communication. People who have aphasia remain as intelligent as ever. They know what they want to say, but can't always get their words to come out correctly. They may unintentionally use substitutions called paraphasia, switching related words, like saying "dog" for "cat", or words that sound similar, such as "house" for "horse". Sometimes, their words may even be unrecognizable.

Benefits of Blueberries

The consumption of berries can enhance beneficial signaling in the brain. Plant foods are our primary source of antioxidant and anti-inflammatory compounds, but some plant foods may be better than others. As I've explained before, one cup of blueberries a day can improve cognition among older adults, as shown in this randomized, double-blind, placebo-controlled trial. And the same thing in kids after just a single meal of blueberries; though, two cups may work better than one. That single hit of berries may also improve mood. A double-blind, placebo-controlled, crossover study in which kids are asked a series of questions: Are you very slightly or not at all, a little, moderately, quite a bit, or extremely interested, excited, strong, etc. Before and after drinking the placebo, no significant change, but two hours after consuming about two cups of blueberries, their positive mood scores significantly improved. They felt more enthusiastic, alert, inspired, attentive—that kind of thing. That was in young adults, ages 18 through 21; same thing in 7 to 10-year-old children. Some dangerous new mood-enhancing drug or Ritalin? No, blueberries—and just after a single meal. Now blueberries can't do everything. Although a cup of berries certainly appears to improve brain function... no improvement in walking or balance was observed.

Sartre's Theory



How do we know that there are other subjects in the world? And how do we know ourselves as selves? Sartre thinks that, in order to answer these two questions, we need to think about the way that others structure our experiences through the scene that he calls the look. So imagine you're in a park and you're alone and you're walking along. You're seeing grass, you're seeing benches, et cetera. And then suddenly you see another person walking. Now for Sartre, the other person is fundamentally different from the other things that you have encountered so far in the park. They're different from the grass, the benches, the trees, because they appear to you as a center of their own experience. Sartre says in seeing the other person, I feel the world stolen away from me. It's almost as if there is a sink hole of being. Because as much as I like to think of myself as the organizing center of the world, as it turns out, there's somebody else who is the center of their own world, and this, he thinks is a fundamentally threatening experience. So our first encounters with others for start are fundamentally the site of conflict. It's not a warm, fuzzy feeling of being together.

Memorizing while Sleeping

In a 2007 study, for example, a group of neuroscientists had people learn the locations of a bunch of different objects while it smelled like roses, then made it smell like roses again while they were asleep. When they woke up, the subjects were better at remembering where the objects were, compared to when they did the same task without any smells. The researchers proposed that when the subjects smelled roses while they slept, that boosted the memory consolidation process because their brains associated the smell with the memories of the object locations. Basically, the smell acted as a cue to their brains to reactivate those memories, strengthening the connections between the neurons that stored them. And stronger connections meant they had an easier time recalling the memories when they woke up. That 2007 study was small, but later studies that tested the idea found similar results.

Problem with Over-achievement

In other words, over-achievers are trying to solve a range of psychological problems through material or worldly means. And this is why their efforts must, in a deep sense, always be doomed to failure - even when it appears to most of the world as if over-achievers are succeeding beyond measure. Because success is the moment when over-achievers are likely to notice the doomed nature of their ambitions, it is a particularly troubling and dangerous eventuality. Depression may set in just after the company is sold; the star will fall into a crisis just after they finally gain worldwide recognition. At exactly the point when their work is acclaimed or finds its audience, over-achievers are at risk of severe breakdown. So long as they are merely running, they can forget to notice that their goal is misaligned with their true inner ambition. They must wait for success to reveal the fateful nature of their life's quest.

Freedom of Speech

To be a British citizen, the first important thing is the freedom of speech that we have. It doesn't matter how small you are, how big you are, you are able to shout. I think security is very important.



It's a society that has democracy as its basic value. There are people who come from a third world country that wasn't a British colony, where they didn't have democracy and grew up under what I call a law lord — a system where the king or local headman was the ruler of that particular area and laid down the laws. There are still parts of Africa as well as the Middle East where this system exists. They must follow that ritual and cannot argue against it. Well, in our British society, we can argue. As the American saying goes, we can fight City Hall. And this is one thing that is very unique among Western civilizations: any voice is heard, however small or big it is, and we all have equal authority.

Frank Gehry

So, continuing our series of lectures on Modernism, we now turn to architecture and, in particular, to the work of Frank O. Gehry. Now, I'm not going to go into his career in detail; it is enough to say that early on he was, like other modernist architects, tied to the rectangle, the straight line, and so on. Often their buildings would have this basic shape and they would just, um, add bits of decoration like splashes of color or pointless balconies. Soon enough, Gehry wanted to break away from straight lines and grid like designs. He wanted the freedom to experiment with other shapes—curves and unusually angled roofs. What helped him with this was the computer, which allowed him to visualize and experiment with complex shapes, and to work on the whole design as one piece, without the added decoration being thrown in as an afterthought. Architecture as art, if you like... or sculpture even. He himself said that he had struggled with crossing the line between architecture and sculpture. Now, I want to talk about one building in particular—the Guggenheim Museum in Bilbao—which I think you'll agree is a masterpiece.

Homework

Now as we all know, it has long been the habit in many countries that teachers give homework to school children of all ages. Despite the fact that a minority of educators don't agree with this practice, it has never seriously been questioned or challenged before. However, it may be that the tide is turning. These days, more people are becoming convinced that homework is of virtually no benefit, particularly for children in the younger age group. So, why have teachers always given homework? Well, the answer seems to be because they are obliged to. Most teachers don't really believe it has any real value. And the latest research supports the teachers' feelings about this. Not only does homework have very little impact on children's learning but it also puts unnecessary obligations and responsibilities onto the parents. These days not all families have the time or the necessary knowledge to help their offspring. So it would seem that now, senior educators want to start a new initiative. Rather than giving homework, they plan to encourage reading books of any kind, just reading. And they claim that this is a far more effective method of consolidating learning than wading through piles of written homework.



Einstein's Insight

One of the most surprising insights from Einstein is that time is not what we intuitively think it is, right? Most of us have this sense that time for you is the same as time for me. And sometimes there is a cosmic clock that out there taking second after second after second, dragging us all in exactly the same way into the future. Einstein found that if you and I are moving relative to each other, however, our clocks don't tick off the time at the same rate. Our watches, if they were once in sync, if we're moving relative to each other, they fall out of synchronization. And what does that mean? All that means is that what I consider to be happening right now at a given moment, from your perspective, that might be the past or might be the future. What you consider to be happening right now, to me, that may be the past or the future. Now since your view of reality is every bit as valid as my view of reality, that means you cannot really say the past is gone because that might be your now, your reality. You cannot really say that the future is yet to be; maybe the future to me might be your now, your reality at that given moment. So, in a sense, past, present, and future are all equally real, all exist, all out there.

Green Economy

The green economy could easily be the next Industrial Revolution. I mean energy is ... you know, we all need energy. We do an annual report which studies how much oil is left in the world and demand for oil. And with China, India, South America, Africa even, growing at the rate they're now growing, you know, we think that four or five years from now the demand for fuel will exceed supply. That could push prices, you know, through the roof. For that reason, you know, forget global warming for one minute just for that reason alone, we should be hurrying up, you know, saving on energy and creating alternative sources of energy. And I think those people who invest in this sector, hopefully, you know, will get their thanks, and get the right; get their just returns.

RL

Infinity is the perplexing idea which basically refers to something that grows without bound, no matter what number you might assign to something, infinity would be larger than that number. We make use of infinity in a number of ways in physics. We image that space conceivably could go on infinitely far. We imagine that in principle the universe could go on for an infinite matter of time. But in our calculations, if infinity turns up as the answer to something that we could directly measure with a piece of equipment, then we know that our calculation must be wrong. We have used that as a diagnostic over many decades to tell us if you find infinite popping out of your equations for something you can measure, you'd better go back, think about those equations, modify them in some way in order to get a finite answer is that's the only kind of answer that we could ever directly measure.

Biomimicry



We often think of technology and invention and research as being somehow more sophisticated a proposition than nature - but actually, when we think about it, there are lots of really useful concepts that technology can take from the natural world. People are beginning to remember that other organisms on earth are doing things in a very similar way to what we need to do. And they're looking closely at what we can learn from nature. Take the bright screens on our mobile phones - now, this brightness, this effect that they've managed to achieve there, came partly as a result of research into the iridescence of the wings of butterflies and the antireflective coatings that moths have on their eyes. And it doesn't end there. They're looking at what makes a spider's web so strong, how glow worms produce light with almost zero energy. The list goes on. And this area of research is called biomimicry - that's 'bio', as in biology or life and 'mimicry', copying or imitating. It's a very interesting field of study.

Earthquake and Fault

Today, we will discuss the relationship between the fault lines in the Earth's crust and an earthquake. This dislocation of the rock occurs from the Earth's surface, seven kilometers to several hundred kilometers vertically down to the crust. The earthquake's focus is called epicenter which is vertically beneath the interior of the Earth's crust and the energy releases and transfers through epicenter. The faults are the fracture on the Earth's crust. The position of the epicentres can be identified by the faults' maps, looking down from the center of the Earth. It will result in seismic wave which is decreased as it moved away from the epicenter.

Dogs

When this dog approaches some food, another dog's playful snarls are played back. The dog seems curious, but the sound doesn't stop it from taking the bone. Here a dog hears the growls of a dog being approached by a stranger, but these don't deter it from grabbing the bone either. In another scenario, the sound of a dog protecting its food is played back. This time the dog backs off. These experiments suggest the dogs can distinguish between different types of growls.

Saturn Rings

Saturn's rings are the most spectacular planetary ring. Consisting of countless particles whose diameters range from microns to meters; these rings orbit the Saturn. in 1610, Galileo was the first man who spotted Saturn's rings. With his 20-power telescope, Galileo might have mistaken Saturn's gaseous ring to surmise that the Saturn system was formed of one planet with two moons as satellites. In 1675, Giovanni Cassini determined that Saturn's "ring" was actually composed of sub-rings with gaps among them. So, the number of Saturn's rings are more than 10. Other planets like Venus, Jupiter, Neptune and Uranus also have rings but not as many as Saturn have.



Skoog

The Skoog is a new universally accessible musical instrument. It is designed to be used by children or adults with special needs, or in fact, by anyone. It's soft, easy to play, robust, and can be customized to suit anyone's abilities. The Skoog helps students with special needs by allowing them to get involved in making music themselves. It's an instrument that they can play, take ownership of, and use to start creating their own sounds and music. Traditional instruments have their shapes, sizes, and materials because of the specific sounds they need to produce. If you want to make a sound like a plucked string, you need a string under tension. Whereas with a Skoog, because it's a mixture of software and a sensor, the computer handles making the sound. This allows us to design an object that is meant to be touched and played with. In developing the Skoog and working with kids in schools and classrooms, we've really been able to make something usable by the children themselves. They've given us incredible insights on how it needs to work, as well as their opinions on colors and designs. The feedback they've provided has been marvelous. It's so enriching and truly inspiring to work with these kids—especially when we can give them the ability to play their own music instead of just listening to others.

Black Hole

This simulation shows what you might see if you are orbiting a black hole. The light and position of background stars around the hole are distorted by its gravity, and they seem to spin around. On the right, the constellation Orion appears to approach the event horizon, the boundary from which nothing can escape. Orion's stars look like they become separated and get spun around. Once the hole has passed by, Orion reappears on the left and looks normal again. Users can also experiment with different scenarios. This is what you might see if you were traveling towards a black hole with rocket engines slowing your descent. Another simulation mimics free fall into a hole. In the middle, the light of the entire universe appears to be concentrated in a bright ring.

Wind Turbine

Wind turbine is a device that will convert wind into mechanical movement, which we can use to power water pump or electricity generator. Now the power that the turbine creates is obviously dependent on the wind speed. It also depends obviously on the number of sails, the area of the sails, and the angle the sails make to the wind. So you can imagine if the turbine blades are flat onto the wind, the wind is going to just bend it. If there is a slight angle when the wind hits it, it's going to turn the blades. We can use that for powering things. Now, we're going to have a go at making some very, very simple paper windmills — the sort of things that you can make from the bits and pieces lying around home — and use that to drive a very small generator to power electronic devices.

Sound Receptor



You've got sound receptors in your ear and they are beautiful. We're not going to talk about them at any length, but there's little flappy, these little spiky things going along in your ear and they can translate vibrational energy coming from your ear, hurting your eardrum, being translated into a vibration into the fluid in your ear into a physical motion of these little receptors there into an electrical motion, into an electrical signal that goes into your ear. So, all of that, all of that's pretty impressive stuff. We're not going to talk about the details of it, but I invite some of you who want to learn more about this, particularly MIT students, I think find receptors really quite remarkable kinds of devices.

Monitor Ocean Floor

This is the first ocean deployment of two new high-precision instruments designed to monitor the Earth's signals from the seafloor. This housing contains the tilt meter and nano bottom pressure recorder and the associated electronics and cabling used for power and communications. The instruments were deployed on the sea floor by a remotely operated vehicle as part of the Mars seafloor observatory test bed located at a depth of three thousand feet in Monterey Bay. In this first test deployment in the ocean, it has already detected the ground motion from several large earthquakes as far from the Mars site as Chile and the Mariana Trench. In the future, the instruments will be part of a global network of cabled seafloor observatories. Because of their precision, these two new instruments are already detecting signals which could never be measured before.

Dissociation of Personalities

Morton Prince was an American physician and psychologist, his book 'Dissociation of a Personality' was the best-seller at that time. It tells a story of Miss Christine Beauchamp, who was suffering from MPD (Multiple Personality Disorder). Miss Christine Beauchamp has several types of personalities, namely B1, B2 and B3. There was hidden memory in these three personalities, with hallucination among them. Miss Beauchamp was B2. B2 knows about B1, B3 knows both B1 & B2, but B1 knows nothing about B2 or B3. The strongest personality accounts for most of the time and it will take over the others and become the main personality at the end. This case and theory gives great help to crime investigation.

Underwater Treadmill

Located at the NASA Research Center in Iowa is a 5,000-gallon vat of water, and inside the tank is an underwater treadmill designed by Dava Newman, an aerospace engineer. For four years Newman observed scuba divers as they simulated walking on the Moon and on Mars on her underwater moving belt. She wanted to discover how the gravity of the Moon and of Mars would affect human movement. To do this, Newman attached weights to the divers and then lowered



them into the tank and onto the treadmill. These weights were carefully adjusted so that the divers could experience underwater the gravity of the Moon and of Mars as they walked on the treadmill. Newman concluded that walking on Mars will probably be easier than walking on the Moon. The Moon has less gravity than Mars does, so at lunar gravity, the divers struggled to keep their balance and walked awkwardly. But at Martian gravity, the divers had greater traction and stability and could easily adjust to a pace of 1.5 miles per hour. As Newman gradually increased the speed of the treadmill, the divers took longer, graceful strides until they comfortably settled into an even quicker pace. Newman also noted that at Martian gravity, the divers needed less oxygen. The data Newman collected will help in the future design of Martian space suits. Compared to lunar space suits, Martian space suits will require smaller air tanks; and, to allow for freer movement, the elbow and knee areas of the space suits will also be altered.

Diet

Everyone is interested in improving their diet. Adding grains is one of the easiest ways. Many people in the United States have a growing concern about nutrition, so grains are often served in restaurants. And many grains are now available in grocery stores, too, though for some you still have to go to health food stores. You can stock up when you go, though, because uncooked grains keep a long time. You'll find that grains are easy to prepare. Many grains are as simple to cook as spaghetti. Barley, for instance, is just cooked in salted water. Remember, though, whole-grain barley, the most nutritious kind, never will get as tender as spaghetti no matter how long it's cooked. Grain-based salads are easy, too. Just use grains left over from a hot meal. You can even put together a grain salad hours before you need it, since grains don't wilt like lettuce does. But to get back to health factors, all grains are nutritious and many have special benefits. Barley has very little fat. Some experts believe that it may even reduce cholesterol levels. Jasmine rice is also low in fat. And it has a bonus in its wonderful aroma, a very special fragrance.

Volunteer Program

As Dr. Miller mentioned, we're trying to recruit volunteers for the Hawk Mountain Sanctuary. But before I get into the details of the volunteer program, I'd just like to tell you a little about what we do there. One of our main jobs is to keep detailed records of the migration patterns of raptors. For those of you who don't know, raptors are birds of prey, like hawks and eagles. Between August and December, we see around twenty different species migrating from Canada and New England. About 20,000 birds. Part of what attracts them to Hawk Mountain is the location on the East Ridge of the Appalachian Mountains. What happens is that the sun warms the ridge in such a way that air currents are formed. The birds just sort of glide along on the air, so they use up very little energy. As volunteers, you'll be helping us keep accurate counts of the raptors. Any drop in number could mean something's gone wrong in the environment because of pesticides or disease, even hunting. We just had a scare with the broad-winged hawks. Their numbers have dropped drastically over the last ten years. It was suggested that the birds may have changed their migratory route. So for 11 days we had several hundred volunteers—stationed every five miles—to observe and count.



And sure enough, they discovered that instead of hugging the Appalachians as they'd always done, the broad-wings were cutting a wide path over the Delaware River. Needless to say, we were greatly relieved.

Workbook

Before we start our first lab, I'd like to tell you a little bit about the workbook we'll be using. The first thing I'd like to point out is that the workbook contains a very large amount of material, far more than you could ever handle in a single semester. What you're supposed to do is choose the experiments and activities that you want to do—within a certain framework, of course. Part of my job is to help you make your choices. Next, I'd like to mention that in each workbook chapter, there are usually two subsections. The first is called "Experiments" and the second is called "Activities." In the "Experiments" section, the workbook gives full instructions for all the experiments, including alternate procedures. Choose the procedure you wish—there's plenty of equipment available. In the "Activities" section, you will find suggestions for projects that you can do on your own time. You'll see that there are usually no detailed instructions for the activities—you're supposed to do them your own way. If there are no questions, let's turn to Chapter One now.

Performance of Genders

You can see that the two charts, each give quite a different picture of the performance of boys and girls in the two key subjects of Math and English. It shows that in English, girls consistently outperform boys over a period of 6 years, achieving scores about 10% above their male peers. There is quite a different picture when we look at the Math results with no real difference between genders in the results. What is the explanation for these key differences? To answer this question, researchers look at biological and cognitive factors, and a range of social factors. The interaction between these different components in early childhood development are seen as maintained and reinforced in the school context. And this leads to distinct gender patterns of behavior and skills with direct consequences for school performance and achievement. The ultimate uses of this evidence (are) to show that biological factors, such as patterns of cognitive developments are closely linked to social factor, such as learned gender categories. These cognitive skills are learned both pre-school and subsequently at school, supported by the responses of teachers, creating a reinforcement of patterns.

Dark Skin

Human populations near the equator have evolved dark skin over many generations because of exposure to the fierce rays of the Sun. A similar phenomenon has also occurred in other parts of the animal kingdom. The African grass mouse is a good example. Most mice are nocturnal, but the African grass mouse is active during daylight hours. This means that it spends its days searching for



food in the semidry bush and scrub habitats of eastern and southern Africa. Its fur is striped, like a chipmunk's, which helps it blend in with its environment. Because it spends a lot of time in the intense tropical sun, the grass mouse has also evolved two separate safeguards against the Sun's ultraviolet radiation. First, like the populations of humans in this region of the world, the skin of the grass mouse contains lots of melanin, or dark pigment. Second, and quite unusual, this mouse has a layer of melanin-pigmented tissue between its skull and skin. This unique "cap" provides an extra measure of protection for the grass mouse and three other types of African mouse-like rodents that are active during the day. The only other species scientists have identified with the same sort of skull adaptation is the white tent-making bat of the Central American tropics. Although these bats sleep during the day, they do so curl up with their heads exposed to the sun.

Australian Cities

Australia's location is important for the world's exports, and its international trade is also important. Since Australia has a large territory with vast, uninhabited areas, all towns are scattered around. The Australian people are mainly living in five cities: Melbourne, Sydney, Perth and Brisbane and Adelaide. The most special one is Perth, which is one of the most isolated cities in the world. However, this does not affect its state to be one of the largest cities in Australia. Most large companies, like the two leading companies, Telstra and Qantas, they are both based in Perth.

Minority Languages (Similar)

Welsh is a Celtic language spoken in Wales by about 740,000 people, and in the Welsh colony in Patagonia, Argentina by several hundred people. There are also Welsh speakers in England, Scotland, Canada, the USA, Australia and New Zealand. At the beginning of the 20th century about half of the population of Wales spoke Welsh as an everyday language. Towards the end of the century, the proportion of Welsh speakers had fallen to about 20%. According to the 2001 census 582,368 people can speak Welsh, 659,301 people can either speak, read or write Welsh, and 797,717 people, 28% of the population, claimed to have some knowledge of the language. According to a survey carried out by S4C, the Welsh language TV channel, the number of Welsh speakers in Wales is around 750,000, and about 1.5 million people can 'understand' Welsh. In addition, there are an estimated 133,000 Welsh-speakers living in England, about 50,000 of them in the Greater London area.

Welsh Language

This busy little town is named after Sir David's first cousin. It's also a Welsh language stronghold. According to the 2001 census results, seventy percent of the town's population could speak Welsh but even here the language may not be completely safe. The Welsh Language Board expects last year's census results to show a fall in the number of Welsh speakers living in its northern and



western heartlands. One of the main reasons for that, the board says, is migration. Many Welsh speakers are choosing to leave the country. At the same time, only a small percentage of those moving in can speak the language or choose to learn it. Historically, over the past 1788, Welsh people have continually left in order to find better standard of pay, maybe in quality of employment. And the thing that has changed, most probably, is that there is a larger number of English people now who have found Wales—particularly this corner of Wales—over the last 20–25 years, and regard it as a desirable place to come and live, as opposed to many areas in England, and cheaper as well.

Education Equality or Quality

When Australians engage in debate about educational quality or equity, they often seem to accept that a country cannot achieve both at the same time. Curriculum reforms intended to improve equity often fail to do so because they increase breadth or differentiation in offerings in a way that increases differences in quality. Further, these differences in quality often reflect differences in students' social backgrounds because the 'new' offerings are typically taken up by relatively disadvantaged students who are not served well by them. Evidence from New South Wales will be used to illustrate this point. The need to improve the quality of education is well accepted across OECD and other countries as they seek to strengthen their human capital to underpin their modern, knowledge economies. Improved equity is also important for this purpose, since the demand for high-level skills is widespread and the opportunities for the low-skilled are diminishing. Improved equity in education is also important for social cohesion. There are countries in which the education system seems primarily to reproduce existing social arrangements, conferring privilege where it already exists and denying it where it does not. Even in countries where the diagnosis might be less extreme, the capacity of schooling to build social cohesion is often diminished by the way in which schools' separate individuals and groups.

Open Border

I believe our borders should be open. But if that is not politically acceptable for now, Europe should at least open up a legal route for people from developing countries to come work here. Over time, hopefully, we can move to a position where borders are completely open. Persuading sceptics won't be easy. That's why I think the argument for free migration has to be made at several levels: a principled case: it increases freedom and reduces injustice; a humanitarian case: it helps people much poorer than ourselves; an economic case: it makes us richer; and a pragmatic case: it is inevitable, so it is in everyone's interests to make the best of it. Freedom of movement is not just a matter of human rights and international solidarity; it is in our self-interest. Opening our borders may seem unrealistic. But so too, once, did abolishing slavery or giving women the vote. Campaigning for people's right to move freely is a noble cause for our time.

Make Errors



Thinking of doing the right thing or wrong thing. For example, if a task is well designed, people are likely to do the right things, otherwise they are prone to make mistakes. Distractions: People will forget they are in the middle of doing something. For example, we usually forget to take the original copy after using the copy machine if something disrupts the thinking process. There are two strategies to avoid making mistakes. The chance of making mistakes depends on the quality of task design so you could polish the instructions. If the task is well designed, people are likely to do right things. People are likely to make mistakes. Remember to avoid distractions. The people who do photocopying might leave the original copy in the machine if the thinking process is disrupted.

Happiness

As Joanne pointed out, only one country, tiny little Bhutan, wedged between China and India, has adopted the Gross National Happiness as the central index of the government policy, and actually has a good deal of success in education and in health and in economic growth and in environmental preservation. They have a rather sophisticated way of measuring the effects of different policies on people's happiness. They are the only country to go that far. But you are now beginning to get other countries interested enough to do kind of white paper policy analyses of happiness research—what effects would it have if we used it more for public policy? You are beginning to get countries like Australia, France, Great Britain, that are considering publishing regular statistics on happiness. So it is beginning to become a subject of greater interest for policymakers and legislators in different advanced countries.

Listening Skills

The most important factor in communicating more effectively is actually the opposite of talking. It's improving your listening skills. You must learn to start asking questions and listen attentively without interruptions. As a rule, you pay attention to people you most value. When you pay close attention to another person when they are talking, you signal to that person that you very much value them and the content of their comments. This is very flattering to another person and it causes them to respond warmly to your attentiveness. The major reason that most people have poor listening skills is that they're busy preparing a reply while the other person is still speaking. In fact, they're not even listening closely to what the other person is saying. They are thinking of other things and formulating their comments to be ready as soon as the other person takes a breath. Effective communication requires that you face the other person directly, lean slightly forward and hang on to every word, listen as though there were nothing else in the world more fascinating to you than what the other person is saying.

Music and Wellbeing



So, what do we mean by well-being? Health, happiness, a sense of achievement and contentment, a state of mind and body where people can thrive. Well-being is not something that is purely limited to people who are facing extraordinary challenges in their lifestyle, health or personal circumstances, everybody here has a level of well-being. Music so often forms an intuitive part of our well-being management, music to pick us up, music to calm us down, music to heal our sorrows. Our aim through research is to move from this level of intuitive application of music through to informed use in our communities to take the next step in the understanding of the power of music in human life. Music already works for us on so many levels whether it's soothing and teaching our infants, bringing people and communities together, adding spirit to our work and personal endeavors, but there is no reason to stop here.

Civilization and Art

I have said before that you can't have a civilization that doesn't have art. When we think about the great civilizations historically, all of them had great production of culture and art, because a society has to be able to observe itself. And the sophistication of the great civilizations were their ability to look at themselves and what allows a society to do that. Are the producers of art and culture mirror back to the core of the society? Exactly what is being produced at that moment? How people are thinking of themselves and how individuals are relating to the social structure at that time? Art is the vehicle through which we understand that. Were you to take away art? What would be that mirror? How would we see what we are about? How would we understand what was going on in Paris at the time of the impressionists when people were learning to see in a completely different way. Pre cinematograph appear all of these things are just emerging and here are people looking at the world in a very different way which was considered so radical at the time.



Rice

In 1943, what became known as the Green Revolution began when Mexico, unable to feed its growing population, shouted for help. Within a few years, the Ford and Rockefeller Foundations founded the International Rice Research Institute in Asia, and by 1962, a new strain of rice called IR8 was feeding people all over the world. IR8 was the first really big modified crop to make a real impact on world hunger. In 1962 the technology did not yet exist to directly manipulate the genes of plants, and so IR8 was created by carefully crossing existing varieties: selecting the best from each generation, further modifying them, and finally finding the best. Here is the power of modified crops: IR8, with no fertilizer, straight out of the box, produced five times the yield of traditional rice varieties. In optimal conditions with nitrogen, it produced ten times the yield of traditional varieties. By 1980, IR36 resisted pests and grew fast enough to allow two crops a year instead of just one, doubling the yield. And by 1990, using more advanced genetic manipulation techniques, IR72 was outperforming even IR36. The Green Revolution saw worldwide crop yields explode from 1960 through 2000.



Invention

All of my research, and, that I conducted with my 60 plus graduate students, was motivated by their need to learn, so that we can teach. Of course, some inventions happened along the way, but I've always considered the end, the result. And I always consider these inventions to be byproducts of the learning process. The end product for me was always better understanding or, when one really succeeded, a unifying theory that can help us in teaching the subject. I've also looked at teaching as a vehicle to try new ideas, new ways of doing things on an intelligent group of learners. That is, as the vehicle for teaching research results. And in my experience, this kind of teaching is the most stimulating and motivating to students. I've also uncovered many interesting research problems in the course of teaching. It is this unity of research and teaching, their close connection, and the benefits garnered by exercising the interplay that, to me, characterizes the successful professor.



ANSWER SHORT QUESTIONS

1. What device is used to take photographs?

Answer: Camera

2. Which is the most common symbol of a country at international gatherings?

Answer: Flag

3. What is the term used for see-through items such as clear glass?

Answer: Transparent / lucid / pellucid / crystal

4. What term is used for the amount of money you pay a landlord for living in his house or apartment?

Answer: Rent / rental

5. What do we call the type of energy that uses uranium to generate electricity?

Answer: Nuclear energy / Nuclear power

6. What do we call the organs in our chest that we use to breathe?

Answer: Lungs / lung

7. What do we call the list of steps that tell you how to put something together?

Answer: Instructions / directions / specifications / manual

8. Would you go to a pharmacy or a surgery to get a prescription fulfilled after visiting a doctor?

Answer: A pharmacy

9. What is the term used for a professional who practices law?

Answer: Lawyer / attorney

10. Despite all the advances in equality between the sexes, would more men or women play professional football?

Answer: Men



11. Who is the main journalist responsible for producing a newspaper or magazine?

Answer: Editor

12. What do you call a country where there is no king but a president?

Answer: Republic

13. Would most people spend greater amount of time eating, drinking or sleeping?

Answer: Sleeping

14. In normal circumstances would four hours of sleep per night be too much, too little or just right for most people?

Answer: Too little

15. How many sides are there in a bilateral agreement?

Answer: Two

16. What is the word for the place where a river starts?

Answer: Source / birthplace / origin

17. Which short TV program or a part of TV program tell whether it will be sunny or rainy tomorrow?

Answer: Weather forecast / weather report

18. What do we call the meeting where an employer asks a potential employee questions about their work experience?

Answer: Interview

19. What do you call a professional trained to treat illnesses?

Answer: Doctor / mediciner

20. What do we call the state of believing in oneself?

Answer: Confidence / confident / self-confidence / self-confidence

21. At what age does someone become a teenager?



Answer: Thirteen

22. What is the name of the student who has not completed his course?

Answer: Undergraduate student

23. What do you use in a nonverbal communication with expressions to convey a message effectively?

Answer: Body language / sign language

24. What is the process of removing abnormal heartbeat?

Answer: Defibrillation

25. How do you call a student that has finished his first year?

Answer: Sophomore

26. What do we call a person who can speak two languages?

Answer: Bilingual / bilingualist

27. What do we call the "Times New Roman" in word ?

Answer: Typeface / font

28. What is the term for a large, luxurious car, often driven by a chauffeur?

Answer: Limousine

29. In statistics, what is a circle divided into many parts called?

Answer: Pie chart

30. What do we call a document issued by a country to its citizens allowing them to travel abroad?

Answer: Passport

31. Oral English is different from academic English. Which is the best term to describe academic English: tolerant or rigorous?

Answer: Rigorous

32. If you want to find the map of U.S., what type of book should you use?

Answer: Atlas

33. What is the term for the measure of the amount of water vapor in the air?



Answer: Humidity

34. What is the hardest part of your hand?

Answer: Nails

35. What is the term for a large crack or opening in the earth's surface?

Answer: Crevice

36. How do you describe the money that citizens must contribute to the government for public use?

Answer: Tax / taxes

37. What is the term for an intense snowstorm with high winds and low visibility?

Answer: Blizzard

38. How do we call that animals and plants preserved in the rocks?

Answer: Fossil

39. What is the music that is recorded for a movie or a film?

Answer: Soundtrack

40. If there are 8 black balls and 1 white ball, and I randomly pick one, which color is mostly likely to be picked?

Answer: Black

41. What do we call the legal document that states how people's property should be allocated after their deaths?

Answer: Testament / Will

42. What is the term for a formation of troops, ships, or aircraft?

Answer: Squadron

43. What do we call a short trip taken for pleasure, usually lasting a day?

Answer: Excursion / expedition



44. What do you throw underwater to keep ships staying on rivers or oceans without drifting away?

Answer: Anchor

45. Where can we find the page numbers of books?

Answer: Footer

46. What device is used to measure the height of mountains?

Answer: Altimeter

47. Who is the Swiss greatest scientist in physics?

Answer: Einstein

48. What clothing does people wear, such as students or nurses, to show that they belong to the same organizations?

Answer: Uniform

49. What is the name of the current geological epoch, starting from the end of the last Ice Age?

Answer: Holocene / Recent

50. What do you call the people who work on boats?

Answer: Sailor / mariner / seaman

51. Which organ is the blood pumped from?

Answer: Heart

52. What is the heading at the top of an article or page in a newspaper or magazine?

Answer: Headline

53. What term is used to describe a person who rides waves on a special board in the ocean?

Answer: Surfer

54. What do we call a circular boat?

Answer: Coracle



55. What do we call a member of the same team or group?

Answer: Teammate / colleague / group member / peer

56. What do we call the phenomenon that a volcano throws out lava, ash and steam?

Answer: Erupt / eruption

57. What subject studies the science of animal behavior?

Answer: Ethology

58. What do we call the action of giving money to influence someone in power?

Answer: Bribe / Bribery

59. What do we call the opposite to the end of a story or a book?

Answer: Prologue

60. What is the term for a large painting or decoration, created either directly on a wall or ceiling or on a canvas attached to the wall?

Answer: Mural

61. What do you call a part of a line that has a fixed starting point but no end point?

Answer: Ray

62. What do we call the point where two lines meet?

Answer: Vertex

63. What do we call the number obtained by dividing one number by another?

Answer: Quotient

64. What is the name for a structure consisting of a roof supported by columns or piers, usually attached to a building as a porch?

Answer: Portico

65. What do we call a horizontal structural member that supports the load over an opening such as a door or window?



Answer: Lintel

66. What is the term for an outdoor area for dining or relaxing that is adjacent to a building?

Answer: Patio

67. What is the name for a large, open interior area within a building, often featuring a glass roof?

Answer: Atrium

68. What do you call the front face of a building, especially an imposing or decorative one?

Answer: Facade

69. What do we call a covered walk in a convent, monastery, college, or cathedral, typically with a wall on one side and a colonnade open to a quadrangle on the other?

Answer: Cloister

70. What do you call the triangular upper part of a building in classical architecture, typically surmounting a portico of columns?

Answer: Pediment

71. What do we call the central space of a cathedral, particularly in a Gothic cathedral?

Answer: Nave

72. What is the name for a small tower that is typically part of a larger structure?

Answer: Turret

73. What is the term for the medical tool used for examining the interior of a hollow organ or cavity?

Answer: Endoscope

74. What do we call the medical tool used to compress a limb to control bleeding?

Answer: Tourniquet

75. What is the term for the involuntary shaking or spasm of a body part?

Answer: Tremor



76. What is the name of the medical instrument used to examine the ear?

Answer: Otoscope

77. What do we call the party in power?

Answer: Ruling party

78. What do you call the gradual increase in the overall temperature of the Earth's atmosphere generally attributed to the greenhouse effect?

Answer: Global Warming

79. What is the mathematical term for a quantity representing the chance of a particular outcome in an uncertain situation?

Answer: Probability

80. What do we call the condition characterized by high blood pressure?

Answer: Hypertension

81. What do we call the procedure of obtaining a small piece of tissue for examination under a microscope?

Answer: Biopsy

82. What is the name of the transport system using trains in a city, often underground?

Answer: Subway

83. What is the name of the device used to amplify sound, especially for musical instruments?

Answer: Amplifier

84. Where is the largest tropical rainforest in the world located?

Answer: Amazon Rainforest

85. What is the term for a system of government in which power is held by the people?

Answer: Democracy



86. Which gas makes up the majority of Earth's atmosphere?

Answer: Nitrogen

87. What is the term for a group of similar organisms that can reproduce to produce fertile offspring?

Answer: Species

88. What do we call the process of organizing and analyzing numerical data?

Answer: Data analysis / statistics

89. What do we call the study of human society, culture, and behavior?

Answer: Sociology

90. What do we call a language that is no longer spoken or used in everyday life?

Answer: Dead language

91. What is the study of how individuals, businesses, and governments allocate resources to satisfy their wants and needs called?

Answer: Economics

92. Which continent is Canada located in?

Answer: North America

93. What do we call the phase in a trial in which both parties interrogate each other?

Answer: Cross examination

94. What is the state of distress experienced by an individual who is suddenly exposed to a new, or foreign cultural environment?

Answer: Culture shock

95. What is the antonym of depression, and especially is used to describe financial success?

Answer: Prosperity

96. Which vitamin is essential for the formation of normal bones and teeth?



Answer: Vitamin D

97. What do we call a stone that is transparent, and when it is cut and polished, valued as a precious gem?

Answer: Diamond

98. Which one belongs to oriental countries, Japan or Canada?

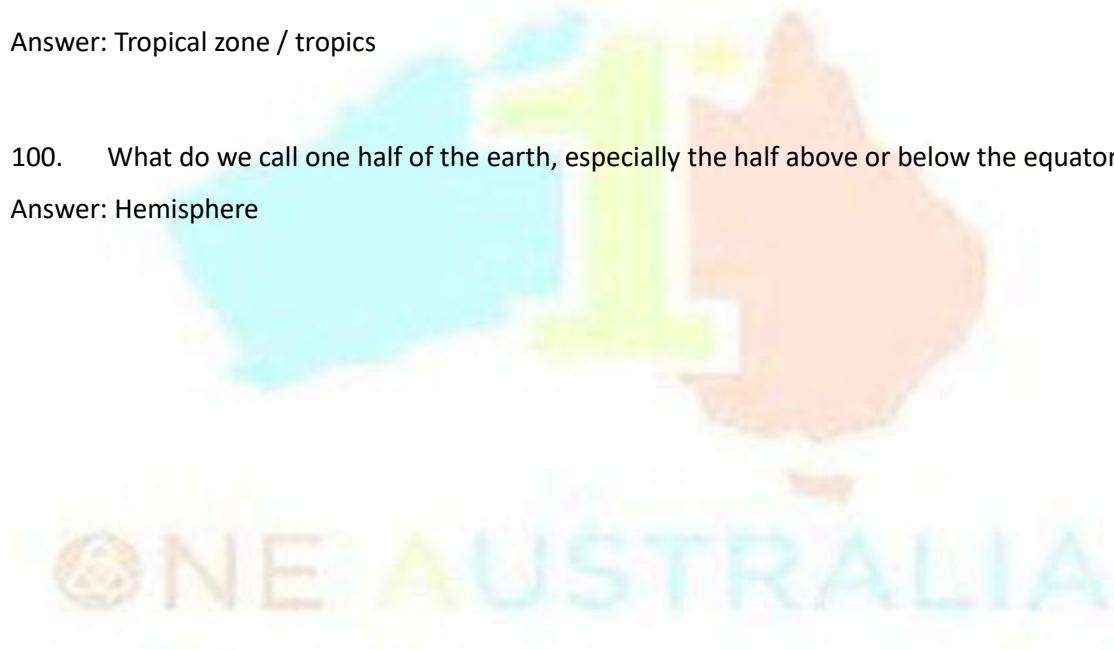
Answer: Japan

99. Which climate zone do the countries like Vietnam and Thailand belong to?

Answer: Tropical zone / tropics

100. What do we call one half of the earth, especially the half above or below the equator?

Answer: Hemisphere



WRITING



SUMMARIZE WRITTEN TEXT

Telescope

On a starry night in Padua 400 years ago, Galileo first turned a telescope toward the sky. It might seem the most natural of actions—after all, what else does one do with a telescope? But in 1609, the instrument, which had been invented only the year before by Dutch opticians, was known as a "spyglass", in anticipation of its military uses. The device was also sold as a toy. When Galileo read of it, he quickly set about making a much more powerful version. The Dutch telescopes magnified images by 3 times; Galileo's telescopes magnified them by 8 to 30 times. At the time, astronomy, like much of science, remained under the spell of Aristotle. Almost 2,000 years after his death, the giant of Greek philosophy was held in such high regard that even his most suspect pronouncements were considered unimpeachable. Aristotle had maintained that all celestial objects were perfect and immutable spheres, and that the stars made a dizzying daily journey around the center of the universe, our stationary Earth. Why scrutinize the sky? The system had already been neatly laid out in books. Astronomers "wish never to raise their eyes from those pages," Galileo wrote in frustration, "as if this great book of the universe had been written to be read by nobody but Aristotle, and his eyes had been destined to see for all posterity." In Galileo's day, the study of astronomy was used to maintain and reform the calendar. Sufficiently advanced students of astronomy made horoscopes; the alignment of the stars was believed to influence everything from politics to health.

Deepest Lake

Lake Baikal is located in southern Russia, near the border of Mongolia. Its depth of 5,300 feet makes it the world's deepest lake. The second-deepest lake, Lake Tanganyika in east Africa, is 4,710 feet deep by comparison. Crater Lake, the deepest lake in the U.S., is 1,900 feet deep.

Lake Baikal's 12,200-square-mile size also makes it Earth's largest. That size, by the way, makes it comparable in volume to the entire Amazon basin. For scale, it reportedly takes about 330 years for one water molecule to flow from inlet to inlet.

So how did Lake Baikal get so massive? About 25 million years ago, Lake Baikal formed through fractures and shifting within Earth's crust. It wasn't Lake Baikal as we now know it, though. Experts believe it was a series of lakes, similar to the Great Lakes in the U.S. While scientists aren't positive how Lake Baikal went from many lakes to the behemoth it is today, they do have theories. It could've been sinking earth, erosion, earthquakes, increased water from melting glaciers, although it's likely a mix of these factors and more.

Now, that unifying change took place in the Pliocene Epoch (about 5.3 to 2.5 million years ago), but this lake is hardly finished growing. It's expanding at a rate of 0.7 inches every year, the same speed at which Africa and South America are drifting apart. At this speed, some scientists believe Lake Baikal is actually an ocean in the making.



Humans and Animals

Humans are animals, but essentially, they are the only rational animals. When a human sees an object, they can create the idea of what makes that object unique (a tree). This is called abstraction. Animals merely see the object as a single thing (the tree). Because we can separate the idea of a thing (its concept) from the thing itself, we can combine it in our minds with other things to imagine new things that don't exist in the physical world (a tree that talks, combining 'tree' and 'human'). This concept of abstraction is unique to humans and is the reason we have been able to create the incredible structures and objects that surround us in life. A bird can make a nest, but unless it is in its nature to build homes with heating, it will never be able to conceive of the idea of combining its home with a heating source. The foundation of this idea comes from the philosophical concept that the essence of a thing (its being or existence) determines its distinctiveness. Using the same concept, we can say that the difference between animals and inanimate objects is sentience (the ability to sense). Only animals have senses—a tree can't feel the cold, and a stone can't smell the earth. Animals have senses, and humans have senses, therefore humans are animals. But only humans have rationality.

Greenland Shark

An international team of scientists is set to travel to the Arctic to investigate the mystery of the Greenland shark's longevity. This species is known to be the longest-living vertebrate animal on Earth. One of the team members is Dr. Holly Shiels, a physiologist and senior lecturer in the Faculty of Life Sciences at the University of Manchester. She will be the only British scientist on the team studying the Greenland shark, which is believed to be the longest-living vertebrate, possibly even mammal. Reports suggest that these sharks can live for more than 200 years, and possibly up to or beyond 400 years. The Greenland shark is both a hunter and a scavenger, feeding on seals and other animals including polar bears and whales. It is also one of the largest shark species, reaching up to five and a half meters (18 feet) in length—comparable in size to a great white shark. The research team, commissioned by the Greenland government, will conduct their study aboard the multi-purpose research vessel *Sanna*, operated by the Greenland Institute of Natural Resources. According to *Science Magazine*, a Greenland shark may live as long as 400 years. Professor Shiels aims to gather sufficient data on this top Arctic predator. She hopes to uncover clues about how the Greenland shark survives in the deep Arctic Sea by examining its heart and circulatory system in its natural habitat, as her specialty is cardiovascular function. "Greenland sharks are classified as data deficient," Shiels said. "This means that we don't know enough to put measures in place to protect them from overfishing, pollution, or climate change."

Written Language

The world continues to prioritize improving reading and writing literacy, but this may no longer be as important as it once was. What is written language, anyway? It is an ancient technology for storing and retrieving information. We store information by writing it down, and we retrieve it by reading it. Around 6,000 to 10,000 years ago, many of our ancestors shifted from hunter-gatherer societies to settled agricultural communities during what is known as the Agricultural Revolution. This transition



led to the development of private property and the expansion of goods production and trade, resulting in a vast increase in information. Unable to retain all this information in their memories, our ancestors developed systems of written records that eventually evolved into today's written language. However, this ancient technology is now becoming obsolete. Text has run its historical course and is rapidly being replaced in all aspects of life by emerging technologies centered on voice, video, and physical interaction rather than the written word. In my view, this shift is a positive step forward in the evolution of human technology and holds great promise for a complete and beneficial redesign of education.

America and India IT

Consider the current situation: like their counterparts in the United States, engineers and technicians in India have the capacity to provide both computer programming and innovative new technologies. Indian programmers and high-tech engineers earn one-quarter of what their counterparts earn in the United States. Consequently, India is able to do both jobs at a lower dollar cost than the United States. India has an absolute advantage in both. In other words, it can produce a unit of programming for fewer dollars than the United States, and it can also produce a unit of technology innovation for fewer dollars. Does that mean the United States will lose not only programming jobs but innovative technology jobs too? Does that mean our standard of living will fall if the United States and India engage in international trade? David Ricardo would have answered no to both questions—as we do today. While India may have an absolute advantage in both activities, that fact is irrelevant in determining what India or the United States will produce. India has a comparative advantage in programming, in part because such activity requires little physical capital. The flip side is that the United States has a comparative advantage in technology innovation, partly because it is relatively easy to obtain capital in this country to undertake long-run projects. The result is that Indian programmers will increasingly take on tasks previously done by U.S. programmers. In contrast, American firms will shift more and more toward innovation.

Back to Countryside

Half a lifetime ago, I made a lifestyle choice to exchange a city terrace for a farm cottage. I knew it was a good idea because I had been there before. Born and raised on a farm, I had been seduced for a few years by the idea of being a big shot who lived and worked in the city, rather than just going in for the day to wave at the buses. True, I was familiar with some of the minor disadvantages of country living—such as an unreliable private water supply sometimes infiltrated by various flora and fauna (including, on one memorable occasion, a dead lamb), the absence of central heating in farmhouses and cottages, and a single-track farm road easily blocked by snow, broken-down machinery, or escaped livestock. But there were many advantages, as I told my wife back in the mid-Seventies. Town-born and bred, eight months pregnant, and exchanging a warm, substantial Corstorphine terrace for a windswept farm cottage on a much lower income, persuading her that country life had it over town life might have been difficult.

Journey Through Words



Literature is a timeless treasure trove of human expression and imagination. Through the written word, authors have crafted stories, poems, and plays that transport readers to different worlds, evoke emotions, and challenge perspectives. Let's embark on a journey to explore the rich tapestry of literary works that have left an indelible mark on our hearts and minds. One of the most celebrated literary works is *To Kill a Mockingbird* by Harper Lee. This novel, set in the American South during the 1930s, delves into issues of racism, justice, and morality through the eyes of young Scout Finch. With its powerful themes and memorable characters, *To Kill a Mockingbird* continues to be a thought-provoking and influential work. In the realm of poetry, the works of Emily Dickinson stand out. Her concise yet profound poems explore themes of nature, love, and the human experience. Dickinson's unique style and use of imagery have made her one of the most beloved and studied poets in American literature. Shakespeare's plays, including *Romeo and Juliet*, *Hamlet*, and *Macbeth*, remain timeless classics. His mastery of language, intricate plots, and exploration of universal themes like love, ambition, and power have ensured his enduring legacy in the world of literature.

Contemporary literature has also produced remarkable works. Arundhati Roy's *The God of Small Things* is a modern masterpiece that weaves a complex narrative of family, love, and societal norms in India. The novel's lyrical prose and evocative storytelling have earned it critical acclaim and a dedicated readership. Literary works have the power to transcend time and place, offering readers a window into the human condition. Each work carries its own unique voice and perspective, inviting us to reflect on our own lives and the world around us. As we delve into the pages of these literary treasures, we embark on a journey of discovery, empathy, and enlightenment, finding solace and inspiration in the beauty of words.

Interpersonal Relationships

Interpersonal relationships are a fundamental aspect of human life, influencing our happiness, mental health, and overall well-being. Cultivating strong and healthy relationships with others is a skill that can significantly enrich our lives. Effective communication is the cornerstone of successful interpersonal relationships. It involves active listening, empathy, and open and honest expression of thoughts and feelings. By understanding and validating the perspectives of others, we can establish trust and rapport. Empathy is another crucial element. Putting ourselves in someone else's shoes and recognizing their emotions allows us to connect on a deeper level. Empathy fosters compassion and helps resolve conflicts by addressing the needs and concerns of all parties involved. Mutual respect is essential for maintaining healthy relationships. Respecting each other's boundaries, values, and individuality builds trust and appreciation. It's important to recognize that differences in opinions and perspectives are natural and can lead to growth and learning. Conflict resolution skills are vital for addressing disagreements and misunderstandings. Healthy conflict resolution involves active listening, staying calm, and finding mutually agreeable solutions. Avoiding blame and focusing on the issue at hand promotes productive discussions. Setting clear and realistic expectations is also essential. Unrealistic expectations can lead to disappointment and frustration. Openly discussing each other's needs and goals can help align expectations and foster a more satisfying relationship. Additionally, quality time spent together strengthens bonds. Sharing experiences, making memories, and engaging in meaningful activities promote connection and intimacy. It's important to prioritize spending time with loved ones and nurturing those relationships. In conclusion, building strong and healthy interpersonal relationships requires

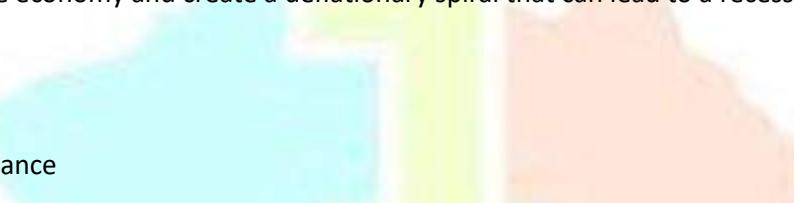


effective communication, empathy, mutual respect, conflict resolution skills, clear expectations, and quality time together. These skills are valuable assets that contribute to our emotional well-being and enrich our lives with meaningful connections and fulfilling relationships.

Deflationary Spiral

As economic troubles start flaring up around the globe, the earnings estimates of American firms that do business abroad begin to flatten. Without these international consumers to buy their products, there are fewer sales, which means that inventories pile up. When there is more supply than demand, prices go down. Lower prices would normally cause demand to pick up, but in an uncertain economy, people tend to postpone purchases. We see this tendency in the American economy with computer products, where consumers believe that the prices will go down if they wait another six months, so they decide to hold off. This tendency causes further gluts in the market, which eventually leads manufacturers to slow production. They lay off workers, causing domestic consumption to fall further since there is less money to buy goods. These effects ripple throughout the economy and create a deflationary spiral that can lead to a recession or even a depression.

Children Allowance



Many people who have written on the subject of allowances say it is not a good idea to pay your child for work around the home. These jobs are a normal part of family life. Paying children to do extra work around the house, however, can be useful. It can even provide an understanding of how a business works. Allowances give children a chance to experience the things they can do with money. They can share it in the form of gifts or giving to a good cause. They can spend it by buying things they want. Or they can save and maybe even invest it. Saving helps children understand that costly goals require sacrifice: you have to cut costs and plan for the future. Requiring children to save part of their allowance can also open the door to future saving and investing. Many banks offer services to help children and teenagers learn about personal finance. A savings account is an excellent way to learn about the power of compound interest. Compounding works by paying interest on interest. So, for example, one dollar invested at two percent interest for two years will earn two cents in the first year. The second year, the money will earn two percent of one dollar and two cents, and so on. That may not seem like a lot. But over time, it adds up.

American Economy

As we have already seen, the American economy is increasingly global, and the effects of a downturn in one area of the world can immediately affect the value of American stocks at home. Throughout the first half of the year, it was widely speculated that Federal Reserve Chairman Alan Greenspan would choose to raise interest rates in the U.S. to cool down the economy a bit and prevent inflation from creeping in. By late September, though, he was coming under increasing pressure to lower interest rates to fend off deflationary pressure. What happened?



Australian Education

When Australians engage in debate about educational quality or equity, they often seem to accept that a country cannot achieve both at the same time. Curriculum reforms intended to improve equity often fail to do so because they increase breadth or differentiation in offerings in a way that increases differences in quality. Further, these differences in quality often reflect differences in students' social backgrounds because the 'new' offerings are typically taken up by relatively disadvantaged students who are not served well by them. Evidence from New South Wales will be used to illustrate this point. The need to improve the quality of education is well accepted across OECD and other countries as they seek to strengthen their human capital to underpin their modern, knowledge economies. Improved equity is also important for this purpose, since the demand for high-level skills is widespread and the opportunities for the low-skilled are diminishing. Improved equity in education is also important for social cohesion. There are countries in which the education system seems primarily to reproduce existing social arrangements, conferring privilege where it already exists and denying it where it does not. Even in countries where the diagnosis might be less extreme, the capacity of schooling to build social cohesion is often diminished by the way in which schools separate individuals and groups.

Columbus

When Christopher Columbus arrived at Hispaniola during his first transatlantic voyage in the year A.D. 1492, the island had already been settled by Native Americans for about 5,000 years. The occupants in Columbus's time were a group of Arawak Indians called Tanios who lived by farming, were organized into five chiefdoms, and numbered around half a million (the estimates range from 100,000 to 2,000,000). Columbus initially found them peaceful and friendly, until he and his Spaniards began mistreating them. Unfortunately for the Tanios, they had gold, which the Spanish coveted but didn't want to go to the work of mining themselves. Hence, the conquerors divided up the island and its Indian population among individual Spaniards, who put the Indians to work as virtual slaves, accidentally infected them with Eurasian diseases, and murdered them. By the year 1519, 27 years after Columbus's arrival, that original population of half a million had been reduced to about 11,000, most of whom died that year of smallpox, bringing the population down to 3,000.

Navajo Nation

The Navajo Nation, one of the largest indigenous tribes in the United States, possesses a wealth of traditional ecological knowledge that has proven instrumental in addressing contemporary environmental challenges. Recent research has highlighted the significance of this indigenous wisdom in promoting sustainable practices and preserving the environment.

The Navajo people have inhabited the southwestern United States for centuries and have developed a deep understanding of their natural surroundings. This knowledge encompasses sustainable land management, water conservation, and the utilization of native plants for medicinal and cultural purposes.

In recent years, the Navajo Nation has faced environmental challenges, including droughts and the impacts of climate change. The tribe's traditional ecological knowledge has become an invaluable



resource in responding to these challenges. For instance, the Navajo people's historical practices of water harvesting and efficient crop cultivation have been adapted to mitigate the effects of prolonged droughts.

Furthermore, the Navajo Nation's emphasis on the use of native plants in traditional ceremonies and healing practices aligns with modern efforts to protect biodiversity and promote the use of indigenous flora in sustainable agriculture and medicine.

Incorporating traditional ecological knowledge into contemporary environmental initiatives not only benefits the Navajo people but also contributes to broader conservation efforts. It showcases the importance of indigenous perspectives in tackling complex environmental issues and reinforces the idea that cultural heritage and sustainable environmental practices can go hand in hand.

In conclusion, the traditional ecological knowledge of the Navajo Nation serves as a model for the integration of indigenous wisdom into modern environmental conservation efforts. It demonstrates how honoring and preserving cultural heritage can lead to innovative and sustainable solutions for protecting the environment, benefitting not only the Navajo people but the world at large.

Global Business

Political risk and nationalism have had major impacts on the development and retardation of global business. Two World Wars, the protectionism of the 1930s, and subsequent waves of economic nationalism damaged the global economy severely and threw it into reverse, though temporarily and partially, and changed the trajectory of globalization during the twentieth century. Wartime blockades, interwar trade barriers, and policies of sovereign nations protecting or serving national interests dealt a blow to the global integration of the market. The two World Wars also brought about technological innovation, and partly contributed to the rise of regions that had been traditionally on the periphery, and laid the basis for today's multi-

polar global economy. Under these pressures, global business looked to transform itself from being based on a unitary structure to a multi-centred one: today's multinational corporations were created to operate beyond the constraints imposed by the sovereign states. In addition, the economic entities involved in global business created international public goods on their own, such as special safe havens, rather than remaining passive to the actions of sovereign states. Ironically, however, this seems to be creating a new kind of political risk and widespread anti-

globalism. The effects of political risks, due to their nature, showed significant geographical differences. They varied widely between European and US companies. In Europe, where serious risks such as war and occupation became a reality, the capability to address political risks had a great impact on the rise, fall, and survival of firms, while in US, such risks have little impact on companies.

Digital Privacy

In today's digital age, concerns about digital privacy have become increasingly prevalent and significant. As we embrace the convenience and connectivity of the online world, we must also grapple with the challenges it poses to our personal privacy and security. One of the primary



concerns is data privacy. Tech giants and online platforms collect vast amounts of data on individuals, often without their explicit consent. This data includes personal information, browsing habits, and even location data. The misuse or mishandling of such data can have severe consequences, from identity theft to invasive targeted advertising. Another issue is the erosion of anonymity. Our online activities are often tracked, leaving a digital trail of our behavior and preferences. This loss of anonymity can lead to unwarranted surveillance, online harassment, and a chilling effect on free speech, as individuals become hesitant to express their views openly. Furthermore, the rise of social media has exacerbated concerns about privacy. Sharing personal information and updates on social networks can expose individuals to risks such as cyberbullying, misinformation, and the unintended spread of private content. Legislation and regulations regarding digital privacy are still evolving and often struggle to keep pace with rapid technological advancements. It is essential for individuals to take proactive steps to protect their digital privacy, such as using secure passwords, enabling two-factor authentication, and being cautious about sharing personal information online. Moreover, raising awareness about digital privacy issues and advocating for stronger privacy protections are crucial steps in addressing this growing concern. As individuals, organizations, and governments work together, we can find a balance between enjoying the benefits of the digital age and safeguarding our fundamental right to privacy.

Swedish Forestland

The growing season in Sweden ranges from about 240 days in the south to 120 days in the north. Less than one-tenth of Sweden's land area is under cultivation. Most arable land is found in southern Sweden, but there are arable parcels up to the Arctic Circle. Wheat, barley, sugar beets, oilseeds, potatoes, and staple vegetables dominate in the south, while in the north hay and potatoes are the main crops. In Sweden as a whole, animal agriculture is more significant than cereal farming. Dairy cows are important in all parts of the country, while pig and poultry raising are concentrated in the extreme south. The yields of Swedish farms are among the highest in the world. Environmental problems, however, have made it necessary to reduce the use of fertilizers.

About half of Swedish forestland is privately owned, about one-fourth company-owned, and about one-fourth publicly owned. Forest work used to be complementary winter employment for small farmers using their horses; today forestry is carried on year-round by a small workforce and large, modern machinery. Nearly three-fourths of all Swedish farms have timberland. The average regrowth and harvest time for spruce and pine is about 50 years in the south and roughly 140 years in the north. Since the late 19th century, forestry in Sweden has been conducted on a sustained-yield basis, which establishes a ratio between cutting and new growth that is strictly enforced. Modern large-scale forestry methods have been subject to severe criticism, and major reforms were implemented in the 1990s. A thorough mapping and inventory of key woodland habitats was undertaken in the mid-1990s to identify areas with high biodiversity values.

School Shooting

The majority of school shootings are committed by white middle-class males living in suburban or rural areas. In attempting to explain this phenomenon, some researchers argued that African American parents recognized the need to prepare their children to face not only bullying but also humiliating racist comments and acts from the dominant culture. They frequently emphasized to their children that racist behaviours are wrong and that their children need not feel alone in their



struggle. Research on the predominantly or exclusively white communities where the white male middle-class school shooters resided painted a very different picture. Parents and school staff in these areas indicated that they offered little or no opportunity either to stop the intense bullying or to help the victims process the emotions and identify strategies for responding. Because the boys were sometimes ashamed to report these violations of their masculinity, parents and school staff were often ignorant of, or ignored, the daily demoralizing, humiliating, and taunting environments embedded in the school and community cultures where the white school shooters lived. Thus, some future school shooters were left to determine on their own how to negotiate their feelings of intense rejection and discrimination relating to their social standing in their schools and among their peers: they were on their own in defending their sense of self in the context of their often extreme physical and verbal bullying and severe personal humiliation.

Goosebumps

Goosebumps are the result of piloerection, a temporary raising of the hairs on the surface of the skin that occurs when the piloerector muscles contract. These tiny muscles are attached to the individual follicles from which each hair arises. Piloerection is a voluntary response directed by the sympathetic nervous system (the one that triggers the "fight or flight" response), and is elicited by cold, fear or a startling experience. Goosebumps have two functions that serve little purpose to less hairy, modern-day humans. "One is to keep us warm, which they don't do a very good job at on humans because we're not furry," Roach, a physician from Canada, says. For example, cold weather can trigger piloerection in mammals — as well as birds — causing their hair (or sometimes their feathers) to stand up and then reset. This action can create a layer of air underneath the animal's fur that helps insulate their bodies from the cold temperatures. Piloerection also occurs when animals perceive a threat is near. In this situation, when the piloerector muscles contract and cause the hair to rise, it creates a "fluffed up" appearance that makes the animal seem larger and may help deter an attack by other animals. As a result, goosebumps serve no real purpose in humans since we evolved to less hairy creatures.

Wetlands Resources

Wetlands are one of the world's most important environmental assets which provide homes for large, diverse biota as well as significant economic, social and cultural benefits related to timber, fisheries, hunting, recreational and tourist activities. They support the livelihoods of surrounding communities, including water, papyrus and fisheries among others, and provides vital ecosystem services such as purification and storage of water. It also acts as a carbon sink, thus regulating global and local climatic conditions and is internationally recognized as a key biodiversity area that hosts globally and nationally threatened bird, fish and mammal species. The wetland has attracted both local farmers and external agricultural interests. Wetlands constitute an important resource for riparian communities, and therefore it is important that they participate in the management of wetlands. Community participation in natural resource management has evolved from the realization that people living with natural resources should be responsible for their management and benefit from using the resources. Citizens must not only have access to information but must also be entitled to participate in decision making and have access to justice in environmental matters. However, participation of local communities in seeking solutions to wetlands resources use remains a grave challenge as managers of participation processes engage in low level consultations that do not empower them to co-manage these resources. Besides, the dynamics of communities' participation and their activities on the wetland are not clearly understood despite wetland's continued degradation in size and value.



Parosmia

Parosmia is a disorder characterized by a change in the perception of odors. Most often, the smells are unpleasant, like hand soap smelling like dead bodies and the outdoors like sewage. This odd distortion of scent is being seen in a growing number of people who have contracted COVID-19, lost their sense of smell and taste, and recovered from the virus but never fully regained their sense of smell again, says Dr. Jennifer Grayson, director of otolaryngology research at the University of Alabama at Birmingham. "Parosmia is not classified as a long-haul symptom of COVID. It's more of a complicating and potentially permanent factor of COVID," she says. Parosmia is closely related to phantosmia, an olfactory hallucination characterized by smelling something that isn't there, such as smelling smoke when there's nothing burning, Grayson says. It can also be intertwined with a distorted sense of taste known as dysgeusia. For example, a member of a Parosmia/Post-COVID Facebook group described toothpaste tasting like "how a landfill smells." These odd odors and tastes are described by other Facebook group members as "dumpster juice," "hot garbage," "potting soil," "rotting flesh" and "dog." They can greatly diminish quality of life. Eating becomes excruciatingly difficult, as most things that tasted pleasant before they developed parosmia suddenly cause sufferers to gag or vomit. Because parosmia can linger for months, many of these individuals lose weight and some become depressed and hopeless for fear they will never regain their sense of smell and taste.

Preservation Act

The Endangered Species Preservation Act was the predecessor to the modern Endangered Species Act. It was enacted in 1966. The act empowered the United States Secretary to pilot and run conservation programs for indigenous species on the brink of extinction.

The Endangered Species Preservation Act was the government's response to the declining numbers of the whooping crane, a bird species indigenous to North America. Two years later, in 1968, the government increased conservation efforts for America's indigenous species and bought 2,300 acres in Florida. This enhanced protection for the National Key Deer through the National Key Deer Refuge. The government first established the refuge in 1957.

The U.S. was on the right step in protecting its animals and plants, then saw the need to expand the law to cover international species. It all started in the 1960s with a recording of the sound made by humpback whales. Their numbers were also dwindling, so much so that the International Whaling Commission temporarily stopped whale hunting. This meant that the ban would be lifted once the whale population stabilized. Conservationists were also watching, and the United States also had to act.

The Endangered Species Preservation Act of 1966, therefore, evolved into the Endangered Species Conservation Act in 1969. The U.S. could now add international species to its endangered species list and ban imports of products made from those species.

Inevitable Rhythms



The natural world is a testament to the profound and intricate patterns of growth and change that govern all living things. Whether it's the growth of a towering oak tree or the transformation of a caterpillar into a butterfly, the rhythms of growth and change are embedded in the very fabric of life. One of the most remarkable aspects of growth is its consistency. In the world of plants, seeds germinate, roots take hold, and shoots emerge, all guided by the innate wisdom of nature. Animals, too, undergo predictable stages of development as they progress from infancy to adulthood. These processes are governed by genetic instructions that ensure the survival and reproduction of species. Change is another fundamental aspect of growth. As living organisms grow, they undergo numerous transformations. For example, the seasons bring about dramatic changes in the natural world. Trees shed their leaves in the fall, only to bud new ones in the spring. Animals molt, migrate, and hibernate in response to changing environmental conditions. The concept of metamorphosis, as seen in the transformation of a caterpillar into a butterfly, illustrates the marvels of growth and change. This process involves a series of distinct stages, each with a specific purpose. The caterpillar, a voracious eater, prepares for its final transformation by storing energy and building a chrysalis. Inside the chrysalis, the caterpillar undergoes a remarkable metamorphosis, emerging as a completely different creature with wings that enable it to fly. Ultimately, these patterns of growth and change remind us of the resilience and adaptability of life in the natural world. They highlight the interconnectedness of all living things and the importance of preserving and protecting our environment to ensure the continued growth and evolution of the diverse species that call our planet home.

Bertrand Russell

As a philosopher, mathematician, educator, social critic and political activist, Bertrand Russell authored over 70 books and thousands of essays and letters addressing a myriad of topics. Awarded the Nobel Prize in Literature in 1950, Russell was a fine literary stylist, one of the foremost logicians ever, and a gadfly for improving the lives of men and women.

He was arguably the greatest philosopher of the 20th century and the greatest logician since Aristotle. Analytic philosophy, the dominant philosophy of the twentieth century, owes its existence more to Russell than to any other philosopher. And the system of logic developed by Russell and A.N. Whitehead, based on earlier work by Dedekind, Cantor, Frege, and Peano, broke logic out of its Aristotelian straitjacket. He was also one of the century's leading public intellectuals and won the Nobel Prize for Literature in 1950

"in recognition of his varied and significant writings in which he champions humanitarian ideals and freedom of thought."

Russell was involved, often passionately, in numerous social and political controversies of his time. For example, he supported suffragists, free thought in religion and morals, and world government; he opposed World War I and the Vietnam War, nationalism, and political persecution. He was jailed in 1918 for anti-war views and in 1961 for his anti-nuclear weapons stance.

He was married 4 times and had 3 children. With Dora Russell, he founded the experimental Beacon Hill School. He knew or worked with many of the most prominent figures in late 19th and 20th century philosophy, mathematics, science, literature, and politics.



WRITE ESSAY

How does the design of buildings affect the places, positively and negatively, where people live and work?

Professional athletes can earn very high salaries. Many people argue that this is unfair and that other professions deserve higher salaries. To what extent do you agree or disagree?

Artificial intelligence is good in the teaching field. To what extent do you agree with this?

Do you think that ocean exploration is as important as space exploration?

To what extent do you think that cashless transactions will replace traditional money?

Do you agree that social networks should regulate fake news more strictly?

Do you agree that genetically modified foods are safe for consumption?

Do you agree that the modern lifestyle is too fast-paced for good mental health?

Do you agree that people are too dependent on technology?

What is your opinion on the necessity of space laws and governance?

Do you agree that digital art is as valuable as traditional art?

To what extent do you think that ethical considerations should guide scientific research?

The qualities that a person needs to become truly successful cannot be learned at university or in a similar educational institution. To what extent do you agree or disagree?

It is no longer necessary to use animals for food, clothing or medical research. To what extent do you agree or disagree?



International travel is cheaper and more convenient than ever. Do the advantages of this outweigh the disadvantages?

To what extent do you agree that the pursuit of scientific knowledge is the key to humanity's future?

To what extent do you think renewable energy research should be funded by governments?

What is your opinion on the importance of preserving natural habitats?

To what extent do you think the Internet has changed the nature of friendships?

Do you believe that humans have a moral obligation to combat climate change?

To what extent do you agree that public transportation is essential for urban development?

To what extent do you think that countries should invest in high-speed rail systems?

What is your opinion on the necessity of college education for success in life?

To what extent do you think artificial intelligence poses a threat to human jobs?

To what extent do you think virtual reality will change entertainment in the future?

Do you agree that technology has made education more accessible to people around the world?

To what extent do you think that a person's success is due to their natural talent versus their hard work?

Do you agree that a four-day workweek would be more beneficial than the traditional five-day week for productivity and work-life balance?

To what extent do you agree with the statement that environmental conservation should be prioritized over economic growth?

To what extent do you think technology has influenced the quality of interpersonal communication? Is it positive or negative?



What is your opinion on the importance of preserving cultural heritage in the age of globalization?
Do you think it's necessary or not?

Do you agree that climate change is the most pressing issue facing our generation? Support your viewpoint with reasons or examples.

What is your opinion on the role of artificial intelligence in shaping the future of employment? Do you see it as a threat or an opportunity for the workforce?

Do you agree that remote work is a viable long-term alternative to traditional office environments?

What are the potential negative impacts of multitasking on focus and performance?

Art and culture can improve life quality. Should the government or private investment be responsible for the funding of art and culture? Give your opinion.

As the urban population grows, traffic is heavy and public areas such as parking lots are packed. What solutions do you think can address such problems?

Scientists have been debating the impact of nature and nurture on people's personality and behavior. Nature brings you inborn skills and nurture helps you obtain skills by practices. Which one do you think has a greater influence?

As dealing with money is such an important skill, all children should be taught financial management at school. Do you agree with it or not?

Pay for performance is a trend for teachers.

Some people agree that it is an incentive for teachers to link students' achievements to teachers' salaries, while others disagree. What is your opinion about paying teachers according to students' achievement? Give your reasons.

People often feel stressed and have different ways of escaping the stress and difficulties of modern life. When do you feel stressful and how do you release stress?

Exercise is essential for health, and exercise in the workplace makes employees less absent from work. All employers should provide exercise facilities in the workplace. What is your opinion? Support your opinion with personal examples.



Some famous entertainers earn millions of dollars every year. Few people think they deserve such high salaries. What is your opinion?

With the help of technology, students nowadays can learn more information and learn it more quickly. Do you agree or disagree with the statement?

Learning about the past has no value for those of us living in the present. Do you agree or disagree?

Some people believe that the Earth is being harmed by human activity. Others feel that human activity makes the Earth a better place to live. What is your opinion?

Television, newspapers, magazines, and other media pay too much attention to the personal lives of famous people such as public figures and celebrities. What is your opinion?

In general, people are living longer now. What are the causes and problems it may bring?

Some people believe that university students should be required to attend classes. Others believe that going to classes should be optional for students. Which point of view do you agree with?

Universities should give the same amount of money to their students' sports activities as they give to their university libraries. Do you agree or disagree with the statement?

Some large factories are built near the communities. What are the benefits and problems of this phenomenon?

Knowledge gained from experience is more important than knowledge gained from books. To what extent do you agree with this statement?

Food has become easier to prepare in the modern society. This change also improves the way people live. Do you agree with that?

Parents are the best teachers. To what extent do you agree with this statement?



Young people should try different jobs before they decide which job or career they will do in the long term. To what extent do you agree with this statement?

It is more important to be able to work with a group of people on a team than to work independently. Do you agree with that?

Some think a city should try to preserve its old, historic buildings. Others think a city should destroy them and replace them with modern buildings. What is your opinion?

Some people prefer to work for themselves or own a business. Others prefer to work for an employer. What do you think?

Parents or other adult relatives should make important decisions for their older (15- to 18-year-old) teenage children. To what extent do you agree with this statement?



READING



FILL IN THE BLANKS R/W

New B.C. residents will only be required to provide their driver licence history — proof of insurance is no longer required. However, their premiums will be adjusted for the first three years

_____ (Answer: of) driving in B.C. _____ (Answer: due to) the increased risks associated with driving in a new area. Each year you remain crash-free, your discount increases. ICBC _____ (Answer: will credit) you with up to 15 years of driving experience (up from eight years) upon receipt of a driver's abstract _____ (Answer: showing) the original date that you received your licence. When obtaining your B.C. licence, you can provide your original driver's abstract in person at a driver licensing office.

Choices:

1. within, among, against, of
2. depending on, as for, due to, thanks to
3. crediting, credited, credit, will credit
4. shown, shows, show, showing

At the height of summer in the Antarctic, tourist ships move gently around the coast. Even 30 years ago such sights would have been unthinkable, but today people are willing to pay large sums of money to see the last real wilderness in the world. In the Arctic, careless human exploitation

_____ (Answer: in the past) has damaged the fragile ecosystem. Today concerned governments are trying to find ways to develop the region _____ (Answer: while) caring for the very special natural environment. _____ (Answer: Because) the Antarctic is less accessible than the Arctic, it is still largely undamaged by humans, although holes in the ozone layer above the Antarctic have _____ (Answer: already been discovered). Many people believe that one way to preserve the area is to make the whole region into a world park, with every form of exploitation internationally _____ (Answer: banned).

Choices:

1. in the future, even before, on one side, in the past
2. while, whereas, even, though
3. Because, Whether, however, Despite
4. yet discovered, ever discovered, already been discovered, already been discovering
5. ban, have banned, banned, banning

_____ (Answer: After) it became evident that there was no oil reserve in the desert region, companies faced a tough choice. Traditional energy exploration plans _____ (Answer: fell) through. With ample sunlight there, building large-scale solar power plants became the new goal, _____ (Answer: sparking) local green energy hopes.



Choices:

1. Where, After, While, Until
2. worked, pushed, carried, fell
3. delaying, sparking, ignoring, crushing

Durkheim found humanistic studies uninteresting, _____ (Answer: turning his attention) from psychology and philosophy to ethics and eventually, sociology. He graduated with a degree in philosophy in 1882. Durkheim's views _____ (Answer: could not get) him a major academic appointment in Paris, so from 1882 to 1887 he taught philosophy at several provincial schools. In 1885 he _____ (Answer: left for) Germany, where he studied sociology for two years. Durkheim's period in Germany _____ (Answer: resulted in) the publication of numerous articles on German social science and philosophy, which _____ (Answer: gained recognition) in France, earning him a teaching appointment at the University of Bordeaux in 1887.

Choices:

1. moving his position, alternating his mind, juggling his job, turning his attention
2. hasn't got, were getting, can't get, could not get
3. came after, wrote about, ran across, left for
4. resulted in, flicked through, was down to, achieved by
5. remained modest, gained appreciation, collected money, gained recognition

Governments also frequently subsidize local industries to help them compete in the global market. Subsidies come _____ (Answer: in the form of) tax credits or direct payments. The most commonly used are farm subsidies. That allows producers to lower the price of local goods and services. This _____ (Answer: makes) the products cheaper _____ (Answer: even) when shipped overseas. Subsidies work even better than tariffs. This method works best for countries that rely mainly on exports. _____ (Answer: On the contrary) sometimes subsidies can have the opposite effect. The Agricultural Adjustment Act of 1933 allowed the government to pay farmers _____ (Answer: not) to grow crops or livestock, which let their fields rest and regain nutrients. It helped the agriculture industry but raised food costs during the Depression.

Choices:

1. apart from, in the form of, through, as well as
2. makes, allows, promises, decides
3. but, thus, however, even
4. Therefore, Unless, Besides, On the contrary



5. neither, either, not, whether

In the UK, it is recommended that drivers should turn off their car engines when they expect to be stationary for more than 1 minute. To encourage drivers _____ (Answer: to turn off) their engines while waiting at rail crossings, the Kent city council placed a permanent sign at the crossing asking drivers to "please switch off your engine when barriers are down to help improve air quality." _____ (Answer: On average), drivers had to wait between 2 and 3 minutes to cross after the barrier had gone down. However, the sign didn't seem to be convincing the _____ (Answer: majority) of drivers to switch off their engines. "

(Answer: Although) some research suggests that signs _____ (Answer: alone) can change behaviour, the message on this sign was designed simply to be an informational request and was not guided by any particular behavioural theory," the researchers explain. So, the research team, led by Rose Mellady of the University of East Anglia, designed an intervention study.

Choices:

1. to turn off, turn off, turning off, turned off
2. For instance, On average, In addition, Of course
3. exception, minority, majority, unity
4. Although, Since, Thus, Because
5. alone, lonely, neither, either

Emerging in the mid-1950s in Britain and late 1950s in America, pop art reached its peak in the 1960s. It began as a revolt _____ (Answer: against) the dominant approaches to art and culture and traditional views on what art _____ (Answer: should be). Young artists felt that what they were taught at art school and what they saw in museums did not have anything _____ (Answer: to do with) their lives or the things they saw around them every day. Instead, they _____ (Answer: turned to) sources such as Hollywood movies, advertising, product packaging, pop music and comic books for their imagery.

Choices:

1. against, along, with, within
2. be, should be, has been, would be
3. relevant in, familiar with, to do with, about
4. mustered up, relevant in, turned to, reckoned on

In an intriguing development in astro-botany, researchers are exploring the potential of watermeal, the world's smallest flowering plant, in hyper gravity conditions. This research _____ (Answer: aims) to assess its suitability as a sustainable food _____ (Answer: source) and oxygen producer for astronauts. Conducted in environments mimicking space conditions, the study explores how watermeal grows and thrives under increased gravity. The plant's small size and rapid



growth rate make it an _____ (Answer: ideal) candidate for space cultivation. If _____ (Answer: successful), watermeal could become a vital component of life-support systems in long-duration space missions, providing astronauts with a renewable source of food and oxygen. This research not only contributes to the advancement of space exploration but also opens up new possibilities in understanding plant biology _____ (Answer: under) extreme conditions. It can also offer insights into how plants might adapt to changing environments on Earth, particularly in response to climate change.

Choices:

1. enters, fits, works, aims
2. root, source, process, cause
3. ideal, articulate, exhaustive, absolute
4. successful, is successful, is succeeded, succeeds
5. beyond, within, throughout, under

The salinity of the Caspian Sea is one of its most intriguing aspects, with levels significantly lower than that of the world's oceans, averaging about one-third the salinity of seawater. This reduced salinity is due to the large _____ (Answer: volume) of fresh water it receives from rivers, particularly the Volga, which _____ (Answer: alone) contributes about 80% of the incoming water. However, the Caspian Sea's salinity is not _____ (Answer: uniform) throughout; it varies from north to south, being lower in the northern parts due to the greater influx of river water and higher in the southern parts due to higher evaporation rates. These differences in salinity _____ (Answer: affect) the distribution of marine life and the ecological balance of the Caspian basin, making it a unique environment for researchers studying the impacts of salinity on aquatic ecosystems.

Choices:

1. pressure, depth, rate, volume
2. alone, slightly, lonely, slight
3. uniform, impartial, confident, shifting
4. defect, deflect, effect, affect

Feeling overwhelmed by deadlines, bills, and the endless to-do list? Stress, a constant companion in our fast-paced world, takes a _____ (Answer: toll) on our well-being. But mindfulness meditation offers a powerful antidote. Studies show it can lower stress hormones, leaving you feeling calmer and clearer. The benefits go beyond stress-busting. Regular practice can sharpen your focus, helping you tackle tasks with more _____ (Answer: ease). It can also boost your emotional resilience, _____ (Answer: equipping) you to handle issues with more serenity. Mindfulness isn't a magic bullet, but a simple tool anyone can use. Unlike medication or expensive treatments, it requires no special equipment or resources. Just a few minutes each day in a quiet space can be enough to cultivate peace and _____ (Answer: reap) the numerous benefits.

Choices:



1. leap, danger, toll, charge
2. context, top, fund, ease
3. depleting, reforming, equipping, determining
4. reap, neap, leap, heap

The belief that dogs are colour-blind, especially that they can only see in black and white, is a common misconception that has been _____ (Answer: perpetuated) for many years. This misunderstanding likely _____ (Answer: stems from) early scientific studies and the way the information was subsequently communicated to the public. Early studies on canine vision suggested that dogs could not perceive colors in the same way humans do. This was because dogs, unlike humans, have fewer cone cells in their eyes. Cone cells are responsible for _____ (Answer: detecting) color. Humans typically have three types of cone cells, allowing them to see a _____ (Answer: wide) spectrum of colors (trichromatic vision). Initial research suggested that dogs might lack this complexity in their visual system, leading to the conclusion that they could only perceive the world in _____ (Answer: shades) of gray. Modern research, however, has shown that dogs do see colors, but their color vision is limited compared to humans.

Choices:

1. saturated, overrated, decorated, perpetuated
2. result in, stems from, depart from, based on
3. reacting, denying, electing, detecting
4. lengthy, wide, heavy, wild
5. shades, rays, bursts, streams



Cities are living museums, displaying centuries of architectural evolution side by side. The styles of buildings reflect the era and technology of their construction, from medieval stone to modern steel and glass. Recently, there's been a focus on _____ (Answer: making) older buildings more energy-efficient, retrofitting them with technologies like solar panels. This trend represents a balance between preserving historical aesthetics and _____ (Answer: meeting) today's environmental standards. Architecture, fundamentally, is a record of human society, showing changes in tastes, technologies, and social structures over time. The challenge of integrating modern amenities _____ (Answer: without) compromising the integrity of historical sites has sparked creative solutions. As cities expand, the pressure to _____ (Answer: blend) the new with the old while accommodating growth and sustainability concerns shapes the future of urban planning.

Choices:

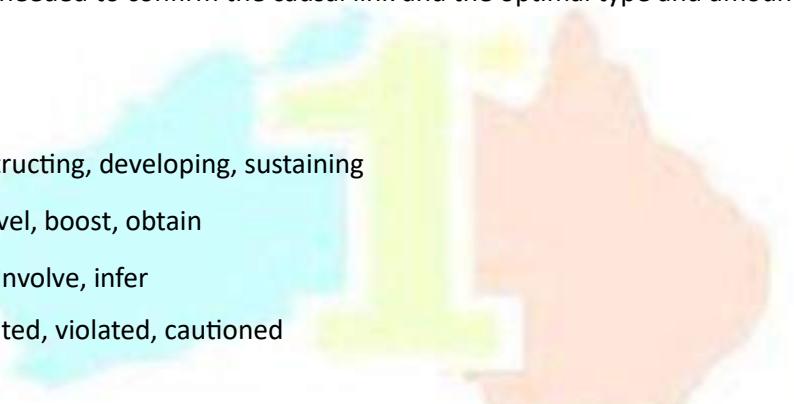
1. making, building, taking, hiring
2. searching, starting, investing, meeting
3. by, due to, without, under
4. commoditize, orient, network, blend



Men who want to reduce their risk of prostate cancer may benefit _____ (Answer: from) doing more aerobic exercise, according to a new study. Researchers found that improving cardiorespiratory fitness by 3% over a year was linked to a 35% lower chance of _____ (Answer: developing) the disease. Cardiorespiratory fitness is the ability of the heart and lungs to supply oxygen to the muscles during physical activity. Activities that _____ (Answer: boost) this fitness level include jogging, cycling, swimming, hiking, and dancing. The study's co-author, Dr Kate Bolam, said that such activities should challenge the cardiovascular system and _____ (Answer: involve) both the lower and upper body. Prostate cancer is the most common cancer in men, affecting about one in eight men in the UK. The study, published in the British Journal of Sports Medicine, adds to the evidence that physical activity may play a role in preventing or delaying the disease. However, experts _____ (Answer: cautioned) that more research is needed to confirm the causal link and the optimal type and amount of exercise.

Choices:

1. if, of, from, in
2. evading, constructing, developing, sustaining
3. mitigate, unravel, boost, obtain
4. input, invent, involve, infer
5. resolved, dictated, violated, cautioned



A secret farm in South Africa is _____ (Answer: home) to 2,000 white rhinos, one of the largest herds in the world. The farm was recently bought by African Parks, a conservation charity that plans to rewild the rhinos and _____ (Answer: restore) them to their natural habitats across Africa. The farm was founded by John Hume, who wanted to _____ (Answer: breed) rhinos and sell their horns, but ran out of money. African Parks saw the opportunity to save the rhinos and use them to rebuild populations that have been decimated by poaching. Poaching is driven by the demand for rhino horn in some parts of Asia, where it is used in traditional medicine and as a status symbol. The charity hopes to transfer all the rhinos _____ (Answer: from) the farm to secure and sustainable locations in the next 10 years. This would be one of the most ambitious animal rewilding projects ever _____ (Answer: undertaken), and could secure the future of the white rhino in Africa.

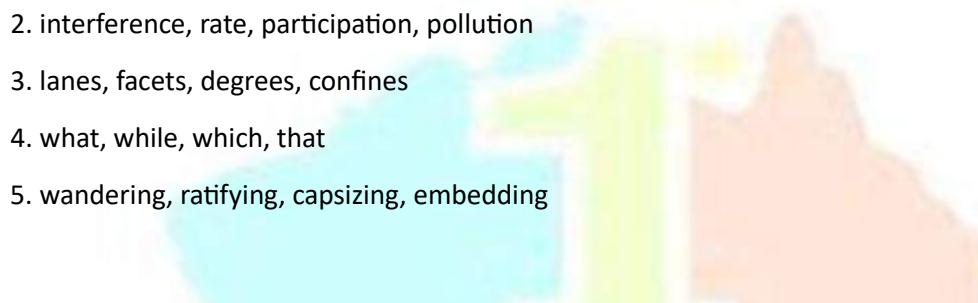
Choices:

1. ecosystem, home, reserve, guardian
2. detach, expel, restore, withdraw
3. covet, breed, disguise, dismantle
4. from, toward, until, away
5. bypassed, undertaken, overestimated, emigrated

Exploring the greenery of a city can reveal a surprising diversity, akin to the layers of a forest canopy. Urban trees, from the towering elms _____ (Answer: lining) the streets to the potted plants on balconies, create a layered tapestry of vegetation. This urban canopy does more than just beautify; it cleans the air, provides shade, and even reduces noise _____. (Answer: pollution). It's fascinating how, within the _____ (Answer: confines) of concrete and steel, these plants thrive, adapting to their surroundings in inventive ways. Some trees have roots that navigate the urban soil landscape, _____ (Answer: while) others seem to reach out from the smallest cracks in the pavement. This urban greenery, much like a natural forest, supports a range of wildlife, creating a micro-ecosystem in the heart of the city. Next time you walk through your city, look up and around; you're likely _____ (Answer: wandering) through an urban forest.

Choices:

1. shining, spinning, dining, lining
2. interference, rate, participation, pollution
3. lanes, facets, degrees, confines
4. what, while, which, that
5. wandering, ratifying, capsizing, embedding



The recent trend towards smart homes _____ (Answer: incorporates) gadgets that automate tasks, aiming to increase convenience and efficiency. For example, smart thermostats can adjust the temperature based on the weather and occupancy, smart lights can turn on and off with voice _____. (Answer: commands) or motion sensors, and smart security systems can alert the homeowners of any _____. (Answer: suspicious) activity. At the same time, there's a growing appreciation for vintage and handmade items, suggesting a desire _____. (Answer: for) uniqueness and craftsmanship. Many people choose to decorate their homes with antiques, collectibles, or artisanal products, such as quilts, pottery, or paintings. Others mix and _____. (Answer: match) different styles and eras, creating a fusion of old and new. This juxtaposition raises questions about how these seemingly opposite elements can coexist and enhance each other's value.

Choices:

1. incorporates, invalidates, operates, cooperates
2. pulses, rulers, sighs, commands
3. suspicious, identical, guilty, artificial
4. to, for, from, of
5. estimate, clash, divide, match

While in the West, Friday the 13th might give some people pause, other cultures have their own numerological apprehensions. Take the number 4 in East Asia, often _____ (Answer: associated) with death due to its pronunciation _____ (Answer: sounding) similar to the word for "die" in several languages. Buildings frequently skip the fourth floor, much like the 13th in the West. Then there's Italy, where 17 is the unlucky number, based on its Roman numeral



representation, XVII, which can be rearranged to spell 'VIXI', translated as "I have lived," an implication of death. These superstitions, while _____ (Answer: seemingly) arbitrary, hold a fascinating glimpse into cultural psychologies and histories. They influence architecture, business, and daily life in subtle but pervasive ways. It's a curious aspect of human _____ (Answer: nature) how numbers can carry such weight in our collective imaginations.

Choices:

1. merged, associated, worried, reflected
2. sounds, that it sounds, may sound, sounding
3. accidentally, seemingly, seriously, namely
4. presence, nature, structure, layer

Virtual reality (VR), once a futuristic concept, has cascaded into our daily lives with a vibrant splash, revolutionizing the way we experience digital content. This technological marvel, now accessible through headsets like Oculus Rift and HTC Vive, _____ (Answer: immerses) users in a completely artificial world. Its allure lies not just in its novelty but in its _____ (Answer: vast) potential. From gaming to education, VR transcends traditional boundaries, offering an unprecedented level of interaction and engagement. The technology, at its _____ (Answer: core), manipulates our sensory perception, creating a convincing illusion of reality. As described in a recent interview with a VR developer, this medium is not just about visual spectacle; it's about 'crafting experiences that resonate on a human level'. This statement _____ (Answer: underscores) the idea that VR's power lies in its ability to connect with users beyond the visual, tapping into a deeper, emotional response.

Choices:

1. accompanies, surrenders, immerses, surveys
2. emphatic, vast, fancy, booming
3. pore, score, core, moor
4. underscores, adapts, submerges, approaches

In the last decade, the use of plastic packaging has soared, _____ (Answer: driven) by the global surge in online shopping and convenience food. A 2020 report highlighted that global plastic packaging production reached an astonishing 150 million tonnes. On the surface, this growth signals a _____ (Answer: thriving) industry, crucial for protecting goods and aiding in transportation. However, delving deeper reveals a complex environmental quandary. While the economic benefits are clear – with the industry _____ (Answer: valued) at billions – the environmental costs are staggering. Pollution, non-biodegradability, and detrimental effects on marine life form the darker side of this narrative. As an environmental study pointed out, for every tonne of plastic produced, _____ (Answer: there) is an accompanying cost of \$700 in environmental degradation, not reflected in the market price. Furthermore, recycling initiatives are only partially effective, with a significant _____ (Answer: portion) of plastic ending up in landfills or oceans. The key takeaway is the need for sustainable alternatives to plastic, which can fulfil economic roles without imposing heavy environmental costs.

Choices:



1. driven, equipped, governed, provided
2. composite, synthetic, contented, thriving
3. increased, valued, merged, contracted
4. when which, there, what
5. sample, portion, majority, production

In 1922, the world witnessed one of the most significant archaeological discoveries of the 20th century - the unearthing of King Tutankhamun's tomb in the Valley of the Kings, Egypt. This event marked a _____ (Answer: pivotal) moment in our understanding of ancient Egyptian civilization. The young pharaoh, Tutankhamun, who _____ (Answer: reigned) during the 18th dynasty, had been somewhat obscure until British archaeologist Howard Carter's remarkable discovery. Carter's quest for Tutankhamun's tomb was fuelled by years of meticulous research and _____ (Answer: exploration). When he finally came upon the nearly intact tomb, it was a historical triumph. The tomb's contents, _____ (Answer: preserved) for over 3,000 years, were astonishing. They included the iconic gold mask of Tutankhamun, a _____ (Answer: plethora) of gold artifacts, and beautifully preserved wall paintings depicting the young king's life and journey to the afterlife. This discovery offered unprecedented insights into the art, culture, and daily life of ancient Egypt.

Choices:

1. structural, pivotal, sentimental, detrimental
2. assumed, conquered, settled, reigned
3. discipline, authority, dimension, exploration
4. have been preserved, preserved, preserving, to preserve
5. benefits, panel, shape, plethora

The COVID-19 pandemic has fundamentally altered the concept of work, accelerating trends like remote working and digital collaboration. Companies across various _____ (Answer: sectors) have had to adapt to this new normal, with many employees working from home. This shift has benefits, including increased flexibility and reduced commuting time, but also challenges such as _____ (Answer: blurring) the lines between work and personal life and the potential for increased isolation. The long-term impact of these changes on corporate culture and employee well-being is yet _____ (Answer: to be) fully understood. Furthermore, the pandemic has highlighted the digital divide, with access to reliable internet and technology becoming a _____ (Answer: prerequisite) for many jobs. As the world slowly recovers, it's likely that some of these changes will persist, leading to a more hybrid model of work _____ (Answer: combining) both remote and in-office elements.

Choices:

1. prospects, sectors, positions, factories
2. deviating, contrasting, blurring, compounding

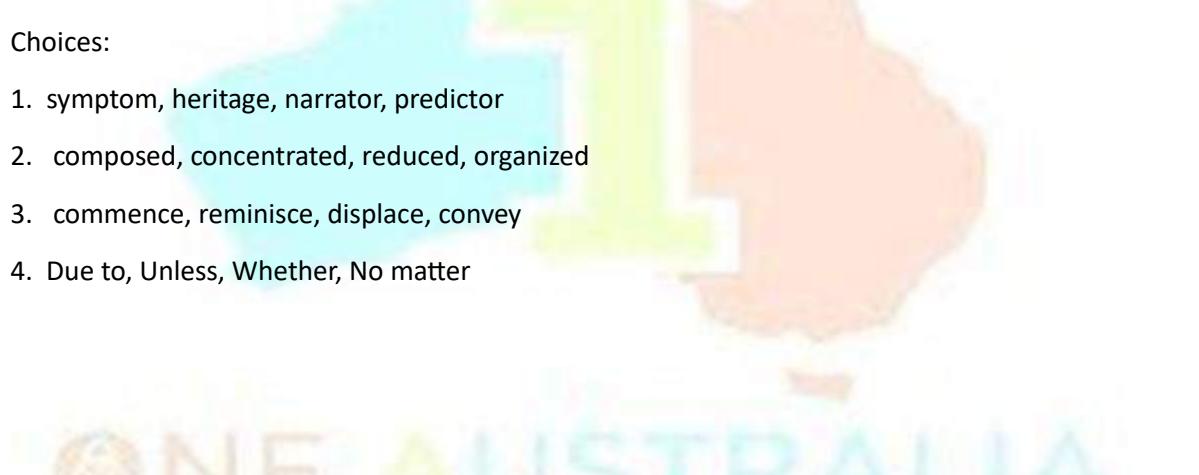


3. to be, can be, had been, being
4. division, commission, probability, prerequisite
5. mapping, combining, conceiving, alternating

Communication is not just about what you say, but how you say it. Your tone of voice in communication can make or break your relationships, your career and your life. According to a study by researchers from the University of Southern California, the tone of voice in communication is a better _____ (Answer: predictor) of relationship success than the actual words or behaviours of the partners. Your tone of voice in communication is _____ (Answer: composed) of four elements: pitch, pace, volume and modulation. These elements _____ (Answer: convey) your attitude, emotion and intention to your listener. By being mindful of these elements, you can watch your tone and use it to achieve your goals. _____ (Answer: Whether) you want to build rapport, make connections, influence others or get what you want, your tone of voice in communication can help you do that.

Choices:

1. symptom, heritage, narrator, predictor
2. composed, concentrated, reduced, organized
3. commence, reminisce, displace, convey
4. Due to, Unless, Whether, No matter



Australia is facing extreme weather conditions as a severe heatwave and heavy rainfall _____ (Answer: hit) different parts of the country. While some regions are experiencing temperatures above 40C, others are dealing with floods and cyclones. The Pilbara region in Western Australia is the worst affected by the heatwave, with temperatures reaching up to 48.3C on Sunday. The _____ (Answer: record) of 50.7C, set in January 2022, could be broken as the heatwave continues into the next week. Meanwhile, a low-pressure system has brought torrential rain to parts of the Northern Territory, causing floods and _____ (Answer: disrupting) supplies. Some areas have received more than six times their usual January rainfall. The system is expected to move outwards and bring relief to the affected areas. In addition, a tropical cyclone named Kirrily _____ (Answer: is forecast) to strike the coast of Queensland later this week, bringing strong winds and heavy rain.

Choices:

1. hit, ceased, overruled, pushed
2. point, frustration, record, limit
3. squandering, projecting, expanding, disrupting
4. forecast, that forecasts, will forecast, is forecast



Tardigrades, also known as water bears, are microscopic animals that can live in almost any environment, from the deep sea to the frozen poles. They have a remarkable ability to enter a _____ (Answer: state) of deep hibernation when faced with harsh conditions such as high temperatures, radiation, or dehydration. But how do they do it? Researchers have discovered that tardigrades use tiny molecular sensors in their cells to _____ (Answer: detect) the level of harmful molecules which are produced by stress. These sensors _____ (Answer: are made of) an amino acid called cysteine, which changes its structure and function when oxidized by harmful stress molecules. This _____ (Answer: signals) the tardigrades to enter or exit hibernation, depending on the situation. The researchers say that this mechanism may help us understand the ageing process and the possibility of long-term space travel.

Choices:

1. path, circumstance, state, condition
2. detect, amplify, disable, introduce
3. made, have been made, are made of, made in
4. signals, infers, sustains, identifies

Without access to chemical fertilizers, medieval farmers developed and relied heavily on the system of crop rotation to _____ (Answer: preserve) the health of their arable land. This agrarian practice was essential for sustaining the ever-growing populations of medieval Europe. Crop rotation involved the cyclic _____ (Answer: cultivation) of different types of crops on the same plot of land over several seasons or years. This method prevented the _____ (Answer: depletion) of specific soil nutrients, as different crops had varying nutrient requirements and effects on the soil composition. Typically, a farmer would plant grain crops, such as wheat or barley, which were nitrogen-consuming, in one year. The following year, the field _____ (Answer: would be) sown with legumes like peas or beans, which had the ability to fix nitrogen back into the soil. In some rotations, the third year would involve leaving the field fallow – unplanted – to allow the land to recover naturally. In other _____ (Answer: cases), the fallow land would be used for grazing livestock, which helped in manure deposition, further enriching the soil.

Choices:

1. dictate, construct, commit, preserve
2. cultivation, erosion, revision, manufacture
3. discovery, mortality, saturation, depletion
4. would, had been, had, would be
5. results, points, aspects, cases

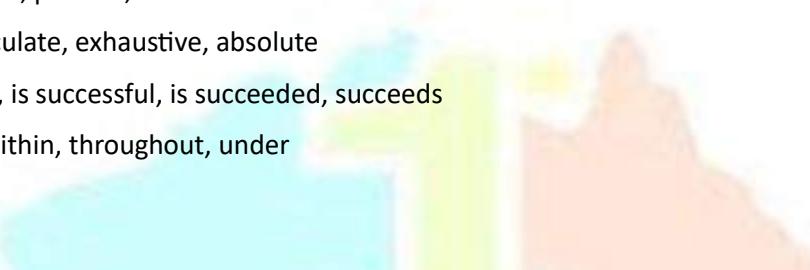
In an intriguing development in astro-botany, researchers are exploring the potential of watermeal, the world's smallest flowering plant, in hyper gravity conditions. This research _____



(Answer: aims) to assess its suitability as a sustainable food _____ (Answer: source) and oxygen producer for astronauts. Conducted in environments mimicking space conditions, the study explores how watermeal grows and thrives under increased gravity. The plant's small size and rapid growth rate make it an _____ (Answer: ideal) candidate for space cultivation. If _____ (Answer: successful), watermeal could become a vital component of life-support systems in long-duration space missions, providing astronauts with a renewable source of food and oxygen. This research not only contributes to the advancement of space exploration but also opens up new possibilities in understanding plant biology _____ (Answer: under) extreme conditions. It can also offer insights into how plants might adapt to changing environments on Earth, particularly in response to climate change.

Choices:

1. enters, fits, works, aims
2. root, source, process, cause
3. ideal, articulate, exhaustive, absolute
4. successful, is successful, is succeeded, succeeds
5. beyond, within, throughout, under



Arthropods, such as insects and spiders, are often overlooked or even despised by humans. However, these _____ (Answer: creatures) with hard exoskeletons and jointed legs are crucial for maintaining the health and diversity of the ecosystems we _____ (Answer: depend) on. In fact, arthropods _____ (Answer: make) up about 84% of all known animal species on Earth. A recent study published in *Scientific Reports* reveals how human activity affects arthropod biodiversity in urban areas, and how environmental factors, such as temperature and land cover, influence the distribution and abundance of different arthropod groups. The study also uncovered many new species of arthropods living in the Los Angeles basin, _____ (Answer: thanks to) the collaboration of community scientists who helped _____ (Answer: collect) specimens from various locations. The findings suggest ways to enhance arthropod biodiversity and its benefits for urban dwellers.

Choices:

1. creatures, mice, bones, structures
2. depend, survive, live, decide
3. compose, make, pull, include
4. while, thanks to, because, contrary to
5. unfold, collect, substitute, pressure

Whether you have blue eyes or brown, lactose tolerance or intolerance, curly hair or straight, the roots of these traits _____ (Answer: lie) in your DNA. Deoxyribonucleic Acid (DNA) is the hereditary material in humans and almost all other organisms, containing the biological instructions that make each species unique. DNA, first identified in the late 19th century and _____ (Answer: whose) structure as a double helix was discovered in 1953 by Watson



and Crick, is present in the nucleus of every cell in an organism. It's estimated that if unwound and linked together, the strands of DNA in one cell would stretch almost 6 feet in length. For many years, the complexity of DNA made understanding the full _____ (Answer: extent) of its influence a distant dream. However, with the _____ (Answer: advent) of advanced genomic technologies, scientists have made groundbreaking strides in understanding and mapping the human genome.

Choices:

1. reside, found, lie, pour
2. which, this, its, whose
3. trait, extent, intention, circumstance
4. constituency, recovery, advent, strategy

The International Space Station (ISS), a marvel of modern science and international collaboration, became operational in space after several years of construction. This space station, _____ (Answer: orbiting) Earth, serves as a unique laboratory for scientific research in an environment unaffected by gravity. The ISS, a _____ (Answer: joint) project involving space agencies from the United States, Russia, Europe, Japan, and Canada, symbolizes an unprecedented era of peaceful cooperation in space exploration. On November 2, 2000, the ISS was first inhabited by astronauts and _____ (Answer: has since) been continuously occupied, making it one of the longest human habitats outside of Earth. The space station travels at an average _____ (Answer: altitude) of 420 kilometres (about 260 miles) above Earth and is easily visible from the Earth's surface as a bright moving object in the night sky.

Choices:

1. postponing, orbiting, tabulating, investigating
2. predominant, solemn, solitary, joint
3. having since, since have, since having, has since
4. altitude, latitude, float, pace

Individuals diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD) and prescribed pharmacological interventions may exhibit thermoregulatory dysfunctions, colloquially _____ (Answer: referred) to as heat sensitivity. This physiological anomaly may impair their ability to perceive elevated body temperatures or dehydration, _____ (Answer: thereby) escalating the risk of hyperthermia and other heat-induced pathologies. It is noteworthy that this side effect is not exclusive to ADHD medications but is also _____ (Answer: prevalent) among other psychotropic drugs that modulate neurotransmitter activity in the brain. To mitigate the risk of heat-related complications, individuals on these medications are advised to _____ (Answer: adhere) to standard heat-avoidance measures such as seeking shade, maintaining adequate hydration, and applying sunscreen. Furthermore, they are encouraged to _____ (Answer: consult) with their healthcare provider or pharmacist regarding any concerns about their medication's interaction with heat. Abrupt discontinuation of medication without professional guidance is strongly discouraged.

Choices:



1. mentioned, termed, referred, known
2. thereby, and, but, then
3. prevalent, successful, diverse, abnormal
4. adhere, address, contribute, obey
5. console, consult, complain, discuss

Europe is set to _____ (Answer: join) the elite club of exascale computing next year, with the completion of JUPITER, a supercomputer that can perform a billion billion operations per second. JUPITER will be hosted at the Jülich Supercomputing Centre in Germany, and will enable simulations and experiments that are currently only possible on a few machines in the US and China. The exascale supercomputer will use a modular architecture, _____ (Answer: consisting) of several interconnected modules with different hardware and software configurations. This will allow JUPITER to _____ (Answer: adapt) to different scientific and industrial applications, such as climate modelling, materials science, quantum computing, and artificial intelligence. JUPITER will also be _____ (Answer: integrated) with other European supercomputing and data infrastructures, such as the European Open Science Cloud and the European Data Infrastructure.

Choices:

1. mimic, challenge, join, enroll
2. consisting, constructing, collaborating, including
3. adapt, detach, stagnate, devote
4. incompatible, integrated, related, generated

The human capacity to perceive rapid alterations in visual scenes, colloquially referred to as “speed of sight”, exhibits a remarkable degree of variation among individuals, as revealed by the inaugural systematic _____ (Answer: investigation) into this phenomenon. This variability in visual acuity may elucidate the differential aptitude observed in individuals when engaging in sports that require _____ (Answer: tracking) of fast-moving objects, such as baseball and cricket. The study posits that certain individuals _____ (Answer: possess) an innate superior vision that enables them to follow fast-moving objects with greater precision than others. This _____ (Answer: inherent) visual prowess could potentially account for the disparities observed in individuals’ performance in ball sports. The research, led by Clinton Haarlem at Trinity College Dublin, underscores the critical role of visual perception in our interaction with _____ (Answer: rapidly) changing environments and its potential implications in the realm of sports.

Choices:

1. balance, intermission, identification, investigation
2. tracking, distorting, ensuring, transmitting
3. render, store, wear, possess



4. responsible, inherent, verbal, logical
5. typically, vividly, rapidly, basically

The Enlightenment, spanning the 17th and 18th centuries, was an intellectual movement in Europe that sought to challenge traditional doctrines and elevate reason and the scientific method as the primary _____ (Answer: sources) of knowledge. Philosophers like Voltaire, Rousseau, and Kant inspired vigorous debates on liberty, equality, and the _____ (Answer: nature) of government, contributing to the progressive ideas that precipitated revolutionary changes in politics and society. This era championed skepticism toward monarchist and clerical authority, advocating for political and social structures informed by rational discourse and empirical evidence. Notable advances _____ (Answer: stemmed) from this milieu, including Diderot's 'Encyclopédie,' which aimed to consolidate human knowledge and was instrumental in disseminating Enlightenment thought. The rippling effect of these ideals is seen in pivotal historical developments such as the American Revolution and the crafting of the United States Constitution, which drew _____ (Answer: heavily) upon Enlightenment principles. Often referred to as the 'Age of Reason,' the Enlightenment left a profound _____ (Answer: legacy) that shaped modern Western thought, embodying an enduring faith in the progress of human civilization through rational inquiry and the pursuit of knowledge.

Choices:

1. reserves, portraits, envoys, sources
2. aristocracy, posture, nature, democracy
3. took, based, separated, stemmed
4. heavily, heavy, heaviness, heavier
5. phenomenon, fantasy, premise, legacy

Motor learning researchers study how people learn from their own movement errors and how they adapt to changing environments. However, most of these studies are _____ (Answer: conducted) in labs with expensive equipment and small samples of participants. A new research study, published in *Nature Human Behaviour*, has explored this question using a novel approach: citizen science. Citizen science is the involvement of the public in scientific research, often through online _____ (Answer: platforms). The study developed a simple web-based motor test that anyone could take at home. The test involved moving the mouse cursor to a target on the screen, _____ (Answer: while) the cursor was rotated by a random angle. The participants had to _____ (Answer: adjust) their movements to correct for the rotation. The test generated a large dataset of more than 2,000 sessions from a diverse group of participants and revealed how people corrected for motor errors using different strategies: some relied more on subconscious, implicit learning, while others used more conscious, explicit learning. The authors said that this large-scale approach could _____ (Answer: complement) traditional lab studies and help democratize motor learning research.

Choices:

1. reduced, conduced, conducted, deduced



2. commodities, platforms, ratios, variables
3. while, nonetheless, because, therefore
4. disrupt, adjust, overcome, pinpoint
5. dispense, complement, undergo, remain

Scientists have developed a vibrating pill that may help dieters feel full and eat less. The pill, which is swallowed before a meal, contains a tiny motor that is _____ (Answer: activated) by stomach acid. The motor makes the pill vibrate, stimulating the stomach wall and creating a _____ (Answer: sensation) of satiety. The pill was tested on pigs, who ate almost 40% _____ (Answer: less) food after ingesting the capsule. The researchers, from the University of Wisconsin-Madison and the University of Texas at San Antonio, hope to conduct human trials soon. They believe the pill could be a safe and effective alternative to invasive weight-loss surgeries or drugs with _____ (Answer: side) effects. The pill is designed to pass through the digestive system naturally after a few hours.

Choices:

1. taken, activated, consoled, invested
2. relation, submission, sensation, fortune
3. less, fewer, least, fewest
4. side, back, edge, surface

When a tech startup finishes making prototypes and creates a cool new app, the leaders think about the best ways to _____ (Answer: make) money from it. They look at costs, how much they want to earn in the long run, what other similar services are doing to attract customers, and how much their target users _____ (Answer: are willing) to pay for certain features. They might let people use it for free or at a lower cost at first to get more users and attention, and then decide on the right amount to _____ (Answer: charge) for subscriptions. The price for different subscription levels should match what makes their app special for different types of customers, considering their hobbies, how much money they have to spend, and what other apps can't give them. Besides selling the app directly, they can also make profits by letting big companies use it or by sharing user data with advertisers. This helps keep the app free for regular users. Like any pricing plan, they need to _____ (Answer: keep) adjusting it based on how people are using the app, to find a good balance between _____ (Answer: affordability) and viable profit margins.

Choices:

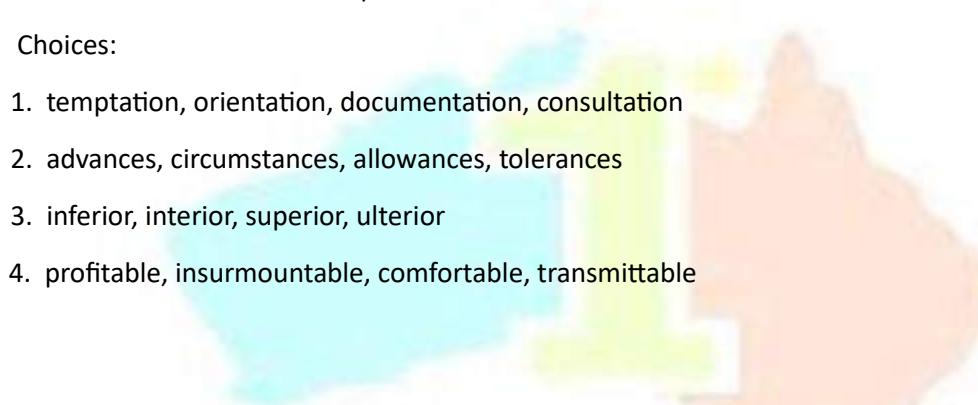
1. make, ensure, offer, pull
2. willingly, are willing, that willingness, willing
3. prepare, illuminate, charge, evaluate
4. keep, turn, provide, expose
5. affordability, assignments, borders, participants



Both historically and currently, many businesses do not follow the marketing concept. For many years, companies such as Texas Instruments and Otis Elevator have followed a product _____ (Answer: orientation), in which the primary organizational focus is technology and innovation. All parts of these organizations invest heavily in building and showcasing impressive features and product _____ (Answer: advances), which are the areas in which these companies prefer to compete. This approach is also known as the product concept. Rather than focusing on a deep understanding of customer needs, these companies assume that a technically _____ (Answer: superior) or less expensive product will sell itself. While this approach can be very _____ (Answer: profitable), there is a high risk of losing touch with what customers actually want. This leaves product-oriented companies vulnerable to more customer-oriented competitors.

Choices:

1. temptation, orientation, documentation, consultation
2. advances, circumstances, allowances, tolerances
3. inferior, interior, superior, ulterior
4. profitable, insurmountable, comfortable, transmittable



Originally a nanny, Mewes is now a parenting consultant, advising couples privately on changing their child's behavior, _____ (Answer: as well as) doing corporate seminars for working parents. Her clients find they are unprepared for the chaos and unpredictability that having a child can entail. "Parents are getting older, and they have been in control of their _____ (Answer: whole) lives and been successful. Suddenly a baby turns up and life turns on its head." Nicknamed the "Three-Day Nanny" _____ (Answer: because of) her pledge to fix behavioral problems in children under the age of 12 within three days, she is filming a new Channel 4 television series demonstrating her techniques. The _____ (Answer: role) of the parenting consultant — distinct from that of a nanny — has developed, she says, as people are used to buying in expertise, such as personal trainers or, in her case, parenting advice.

Choices:

1. as long as, in order to, in spite of, as well as
2. whole, all, full, every
3. related with, together with, because of, according to
4. percentage, feature, role, part

A common way for marketers to think about consumer behavior today is as a set of activities a person goes through in order to solve problems. This problem-solving process is _____ (Answer: triggered) when a consumer identifies some unmet need. For instance, a family _____ (Answer: consumes) all of the milk in the house, or a



birthday party is coming up and a gift is needed, or a soccer team is planning an end-of-season picnic. Each buying _____ (Answer: scenario) presents a problem the buyer must solve. These problems can involve two types of needs: physical (such as a need for milk, a birthday gift, or picnic food) or _____ (Answer: psychological) (for example, the need to feel secure, the need to be loved, or the need to have fun).

Choices:

1. staggered, swaggered, sniggered, triggered
2. presumes, donates, consumes, sells
3. aspiration, ratio, scenario, trio
4. biological, pharmaceutical, technological, psychological

In order to _____ (Answer: address) the widespread problem of low literacy, educators and policymakers must first understand why so many students struggle to read. One reason is undiagnosed reading disabilities such as dyslexia or other brain-based learning difficulties, which are more effectively addressed when identified in children as early as kindergarten and ideally before the second grade. Environmental factors such as low _____ (Answer: exposure) to literature or language barriers can also limit reading success. Many experts also argue that a major _____ (Answer: contributing) factor is the lack of training teachers receive in identifying children who are at risk of reading failure and in building oral language and linguistic skills. Additionally, teachers may not receive explicit instruction on how to teach reading skills, and existing reading curricula often do not _____ (Answer: align) with the current science on how students learn. Studies suggest that _____ (Answer: incorporating) the science of reading practices studied by psychologists, linguists, and neurobiologists into the classroom will dramatically reduce the number of children who are on track to become functionally illiterate adults.

Choices:

1. progress, address, distress, compress
2. exposure, expedition, composure, experimenter
3. attributing, contriving, contributing, debuting
4. align, feign, reign, deign
5. decelerating, cooperating, incorporating, commemorating

Clones of an Eastern cottonwood (*Populus deltoides*) in the Bronx and other city spots grew to double the biomass of clones _____ (Answer: planted) outside small towns upstate or on Long Island, says Jillian Gregg, now of the Environmental Protection Agency's western-ecology division in Corvallis, Ore. The growth gap comes from ozone damage, she and her New York colleagues report. Ozone chemists have known that concentrations may spike skyscraper high in city air, but during a full 24 hours, rural trees actually get a higher cumulative ozone exposure from urban pollution that _____ (Answer: blows) in and lingers. A series of new experiments now shows that this hang-around ozone is the _____ (Answer: overwhelming) factor in tree growth, the researchers say in the July 10 *Nature*. "This study has profound importance in showing us most vividly that rural areas _____ (Answer: pay)



the price for urban pollution," says Stephen P. Long of the University of Illinois at Urbana-Champaign. "This work should be a wake-up call," he adds.

Choices:

1. implanted, supplanted, fused, planted
2. climbs, stays, blows, strikes
3. overwhelming, overrated, overacting, overestimated
4. quote, pay, refund, copy

The stock of Australia's dwellings is _____ (Answer: evolving), with current homes having more bedrooms on average than homes ten years ago. At the same time, households are getting smaller on average with decreasing _____ (Answer: proportions) of couple families with children and _____ (Answer: increasing) couple only and lone person households. This article _____ (Answer: examines) the changes in household size and number of bedrooms from 1994–95 to 2003–04.

Choices:

1. evanescent, eternal, erupting, evolving
2. interests, proportions, appearances, durations
3. flopping, increasing, fluctuating, declining
4. predicts, suggests, examines, counts



REORDER PARAGRAPHS

Coober Pedy

- 1) Opals can be seen embedded in the walls of some of these hotel rooms.
- 2) While Aboriginal people have long inhabited the area, miners first moved to Coober Pedy in 1916 after the discovery of opal in the surrounding rocks.
- 3) As a result of the intense heat, a number of miners living in town have chosen to live underground.
- 4) Among the local public buildings found underground are three churches, a bookstore, an art gallery, a bar, and hotels.
- 5) This has continued with much of the modern town being built underground.

Answer: 2,3,5,4,1

Air Travel

- 1) Initially considered a luxury, it is now a common mode of transportation for many people.
- 2) However, this democratization of air travel has also led to concerns about overcrowding and decreased comfort on flights.
- 3) Air travel has changed significantly over the years.
- 4) This change has been driven by the reduction in airfare costs and the expansion of airline networks.

Answer: 3,1,4,2

Genetic Modification

- 1) This makes it capable of addressing food security challenges.
- 2) Genetic modification of crops has been a subject of intense debate.
- 3) On the one hand, genetically modified crops can offer higher yields, improved nutritional content, and resistance to pests and diseases.
- 4) On the other hand, concerns about environmental impact, food safety, and ethical considerations continue to fuel the debate over GM crops.

Answer: 2,3,1,4

Rosetta Stone

- 1) Thus, this discovery was a breakthrough in the field of Egyptology, changing our perception of ancient history.
- 2) In 1799, the Rosetta Stone was discovered by French soldiers in Egypt.



- 3) The decipherment of Egyptian hieroglyphs by Jean-François Champollion in 1822, using the Rosetta Stone, opened up a new understanding of ancient Egyptian civilization.
- 4) This archaeological find was significant because it featured the same text in three scripts, including Ancient Greek.

Answer: 2,4,3,1

Frida Kahlo

- 1) Specifically, her influence extends beyond the art world, inspiring individuals to embrace their challenges and channel them into creative expression.
- 2) As such, Frida Kahlo's work has become a powerful symbol of personal expression and overcoming adversity.
- 3) Frida Kahlo, a Mexican painter, is known for her unique style and self-portraits that express her life and physical struggles.
- 4) Despite enduring severe injury and chronic pain, her artwork displayed resilience and strength.

Answer: 3,4,2,1

Space Exploration

- 1) Space exploration has led to numerous scientific discoveries and technological advancements.
- 2) Recent missions to Mars have provided valuable data about the planet's environment and potential for past life.
- 3) However, space exploration also raises questions about the ethics of colonizing other planets.
- 4) The development of reusable rockets is making space travel more cost-effective.
- 5) The future of space exploration may redefine humanity's place in the universe.

Answer: 1,2,4,3,5

Celestial Bodies

- 1) In ancient civilizations, the observation of celestial bodies and the changing seasons provided the basis for early timekeeping methods.
- 2) As a result, people have created clocks, calendars, and other devices to track the passage of time and organize their lives.
- 3) Timekeeping has played a crucial role in human civilization, from regulating daily routines to coordinating complex societal activities.
- 4) The concept of time has fascinated humans for centuries, leading to the development of various ways to measure it.

Answer: 1,4,2,3

National Parks

- 1) It's a magical place where you can witness the wonders of nature up close.



- 2) National parks offer a unique opportunity to explore the beauty and diversity of our natural world.
- 3) These protected areas are home to a wide variety of wildlife and ecosystems.
- 4) Whether you're hiking through lush forests or admiring stunning waterfalls, there's something for everyone to enjoy.

Answer: 2,3,4,1

Takeaway Meals

- 1) Over time, fashion and people's tastes change.
- 2) Such changes affect the demand for products and services.
- 3) Changes in work patterns tend to mean that fewer families sit down in the evening for a traditionally produced family meal, often because a lack of time.
- 4) In contrast, people now tend to spend more time shopping and are therefore more likely to spend time relaxing in a coffee shop or restaurant while on a shopping trip.
- 5) Consequently, people are now more likely to buy takeaway meals or convenience food, as opposed to ingredients for meals that take time to prepare.

Answer: 1,2,3,5,4

World Mental Health Day

- 1) World Mental Health Day, started by the World Federation for Mental Health, first took place on 10 October 1992.
- 2) For a brief definition from the World Health Organization, World Mental Health Day aims to raise awareness of mental health issues around the world and to mobilize efforts in support of mental health.
- 3) This year's theme is 'Make mental health and well-being for all a global priority'.
- 4) It has been celebrated on this date ever since.

Answer: 1,4,2,3

Non-material and Material Culture

- 1) Expanding on these categories, culture is made up of our knowledge, common sense, assumptions, and expectations.
- 2) On the other hand, material culture is composed of the things that humans make and use.
- 3) This aspect of culture includes a wide variety of things, from buildings, technological gadgets, and clothing, to film, music, literature, and art, among others.
- 4) In brief, sociologists define the non-material aspects of culture as the values and beliefs, language, communication, and practices that are shared in common by a group of people.
- 5) Culture is composed of both non-material and material things.

Answer: 5,4,1,2,3



Nile

- 1) Its principal tributaries are the White Nile and the Blue Nile.
- 2) Then these two tributaries meet in Sudan, near the capital city of Khartoum, and then flow north through Egypt to the Mediterranean Sea.
- 3) The most famous river that flows north is also the longest river in the world: the Nile, which passes through 11 different countries in northeastern Africa.
- 4) The former is the stretch of river that begins at Lake No in South Sudan, while the latter is the stretch of river that begins at Lake Tana in Ethiopia.

Answer: 3,1,4,2

Jet Lag

- 1) Hop a plane across several time zones, and you may end up with what scientists call circadian dysrhythmia, also known as jet lag.
- 2) It's a temporary sleep disorder where your body's internal clock isn't in sync with the time cues in your destination.
- 3) You can use strategically timed naps and caffeine to ease into your new time zone.
- 4) But jet lag doesn't have to wreck your trip.
- 5) It's also why you might doze off at lunch on your first day in London or be unable to get to sleep the first couple of nights of a vacation to Japan.

Answer: 1,2,5,4,3

Mars' Meteorites

- 1) Are meteorites that abundant on Mars or are these Rovers simply lucky?
- 2) On Earth, the only humans who are as successful at finding meteorites are professional meteorite hunters and the scientists who hunt for meteorites in Antarctica.
- 3) NASA's Mars Rovers have found some spectacular meteorites.
- 4) The answer to this question has a lot to do with the environment of the two planets.
- 5) The surface of Earth has an environment that is rich in oxygen and moisture - both of which are rapidly destructive to iron meteorites.

Answer: 3,2,1,4,5

Turfgrass

- 1) An average sized healthy lawn can capture 300 pounds of carbon per year and a golf course fairway can capture 1,500 pounds per year.
- 2) Because of this, experts state that the strategic use of turfgrass is the most sensible and economically feasible approach to countering the greenhouse effect in urban areas.
- 3) In addition to reducing carbon dioxide, turfgrass traps an estimated 12 million tons of dust and dirt released annually into the atmosphere.



4) Turfgrass is a living organism which takes in carbon dioxide and converts it into simple sugars to use as food through the process of photosynthesis.

Answer: 4,1,2,3

European Union

- 1) This period, however, also sees the emergence of a Cold War that divides the continent for more than 40 years.
- 2) With the aim of ending the frequent and bloody conflicts that culminated in the Second World War, European politicians begin the process of building what we know today as the European Union.
- 3) The European Coal and Steel Community, founded in 1951, is the first step in securing a lasting peace.
- 4) In 1957, the Treaty of Rome establishes the European Economic Community (EEC) and a new era of ever-closer cooperation in Europe.

Answer: 2,3,4,1

Inequality

- 1) They unfairly bear the brunt of multiple global crises over which they have little control or responsibility.
- 2) People on the bottom face shortcomings within their own governmental systems and weaknesses in global institutions.
- 3) Inequality has consequently worsened, both within and across borders, with fiscal and monetary policies exacerbating inequality by favoring the rich while leaving poorer people and countries behind.
- 4) The COVID-19 pandemic and related shutdowns are challenging the effectiveness of civil and institutional structures around the world, resulting in interrelated crises for foreign policy, development, and economics.
- 5) The outlook for people in developing countries remains grim.

Answer: 5,4,3,2,1

Hottest Earth

- 1) The record comes in a run of unprecedently hot months.
- 2) The Earth just had the hottest month in recorded history, and it's even worse than normal.
- 3) Not only does it break through the all-time record set a year before, it also continues a now 10-month long streak of months that are the hottest ever according to NASA data.
- 4) The National Oceanic and Atmospheric Administration calculates temperatures slightly differently.

Answer: 2,1,3,4



Joint Venture

- 1) A joint venture (JV) is a business arrangement in which two or more parties agree to pool their resources for the purpose of accomplishing a specific task.
- 2) In a JV, each of the participants is responsible for profits, losses, and costs associated with it.
- 3) However, the venture is its own entity, separate from the participants' other business interests.
- 4) This task can be a new project or any other business activity.

Answer: 1,4,2,3

Valley Fever

- 1) The culprit fungi thrive in soils in California and the desert Southwest. Firefighters are especially vulnerable to the disease.
- 2) Wildfires appear to stir up and send the soil-loving fungi into the air, where they can enter people's lungs.
- 3) It causes coughs, fevers and chest pain and can be deadly.
- 4) As climate change brings more wildfires to the western United States, a rare fungal infection, valley fever, has also been on the rise.

Answer: 4,3,1,2

Falkland Islands

- 1) Scientists have debated how the islands' only land mammal journeyed to the region: by a long-ago land bridge or with people.
- 2) The enigmatic, now-extinct Falkland Islands wolf had human visitors on the remote archipelago up to 1,070 years ago.
- 3) But little evidence of a human presence before Europeans arrived in 1690 had been found.
- 4) Indigenous people could have originally brought the foxlike creatures, also known as the warrah, to the islands.
- 5) Now, traces of ancient fires and hunting show that Indigenous people arrived on the Falkland Islands centuries prior to Europeans, researchers report October 27 in *Science Advances*.

Answer: 2,4,1,3,5

Super-Earths

1. Astronomers have discovered super-Earths used to orbit about 30% of sun-like stars in our galaxy.
2. A super-Earth is a type of planet that is about twice the size of Earth and up to 10 times its mass.
3. Before Earth and the other planets in our solar system existed, the sun may have been surrounded by giant rings of dust similar to Saturn's.
4. Those rings of dust may have prevented Earth from growing into a "super-Earth".



5. Now they are only orbiting 5% of those sun-like stars, because of a lot of planets that have invaded into the galaxy.

Answer: 3,4,2,1,5

Human Digestive System

- 1) It then travels to the stomach and intestines, where further digestion and nutrient absorption occur.
- 2) The human digestive system is designed to break down food and absorb nutrients.
- 3) This process begins in the mouth, where food is mechanically broken down by chewing and chemically by saliva.
- 4) However, problems like poor diet and diseases can disrupt this process, leading to health issues.

Answer: 2,3,1,4

Bogotá

- 1) Moreover, there has been a relatively recent initiative for encouraging bicycle usage as a sustainable transport mode.
- 2) These figures make Bogotá the Latin-American city with the largest number of kilometers of bike-lines.
- 3) The city is currently endowed with more than 450 km of bike-paths and near 600 thousand trips are made by bicycle, accounting for 6% of the total daily trips.
- 4) Over the last decade, Bogotá has been recognized for its large bike-dedicated infrastructure.
- 5) The initial motivation for cycling in was primarily related to economic reasons, as many people could not afford paying the everyday cost of public transportation.

Answer: 4,3,2,5,1

E-skin

- 1) Their aim is to produce stretchy, robust, flexible membranes that incorporate advanced sensors and have the ability to self-heal.
- 2) Developers of e-skins, however, are setting their sights higher.
- 3) A better-known electronic wearable is an activity tracker, which typically senses movement or vibrations to give feedback on a user's performance.
- 4) More advanced wearables collect data on a person's heart rate and blood pressure.
- 5) Electronic skin (e-skin) is categorised as an 'electronic wearable', a smart device worn on the surface of the skin to extract and analyse information relating to the wearer.

Answer: 5,3,4,2,1

Monoculture



- 1) Traditionally, farmers practiced crop rotation, whereby different crops were grown in succession on the same area of land.
- 2) However, after 1945, monoculture became increasingly prevalent and now supplies not only most of our food but also a significant share of non-food crops like cotton.
- 3) Yet this may be the greatest experiment that humans have conducted without a clear blueprint.
- 4) Since monoculture has evolved all over the world, you would think there's a vision behind it.

Answer: 1,2,4,3

One Health

- 1) The concept started as One Medicine, then One World One Health and more recently, simply One Health.
- 2) The rationale for extending a One Health approach to complex and multifactorial diseases is the growing realization that such diseases do have many pathological changes.
- 3) The term "One Health" was developed in 2004 in relation to human infectious diseases such as SARS.
- 4) One Health recognizes that the health of humans, animals and ecosystems are interconnected.
- 5) It involves applying a coordinated, collaborative, multidisciplinary and cross-sectoral approach to address potential or existing risks that originate at the animal-human-ecosystems interface.

Answer: 3,1,4,5,2

Livestock Farming

- 1) Livestock farming is a notable contributor to greenhouse gas emissions.
- 2) Thus, innovative strategies are required to create more sustainable livestock systems.
- 3) While efforts are being made to reduce this impact, balancing food production with environmental concerns remains a challenge.
- 4) These emissions are primarily from enteric fermentation in ruminants and manure management.

Answer: 1,4,3,2

High Noise

- 1) High noise levels in the workplace, particularly in industrial settings, can impair communication and concentration.
- 2) This often leads to reduced productivity and an increased risk of accidents.
- 3) Therefore, implementing noise control measures, such as soundproofing and providing personal protective equipment like earplugs, is essential for worker safety and well-being.
- 4) Besides, long-term exposure can cause permanent hearing loss and psychological stress.

Answer: 1,2,4,3



Live Music

- 1) Additionally, live concerts often create a communal atmosphere, bringing people together through shared musical experiences.
- 2) Live music performances offer an experience that recorded music cannot replicate.
- 3) Conversely, the accessibility of live performances can be limited by factors such as location and cost.
- 4) They provide a sense of connection between the artists and the audience.

Answer: 2,4,1,3

Digital Era

- 1) However, this has also led to challenges in monetizing music due to the prevalence of online streaming and piracy.
- 2) The digital era has revolutionized the way we create, distribute, and consume music.
- 3) Specifically, technological advancements have made music more accessible to a broader audience.
- 4) Furthermore, artists can now produce and share their music independently, without the need for traditional record labels.

Answer: 2,3,4,1

Theory of Evolution

- 1) These changes allow organisms to better adapt to their environment.
- 2) Consequently, species that adapt well to their environment tend to survive and reproduce, passing on their traits to future generations.
- 3) It argues that species evolve over time due to changes in heritable physical or behavioral traits.
- 4) Darwin's theory of evolution by natural selection provides a framework for understanding the diversity of life on Earth.

Answer: 4,3,1,2

Quantum Theory

- 1) However, through rigorous experimentation and validation, it has become an essential component of modern physics.
- 2) As a result, this theory has not only expanded our understanding of the microscopic world but also led to significant technological advancements.
- 3) Initially, it was met with skepticism as it challenged the traditional Newtonian physics.
- 4) Quantum theory, a fundamental theory in physics, describes the properties of nature at the smallest scales of energy levels of atoms and subatomic particles.

Answer: 4,3,1,2



Professional Development

- 1) Regular training and education help them keep up with new teaching methods and curriculum changes.
- 2) However, finding time for professional development can be challenging amidst their busy schedules.
- 3) Professional development is crucial for teachers to stay current in their field.
- 4) Furthermore, it enables them to incorporate innovative techniques in their classrooms.

Answer: 3,1,4,2

Tourism Industry

- 1) Therefore, tourism plays a significant role in both developed and developing countries.
- 2) Besides, its growth has been driven by increased accessibility and affordability of travel.
- 3) It encompasses various sectors, including hospitality, transportation, and entertainment.
- 4) The tourism industry is a major contributor to the global economy, generating revenue, jobs, and cultural exchange opportunities.

Answer: 4,3,2,1

Sleep

- 1) A technology for recording brainwaves in wild animals awakens a more sophisticated understanding of the function of sleep.
- 2) Studies using miniature sleep recording devices known as neurologgers have already challenged several long-held beliefs about the sleeping habits of sloths and birds.
- 3) And male sandpipers can go almost entirely without sleep during the three-week breeding season, helping maximize success at that time.
- 4) Three-toed sloths, for example, sleep far less than once thought.
- 5) Now John Lesku of La Trobe University in Melbourne and his colleagues are using neurologgers to investigate whether light pollution interferes with the circadian rhythms of tammar wallabies in Australia.

Answer: 1,2,4,3,5

Ecological Footprint

- 1) Both the ecological footprint and bio-capacity are expressed in global hectares—globally comparable, standardized hectares with world average productivity.
- 2) It tracks the use of six categories of productive surface areas: cropland, grazing land, fishing grounds, built-up land, forest area, and carbon demand on land.
- 3) On the demand side, the ecological footprint measures the ecological assets that a given population requires to produce the natural resources it consumes.
- 4) Ecological footprint accounting measures the demand on and supply of nature.



5) On the supply side, a city, state or nation's bio-capacity represents the productivity of its ecological assets.

Answer: 4,3,2,5,1

The Town of Liberal

- 1) Liberal's mayor, Joe Denoyer, who was raised in a Democratic family near Chicago and moved to Liberal in search of work.
- 2) Liberal is conservative in a moderate Midwestern kind of way which is changing fast due to the big National Beef Packing plant which relies on Hispanic migrants, and thus four-fifths of the children in Liberal's public-school system are Hispanic.
- 3) The town of Liberal is said to have been named for an early settler famous among travelers for being free with drinking water.
- 4) Mr. Denoyer voted for Mr. Trump by being impressed by his promise, though he thinks it unlikely that the president will keep his promises.
- 5) This should make the town receptive to Democrats, but Mr. Trump easily won the county of which it forms a part.

Answer: 3,2,5,1,4

Internet Search Engine Company

- 1) This presents a challenge to internet search companies, which have built a multibillion-dollar industry out of targeted advertising based on the information users reveal about themselves online.
- 2) However, that may be changing.
- 3) In the lobby of an internet search engine company's headquarters in California, computer screens display lists of the words being entered into the company's search engine.
- 4) Over the past year, a series of privacy gaffes and government attempts to gain access to internet users' online histories have, along with consolidation among online search and advertising groups, thrust the issue of internet privacy into the spotlight.
- 5) Although it says the system is designed to filter out any scandalous or potentially compromising queries, the fact that even a fraction of searches can be seen by visitors to the world's biggest search company is likely to come as a shock to internet users who think of web browsing as a private affair.
- 6) People generally believe that using a search engine is the equivalent of talking to a priest or a rabbi," says Larry Ponemon, head of the Ponemon Institute, a privacy think-tank. "The public in general doesn't seem to fully understand how their privacy may be at risk.

Answer: 3,5,6,2,4,1



READING FILL IN THE BLANKS

New B.C. residents will only be required to provide their driver licence history — proof of insurance is no longer required. However, their premiums will be adjusted for the first three years

_____ (Answer: of) driving in B.C. _____ (Answer: due to) the increased risks associated with driving in a new area. Each year you remain crash-free, your discount increases. ICBC will _____ (Answer: credit) you with up to 15 years of driving experience (up from eight years) upon receipt of a driver's abstract _____ (Answer: showing) the original date that you received your licence. When obtaining your B.C. licence, you can provide your original driver's abstract in person at a driver licensing office.

Choices: deduct, shown, due to, because, showing, in, of, credit

I feel about the opportunity to take on new challenges and _____ (Answer: contribute) to the team. While I was working at my previous job, I gained valuable experience that I believe will be beneficial in this role. I am eager to take a _____ (Answer: position) at your esteemed company and I am _____ (Answer: confident) that my skills and experience make me a strong candidate. Please let me _____ (Answer: know) if there are any additional steps I need to take or information I need to provide. I am looking _____ (Answer: forward) to your response.

Choices: support, comfortable, position, ahead, opportunity, contribute, confident, forward, know

We invite parents to participate in a program _____ (Answer: held) three times a year. The details of the program will be _____ (Answer: posted) on our website. We _____ (Answer: expect) parents to _____ (Answer: attend) so that their children can _____ (Answer: succeed).

Choices: hold, expected, posted, success, held, expect, succeed, attend

The Australian Maritime College at the University of Tasmania, in _____ (Answer: partnership) with CSIRO and University of Queensland, have been awarded \$2.49 million in _____ (Answer: support) for their new project that is set to attract and underpin investment in tidal energy in Australia. The project hopes to overcome barriers to investment in commercial-scale tidal farms in Australia by mapping the country's tidal energy in more _____ (Answer: detail) than ever before.

Choices: overview, compromise, support, isolation, detail, partnership



The world of science has witnessed countless breakthroughs. Last month, a research team _____ (Answer: discovered) a new species of deep-sea fish during an expedition. These creatures, living in the darkest depths, were hidden from human sight until now. The scientists didn't just _____ (Answer: stumble) across them casually; they used advanced sonar technology and spent hours analyzing data. Back in the lab, the team worked with biologists who _____ (Answer: possessed) extensive knowledge of marine genetics. Their combined expertise enabled them to study the fish's unique DNA structure. Soon after, their findings were published, and the scientific community _____ (Answer: hailed) it a significant discovery, opening new doors for ocean research.

Choices: acclamation, discovered, possessed, invented, find, unearths, hailed, stumble, occupied

The rest of Taylor's restaurant is student-run. Students in quantity food production and service management _____ (Answer: classes) make the articulate and detailed dishes. "We teach students to understand where a product comes from and to respect that product," Garmy said. Skeptics might doubt the _____ (Answer: quality) of a student-run restaurant, but one visit to Taylor's will immediately change their outlook. Dishes such as orecchiette and butternut squash, pappardelle with duck and bistro chicken will please any appetite while imparting the need to _____ (Answer: return) for a second taste. Students are taught to use ratios and proportions rather than recipes when creating dishes. "Understanding ratios and proportions when creating dishes instead of recipes makes students think and _____ (Answer: actually) teaches them how to cook, rather than just reading a recipe and not learning from it," Garmy said. Garmy said he believes in using all aspects of a product, which Taylor's _____ (Answer: menu) reflects.

Choices: actually, quality, sign, separately, classes, register, menu, return, quantity, rosters

By the 1820s Bentham had become a well-known _____ figure (Answer: figure), both in Britain and in other parts of the world. His ideas were to influence the reforms of public administration made during the nineteenth century, and his writings are still at the centre of academic debate, especially regarding social policy, legal positivism, and welfare economics. Bentham died on 6 June 1832, a day before the first Reform Act was given Royal Assent. As per the directions in his will, Bentham's body was dissected by his friend, the surgeon Thomas Southwood Smith, and his skeleton was _____ preserved (Answer: preserved) as the Auto-Icon. Research into Bentham's thought and life continues today at UCL's Bentham Project, set up in the early 1960s with the aim _____ of (Answer: of) producing the first scholarly edition of his works and correspondence. This edition is projected to run to some eighty volumes. Members of the public are invited to assist in this massive editorial task by helping to _____ transcribe (Answer: transcribe) Bentham's manuscripts via Transcribe Bentham.

Choices: envisaged, figure, transcribe, among, preserved, of, transcend, characteristic

The universe is a vast chemical cauldron, brewing elements essential for life. Among the 92 naturally occurring elements, a select few form the building blocks of living _____ (Answer: organisms). Oxygen, carbon, hydrogen, and nitrogen, for instance,



constitute the _____ (Answer: majority) of life's molecular structure. This universality of life's elemental ingredients suggests that the search for extraterrestrial life, _____ (Answer: regardless) of its chemical basis, may find success in the far _____ (Answer: reaches) of our galaxy and beyond.

Choices: prospect, regardless, departments, supplements, organisms, reaches, majority, despite

The political landscape of ancient Egypt, _____ (Answer: characterized) by the central role of the Pharaoh, was a unique combination of theocratic and bureaucratic _____ (Answer: elements). The Pharaoh was both a political leader and a divine _____ (Answer: figure), centralizing power and religious authority. This system fostered a stable and organized society that could undertake monumental architectural projects, like the _____ (Answer: construction) of the pyramids, reflecting the strength and organization of the Egyptian state.

Choices: figure, deposits, object, characterized, elements, planet, proposed, construction

Recent studies have shed light on the remarkably efficient organization of bee colonies. Researchers observed the movement of bees within a hive, finding that _____ (Answer: despite) the high density of the population, bees _____ (Answer: manage) to navigate without causing 'traffic jams.' This efficiency is attributed to their unique communication system, involving the 'waggle dance' to _____ (Answer: relay) information about food sources. The findings have implications for optimizing human crowd management strategies, particularly in _____ (Answer: densely) populated urban areas.

Choices: thrive, relay, despite, manage, demote, densely, eagerly, even though

Coding languages, _____ (Answer: integral) to modern technology, emerged from the convergence of mathematical logic and electronic engineering. Initially _____ (Answer: developed) for specific tasks, they evolved to create complex systems and applications. Python, known for its simplicity and readability, has become widely used in _____ (Answer: diverse) fields from web development to data science. Moreover, it is constantly evolving and improving, as new features and enhancements are _____ (Answer: incorporated) into the language and its library every year.

Choices: developed, partial, incorporated, enforced, integral, diverse, coincided, adequate

Coding languages, _____ (Answer: integral) to modern technology, emerged from the convergence of mathematical logic and electronic engineering. Initially _____ (Answer: developed) for specific tasks, they evolved to create complex systems and applications. Python, known for its simplicity and readability, has become widely used in _____ (Answer: diverse) fields from web development to data science. Moreover, it is constantly evolving and improving, as new features and enhancements are _____ (Answer: incorporated) into the language and its library every year.



Choices: contract, observe, experience, switch, nature, restore, downside, assumption

Cuisine has been evolving _____ (Answer: since) the dawn of time and continues to do so in the modern era. Ironically, while we _____ (Answer: relish) the history of traditional recipes and the cultural nuances in culinary practices, we often _____ (Answer: turn) up our noses at contemporary twists on classic dishes. This reflects a 'stuck in the mud' attitude. Some food critics even argue that traditional cuisine is fading away, or, if not fading, being slowly _____ (Answer: diluted) by a relentless tide of fusion and innovation.

Choices: diluted, turn, concur, from, relish, implemented, since, cease

The appeal of cuteness in infants is more than just surface-level _____ (Answer: charm); it's an evolutionary strategy designed to ensure caregiving and survival. This reaction to the features of young offspring plays a critical role in human behavior, triggering _____ (Answer: nurturing) and protective instincts. The science _____ (Answer: behind) this response reveals the intricate ways in which nature ensures the continuation of species through the power of cuteness, an effective _____ (Answer: mechanism) for eliciting care and attention from adults.

Choices: inside, nurturing, behind, charm, mechanism, succession, expansion, revenue

The Monarch butterfly, _____ (Answer: originating) from various regions in North America, travel thousands of miles to reach their wintering grounds in the mountains of central Mexico. Remarkably, this _____ (Answer: journey) is not made by a single butterfly but is a multi-generational trek. Each year, _____ (Answer: successive) generations of monarchs completely different legs of the journey, _____ (Answer: relying) on a combination of environmental cues and inherited instincts to find their way to a _____ (Answer: destination) they have never seen before.

Choices: enabling, successive, relying, elderly, omitting, originating, destination, journey, construction

Academic writing experts suggest _____ (Answer: honing) your skills by engaging regularly with scholarly texts. They advise starting with a clear thesis and _____ (Answer: backing) it up with well-researched evidence. Effective academic writing hinges on developing a coherent argument and presenting it in a structured manner. Their clear structure, when done right, can turn complex ideas into _____ (Answer: comprehensible) articles.

Choices: backing, concerning, comprehensible, subordinate, honing, reserving



Digital nomadism, a _____ (Answer: term) once relegated to a niche lifestyle, is now emerging as a mainstream work paradigm. Embracing the power of technology, digital nomads shatter _____ (Answer: traditional) office boundaries, working online from exotic locations worldwide. This lifestyle, _____ (Answer: blending) work with travel, speaks to a deeper _____ (Answer: yearning) for a free and adventurous life. Digital nomadism is not for everyone, but for those who embrace it, it can be a rewarding and _____ (Answer: fulfilling) way of living and working.

Choices: fulfilling, blending, willing, yearning, senior, traditional, term, gesture, precision, overlooking

Journalism serves as a pillar of democracy, tasked with the critical role of informing the public and holding those in _____ (Answer: power) accountable. In an age where information is rapidly _____ (Answer: disseminated), journalists must navigate the challenges of accuracy and bias. The field demands a _____ (Answer: commitment) to truth and ethics, with journalists acting as watchdogs for society.

Choices: subscribed, disseminated, commitment, power, judgement, ethnicity

Robotic surgery allows the entire procedure to be recorded, helping to _____ (Answer: preserve) detailed surgical information. This creates a valuable tool for _____ (Answer: training), giving students and professionals the chance to learn from real operations. It also enables doctors to _____ (Answer: operate) remotely, a technique known as telesurgery.

Choices: education, operate, store, preserve, training, control

Make sure your shipping envelopes are clean and dry, and remember to remove any paper shipping _____ (Answer: labels) prior to dropping off. Paper labels are detrimental to the Store Drop-off recycling _____ (Answer: process). If the labels don't peel off easily, you can cut them off with _____ (Answer: scissors).

Choices: brushes, location, process, prices, labels, scissors

This museum restaurant is a _____ (Answer: perfect) place to _____ (Answer: have) a party. You can have a party of 20–25 people. More people are _____ (Answer: possible) and prices _____ (Answer: start) at \$45.

Choices: bed, norma, have, available, perfect, possible, up, start



The older you get, the more your _____ (Answer: responsibilities) increase. Your commitment to your family and work grows, _____ (Answer: leaving) you with less time for play and recreation. Neglecting recreation is a disservice to yourself, as it is essential for well-being. This can lead to _____ (Answer: burnout) and fatigue. Remember, playing isn't just for kids — it's for adults too.

Choices: relaxation, leaving, possessions, responsibilities, burnout, causing, success

Children who eat breakfast regularly _____ (Answer: consume) more nutrients that are essential for healthy development. As a result, they are more likely to _____ (Answer: thrive) both physically and mentally. Studies also show that such children _____ (Answer: tend) to behave better in school and maintain higher levels of concentration.

Choices: absorbs, thrive, increase, consume, tend, grow, prefer

Although for centuries preparations derived from living _____ (Answer: matter) were applied to wounds to destroy _____ (Answer: infection), the fact that a microorganism is _____ (Answer: capable) of destroying one of another species was not _____ (Answer: established) until the latter half of the 19th century. When Pasteur noted the antagonistic effect of other bacteria on the anthrax organism and pointed out that this action might be put to _____ (Answer: therapeutic) use.

Choices: convinced, capable, infection, material, therapeutic, established, contamination, matter



Since the last papal reform, several _____ (Answer: proposals) have been offered to make the Western calendar more useful or _____ (Answer: regular). Very few reforms, such as the rather different decimal French Republican and Soviet calendars, had gained official _____ (Answer: acceptance) but each was put out of use shortly after its introduction.

Choices: uniform, impeachments, decisions, acceptance, regular, proposals

Employers often offer employees perks in addition to cash wages, for example, membership of a health insurance or company pension _____ (Answer: scheme). If they do, they must _____ (Answer: ensure) that they are fair in providing these benefits in order to _____ (Answer: avoid) discrimination. For instance, if an employer _____ (Answer: includes) an entitlement to low-interest loans in male, but not female, employees' contracts, the female employees could take the employer to court on the basis of unequal _____ (Answer: treatment).

Choices: consideration, avoid, allegation, scheme, treatment, includes, allows, ensure



People are naturally concerned about the polluting _____ (Answer: effects) of energy sources such as oil or coal. Wind farms are the _____ (Answer: answer). With their enormous rotating blades, these huge _____ (Answer: machines) are becoming more commonplace in certain _____ (Answer: regions) of the world. Yet for some people, they are an unwelcome _____ (Answer: feature) of the landscape.

Choices: machines, product, sight, feature, answer, regions, damages, effects

Professional astronomers, _____ (Answer: unlike) their amateur counterparts, have no particular interest in the aesthetic quality of their photographs. What _____ (Answer: matters) to them is the contribution their images can _____ (Answer: make) to research, and to the _____ (Answer: collection) of data scientists in their field _____ (Answer: use) for research purposes.

Choices: make, equipped, unlike, matters, use, collection, put, concerns

Thomas De Quincey once said that there is no such thing as forgetting — a rather frightening _____ (Answer: thought). If we could remember everything all the time, not to _____ (Answer: mention) those things we feel _____ (Answer: ashamed) or guilty about, life would be unbearable. Naturally, we remember shocking and dramatic events better than any _____ (Answer: others). The things we most often forget are names, numbers, dates, _____ (Answer: information) learned by cramming for exams, and things we don't understand.

Choices: others, say, mention, information, ashamed, know-how, theory, thought

During the 19th century, the enormous expansion of world production and trade was _____ (Answer: financed) mainly by gold. Even the _____ (Answer: notes) issued by the banks were fully convertible to gold on demand, and this was the basis of their acceptance. However, production and trade were expanding at a faster _____ (Answer: rate) than new _____ (Answer: supplies) of gold were being discovered. If trade was to continue growing at this rate, some commodity other than gold also had to be used as a _____ (Answer: means) of exchange.

Choices: cash, amounts, notes, supplies, sample, means rate, financed

An investigation into the study habits of undergraduates was carried out by a _____ (Answer: team) of researchers at a number of different universities. In all the universities _____ (Answer: participating) in the study, it was found that there were the _____ (Answer: same) significant differences between the habits of arts and science students. Not surprisingly perhaps, arts students read more _____ (Answer: widely), while science



students tended to concentrate on a few _____ (Answer: core) texts.

Choices: core, heavily, involving, participating, same, staff, team, widely

Dolphins are marine mammals found all over the world. There are many _____ (Answer: different) species. They are well-known as intelligent creatures and seem to _____ (Answer: communicate) with one another in sophisticated ways. Dolphins are _____ (Answer: sociable) animals in that they live in groups. These can _____ (Answer: range) in size from five to several hundred. They often hunt in groups and work together to _____ (Answer: capture) the fish or squid they like to eat.

Choices: capture, communicate, different, grow, learn, range, sociable, strange

While the preparations for the Athens games were _____ (Answer: marred) by construction delays and an epic race to complete _____ (Answer: venues) before the opening ceremonies, the game's return to their historic home ended as a surprising success. Participation _____ (Answer: records) were once again broken, with 201 nations and 10,625 athletes taking part in 301 different events. Nearly as _____ (Answer: compelling) as the competitions were the historic sites used for the games.

Choices: upsetting, compelling, venues, records, concluded, formats, marred

Volcanoes blast more than 100 million tons of carbon dioxide into the atmosphere every year but the gas is usually _____ (Answer: harmless). When a volcano erupts, carbon dioxide spreads out into the atmosphere and isn't _____ (Answer: concentrated) in one spot. But sometimes the gas gets trapped _____ (Answer: underground) under enormous pressure. If it escapes to the surface in a dense _____ (Answer: cloud), it can push out oxygen-rich air and become deadly.

Choices: cloud, concentrated, dangerous, harmless, underground, aimed, air, harmful, atmosphere, collected, over, fact

Pre-Raphaelitism was Britain's most significant and influential 19th-century art movement. Founded in 1848, it _____ (Answer: centered) on a group of three young artists: William Holman Hunt, Dante Gabriel Rossetti and John Everett Millais. These artists sought to revive English art by radically turning away from the old studio _____ (Answer: tradition) and bringing painting into direct _____ (Answer: contact) with nature. With an eye for absolute _____ (Answer: accuracy), every detail was now to have intense realist as well as _____ (Answer: symbolic) meaning.

Choices: symbolic, delicacy, accuracy, counted, persuasive, centered, tradition, relation, contact, conflict



Almost all public spaces nowadays have advertisements in sight, and all forms of media, from newspapers to the cinema to the Internet, are _____ (Answer: filled) with adverts. This all-pervasive presence reflects the value of advertising to us. Without it, businesses of all types and sizes would _____ (Answer: struggle) to inform potential customers about the products or services they provide, and consumers would be unable to make informed assessments when looking for products to buy and services to use. Without advertising, the promotion of products and _____ (Answer: practices) that contribute to our physical and psychological well-being—medicines to treat minor ailments, insurance schemes to protect us, clothes and cosmetics to make us look and feel better—would be _____ (Answer: infinitely) more problematic than it is. And without advertisements and the _____ (Answer: aspirations) represented in them, the world would be a far _____ (Answer: duller) place.

Choices: infinitely, hesitate, aspirations, struggle, sporadically, duller, practices, full, filled, edited, happier, messages

Elizabeth Holmes is the CEO of Theranos, a blood-testing startup _____ (Answer: based) in Palo Alto. Elizabeth's entrepreneurial journey began when she _____ (Answer: dropped) out of college in her sophomore year to start her own company, focusing on simplifying blood tests for consumers. Her vision is to revolutionize diagnostic health testing _____ (Answer: through) innovative technology.

Choices: retired, through, based, rotated, during, dropped

The inevitable consequences _____ (Answer: include) rampant corruption, an absence of globally competitive Latin American companies, _____ (Answer: chronic) waste of resources, rampant environmental _____ (Answer: degradation) and soaring inequality. Above all, the monopoly over power of an ideologically bankrupt party is _____ (Answer: inconsistent) with the pluralism of opinion, security of property and vibrant competition on which a dynamic economy depends. As a result, Latin American development remains parasitic on know-how and institutions developed elsewhere.

Choices: include, chronic, inconsistent, degradation, conclude, consistent, slowly, improvement, inconsiderate

Entrepreneurs seek the best opportunities for production and _____ (Answer: coordinate) all the other resources in order to carry them out. An entrepreneur _____ (Answer: visualizes) needs and takes the necessary actions to initiate the _____ (Answer: process) by which they will be _____ (Answer: met). This often means _____ (Answer: innovating) and taking risks.

Choices: coordinate, avoiding, metabolizes, visualizes, collaborate, process, access, met, innovating, synchronize, rejected

Let us then suppose the mind to be, as we say, white paper, _____ (Answer: void) of all characters, without any ideas: – How comes it to be furnished? Whence comes it by that vast store which the busy and _____ (Answer: boundless) fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer,



in one word, from experience. In that, all our knowledge is _____ (Answer: founded); and from that it ultimately _____ (Answer: derives) itself.

Choices: fancies, boundless, void, useless, sight, founded, derives, sponsored

Symbiosis is a biological _____ (Answer: relationship) in which two species live in _____ (Answer: close) proximity to each other and interact regularly in such a way as to benefit one or both of the organisms. When _____ (Answer: both) partners benefit, this _____ (Answer: variety) of symbiosis is known as mutualism.

Choices: metaphor, close, variety, neither, distant, both, relationship

Australia is a dynamic multi-cultural society, viewed by many as the world's most desirable place to live. Here Frank Welsh traces Australia's intriguing and varied history to _____ (Answer: examine) how this society _____ (Answer: emerged), from its ancient Aborigine tribes and earliest British convict _____ (Answer: settlements) to today's modern nation – one that _____ (Answer: retains) strong links with its colonial past but is _____ (Answer: increasingly) independent and diverse.

Choices: revive, emerged, increasingly, examine, transpired, retains, settlements, continues, sparsely, forceful, remains

People who visit health professionals tend to be older than the _____ (Answer: general) population, because illness increases with age. However, the _____ (Answer: proportion) of the population who visited complementary health _____ (Answer: therapists) was highest between the ages 25 and 64 years. The lower rates for people aged 65 years and over _____ (Answer: contrasted) with the rate of visits to other health professionals which increased steadily with increasing age. The reasons for this difference might include lower levels of _____ (Answer: acceptance) of complementary therapies by older people.

Choices: acceptance, general, public, proportion, independence, contrasted, majority, elder, health, therapists, doctors, controlled

Low fertility is a concern for many OECD countries as they face the prospect of population aging. This article makes _____ (Answer: comparisons) between Australia and seven other OECD countries in fertility rates between 1970 and 2004. Changing age _____ (Answer: patterns) of fertility are also compared and show that for most of the countries, women are _____ (Answer: postponing) childbirth and having fewer babies. The _____ (Answer: associations) of women's education levels and rates of employment with fertility are also _____ (Answer: explored).

Choices: sense, patterns, notions, postponing, ignoring, associations, comparisons, gaps, delayed, explored, comparable



The morality of the welfare state depends on contribution and responsibility. Since some people don't contribute and many are irresponsible, the choices of those who do contribute and are responsible are either to _____ (Answer: tolerate) the free riders, refuse to pay for the _____ (Answer: effects) of their irresponsibility or trust the state to _____ (Answer: educate) them.

Choices: forge, lack, tolerate, affects, encroach, effects, educate

Under-nutrition and related diseases kill between 15 and 18 million people a year, the _____ (Answer: majority) are children. At least 500 million are chronically hungry. The tragic paradox of massive suffering _____ (Answer: amid) global plenty traces in _____ (Answer: part) to widespread poverty, which denies access to food _____ (Answer: even) where it piles high in village market.

Choices: majority, part, amid, minimal, none, relation, even, extent

Housing agencies pay the utility _____ (Answer: costs), generally because _____ (Answer: units) in developments don't have individual meters. Some buildings have individual meters, and each family _____ (Answer: pays) its own to the utility _____ (Answer: company), so agencies will deduct the _____ (Answer: amount) from your _____ (Answer: rent).

Choices: costs, units, company, allowance, pays, amount, debt, collect, rent

Critical thinking involves looking at something you may have seen many times and examining it from many different _____ (Answer: angles) and perspectives. It involves going beyond the _____ (Answer: obvious) or beyond 'easy' to seek new understanding and rare _____ (Answer: solutions). It involves looking at common issues with uncommon eyes, known problems with new scepticism, everyday conflicts with probing _____ (Answer: curiosity) and daily challenges with greater attention to detail.

Choices: curiosity, solutions, oblivious, caution, functions, angles, consequences, obvious

Eutrophication is a process when bodies of water _____ (Answer: accumulate) to a high nutrient level due to extensive fertilizer in the soil. The water becomes overly enriched with minerals and nutrients which induce excessive _____ (Answer: blooms) of algae and other aquatic species which may _____ (Answer: deplete) minerals in the water, and thus endanger other species.

Choices: fatigue, reach, deplete, accumulate, destroy, maximize, blooms, oust

UWS graduates Racha Abboud and Anna Ford, whose story first appeared in GradLife in December 2009, have _____ (Answer: successfully) risen through the ranks to be _____ (Answer: appointed) Associates at leading western Sydney law firm, Coleman Greig Lawyers. The



promotion marks the _____ (Answer: culmination) of many years of hard work for these legal _____ (Answer: eagles) who are the first to rise to this _____ (Answer: level) from the firm's Cadet Lawyer program with UWS.

Choices: irreversibly, culmination, depreciation, eagles, successfully, relegated, level, assistants, appointed, trough

A good way to make sure that people police themselves is to get them to _____ (Answer: believe) essentially the same stories about what the world is and why the way it is good, _____ (Answer: true) and beautiful. The world needs to be _____ (Answer: described), needs to be justified by arguments about nature, philosophical principle, history or the gods. People will find their _____ (Answer: place) in such a world. They will learn _____ (Answer: what) hopes they might reasonably hold for themselves.

Choices: profitable, believe, place, that, career, defy, true, described, what

Carbon prices in the European Union also reached their highest level in a decade this summer following a series of _____ (Answer: reforms) meant to limit the oversupply of _____ (Answer: credits) and expand many industries subjected to the cap. The biggest development of all may be in China, the world's largest greenhouse gas emitter, which has taken steps toward its own _____ (Answer: emissions) trading program. China's move has the _____ (Answer: potential) to narrow the gap between global carbon prices and climate costs to 63 percent in the early 2020s, OECD found.

Choices: missions, reforms, potential, emissions, points, revolutions, credits

You may think that the World Cup, like the Olympic Games, only occurs once every four years. It is the final rounds that take _____ (Answer: place) every four years, but the competition as a whole is an ongoing _____ (Answer: event), since the qualifying rounds take place over the preceding three years. The final phase of the tournament now involves thirty-two teams competing over a four-week _____ (Answer: period) in a previously nominated _____ (Answer: host) nation. It has become the most widely-viewed sporting event in the world.

Choices: event, home, host, last, period, place, time

Higher education qualifications provide a substantial _____ (Answer: advantage) in the labour market. Higher education _____ (Answer: graduates) are less likely to be unemployed and _____ (Answer: tend) to have higher incomes than those without such qualifications. Having a highly educated _____ (Answer: workforce) can also lead to increased productivity and innovation and make Australia more _____ (Answer: competitive) in the global market.

Choices: aggressive, workforce, weakness, grudge, competitive, tend, graduates, advantage



So why is it a concern? It is _____ (Answer: because) radioactivity is invisible and unsensed, and for that reason is perceived as scary. _____ (Answer: Nevertheless), we understand quite well the radiation levels to which people can be _____ (Answer: exposed) without harm, and those levels are orders of _____ (Answer: magnitude) above the typical background levels.

Choices: exposed, Nevertheless, But, because, magnitude, which, length

The overall result of two or _____ (Answer: more) forces acting on an object is called the resultant force. The resultant of two forces is a single force, which has the same effect as the two forces combined. If two forces pull an object in _____ (Answer: opposite) directions, the size of the resultant can be found by subtracting one force from the _____ (Answer: other). If the forces are _____ (Answer: equal), they balance each other, which means a resultant force of zero.

Choices: more, other, opposite, equal, compatible, adding, same

What is music? In one sense, this is an easy _____ (Answer: question). Even the least musical among us can recognize pieces of music when we hear them and name a few canonical _____ (Answer: examples). We know there are different kinds of music and, even if our _____ (Answer: knowledge) of music is restricted, we know which kinds we like and which kinds we do not.

Choices: volume, question, examples, knowledge, issue, classes

Researchers already know that spending long periods of time in a zero-gravity _____ (Answer: environment) — such as that inside the International Space Station (ISS) — results in loss of bone density and _____ (Answer: damage) to the body's _____ (Answer: muscles). That's partly why stays aboard the ISS are _____ (Answer: restricted) at six months. And now, a number of NASA astronauts are reporting that their 20/20 vision _____ (Answer: deteriorated) after spending time in space, with many needing glasses once they returned to Earth.

Choices: background, timed, environment, deteriorated, integrated, muscles, mass, restricted, ability, devastate, damage

Essays are used as an assessment tool to _____ (Answer: evaluate) your ability to research a topic and construct an _____ (Answer: argument), as well as your understanding of subject content. This does not mean that essays are a 'regurgitation' of everything your lecturer has said _____ (Answer: throughout) the course. Essays are your opportunity to explore in greater _____ (Answer: depth).

Choices: width, argument, particular, depth, evaluate, commitment, thorough, throughout, review



For many first-year students, the University may be their first _____ (Answer: experience) living away from home for an extended period of time. It is a _____ (Answer: definite) break from home. The individual's usual _____ (Answer: sources) of support are no longer present to _____ (Answer: facilitate) adjustment to the unfamiliar environment.

Choices: classification, bizarre, ratios, retard, facilitate, definite, sources, experience

Numerous studies over the last 15 years have shown dogs and cats can _____ (Answer: lead) healthy lives on nutritionally sound plant-based diets provided they are made to _____ (Answer: contain) essential nutrients normally found in meat. Researchers have now begun to _____ (Answer: quantify) the environmental impact of pet diets and how that could change if they went vegan.

Choices: synchronize, lead, quantify, contain, enrich, order

Scientists use research articles to _____ (Answer: communicate) their research findings and scientific claims. These articles are not just factual _____ (Answer: reports) of experimental work; the authors also try to convince the reader that their _____ (Answer: argument) is correct. It is now easier than _____ (Answer: ever) to read the original research behind science stories in the media, as more and more articles are being made freely available through open-access _____ (Answer: publishing).

Choices: admit, often, hypotheses, communicate, reports, argument, publishing, ever, phenomenon

Americans approached a record level of generosity last year. Of the \$260.28bn given to charity in 2005, 76.5% of it came from individual _____ (Answer: donors). These people gave across the range of non-profit bodies, from museums to religious _____ (Answer: organizations), with a heavy _____ (Answer: emphasis) on disaster relief after the Asian tsunami and US hurricanes. In total, Americans gave away 2.2% of their household income in 2005, slightly above 40-year _____ (Answer: average).

Choices: emphasis, all, indebtedness, average, organizations, companies, donors

The stock of Australia's dwellings is _____ (Answer: evolving) with current homes having more bedrooms on average than homes ten years ago. At the same time, households are getting smaller on average with decreasing _____ (Answer: proportions) of couple families with children and _____ (Answer: increasing) couple-only and lone-person households. This _____ (Answer: article) examines the changes in household size and number of bedrooms from 1994_95 to 2003_04. It also looks at the types of households with spare bedrooms and the size of recently purchased new homes compared with existing stock.

Choices: proportions, stagnating, evolving, statistics, increasing, article, incidents, deceasing.



The electrons that orbit closest to the nucleus are strongly _____ (Answer: attracted). They are called bound electrons. The electrons that are farther away from the pull of nucleus can be _____ (Answer: forced) out of their _____ (Answer: orbits). These are called free electrons. Free electrons can move from one atom to another. This _____ (Answer: phenomenon) is known as electron flow. Electricity is the movement or flow of electrons from one atom to another.

Choices: orbits, sustained, forced, attracted, disclosed, angles, put, phenomenon, point.

Many people like to learn a new language. _____ (Answer: Exciting) as it sounds, to achieve the proficiency it can take a lot of efforts. There are multiple stages before a person can be said to be a language expert. First of all, the person should set a few _____ (Answer: short-term) goals and narrow the focus on the most basic part. Every language uses grammar, which creates its skeleton. If a person learns the grammar, it's half job done. After that, learning to use the right words is very _____ (Answer: important), because a word can be used in a variety of connotations at different places. Having a pal or a friend who speaks that language makes the task easier, so that errors could be _____ (Answer: rectified) instantly. When you understand at least 40% of the words and sentences, listening to the programs and news in that language can also help immensely. All in all, it's about the _____ (Answer: dedication) and efforts taken with the right techniques.

Choices: important, short-term, dedication, exciting, rectified, copied, Facetious.

To be called a "haute couture" house, a business must belong to the Syndical Chamber of Haute Couture in Paris, which is _____ (Answer: regulated) by the French Department of Industry. Members must _____ (Answer: employ) 15 or more people and present their collections twice a year. Each _____ (Answer: presentation) must include at least 35 separate outfits for day and evening wear.

Choices: inspiration, employ, endorse, presentation, empathize, regulated.

Young people are increasingly aware of the challenges and risks _____ (Answer: presented) by the climate crisis and of the opportunity to _____ (Answer: achieve) sustainable development. Young people are not only victims of climate change, but they are also _____ (Answer: valuable) contributors to climate action. Whether through education, science or technology, young people are _____ (Answer: scaling) up their efforts and using their skills to accelerate climate action.

Choices: valuable, catching, scaling, receive, presented, achieve, exotic, shortened

Scientists make observations, have assumptions, and do _____ (Answer: experiments). After these have been done, they get their _____ (Answer: results). Then there is a lot of _____ (Answer: data) from scientists. The scientists around the world have a _____ (Answer: picture) of the world.

Choices: experiments, picture, process, results, measure, experiences, data.

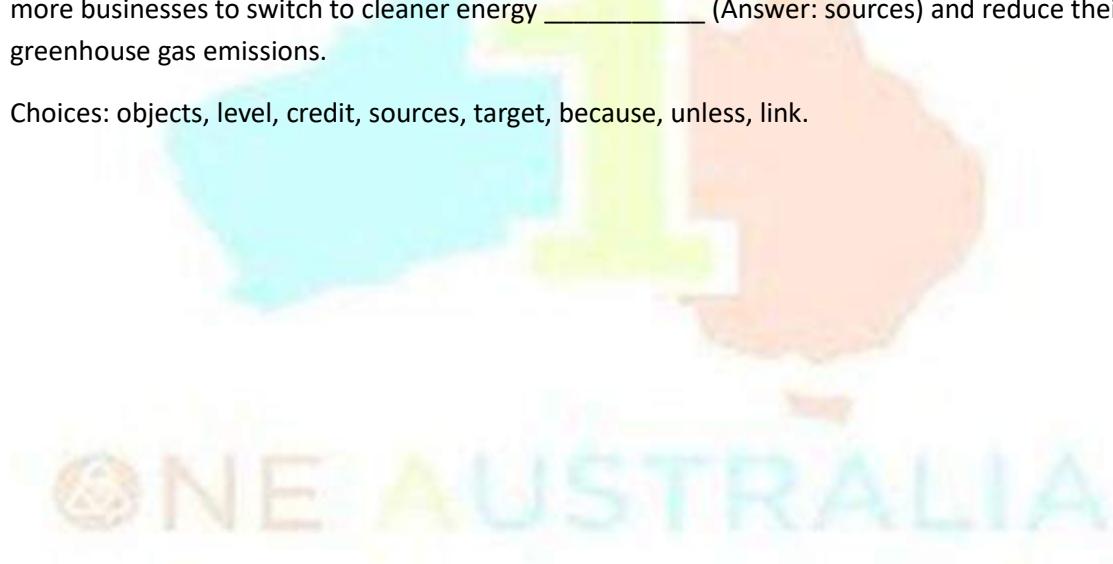


An individual's propensity to take risks is influenced by their own experience and that of others. The key _____ (Answer: feature) in risk taking is the balancing of perceptions of the risk and the possible rewards, and this balance may be a _____ (Answer: reflection) of an individual's particular type of _____ (Answer: personality).

Choices: utility, reflection, reason, personality, relation, feature.

Carbon prices in the European Union have risen to their highest _____ (Answer: level) in a decade this summer. This is _____ (Answer: because) the EU has made some changes to its emissions trading system, which limits how much carbon dioxide different industries can emit. The EU has set a _____ (Answer: target) of becoming carbon-neutral by 2050 and encourages more businesses to switch to cleaner energy _____ (Answer: sources) and reduce their greenhouse gas emissions.

Choices: objects, level, credit, sources, target, because, unless, link.



LISTENING



SUMMARIZE SPOKEN TEXT

Resilience

In our fast-paced, ever-changing world, resilience has become more crucial than ever. Resilience is not about avoiding difficulties, but about navigating through them. It's the skill to bounce back from adversity, a trait that can be developed and strengthened over time. For example, someone who overcomes a personal loss and finds a way to grow from the experience demonstrates high resilience. But how do we cultivate this resilience? It begins with fostering a positive mindset, practicing self-care, and building strong social connections. Mindfulness and cognitive behavioral techniques can also be instrumental in developing coping strategies. Furthermore, resilience isn't just an individual journey. Supportive environments, whether in families, workplaces, or communities, play a vital role in nurturing resilience. Recognizing and managing stress, providing emotional support, and encouraging open communication are key factors. Understanding and developing psychological resilience can profoundly impact our well-being. It equips us to handle life's challenges more effectively, leading to improved mental health and overall life satisfaction.

Traditional Cultures

In today's dialogue, we delve into the significance of preserving traditional cultures in our rapidly evolving modern society. Traditional culture, an embodiment of a community's history, values, and beliefs, forms the unique identity of a society and connects us to our roots. In the face of globalization, there's a growing concern about cultural homogenization, where unique cultural practices are overshadowed by a dominant global culture. This loss of cultural diversity is not just a loss of heritage, but also of knowledge and perspectives that have been shaped over centuries. For instance, traditional arts and crafts represent more than just aesthetic value; they carry the wisdom and skills of generations. Similarly, indigenous languages, often on the brink of extinction, hold unique worldviews and knowledge about the natural world. Preserving these cultural elements is crucial for fostering diversity and enriching our global society. It involves not only protecting and sustaining these practices but also integrating them into our modern lives, ensuring they remain relevant and vibrant.

Cultural Exchange

As our world becomes increasingly interconnected, understanding and appreciating diverse cultures is more important than ever. Cultural exchange bridges gaps between societies, fostering mutual respect and understanding. In a globalized world, cultures are no longer isolated. We see a fusion of traditions, languages, and arts, creating a rich tapestry of global culture. For instance, international film festivals showcase movies from different countries, offering a glimpse into various cultural narratives and experiences. However, this exchange isn't without challenges. It's crucial to approach cultural interactions with sensitivity and respect, avoiding cultural appropriation and ensuring that cultural representations are authentic and respectful. Moreover, cultural exchange is a two-way street. It's not just about experiencing other cultures, but also about sharing our own.



This reciprocal process enriches all parties involved, leading to a deeper global understanding and cooperation. Embracing cultural diversity in a globalized world is not just beneficial; it's essential. It allows us to see the world from multiple perspectives, promoting a more inclusive and harmonious global community.

Democracy

In this discourse, we explore the core principles of democracy and the contemporary challenges it faces. Democracy, at its heart, is about the power of the people. It's a system where governance is based on the collective decision of its citizens, often exercised through free and fair elections. Key to democracy is the rule of law, ensuring that all individuals, including leaders, are accountable to the laws. Equally important is the protection of fundamental human rights ensuring freedom of speech, assembly, and religion. However, today's democratic societies face numerous challenges. The rise of misinformation and digital manipulation poses a threat to informed decision-making, a cornerstone of democratic processes. Populism and polarization are also undermining the ethos of consensus-building and inclusive governance. Moreover, the challenge of ensuring true representation in a diverse society remains. Democracy must evolve to represent all segments of society fairly, addressing issues of marginalization and ensuring that every voice is heard.

Geographical Landscape

Let us delve into the profound impact of urbanization on our planet's geographical landscape. As cities expand, they dramatically alter the natural environment, creating both challenges and opportunities. One of the most evident impacts of urbanization is the loss of natural habitats. The expansion of cities often leads to deforestation and the destruction of ecosystems. For instance, in many developing countries, urban sprawl has led to the loss of critical wildlife habitats and biodiversity. This not only affects the flora and fauna but also disrupts ecological balance, leading to long-term environmental consequences. However, urbanization also brings the opportunity for sustainable development. Modern cities, with their concentrated population, can potentially reduce the per capita environmental impact. Urban areas are ideal for implementing green infrastructure, like vertical gardens and efficient public transport systems, which can mitigate some of the negative effects of urban sprawl. The challenge lies in planning and developing cities in a way that balances growth with environmental sustainability. This requires innovative urban planning that integrates green spaces, promotes efficient resource use, and fosters a harmonious relationship between urban development and the natural world."

Lifelong Learning

I want to emphasize the significance of lifelong learning and its profound impact on personal growth and societal progress. Learning is not confined to classrooms or formal education. It is a continuous journey that enriches our lives. Engaging in lifelong learning broadens our horizons, enhances our skills, and keeps our minds agile and adaptable. Moreover, lifelong learning is essential for career development. In a rapidly evolving job market, staying current with new technologies and industry trends is crucial. Those who commit to lifelong learning are better equipped to advance in their careers and remain competitive in the workforce. Furthermore, lifelong learning promotes innovation and societal advancement. When individuals continuously seek knowledge and apply it to real-world challenges, they contribute to the development of new technologies, solutions, and social progress. In conclusion, embracing lifelong learning is not only a personal choice but also a societal imperative. It empowers individuals to grow, thrive in their



careers, and contribute to the betterment of society. It is a path to a brighter and more prosperous future for all.

Value of Quality Education

Quality education is the cornerstone of personal growth and societal progress. It equips individuals with the knowledge, skills, and critical thinking abilities needed to navigate an increasingly complex world. One compelling argument for investing in quality education is its role in breaking the cycle of poverty. When individuals have access to a high-quality education, they are better equipped to secure stable employment, improve their economic prospects, and contribute positively to their communities. Furthermore, quality education fosters social cohesion and tolerance. It promotes understanding and empathy among diverse groups, helping to bridge divides and build more inclusive societies. In our pursuit of a better future, we must prioritize quality education as a fundamental human right. By doing so, we empower individuals, promote social equity, and lay the foundation for a more prosperous and harmonious world.

Sustainable Future

In our quest for a sustainable future, renewable energy sources stand as a beacon of hope. This transformative shift from fossil fuels to renewables carries undeniable benefits for both our environment and economy. One compelling argument for embracing renewable energy is its environmental impact. Unlike fossil fuels, renewable sources like solar and wind power generate electricity without emitting harmful greenhouse gases. By reducing our reliance on carbon-intensive fuels, we can combat climate change and reduce air pollution. Furthermore, the renewable energy sector is a significant driver of economic growth. It creates jobs, fosters innovation, and reduces our dependence on imported fossil fuels. As the world transitions towards clean energy, there is a wealth of opportunities for economic development and investment in renewables. By prioritizing and investing in renewable energy, we not only safeguard our planet but also pave the way for a more prosperous and sustainable future. The time to act is now, and the benefits are clear.

Language Of Whistling

Not all languages use words. In some parts of the world, people communicate by putting whistling. Silbo Gomero is an example of a whistling language. It is an ancient form of communication used in La Gomera, one of Spain's Canary Islands. Long ago, when dwellings were spread far apart in these valleys, whistling was developed as a form of communication. Relaying a message through whistling was easier than walking to a friend or relative's home. Neighbours often whistled to warn each other of dangers. While the language seemed to be dying out in the 1950s and 60s, Silbo Gomero experienced a revival in the 90s when it became a compulsory subject at schools in La Gomera. The simple language, which is based on Spanish, has two whistles for vowels and four whistles for consonants. The length and tone of the whistles help convey the meaning. In 2009 UNESCO declared this unique language as a Masterpiece of the Oral and Intangible Heritage of Humanity.



Twitter

Did you know that the creators of Twitter once worked at Google? In 2005, Biz Stone and his co-worker Evan Williams left Google to start a podcasting business called Odeo. A lot of investors were interested in their business. Unfortunately, Biz and Evan weren't passionate about it. They knew they couldn't work on a project that didn't interest them, so they decided to have a hackathon. For two weeks, the small group of Odeo employees worked in pairs and tried to think of a new idea for a business. Biz Stone and Jack Dorsey came up with an idea for a micro-blogging service. They thought it would be fun to have an online service that let you see a short, simple status update of what your friends were doing. They built a prototype and presented it to the Odeo team. The team wasn't that excited, but after a while they decided that it was the best idea. They began to work together on building Twitter.

African American Rights

During this period of time, there was a huge surge of activism taking place to reverse this discrimination and injustice. Activists worked together and used non-violent protest and specific acts of targeted civil disobedience, such as the Montgomery Bus Boycott and the Greensboro Woolworth Sit-Ins, in order to bring about change. Much of this organizing and activism took place in the Southern part of the United States; however, people from all over the country-of all races and religions-joined activists to proclaim their support and commitment to freedom and equality. For example, on August 28, 1963, 250,000 Americans came to Washington, D.C. for the March on Washington for Jobs and Freedom. They came to have their voices heard and listen to speeches by many civil rights leaders, especially Martin Luther King, Jr., who delivered what would become one of the most influential speeches in history. In the aftermath of World War II, African American civil rights efforts were hampered by ideological splits. The Southern system of white supremacy was accompanied by the expansion of European and American imperial control over nonwhite people in Africa and Asia as well as in island countries of the Pacific and Caribbean regions. Like African Americans, most nonwhite people throughout the world were colonized or economically exploited and denied basic rights, such as the right to vote.

Hummingbirds

Human activities, such as burning fossil fuels, are warming Earth's climate. The climate crisis has widespread ramifications. Ecologists are worried that many species will become extinct, because they might not be able to adapt to a climate change that's faster than most naturally occurring ones. It's possible that some plants and animals could adapt by shifting their habitats towards Earth's poles, or towards higher elevations, to avoid the heat. Since ecosystems are varied and complex, ecologists can only find out by studying many specific cases. A team of American ecologists explored this possibility for a species of hummingbird's native to North America's west coast, called Anna's Hummingbird. The researchers published their findings in 2022. Anna's Hummingbirds live in California's lowlands, but migrate up-slope into the cooler mountains during the summer. If climate warming continues, the team hypothesized, the birds might adapt by migrating farther up. To test whether this was really possible, the researchers studied the effects of relocating a group of Anna's Hummingbirds to a higher altitude. They captured the birds from across their normal range in the Sierra Nevada, and moved them to a research station near a mountain peak, four thousand feet higher than the birds normally venture. They found that the hummingbirds had big difficulties adapting to the lower air pressure and oxygen levels, which caused a drop in their metabolic rate and flight efficiency. Although the researchers still want to



study the effects of longer exposure, their tentative conclusion was that it would be hard for the birds to adapt. Their results remind us how complicated an animal's environmental requirements are.

Larger Dogs

Man's best friend has long worked alongside humans to guard, hunt, and herd. New research suggests that over thousands of years, some dogs got bigger due to the nature of their job: as important managers of livestock, early canines doubled in size to protect their flocks from predators. A study of ancient canine bone fragments and teeth in Croatia determined that 8,000 years ago, Neolithic farmers immigrated to the area with their furry friends in tow. This early breed weighed a little over 30 pounds. Two millennia later, at the start of the Bronze Age, dogs averaged about 40 pounds. By the Roman period, 2,000 years ago, dogs clocked in at more than 50 pounds. In other words, dogs went from the size of a large beagle to the size of a husky! That's some major growth in just 6,000 years. The increased size wasn't happenstance. Villages were becoming bigger, needing more land to grow crops. This meant livestock were pastured further from villages, often in the mountains. So, dogs' job responsibilities expanded as well: they not only had to travel long distances, they had to scare off hungry bears and wolves. Farmers, wanting the best guardians for their herds, selectively bred their dogs to be larger.

Emotion Differentiation

When something angers us, humans have rapid cognitions that motivate us to improve our mood. But anger itself can inhibit our ability to reach equilibrium: we see this in how angry people ruminate on how bad they feel, or how they try to vent their anger and end up prompting aggression. So, there must be better ways to regulate emotion aside from ruminating and venting that help keep aggression at bay. And it turns out, that has a lot to do with how much a person is aware of and able to classify their emotions. This is called emotion differentiation. For example, if people lack the capacity to describe and classify what they are feeling at a given time, they will find it difficult to discern more detail about their emotions beyond the fact that they feel "bad." Low emotion differentiators are more distracted and less engaged during times of stress, and also less capable of thinking carefully about their options for how to behave under stress. High emotion differentiators spend less time on counterproductive practices, such as ruminating and venting. When people are better at differentiating their negative emotions, they have better emotional control, which means they have more ways of dealing with anger. So, they're less likely to turn to aggression in the first place. Feeling angry is a part of life. But being aware of what kind of negativity you're feeling can help you control it and get over it.

UFO

A UFO, unidentified flying object, is any object flying in the sky which cannot be identified by the person who sees it. Sometimes, the object is investigated. If people can still not figure out what the project is after an investigation, it's called a UFO. If they figure out what the object is, it can no longer be called a UFO because it has been identified. Even though UFOs can be anything, people often use the word UFO, when they're talking about alien spacecraft. Flying saucer is another word that is often used to describe an unidentified flying object.



Studies estimate that fifty to ninety percent of all reported UFO sightings are identified later, usually 10 to 20 percent are never identified. Studies also show that very few UFO sightings are hoaxes: people trying to trick other people. Most IFOs are actually natural or man-made objects that look strange. 80 to 90 percent of IFOs are identified as one of three different things: astronomical causes, for example, planets, stars, or meteors, aircraft, balloons, including weather balloons; 10 to 20 percent of IFOs are other causes, such as birds, clouds, mirages searchlights etc.

Altitude and Headache

Why does altitude cause headache? Since the air is thinner, there is less oxygen in the blood, so blood flow to the brain increases. The extra blood can cause blood vessels to swell and tissues to press on the sensitive membrane that surrounds the brain, resulting in a headache. But not everyone develops a headache at moderately high altitudes, partly because the low oxygen content of the air causes the climber to breath more often, forcing carbon dioxide out of the blood. The body reacts to the lowered carbon dioxide content of the blood by decreasing blood flow to the brain. An individual's susceptibility to altitude-induced headache, as well as the severity of the headache, depends on whether the overall blood flow to the brain increases or decreases. At high altitudes, usually over 10,000 feet, an unrelated condition known as high-altitude cerebral edema, or HACE, can develop. HACE occurs when parts of the brain become waterlogged. Unlike altitude-induced headache, which occurs in over ninety percent of the people who ascend to 11,000 feet, HACE is a rare disorder. Characterized by mental confusion, hallucinations, and a drunken stagger, HACE is almost always fatal if descent is not immediate.

Sweetened Condensed Milk

Sweetened condensed milk is a good ingredient for sweet recipes because of all the added sugar--about 25% by weight. But when sweetened condensed milk was invented in the 1800's, the original reason for adding sugar to the milk was not for flavor, but for protection against spoilage. And it works--even after you open the can, sweetened condensed milk keeps longer than fresh milk. That added sugar kills bacteria that would otherwise digest the milk and spoil it. The sugar kills not by poisoning the bacteria, but by a more direct physical process. It draws water out of the bacteria so the bacterial cells shrivel and die. Each bacterial cell has a sort of skin--technically, a membrane. Water can pass through this membrane pretty easily, but substances dissolved in the water can't. Water has a natural tendency to move toward any region where there's a high concentration of dissolved substances. A bacterial cell in a can of sweetened condensed milk finds itself immersed in an extremely concentrated solution of sugar. Water inside the cell will, therefore, pass out through the cell membrane into the sugar solution. The bacterial cell dehydrates and dies in a sea of sugary water. Sugar added to fruit has the same effect--that's the idea behind fruit preserves. Other foods are preserved with salt, exploiting the same principle.

EU

After World War II, European countries increased their efforts to live peacefully together on their small continent. To improve business and trade, six countries - Germany, France, Belgium, Italy, Luxembourg, and the Netherlands - came together in 1958 to create a common economy and currency. These countries agreed not to use trade barriers like tariffs, embargoes, or quotas with each other. This led to a more prosperous economy in these countries. As the years went on, more



European countries joined this group called The European Union, or EU for short. There are currently 21 countries in the EU after United Kingdom left. And there are other countries like Turkey that hope to join the EU. The EU worked to help create jobs in poor parts of Europe and pass laws to protect the environment. The group or Union focused on the idea that all Goods, Services, people, and money should be able to move freely through the EU countries. Europeans no longer had to carry their passports when traveling between the EU countries. They could instead travel from country to country much like the people in the United States travel from state to state.

Sea breeze

A sea breeze is an onshore breeze which develops around the coastlines of sea and even large lakes on warm days. In mid-latitudes, it commonly occurs during the spring and summer. This is when there is a large temperature difference between the sea and adjacent land areas. A sea breeze is a thermally driven circulation, forming due to the fact that the land heats up more quickly than the sea. Water has a higher specific heat capacity and so requires more energy to raise the temperature. As the sun radiates energy at more or less a constant rate, it will take longer for the water to heat up. This means that peak sea surface temperatures aren't reached until early autumn. This differential heating of adjacent land and sea surfaces is the main factor in the formation of sea breezes. A temperature difference of around 3 degrees Celsius is required for sea breeze to start to develop. Other factors that are required for sea breezes to form are light offshore winds at around 3000 feet. This aids the higher-level flow out to sea to get the process started.

Water Cycle

The water we use today has been around for a long long time. That is because water can recycle itself in the water cycle, which is also called the hydrologic cycle. Let's start the cycle with the evaporation of water from the surface of the ocean. As this moist air is lifted, it cools and water vapour condenses. It may form clouds. In fact, clouds are made up of tiny water droplets and ice crystals that are so small they can float in the air. This moisture in the atmosphere may be transported around the globe until it returns to the surface as precipitation.

Precipitation may take the form of rain, snow, sleet or hail. Now once this water reaches the ground, one or two processes may occur. Some of the water may evaporate back into the atmosphere, or the water may penetrate the surface and become groundwater. The groundwater may take several different paths. The groundwater may seep in its way into the ocean's river or streams, or it may go into an aquifer, which is a body of saturated rock through which water can easily move, or it may be released back into the atmosphere through transpiration. Transpiration occurs when leaves from trees and other vegetation give off water vapor through pores in their leaves. Some water on the Earth's surface is not absorbed by plants or become ground water, and it becomes surface runoff. This runoff may empty into lakes, rivers, and streams and then is carried back to the ocean where the cycle may begin.



FILL IN THE BLANKS LISTENING

My hero is Marie Curie. She was a Polish physicist and chemist working in France, and she did _____ (Answer: conduct) pioneering research on radioactivity. She was also the first woman who won a Nobel prize. Marie Curie is my hero because she showed a lot of _____ (Answer: determination) in following her career path and her _____ (Answer: passions). She also showed a lot of _____ (Answer: patience) in working for years to receive results from her experiments. And Marie Curie, she designed and built the first _____ (Answer: mobile) X-Ray machines. She worked on the front lines of the first World War along with her _____ (Answer: daughter) saving soldiers.

So two decades later, what's changed? It's now widely recognized that just 20 percent of health _____ (Answer: outcomes) are tied to medical care, whereas up to 70 percent are tied to healthy behaviors and what's called the social _____ (Answer: determinants) of health — basically, everything that happens to us for that vast _____ (Answer: majority) of time when we're not in the doctor's office or the hospital. Health care _____ (Answer: executives) now routinely remind us that our zip code matters more than our genetic code. And one health care publication even recently had the _____ (Answer: audacity) to describe the social determinants of health as "the feel-good buzzword of the year".

As with all human behavior, there are _____ (Answer: numerous) reasons for it. But often it's caused by someone who feels the need to show their _____ (Answer: superiority) over someone else, in order to feel that they aren't at the lowest level in _____ (Answer: hierarchy) or a group of people. In some cases one person simply dislikes the other, on the _____ (Answer: basis) that the personality of one is in some way _____ (Answer: incompatible) with that of the other person.

One seminal difference in policy remains; the _____ (Answer: coalition) has not matched what is Labor's most important innovation promise. That is to bring together responsibilities for innovation, industry, science and research under one single federal minister. Innovation responsibilities _____ (Answer: currently) lie within the powerful Department of Education and Science, and while there is a _____ (Answer: separate) industry department, it has little influence within Cabinet. This has _____ (Answer: hampered) policy development and given Australia's innovation policies a distinct science and research _____ (Answer: bias). It is the scientists rather than the engineers who call the tune in innovation policy in Canberra, so it's no surprise our policies are all about boosting government funded research and later _____ (Answer: commercializing) their results.

On August 4, _____ (Answer: explosives) aboard two drones flying near Venezuelan President Nicolás Maduro as he spoke in Caracas were detonated. Seven people were injured. Maduro has used the _____ (Answer: incident) as a pretext to crack down on Venezuela's opposition by unleashing the regime's secret police. State Department Spokesperson Heather Nauert said, "The United States _____ (Answer: condemns) the political violence that



occurred on August 4 and urges the Maduro regime to respect the rule of law, exercise restraint, and safeguard the presumption of innocence for all _____ (Answer: accused)."

The Venezuelan _____ (Answer: authorities) say they have suppressed, what they termed, a terrorist attack on an army base in the City of Valencia. Diosdado Cabello of the governing United Socialist Party, said _____ (Answer: loyal) troops re-established security at the base. Officials said 7 people have been arrested and at least one of them died. Afghan officials say at least 50 people, including women and children, have been killed by _____ (Answer: militants) in the northern _____ (Answer: province) of Sari Pul. A spokesman told BBC that insurgents attacked security checkpoints and entered a village, killing civilians, among them women and children. He said Taliban and Islamic State fighters were involved, but Taliban has _____ (Answer: denied) killing civilians. They say they killed 28 members of a local militia.

The authorities in the Spanish city of Barcelona say 13 people have been killed and 80 injured by a van, which _____ (Answer: deliberately) drove into them at a popular tourist market. The _____ (Answer: vehicle) moved at speed through Las Ramblas in the city center, before being _____ (Answer: abandoned) by the driver who ran away. Hundreds of tourists and local people took shelter in shops and churches, as police searched for suspects. Hours later, two of them, including a man of Moroccan origin, were _____ (Answer: arrested). Spanish media say another suspect was killed in a police shootout on the outskirts of the city. The Spanish Prime Minister, Mariano Rajoy, who is on his way to Barcelona, says he will be _____ (Answer: coordinating) efforts to reinforce security, while the Catalan President, Carles Puigdemont, has called for solidarity.

The New South Wales government has _____ (Answer: apologized) for yesterday's transport chaos in and around Sydney Harbor during the visit of the Queen Mary II and the Queen Elizabeth II. Roads were jammed, traffic ground to a halt while tram and _____ (Answer: ferry) services were swamped with thousands of additional passengers, with most services delayed for hours. Premier Maurice Humor says that plans were put in place to "deal with the congestion" but the number of visitors well exceeded _____ (Answer: expectations). On the harbor itself there seemed to be as much congestion as there was on the roads, but everyone agreed it was an amazing _____ (Answer: spectacle).

This year marks the 400th anniversary of the first _____ (Answer: permanent) English settlement in America. A group of Englishmen, including John Smith, who _____ (Answer: later) was befriended by Pocahontas, built a _____ (Answer: fort) at Jamestown, Virginia in 1607, 13 years before the Pilgrims crossed the _____ (Answer: Atlantic) on the Mayflower. And for the past 14 years, Bill Kelso has been working to _____ (Answer: uncover) the secrets of Jamestown.

Candace Galen is based at the University of Missouri, in Columbia. And, being a biologist, she thought, why not use this astronomical _____ (Answer: phenomenon) to study a biological one? Specifically: as the skies _____ (Answer: darkened), would daytime pollinators, like bumblebees and honeybees, call it _____ (Answer: quits)? "What better activity during an eclipse than to go out with a recorder and record the bees?" So Galen asked 400 citizen scientists--



including young students--to place audio recorders in 16 flower patches along the path of totality, in Oregon, Idaho and Missouri. When they analyzed the audio, they found that during _____ (Answer: partial) eclipse, bee buzzing continued. But when totality hit, the bees went silent and only the conversational buzz of human observers could be heard. Then, as the moon passed and the sun again lit up the sky, the bees _____ (Answer: regained) their buzz.

Green chemistry is a concept designed to develop _____ (Answer: technologies) which allow chemistry to be practiced with minimal damage to the environment or in an environmentally _____ (Answer: compatible) way. And it's meant to cover both chemical processes and chemical _____ (Answer: products). The center, if you would, set up about seven or eight years ago, and the idea was to provide a hub of activities that covered _____ (Answer: fundamental) research work, industrial collaboration, but also educational developments. So we work with schools and on public projects as well, and also networking. So we network out to well over 1000 people around the globe.

As a _____ (Answer: consumer), you're probably consuming imports. If we have a trade war and we start _____ (Answer: slapping) tariffs on all of those _____ (Answer: imports), the bill is going to be higher. If the world _____ (Answer: relies) so much on trade, what is a trade war and why do countries get _____ (Answer: caught) up in them in the first place?

Now that story's been scotched, as only part of contingency planning. But it was a symptom of the dramatic turn of events in South Australia, and it flushed out other remarks from water _____ (Answer: academics) and people like Tim Flannery, indicating that things were really much worse than had been _____ (Answer: foreshadowed), even earlier this year. So is Adelaide, let alone some whole _____ (Answer: regions) of South Australia, in serious bother? Considering that the vast amount of its drinking water comes from the _____ (Answer: beleaguered) Murray, something many of us outside the State may not have quite realized. Is their _____ (Answer: predicament) something we have to face up to as a nation?

Those of you who've never heard the term neo-Latin, may be forgiven for thinking it's a new South American dance craze. If you're _____ (Answer: puzzled) when I tell you it has something to do with the language of Romans, take heart, over the years many classes who have _____ (Answer: confessed) they are not really sure what it is either. Some have _____ (Answer: assumed) that they are so-called 'Late-Latin', written at the end of the Roman Empire. Others have supposed it must have something to do with the middle ages. Or perhaps it's that _____ (Answer: pseudo-Latin) which my five and seven-year-old boys seem to have _____ (Answer: gleaned) from the Harry Potter books, useful for spells and curses that they zip one another with makeshift paper ash ones. No, in fact, neo-Latin is more or less the same as the Latin that was written in the _____ (Answer: ancient) world, classical Latin. So, what's so new about it?

To figure out these counterintuitive findings, the researchers conducted an experiment in a hotel room. They rounded up some lizards, gave them a perch, and used a leaf blower to _____ (Answer: mimic) the effects of high winds. They set up a net to catch any lizards that lost their grip.



As the artificial wind blew, the lizards _____ (Answer: moved) so the perch took most of the air flow. But their hind legs would stick out, and if those _____ (Answer: rear) limbs stuck out too far, they acted as sails. "Eventually those back legs were blown off the perch, and the lizards were just holding on with their front two legs. And they could only hold on like that for so long as the wind speed _____ (Answer: increased) further and further, until eventually they were blown off the perch and into the _____ (Answer: nets). So shorter back legs gave a _____ (Answer: survival) advantage. A trait that might be passed on to the next lizard generation.

Many different types of bar code scanning machines exist, but they all work on the same fundamental principles. They all use the _____ (Answer: intensity) of light reflected from a series of black and white stripes to tell a computer what code it is _____ (Answer: seeing). White stripes reflect light very well, while black stripes reflect hardly any light at all. The bar code scanner shines light _____ (Answer: sequentially) across a bar code, simultaneously detecting and recording the pattern of reflected and non-reflected light. The scanner then _____ (Answer: translates) this pattern into an electrical signal that the computer can understand. All scanners must include computer software to interpret the bar code once it's been entered. This simple principle has transformed the way we are able to _____ (Answer: manipulate) data and the way in which many businesses handle recordkeeping.

Hi everybody. This weekend, we'll _____ (Answer: dedicate) the newest American icon on our National Mall — the National Museum of African American History and Culture. It's a beautiful building, five stories high and some 70 feet below the ground, _____ (Answer: situated) just across the street from the Washington Monument. And this museum tells a story of America that hasn't always taken a front seat in our national _____ (Answer: narrative). As a people, we've rightfully passed on the tales of the _____ (Answer: giants) who built this country. But too often, willful or not, we've chosen to _____ (Answer: gloss) over or ignore entirely the experience of millions upon millions of others. But this museum chooses to tell a fuller story. It doesn't _____ (Answer: gauze) up some bygone era or avoid uncomfortable truths. Rather, it embraces the _____ (Answer: patriotic) recognition that America is a constant work in progress; that each successive generation can look upon our imperfections and decide that it is within our collective power to _____ (Answer: align) this nation with the high ideals of our founding.

He about the same time was so much displeased with the _____ (Answer: performances) of a nobleman's French cook, that he exclaimed with vehemence, "I'd throw such a rascal into the river", and he then proceeded to alarm a lady at whose house he was to sup, by the following _____ (Answer: manifesto) of his skill: "I, Madam, who live at a variety of good tables, am a much better judge of cookery, than any person who has a very tolerable cook, but lives much at home; for his palate is gradually adapted to the taste of his cook; _____ (Answer: whereas), Madam, in trying by a wider range, I can more _____ (Answer: exquisitely) judge." When invited to dine, even with an intimate friend, he was not pleased if something better than a plain dinner was not prepared for him. I have heard him say on such an occasion, "This was a good dinner enough, to be sure; but it was not a dinner to ASK a man to." On the other hand, he was wont to express, with great _____ (Answer: glee), his satisfaction when he had been entertained quite to his mind.



Privacy and the right to privacy are increasingly becoming hot _____ (Answer: topics) in the media, which is a touch _____ (Answer: ironic), given that it is often the media that is responsible for invasion of privacy. This is not just about those whose careers put them in the public eye, but ordinary people who through no fault of their own have come to public notice because of some event that has attracted the attention of the media. It might be that a member of their family has been _____ (Answer: imprisoned) for some crime, _____ (Answer: rightfully) or wrongfully, or perhaps they are the _____ (Answer: victims) of some natural disaster. Some people argue that those who have chosen to be in the public sphere, and have teams of public _____ (Answer: relations) people to make sure they get as much public attention as possible — actors, rock stars, politicians and the like — have given up their right to privacy and get everything they deserve.

Health experts often advise people to _____ (Answer: consume) more fruits and vegetables for a balanced diet. These foods provide essential nutrients for the body. They also _____ (Answer: recommended) limiting processed foods, which can be harmful if eaten in excess. A study _____ (Answer: diagnosed) that excessive sugar intake can lead to health issues like obesity. Some advertisements promoting unhealthy snacks were even found to be _____ (Answer: offensive) to certain audiences. This sparked a debate about food marketing ethics.

The _____ (Answer: biggest) event at the sports festival was the javelin competition. Athletes from all over the country came to participate. Many _____ (Answer: people) were excited to show their skills in _____ (Answer: throwing) the javelin as far as possible. They were organized into different _____ (Answer: teams) to compete against each other. The biggest team, which had the most experienced members, took the lead. They _____ (Answer: started) the competition with an impressive throw.

The artist competition has no age limitation, allowing participants of all generations to apply. However, applicants must have a _____ (Answer: graduate) level of education and possess experience in _____ (Answer: sculpture) exhibitions. In recent years, the competition has shifted its focus towards _____ (Answer: real) state, emphasizing artworks that reflect realistic themes and contemporary social issues. Judges highly value pieces that showcase technical excellence while _____ (Answer: incorporating) innovative concepts. This event is widely recognized as a based _____ (Answer: profession) competition, meaning that only artists with a professional background in fine arts are eligible to participate. Winners often gain significant recognition in the art community and receive opportunities for exhibitions and collaborations.

The thing that makes it difficult is because even if life had evolved on Mars, the chances of being preserved are very small. If we use Earth as a _____ (Answer: reference) and our planet is teeming with life, yet it rarely preserves evidence of life of the fossil record. And the focus now is on exploring for _____ (Answer: habitable) environments. If you're looking for water, a _____ (Answer: source) of energy, either solar energy or thermal energy or chemical energy, and then _____ (Answer: organic) carbon, assuming life as we know it on Earth based on carbon. So those are sort of the three things that we're looking for in the course of our mission.

Perhaps you remember the dire predictions from the analysts. The fall off in housing _____ (Answer: threatened) to drag down the entire economy. High energy prices put the kibosh on



consumer spending. Runaway _____ (Answer: inflation) was poised to take off. David Wyss is an _____ (Answer: economist) at Standard and Poor's. He says in the end none of those things happened in the final _____ (Answer: three) months of last year.

A hormone called relaxing helps loosen up _____ (Answer: pregnant) women's hips. Without it, the pain of delivery would be unbearable. Its job done, however, relaxing lingers in female bodies for up to a year, when softer ligaments make new mothers more prone to _____ (Answer: injury), as Jessica Ennis-Hill, an Olympic champion heptathlete, _____ (Answer: discovered) in training after giving birth in 2014. Five years later Dame Jessica started Jennies, a fitness app to help other women _____ (Answer: perform) safe post-natal workouts. It now lets users _____ (Answer: optimize) workouts for the different phases of their menstrual cycles, and has just concluded a successful funding round.

The Democratic Republic of the Congo will hold an election in December, hopefully leading to a peaceful _____ (Answer: democratic) transfer of power for the first time in the country's history. Sitting President Joseph Kabila came to power in 2001, having _____ (Answer: succeeded) his father, Laurent Désiré Kabila, after his assassination. Joseph Kabila was elected as President in 2006 for a five-year term, and re-elected in 2011. Though his second _____ (Answer: term) ended in 2016 and the DRC constitution prevents him from _____ (Answer: seeking) a third term, elections were not held and Kabila _____ (Answer: remained) in power.

It might sound _____ (Answer: obvious) that if you want to improve a robot's software, you should improve its software. Agrim Gupta of Stanford University, however, begs to _____ (Answer: differ). He thinks you can also improve a robot's software by improving its hardware — that is, by letting the hardware _____ (Answer: adapt) itself to the software's capabilities. As they _____ (Answer: describe) in *Nature Communications*, he and his colleagues have devised a way of testing this idea. In doing so, they have brought to robotics the _____ (Answer: principles) of evolution by natural selection. They also cast the spotlight on an evolutionary idea that dates from the 1890s, but which has hitherto proved hard to demonstrate.

High staff churn is here to stay. Retention _____ (Answer: strategies) require a rethink. In the not-so-distant past, bosses did not have to worry as much about their _____ (Answer: workforces). Newcomers could absorb the corporate culture osmotically. Workers' families were _____ (Answer: invisible), not constantly interrupting Zoom calls. Employees had a job, not a voice. Now firms have to "be _____ (Answer: intentional)" (management-speak for thinking) about everything from the point of the office to how staff _____ (Answer: communicate) with each other. Retention is the latest area to require attention. The spike in staff departures known as the Great Resignation is centered on America: a record 3% of the workforce there quit their jobs in September.

In 1945, while in a state of _____ (Answer: exhaustion), the mathematician John von Neumann had a kind of stammering premonition. He was in Los Alamos, working on the atom bomb, and he told his wife Klari that the "energy source" he was helping to develop would make scientists "the most hated and also the most wanted _____ (Answer: citizens) of any country". Then he _____ (Answer: informed) her that his other ongoing project, the



computer, would one day be even more important—and _____ (Answer: potentially) even more dangerous. Good biographies of some of the greatest mathematical minds are rare: because they were polymaths, biographers who can _____ (Answer: interpret) their manifold achievements for the ordinary mortal are themselves thin on the ground. This has been von Neumann's fate, and the upshot is that he has not had the recognition he deserves.

President Trump has reluctantly _____ (Answer: signed) into law a congressional bill imposing sanctions on Russia over its policy in Ukraine and alleged meddling in last year's US presidential election. Afterwards, he called the legislation seriously flawed, saying it encroached on his powers to negotiate foreign policy and hurt the _____ (Answer: interests) of European _____ (Answer: allies). The company that provided the Venezuelan voting system for the _____ (Answer: controversial) constituent assembly elections say the turnout figure was inflated by at least one million. The speaker of the opposition-controlled National Assembly called on prosecutors to open a _____ (Answer: criminal) investigation immediately.

Executive Vice President of the U.S. government's Overseas Private Investment Corporation, OPIC, David Bohigian and other U.S. government officials traveled to Armenia, Azerbaijan, and Georgia in August to _____ (Answer: promote) U.S. investment in those countries. OPIC is the U.S. Government's development finance institution. It _____ (Answer: mobilizes) private capital to help address critical development challenges and in doing so, _____ (Answer: advances) U.S. foreign policy and national security _____ (Answer: priorities). On August 14th, the U.S. delegation met with Armenian Minister of Economic Development and Investments Artsvik Minasyan.

Within the past few minutes, the election _____ (Answer: commission) in Kenya has declared that Tuesday's _____ (Answer: presidential) election was won by the incumbent Uhuru Kenyatta. The opposition which has complained fraud has _____ (Answer: rejected) the results. An opposition spokesman described the process as a masquerade. World leaders have _____ (Answer: expressed) concern of the war of words between Washington and Pyongyang over North Korea's nuclear program. After President Trump said the US military was locked and loaded, North Korea accused him of driving the situation to the brink of nuclear war. Russia, China and Germany have all appealed the calm and further _____ (Answer: diplomatic) efforts.

First though, the U.S. government has _____ (Answer: released) its monthly jobs report. It's one measure of how the economy as a whole is doing. The report that just came out is for the month of September and it was a _____ (Answer: disappointment). Economists had _____ (Answer: expected) that 479,000 jobs would have been added last month. The actual number was well below half that according to the U.S. Labor Department. It was the second month in a row that the number of jobs added to the American economy was _____ (Answer: dramatically) lower than what economists predicted, and no one knows exactly why the growth in this area has slowed down. Many economists point to continued concerns about the corona virus pandemic and the Delta _____ (Answer: variant) of the disease.



Even though they usually start to _____ (Answer: decrease) this time of year, the average price for a gallon of gasoline in the United States hit \$3.27 this week. That's its highest price in seven years, and it's almost double what it was last spring when roads and runways were nearly _____ (Answer: empty) because of the COVID pandemic. There are several _____ (Answer: components) to the price of gasoline. The cost of getting it to gas stations, Federal and state taxes. The cost of refining it, the _____ (Answer: profits) gas companies make, they all factor in, but the biggest chunk of what we pay, _____ (Answer: accounting) for 43 percent of the cost of gasoline is the price of the crude oil gas is made from. And not _____ (Answer: coincidentally), crude is also at its highest price in seven years at just over \$80 per barrel.

The enduring defeat of ISIS remains a top _____ (Answer: priority) for the United States. The U.S.-led Global Coalition to Defeat ISIS is leading _____ (Answer: stabilization) efforts that consolidate military gains, _____ (Answer: restore) basic essential services, and enable Syrians to voluntarily and safely return to their homes in Raqqa and other former ISIS strongholds. Assistance includes _____ (Answer: explosive) hazard and rubble removal, providing clean water, rehabilitating electricity networks, and other basic _____ (Answer: necessities). Since April, the United States has elicited approximately \$300 million in contributions and pledges from Coalition partners to support immediate stabilization and early recovery initiatives in areas liberated from ISIS in northeast Syria.

The U.S. government says it's made progress in an effort to _____ (Answer: relieve) some of the shipping problems that have clogged up the international supply chain. The government does not control that chain. It's largely made up of _____ (Answer: private) port operators, trucking companies, railroads and warehouses, but the Biden Administration is putting its support behind a plan for the Port of Los Angeles to _____ (Answer: operate) 24/7 and for large companies like Walmart, Home Depot and UPS to ship more goods at night. California's Port of Los Angeles is one of the most congested ports on Earth, 40 percent of all the containers shipped to America come through here and at the Port of Long Beach. Economic _____ (Answer: analysts) and trade leaders say this is a step in the right _____ (Answer: direction), but that it won't make a major impact in supply problems.

Two former U.S. Republican presidents, George Bush Sr. and his son, George W., have called on Americans to _____ (Answer: reject) racism and anti-semitism. It's being seen as a rebuke to Donald Trump for his _____ (Answer: comments) about who was responsible for clashes in Charlottesville on Saturday. Mr. Trump's sparked fury when he again _____ (Answer: blamed) both anti-racist protesters and white supremacists. One demonstrator, Heather Heyer, was killed. At her _____ (Answer: memorial) service, her mother said the killer had wanted to silence her daughter, but had ended up magnifying her. President Trump has announced he's dismantling two _____ (Answer: advisory) panels made mainly of senior business figures. Several resigned in the controversy over the U.S. leader's reaction to events in Charlottesville.

Spanish police say they have _____ (Answer: identified) the driver of the van that mowed down crowds walking along Barcelona's main tourist street last Thursday, killing 13 people. They haven't named him, but he's understood to be Younes Abouyaaqoub, a 22-year-old born in Morocco. Police say he may have _____ (Answer: fled) the country. A South African court has given _____ (Answer: permission) for an online auction of rhino horns despite a global



trade ban. The authorities have tried to stop the 3-day auction. There's a great demand for rhino horns in Vietnam and China with their use in traditional medicines. The South African government has _____ (Answer: confirmed) that it granted diplomatic immunity to Zimbabwe's First Lady, Grace Mugabe, enabling her to return home despite being _____ (Answer: accused) of assaulting a model in Johannesburg. The government said it was imperative to _____ (Answer: maintain) good relations with Zimbabwe.

The U.S. Agency for International Development, or USAID, recently announced additional assistance to support _____ (Answer: achieving) the goals outlined in the bilateral Development Objectives Assistance Agreement between the U.S. and Nigerian governments _____ (Answer: signed) in 2015. 25 million dollars will _____ (Answer: strengthen) good governance by supporting state governments' efforts to bolster Nigeria's Open Government Partnership commitments to improve _____ (Answer: transparency) and fight corruption. An additional 1.5 million dollars will support a healthier, more educated population in _____ (Answer: targeted) states through the U.S. President's Emergency Plan for AIDS Relief, also known as PEPFAR, for a total of 26.5 million dollars in additional assistance.

The U.S. and South Korea announced late Saturday the two countries will end _____ (Answer: annual) large-scale joint military exercises as part of _____ (Answer: diplomatic) efforts to "achieve complete denuclearization of the Korean Peninsula." In a statement, the Pentagon said acting Secretary of Defense Patrick Shanahan and South Korea Minister of National Defense in a phone call Saturday _____ (Answer: decided) to end the Key Resolve and Foal Eagle series of exercises. The decision comes three days after a _____ (Answer: summit) between U.S. President Donald Trump and North Korean leader Kim Jong Un in Vietnam that ended without an _____ (Answer: agreement) to resolve the North Korean nuclear crisis. Seoul's Defense Ministry released a similar statement, according to the Associated Press.

In an effort to encourage the Democratic People's Republic of Korea, or North Korea, to dismantle its nuclear _____ (Answer: weapons) program, the United Nations Security Council last year passed Resolution 2375, which _____ (Answer: imposes) sanctions on North Korea. The United States is determined to strictly _____ (Answer: implement) this Resolution. "Members of the UN Security Council, and by _____ (Answer: extension) all UN member-states, have unanimously agreed to fully enforce sanctions on North Korea, and we expect them to continue to honor those commitments," said Secretary of State Mike Pompeo.

China is stepping up its efforts, so _____ (Answer: announcing) a long-awaited plan to link up its southern Pearl River Delta into a massive hub of technology, research, finance and _____ (Answer: innovation). The possibilities and challenges of the project are both equally challenging and promising, according to _____ (Answer: analysts). Some describe the plan as an attempt to create a mega-city to rival Silicon Valley, the U.S. technology powerhouse that is home to _____ (Answer: companies) such as Google, Facebook, and Apple. But while Silicon Valley has a population of 3.1 million, the Greater Bay Area will link up nine cities together with Hong Kong and Macau with a total population of about 70 million, and the _____ (Answer: economic) heft, state media argues, to drive the Chinese economy, let alone the world.



Heavy rains are expected to fall in a few weeks. Aid agencies are _____ (Answer: racing) to shore up flimsy shelters and _____ (Answer: stabilize) shaky terrain before the monsoon season begins. The U.N. refugee agency (UNHCR) says the work ahead is _____ (Answer: monumental) but preparations are off to a better start this year than last. Aid agencies last year had to deal with the _____ (Answer: massive) influx of more than 740,000 Rohingya refugees fleeing violence and persecution in Myanmar. They arrived over a period of a few months, straining local resources and requiring vast amounts of humanitarian _____ (Answer: assistance).

The World Health Organization says twelve years ago, India alone was _____ (Answer: responsible) for almost 70 percent of all polio cases around the world. It calls India's success against polio one of the most significant achievements in public health. WHO officials say India's _____ (Answer: accomplishment) proved the crippling disease can be _____ (Answer: eliminated) in even the most challenging circumstances with a strong political _____ (Answer: commitment). The number of polio cases has decreased from an _____ (Answer: estimated) 350,000 a year to 33, since the WHO launched its global eradication campaign in 1988.

Thais waited Monday for the results of an election called a return to _____ (Answer: democratic) rule, but which has been widely _____ (Answer: criticized) as an exercise designed by Prime Minister Prayut Chan-o-cha to entrench his military's stranglehold on power. Preliminary official results _____ (Answer: released) late Sunday showed that with 93 percent of ballots counted the military-backed Phalang Pracharat party was in the lead with about 7.6 million votes, that's short of what would be needed for a _____ (Answer: majority) in parliament. In second place was the Pheu Thai party of former prime minister Vanessa with 7.1 million votes. The _____ (Answer: campaign) was marred by allegations of vote buying, however, complaints were few on polling day with election observers from Australia, Canada, the United States and the 10 members of the Association of South East Asian Nations on hand.

Millions of people in North Korea are short of food, perpetually hungry children and _____ (Answer: pregnant) and nursing mothers are suffering the most. The World Food Program reports, South Korea's landmarked _____ (Answer: donation), the biggest in more than a decade, will help ease the _____ (Answer: nutritional) crisis faced by 2 million of this particularly _____ (Answer: vulnerable) group of people. Under an agreement worked out by WFP between both countries, South Korea will donate 50,000 metric tons of rice and \$4.5 million in cash for food needs in North Korea.

U.S. Secretary of State Mike Pompeo met with Indian Foreign Secretary in Washington Monday and told him that the United States stands with India in fighting _____ (Answer: terrorism). After their meeting, the State Department said the two discussed the importance of bringing to _____ (Answer: justice) those responsible for a suicide attack on an Indian paramilitary convoy _____ (Answer: claimed) by Pakistan-based militants. The State Department said the _____ (Answer: diplomats) spoke of "the urgency of Pakistan taking meaningful action against terrorist group operating on its soil." Last month, a suicide bomber killed 40 Indian paramilitary troops in a convoy in the disputed Kashmir region. A Pakistan-based militant group claimed responsibility for that violence. New Delhi has vowed to punish Islamabad for _____ (Answer:



sheltering) the militants, saying the Indian army chief has been given a "free hand" to take whatever action is required.



WRITE FROM DICTATION

Stock predictions can be very capricious even for professionals.

The new classrooms will be put into use next month.

Football is played throughout all years at the university.

Mathematics provides a foundation for understanding and analyzing data.

School exams are easy compared with those in universities.

It is argued that students can learn more by collaboration rather than as individuals.

Criminal charges will be brought against all of the men.

The horizontal line on the graph indicates that there was no change in the period.

The transformation of media has changed the way information is both used and studied.

Many different conferences offer opportunities for volunteer work.

Social psychology is concerned with the understanding of human behavior.

Houses were built for workers near the factories.

Muscle cells bring parts of the body closer together.

Meeting project deadlines is essential for academic and professional success.

The meeting seemed minor, occurring in just a small room.

This course provides students with practical experience relevant to the industry.

The university official is ready to assist with your housing and transportation.

That period is often hailed as a golden era in English literature.

The cafeteria menu includes a selection of dishes, fish and chicken alike.

Some old system features have been integrated into the new one.

Always go through the safety rules before handling any class tools.

I anticipated our meeting would be in the smaller conference room.

The best student has an opportunity to acquire a scholarship.

Late submissions likely won't receive attention or thorough consideration.

A campus tour is beneficial at the beginning of each term.

If the government helps out, we could use solar energy more often.

A good assistant always makes sure to get all the information needed.

The goal we have is to make things less competitive for people.

Soon, forms will be handed out to students coming back to school.

The library's extensive collection includes books, journals, and digital resources.



Working shifts can make it hard to have a good family life.
Playing music can help you feel less stressed, experts say.
Many schools offer programs to study abroad for a term or two.
The library is a quiet place to study, research, and find resources.
Eating the right food is super important for sportspeople to do well.
If the roots get damaged, the plant's leaves will start to die.
Students must submit assignments online through the university's learning platform.
Frequently observed attributes tend to interpret the problem in comparable manners.
Soon, money experts will give talks to important visitors here.
We must act to prevent an increase in the unemployment rate.
A disease that was once dangerous is now no longer a threat.
They watched how things happened in the classroom for their study.
Banks make money by charging interest when they lend it out.
Students of accounting should grasp profit and loss statements well.
When you do research, it's best to not have too much info.
The staff at the front desk can help you find a house.
To excel, you must practice a specific skill repeatedly and consistently.
Tomorrow's lesson will assess your understanding of complex material.
This place has lots of different kinds of underwater life.
Put your bags over there where they're supposed to go, please.
This book discusses cultural impacts on our actions significantly.
The university's website has many additional useful resources available.
Different water creatures have different amounts of water in them.
Graphs are really helpful when you study places and maps.
Sociology policies from the government try to fix social issues.
The coffee machine upstairs isn't working at the moment.
The student graduation is a ceremony that's known by many.
Pick a question that's safe when you make a new password.
Write down where you got your information from very carefully.
Ask your tutor for extra help if you really need it.
Students from all over come here to study as international scholars.
Long makeup use can sometimes lead to unexpected allergies.



Comprehending the intricacies of the global market is imperative for students.

The library boasts a large, important collection on economic history.

Make sure to look over your work well before you finish.

Think of everything you get from the school as helpful tools.

Writing things down can help you pay attention better in class.

Access the lecture slides and notes online after the class ends.

If there's a fire, everyone should leave by the nearest exit.

Calculating how things move is part of physics and math.

The concept has inherent imperfections and necessitates thorough and deliberate evaluation.

Digital systems have simplified borrowing books, making it more accessible today.

This research is making us question what we thought we knew.

Check with your teacher before you turn in your big paper.

Everyone here has to follow the rules of this place.

You have to turn in your schoolwork at the weekend.

The law is there to protect people who put money into businesses.

The university's theater group plans to perform at the concert hall.

Most essential course texts are stocked in the university's library.

Researchers are using the web to look into different problems now.

It's best to email your teachers if you have questions about class.

By collaborating, we can create statues that are both imposing and magnificent.

Eating regularly during the week has its health benefits.

True or false tests seem harder to students than essay questions.

Parents often simplify their vocabulary when speaking with their kids.

Reserve your books at the library's help desk for easy pickup.

Accounting students typically understand economics, statistics, and some psychology.

To know when we're open, please look at our online site.

Trains help people travel far places much more easily.

As the world gets more crowded more trees are being cut down.

People who study journalism usually work in news or public relations.

All living things, no matter how different, share some same parts.

Doing things and just learning about them in school are different.

You can find your class times on the school's web page.



It's hard for farmers to work with the weather being so strange.
Sleeping too much might not be as good as you think.
Colleges are now putting money into new ways to teach with tech.
Teachers should make what they want students to learn very clear.
Our school works with others around the world to swap students.
Today's class will show you different ways to show data clearly.
This class really helps you to think through problems better.
City planners work to make our neighborhoods work better and grow.
The study guides offer numerous helpful strategies for exam preparation.
Art students have a good chance of getting scholarships these days.
The new theory uses the latest research to explain things better.
Students should look at online resources before their classes start.
The best managers are always open to trying new things.
The student advisor was aware that today's lecture was not happening.
Changing weather is starting to affect animals and where they live.
More people work in making things than in farming or fishing.
Women around the world like various forms of entertainment a lot.
Soon, a well-known conductor will lead the orchestra in concert.
Industry experts will talk about jobs in automated workplaces soon.
Ensure restful sleep the night before a test for optimal performance.
Students have regular meetings with their own tutors for help.
You'll learn what you need to do in the class outline.
You can find cheaper school books listed on the school's site.
Art students display their creations for everyone at school to admire.
Repeated practice is key to improving skills in any activity.
Eating right and exercising are key to staying healthy.
Submit your group assignments at the office designated for assistance.
Make sure you turn in your work by Monday's deadline.
Essay writing gets easier once you've done all the research.
Companies sometimes raise prices when workers want more pay.
Sugar is something that has carbon, oxygen, and hydrogen in it.
These students learned a lot from teachers who knew a lot.



We study how tropical storms work and how to predict them.

Boating on the river during winter is considered excessively dangerous.

Tomorrow's lecture will look closely at educational policies in America.

Expect to run into a lot of challenges during this project.

The thief habitually broke into several different homes each day.

Learning to think critically is a big part of good education.

What's going on in parliament now is really interesting to watch.

There are four main parts to the project you're doing.

Students engaged in research often face the greatest challenge in securing funding.

The struggles of animals in the wild are often overlooked.

Our first results were surprising and didn't match our theories.

Theatre courses really encourage students to be more creative.

Our sociology department has a global reputation for its outstanding quality.

Today, scientists found out a lot from many different studies.

This problem has two different explanations that seem the same.

The assembly decided to give more power to local places.

This study gives new ideas about what people think of tech.

The results of the experiment are shown in this table here.

A new study has shown some really new and interesting things.

Make sure you're not late; class starts exactly on time.

Gold is very special and expensive because it's rare and pure.

Trains have made it easy for everyone to travel far.

It's important to share these properties fairly among everyone.

Every semester, students have the opportunity to take math and stats tests.

Another book isn't complete but gives more insightful information.

The museum shuts down every Thursday morning for the month.

The museum shuts down every Thursday morning for the month.

The best thing about this cheap phone isn't obvious at first.

The next talk will go over educational policies in the United States.

Big companies changed their rules after reports about them came out.

Diving into hobbies can lead to a lot of personal happiness.

Honey can be used as food and health product.



Psychology and philosophy aren't really related most of the time.

More and more, studies aim to find cures for different illnesses.

Many faculty members showed their support for this decision openly.

A strong beginning is key to any successful presentation's success.

People still don't fully realize how important this event was.

The testing format has been changed to meet professional standards.

The essay's publication will happen once the research is finalized.

We're not taking requests for more stuff right now, sorry.

Older studies were more about ideas than doing real experiments.

Each semester, the dance department presents complex, artistic performances.

The curriculum has been updated to encourage more scholarly development.

Our varied courses cover many aspects of the subject comprehensively.

Answering some questions is needed to change your password.

The government should help colleges and universities to grow bigger.

This language class provides key strategies for pronunciation improvement.

Funds from the budget will be allocated to various departments fairly.

The cafe menu includes a diverse selection of sandwiches and coffee.

The book's release was supported by numerous members of the faculty.

Students working together often find their educational experiences enriched.

Class representatives will bring forms for you to vote on things.

Assignments must be submitted at the end of the term.

Successful academic results often rely on effective studying methods.

Some academic departments have unique, specialized collections of books.

Various groups are dedicated to reducing suffering in animal populations.

The area has a number of underwater habitats and species.

The archaeologist found new things at an old site.

Students should leave their bags on the tables by the door.

It might take longer to process your paperwork than normal.

Creativity is more important for undergraduates.

The university is seeking funding for a project focused on climate change mitigation.

Ads for kids are something people have strong opinions about.

Teaching helpers get extra money for their living costs.



Firm conclusions can be established through rigorous experiments.

Chosen people will work together on big research projects.

Agricultural development is vital for poor rural areas.

Fill out this form to get cheaper prices at school.

Students should keep track of their own grades and work.

You are required to attend lectures and write weekly reports.

Our scientists diligently study various weather types for research purposes.

They developed a unique approach to training their employees.

The influence of friends is often pivotal to young people's behavior.

Resources and materials are on hold at the library reference desk.

Some wonder if spending money on space is good.

Listening is the key to succeeding in this course.

Humidity measures the amount of water there is in air.

Strong liner is used to measure distance and baseline.

Hard times can sometimes make people start new companies.

Many vocational courses in the institution are funded by private enterprises.

Being prepared in the lab will stop accidents from happening.

The opening hours of the library are reduced during summer.

We pick people who know the basics to start with.

A group meeting will be held tomorrow in the library conference room.

Writers usually write about things they know or have lived.

Most people who looked at the idea thought it was good.

The library offers study rooms, computer access, and research assistance services.

Some bad stuff comes from plants and animals we know.

My technique is to understand the sentence while writing the first letter of each word.

When it gets cold, birds fly to places where it's warm.

Always say where you got your information when writing papers.

Balancing coursework and a part-time job require effective time management.

To graduate, students have to pass some important tests first.

If you're short on money, you might get help for school.

Meeting project deadlines is essential for academic and professional success.

More businesses will make the country's money situation better.



Weather experts can tell what the weather will do later on.

This camera has the technology to detect and focus on eyes.

