

PTE vocabulary list: 209 words with meanings

The academic words most often the answer in PTE Reading Fill in the Blanks, grouped by topic, with a sentence from a real PTE question.

Research and evidence

associate /ə'səʊʃieɪt/ (verb) to connect two things as being linked

A higher potassium intake has also been associated with increased bone density and bone strength.

identify /aɪ'dentɪfaɪ/ (verb) to recognize or find out what something is

Using data from the scans, the team identified more than 1,000 settlements dotting the region.

conduct /kən'dʌkt/ (verb) to organize and carry out a study or activity

For the first time Japanese researchers have conducted a real-life experiment that shows how some traffic jams appear for no apparent reason.

insight /'ɪnsaɪt/ (noun) a clear, deep understanding of something

Mills was a contemporary sociologist who brought tremendous insight into the daily lives of society's members.

reveal /rɪ'vi:l/ (verb) to show something that was hidden or unknown

Videos revealed that the jays shake the nuts before selecting one, which apparently lets them gauge the nut's mass and perhaps also listen for the rattle of a well-packed shell.

discovery /dɪ'skʌvəri/ (noun) finding something that was not known before

The discovery of radioactivity won the Curies and Becquerel the Nobel Prize for Physics in 1903.

evidence /'eɪdəns/ (noun) facts or signs that show something is true

It puts into words your knowledge and your conceptual understanding and shows evidence of your ability to think critically.

monitor /'mɒnɪtə/ (verb) to watch and check something over time

National Ice Center uses satellite data to monitor icebergs near Antarctica.

detect /dɪ'tekt/ (verb) to notice or discover something hard to see

Researchers have discovered that tardigrades use tiny molecular sensors in their cells to detect the level of harmful molecules which are produced by stress.

participant /pɑ:'tɪsɪpənt/ (noun) a person who takes part in something

In such conditions, it is necessary to define special rules of behavior for all the participants in the energy sector.

demonstrate /'demənstreɪt/ (verb) to show clearly that something is true

It was built for the World's Fair to demonstrate that iron could be as strong as stone while being infinitely lighter.

estimate /'estɪmeɪt/ (verb) to roughly calculate an amount or number

When Captain Cook visited these islands towards the end of the 18th century, he estimated that the population numbered about a hundred thousand.

findings /'faɪndɪŋz/ (noun) the results of a study or investigation

The scientists presented their findings at the Society for Experimental Biology's annual conference in Prague.

shed /ʃed/ (verb) (shed light on) to help explain something

The answer to that question could shed light on the proficiency of these Stone Age humans as mariners and their mental capabilities overall.

comprehensive /ˌkɒmprɪ'hensɪv/ (adjective) including everything or nearly everything

This provides a more comprehensive and accurate measure when compared with confirmed COVID-19 deaths alone.

observe /əb'zɜ:v/ (verb) to watch or notice something carefully

Scientists have not yet observed dark matter directly.

relevant /'reləvənt/ (adjective) closely connected to the subject being discussed

Having tracked down research that is relevant to your area of interest, the next task is to actually make sense of that research.

correlate /'kɒrəleɪt/ (verb) to be connected, so one changes as the other changes

In their paper in BioScience, the two researchers showed that reintroducing the wolves was correlated with increased growth of willow and cottonwood in the park.

dissemination /dɪ'semi'neiʃn/ (noun) the spreading of information to many people

The exponential growth of the Internet was heralded, in the 1990s, as revolutionizing the production and dissemination of information.

elusive /i'luːsɪv/ (adjective) difficult to find, achieve or understand

While the comprehensive picture remains elusive, research has illuminated some contributing factors.

indicate /'ɪndɪkeɪt/ (verb) to show or suggest that something is true

Evidence indicates the giant elliptical galaxy Messier 87 contains a supermassive black hole over 6 billion times the mass of our sun.

replicate /'replɪkeɪt/ (verb) to copy something exactly

Tiny 'living machines' made of frog cells can replicate themselves, making copies that can then go on to do the same.

unravel /ʌn'rævl/ (verb) to explain or solve something complicated

Figuring out what peace and quiet actually does for our mental and physical health is the ambition of a group of neuroscientists and health professionals who are beginning to unravel the benefits.

Cause and effect

determine /dɪ'tɜːmɪn/ (verb) to decide or control what something will be

Our purpose and background knowledge will also determine the strategies we use to read the text.

factor /'fæktə/ (noun) one of the things that influences a result

However, individual tastes differ significantly and are influenced by a variety of factors.

benefit /'benɪfɪt/ (verb) to help or be useful to someone or something

In everyday life, we sometimes use the term symbiosis to mean a relationship that benefits both parties.

influence /'ɪnfluəns/ (verb) to have an effect on someone or something

The scientists had earlier found that nest temperature can influence the sex of lizard hatchlings.

ensure /ɪn'ʃʊː/ (verb) to make certain that something happens

Just because an article appears in a print publication does not ensure its credibility.

impact /'ɪmpækt/ (noun) a strong effect on something

The slow process of global warming may have a different impact on various regions.

promote /prə'məʊt/ (verb) to encourage or help something to happen

Ultraprocessed foods are usually high in sugar, salt and fat, all of which promote inflammation throughout the body.

contribute /kən'trɪbjʊːt/ (verb) to be one of the causes of something

Previous studies have shown that climate change hits the poorest nations hardest, despite them contributing the least to climate change.

facilitate /fə'sɪlɪteɪt/ (verb) to make an action or process easier

The classrooms are designed to facilitate hands-on activities and problems that require students to interact with each other to reach a solution.

consequence /'kɒnsɪkwəns/ (noun) a result of an action, often a bad one

But today, I more clearly understand the consequences of leaving my original profession.

devastating /'devəsteɪtɪŋ/ (adjective) causing very great damage or harm

It was a mass extinction event and it was devastating.

rooted /'ruːtɪd/ (adjective) having its origin or basis in something

The world of organic agriculture has often been critiqued as being rooted more in philosophy than in science.

thereby /ˌðeə'baɪ/ (adverb) as a result of this

The primary purpose of assistive products is to maintain or improve an individual's functioning and independence, thereby promoting their well-being.

undermine /ʌndə'maɪn/ (verb) to gradually weaken something

Its causes are complex and multifaceted, reflecting a combination of domestic and international conditions that conspired to undermine economic stability and confidence.

pose /pəʊz/ (verb) to create a problem, danger or difficulty

Icebergs pose a danger to ships traversing the North Atlantic and the waters around Antarctica.

detrimental /ˌdetrɪ'mentl/ (adjective) causing harm or damage

Empirical studies have delineated a dual-edged nature of computer gaming, presenting both beneficial and detrimental outcomes.

disrupt /dɪs'rʌpt/ (verb) to stop something from working or continuing normally

Meanwhile, a low pressure system has brought torrential rain to parts of the Northern Territory, causing floods and disrupting supplies.

outcome /'aʊtkʌm/ (noun) the result of an action or process

By addressing these early on, it may be possible to prevent or delay the onset of YOD and improve the outcomes for the affected individuals and their families.

attribute /ə'trɪbjʊ:t/ (verb) to say that something is caused by something

The researchers attribute this finding to "male" being historically seen as the default gender.

mitigate /'mɪtɪgeɪt/ (verb) to make something bad less harmful or serious

This involves recognizing the potential for cognitive and social skill development through selective game genres while instituting boundaries to mitigate exposure to harmful content and prevent problematic gaming behaviors.

trigger /'trɪgə/ (verb) to cause something to start happening

Scientists warn that this level of warming could trigger tipping points that would spark runaway climate change.

Society and people

establish /ɪ'stæblɪʃ/ (verb) to set up or create something official

Governments across the globe have established stringent criteria and certification processes for producers of green energy.

engage /ɪn'geɪdʒ/ (verb) to take part in an activity

Many of us engage in financial transactions without fully grasping the implications of interest rates or investment risks.

vulnerable /'vʌlnərəbl/ (adjective) easily harmed or affected

It is women, more than men, who are disproportionately more vulnerable to the effects of climate change.

interact /ɪntər'ækt/ (verb) to act together or affect each other

In reality, many complex factors and personal reasons may interact to motivate a person or family to move.

address /ə'dres/ (verb) to start dealing with a problem

In order to address the widespread problem of low literacy, educators and policymakers must first understand why so many students struggle to read.

acceptance /ək'septəns/ (noun) agreement that something is right or suitable

Very few reforms, such as the rather different decimal French Republican and Soviet calendars, had gained official acceptance, but each was put out of use shortly after its introduction.

adopt /ə'dɒpt/ (verb) to start using a particular idea, method or habit

So what principles should you adopt when you go out shopping?

burden /'bɜ:dn/ (noun) a heavy responsibility or difficulty

This places the burden and responsibility of making choices and directing one's life solely on the individual.

equitable /'ekwɪtəbl/ (adjective) fair and equal for everyone

The situation calls for a reassessment of environmental policies, emphasizing the need to address these disparities and ensure equitable access to clean air.

accessible /ək'sesəbl/ (adjective) easy to reach, get or use

We need to find the tools to fight COVID, and we need to make them accessible to all.

overcome /əʊvə'kʌm/ (verb) to succeed in dealing with a problem

Early intervention can make a big difference in helping children overcome their difficulties and achieve their full potential.

autonomy /ɔ:'tɒnəmi/ (noun) the freedom to make your own decisions

The division of powers is constitutionally established, ensuring that each level of government has a degree of autonomy and can make decisions within its jurisdiction.

awareness /ə'weənəs/ (noun) knowledge or understanding of a situation or problem

The authors hope that their findings will raise awareness of the potential health risks of nanoplastic pollution, which is a growing environmental concern.

barrier /'bæriə/ (noun) something that blocks progress or keeps things apart

Employers of choice remove the barriers between the different segments of people's lives, by creating flexible conditions of work and a range of leave entitlements.

commitment /kə'mɪtmənt/ (noun) dedication to a cause, activity or person

The field demands a commitment to truth and ethics, with journalists acting as watchdogs for society.

confront /kən'frʌnt/ (verb) to face and deal with a difficult problem

Over the decades, the UN expanded to encompass 193 member states, adapting its mission to confront emerging challenges like climate change, terrorism, and humanitarian crises.

diverse /daɪ'vɜːs/ (adjective) very different from each other; varied

Python, known for its simplicity and readability, has become widely used in diverse fields, from web development to data science.

foster /'fɒstə/ (verb) to encourage something to develop

The results indicated not only a positive environmental impact but also a change in the social fabric of urban communities, fostering a more connected and accessible city environment.

tackle /'tækəl/ (verb) to make an effort to deal with a problem

Universal basic income (UBI) has become more popular as a way to tackle economic inequality.

cope /kəʊp/ (verb) to deal successfully with something difficult

If a couple does divorce, there are specific considerations they should take into account to help their children cope.

emulate /'emjuleɪt/ (verb) to copy someone you admire

In search of lessons to apply in our own careers, we often try to emulate what effective leaders do.

enact /ɪ'nækt/ (verb) to make a proposal into law

That's because limitations on new tax credits enacted in August as part of the Inflation Reduction Act won't be put into force all at once, the Treasury Department announced this week.

inequality /ɪnɪ'kwɒləti/ (noun) an unfair difference between groups in society

These barriers are often unfair and reflect the social and economic inequalities in our society.

innate /ɪ'neɪt/ (adjective) present from birth; natural, not learned

Indeed, a sense of rhythm seems to be innate.

mortality /mɔː'tæləti/ (noun) death, or the number of deaths in a group

Social ties also reduce mortality risk among adults with documented medical conditions.

mutual /'mjuːtʃuəl/ (adjective) felt or done equally by each side toward the other

When everyone in a corporation shares the same values and goals, it's possible to create a culture of mutual respect, collaboration, and support.

notorious /nəʊ'tɔːriəs/ (adjective) famous for something bad

The most notorious among these is the female Anopheles mosquito, the primary vector for malaria, a disease that claims the lives of hundreds of thousands of people each year, predominantly in sub-Saharan Africa.

nurture /'nɜːtʃə/ (verb) to care for something while it grows and develops

Through nurturing each bonsai, the grower embarks on a personal journey, discovering not just the art of miniaturization but also the profound lessons of growth, adaptation, and the transient nature of existence itself.

prohibit /prə'hɪbɪt/ (verb) to officially forbid something

A crime is generally a deliberate act that results in harm, physical or otherwise, toward one or more people, in a manner prohibited by law.

renowned /rɪ'naʊnd/ (adjective) famous and respected

He's renowned for his beautiful water lilies and Japanese footbridge scenes, which brilliantly play with light and color.

sedentary /'sedntri/ (adjective) involving a lot of sitting and little exercise

Additionally, the immersive nature of many games can lead to sedentary lifestyle habits, contributing to obesity and related health issues.

tribute /'trɪbjʊːt/ (noun) something done or given to show respect or thanks

An Australian sheep farmer paid his own unique tribute to his beloved aunt.

Other

potential /pə'tenʃl/ (noun) possible future ability or success

This marked a significant achievement in the field of space communication, demonstrating the potential of laser technology in transmitting data across vast distances in space.

maintain /meɪn'teɪn/ (verb) to keep something in the same good state

In general, sleeping on your back or side is best for preventing neck or back pain as both positions help maintain your spine's natural curves.

equivalent /ɪ'kwɪvələnt/ (adjective) equal in value, amount or meaning

They estimate that humans consume about 5 grams of plastic per week, equivalent to a credit card.

tremendous /trə'mendəs/ (adjective) very great in amount or level

Moreover, access to appropriate assistive products can have a tremendous impact on community development and economic growth.

core /kɔː/ (noun) the central, most important part

The technology, at its core, manipulates our sensory perception, creating a convincing illusion of reality.

accompany /ə'kʌmpəni/ (verb) to happen or exist together with something

Trading, for example, is often accompanied by hard bargaining, in which both sides conceal their full hand and perhaps engage in some bluffing.

encompass /ɪn'kʌmpəs/ (verb) to include a wide range of things

Higher up is the need for love and belonging, encompassing friendships, family, and intimate relationships.

extent /ɪk'stent/ (noun) how large, important or serious something is

For many years, the complexity of DNA made understanding the full extent of its influence a distant dream.

obstacle /'ɒbstəkl/ (noun) something that blocks progress

But the path to that cleaner future is daunting, clogged with political and societal roadblocks, as well as scientific obstacles.

vast /vɑːst/ (adjective) extremely large

The capability to process vast amounts of data simultaneously could lead to breakthroughs in cryptography, materials science, and complex system modeling.

feat /fi:t/ (noun) an impressive achievement that needs skill or effort

A team of Indian scientists has achieved a historic feat by successfully landing a spacecraft at the lunar south pole, where no one has ever gone before.

overlap /'əʊvə'læp/ (verb) to partly cover or share the same area

Both management and leadership are necessary skills, and they often overlap with one another.

prior /'praɪə/ (adjective) existing or happening earlier

The rate of deforestation and habitat loss, especially in the Amazon and Southeast Asian rainforests, is exceeding prior estimates.

severe /sɪ'viə/ (adjective) very serious or bad

The Great Depression, which began in 1929 and lasted until the late 1930s, was the most severe and prolonged economic downturn in the history of the Western industrialized world.

sufficient /sə'fɪʃnt/ (adjective) enough for a particular purpose

COVID-19 exposed the consequences of failing to make sufficient progress on the Sustainable Development Goals and implementing the Paris Agreement on climate change.

array /ə'reɪ/ (noun) a large group or range of things

They are inundated with music emitting from a wide array of electronic devices, toys, and computers offering a limitless number of musical selections.

complement /'kɒmplɪment/ (verb) to add to something in a way that improves it

The authors said that this large-scale approach could complement traditional lab studies and help democratize motor learning research.

consist /kən'sɪst/ (verb) (consist of) to be made up of

The exascale supercomputer will use a modular architecture, consisting of several interconnected modules with different hardware and software configurations.

consistently /kən'sɪstəntli/ (adverb) always in the same way

We can, and do, consistently communicate our feelings to one another.

constitute /'kɒnstɪtju:t/ (verb) to form or make up something

If you had a worm that constituted a quarter of your body weight, you'd eat more too.

embedded /ɪm'bedɪd/ (adjective) firmly fixed as part of something

The game is so embedded in the public's consciousness that there is now even such a thing as a chess influencer.

encounter /ɪn'kaʊntə/ (verb) to experience or meet something

An individual organism can regulate its internal processes rapidly to sustain itself within the usual range of environmental changes that it encounters hourly or daily.

endeavor /ɪn'devə/ (verb) to try hard to do something

But most students, most of the time should endeavor to be sensibly simple to develop a baseline style of short words, active verbs and relatively simple sentence carrying clear actions or identities.

fraction /'frækʃn/ (noun) a small part or amount of something

In other words, these devices are transparent to the human eye but still absorb a fraction of the solar light which they can then convert into electricity.

incorporate /ɪn'kɔ:pəreɪt/ (verb) to include something as part of a whole

For the first time, dictionary publishers are incorporating real, spoken English into their data.

navigate /'nævɪgeɪt/ (verb) to find your way from one place to another

Butterflies, being diurnal creatures, have evolved to navigate using the sun.

overwhelming /,əʊvə'welmɪŋ/ (adjective) too great or strong to deal with easily

An insignificant amount for an adult could be overwhelming for a small child.

pivotal /'pɪvətl/ (adjective) very important; central to what happens

Despite its complexities, the UN remains a pivotal force in international affairs, mediating conflicts, delivering aid, and advocating for human dignity worldwide.

proximity /prɒk'sɪməti/ (noun) being near to something in space

This bond is rooted in a shared history, common cultural values, and geographic proximity.

significant /sɪg'nɪfɪkənt/ (adjective) large or important enough to have an effect

They spend a significant amount of time with us, understanding our strengths and weaknesses and helping us improve.

substantial /səb'stænʃl/ (adjective) large in amount, size or importance

A recent study suggests that short bursts of vigorous activity every day climbing stairs, carrying a heavy load of groceries, or stepping up the pace of housework can provide substantial health benefits.

vital /'vaɪtl/ (adjective) extremely important or necessary

This precipitation is a vital part of the water cycle.

comprise /kəm'praɪz/ (verb) to consist of; be made up of

The initial membership comprised 51 countries, each committed to maintaining international security, fostering economic development, and upholding human rights standards.

evoke /ɪ'vəʊk/ (verb) to bring a feeling or memory into the mind

Then, they decorate it with glittering lights, colorful ornaments, and an elegant tree topper, making it the focal point of all their activities and evoking all those warm, cheerful holiday emotions.

favorable /'feɪvərəbl/ (adjective) good or helpful; giving an advantage

One advantage of vegetative propagation is that plants with favorable traits are repeatedly reproduced.

fragmented /fræg'mentɪd/ (adjective) broken into separate parts

The theory of plate tectonics states that the Earth's outermost layer is fragmented into a dozen or more large and small plates that are moving relative to one another.

potent /'pəʊnt/ (adjective) very powerful or effective

Cuteness in offspring is a potent protective mechanism that ensures survival for otherwise completely dependent infants.

predominantly /prɪ'dɒmɪnəntli/ (adverb) mostly; mainly

The data suggested that bloggers predominantly write individually rather than in groups, with millennials being the most active demographic.

Thinking and argument

reflect /rɪ'flekt/ (verb) to show or express something

What is perhaps more important, however, is that our body language reflects how we judge, think, and feel about ourselves.

differ /'dɪfə/ (verb) to be different from something else

He observed that individuals differ in their inherited traits and that selection acts on such differences, leading to evolutionary change.

specific /spə'sɪfɪk/ (adjective) particular, not general

We always read within a specific context, and this affects what we notice and what seems to matter.

principle /'prɪnsəpl/ (noun) a basic rule or idea that explains how something works

Observational astronomy, as the name suggests, is concerned with observing the skies and then analyzing the observations, using the principles of physics.

emphasis /'emfəsɪs/ (noun) special importance given to something

Strongly influenced by Dada and its emphasis on appropriation and everyday objects, artists increasingly worked with collage, consumer products, and a healthy dose of irony.

overlook /,əʊvə'lʊk/ (verb) to fail to notice or consider something

The white chunks previously had been overlooked as evidence of sloppy mixing or poor-quality raw material.

regardless /rɪ'gɑːdləs/ (adverb) without being affected by something

That suggests calories are metabolized the same regardless of when they are consumed, says Johnstone.

alternative /ɔː'l'tɜːnətɪv/ (noun) another possible choice

A better alternative is to use reusable cups, which can reduce waste, save resources, and protect the planet.

concentration /ˌkɒnsn'treɪʃn/ (noun) giving most attention to one particular thing

Its concentration on the transformation of data into actionable knowledge for decision-making makes scholarship in decision science highly collaborative.

distinct /dɪ'stɪŋkt/ (adjective) clearly separate and different

Australia and New Zealand, while distinct nations, share a profound and enduring connection.

passive /'pæsɪv/ (adjective) accepting things without taking action

Reading is an active process, not a passive one.

perspective /pə'spektɪv/ (noun) a particular way of thinking about something

Analyzing food from a sociological perspective reveals the layers of meaning it carries beyond mere sustenance, encompassing issues of power, tradition, and resistance in a globalized world.

characterize /'kærəktəraɪz/ (verb) to describe the typical qualities of something

The biosphere is characterized as an area that contains all living organisms and the products of their activities.

comparable /'kɒmpərəbl/ (adjective) similar in size, amount or quality

The amount of water was comparable to that found on the lunar surface by the same telescope in 2020.

identical /aɪ'dentɪkl/ (adjective) exactly the same

Research has found that the packaging of some edible products, especially those available on the black market, looks nearly identical to the real thing.

regard /rɪ'gɑːd/ (noun) (with regard to) about; concerning

Most TED Talk speakers follow Steve Jobs's speaking style with regard to visuals.

relatively /'relətɪvli/ (adverb) fairly, when compared with others

However, heat pumps are still relatively uncommon in the UK, with only 1% of British homes having one installed, compared to 60% of Norwegian homes.

acknowledge /ək'nɒlɪdʒ/ (verb) to accept or admit that something exists or is true

While any attempt to be objective in your analysis is a good thing, it can be just as useful to acknowledge your biases in your research and arm the reader or consumer of your material accordingly.

context /'kɒntekst/ (noun) the situation in which something happens

In the context of these regulations, foods marketed as organic are produced in a way that complies with organic standards set by national governments and international organic industry trade organizations.

conversely /'kɒnvɜːsli/ (adverb) in an opposite way

Adding heat will increase a body's temperature while removing heat will lower the temperature, thus changes in temperature are the result of the presence of heat, or conversely, the lack of heat.

framework /'freɪmwɜːk/ (noun) a basic structure of rules or ideas

The absence of a universal framework for digital governance only adds to the complexity, mirroring the geopolitical debates over the recognition of nation-states.

notion /'nəʊʃn/ (noun) an idea or belief about something

Economists, for example, create mathematically-based models on the notion that people act rationally as far as their own economic interests are concerned.

objective /əb'dʒektɪv/ (adjective) based on facts, not personal feelings

In an ideal world, 'objective' or 'balanced' information would present all the evidence for and against, and leave you to weigh this up and draw conclusions.

perceive /pə'siːv/ (verb) to notice or understand something in a particular way

As the light exits the raindrop, it bends again, creating the spectrum of colors we perceive as a rainbow.

underscore /ˌʌndə'skaʊ/ (verb) to emphasize or show that something is important

This statement underscores the idea that VR's power lies in its ability to connect with users beyond the visual, tapping into a deeper, emotional response.

akin /ə'kɪn/ (adjective) (akin to) similar to

Defining sovereignty in the digital era presents a complex challenge, akin to the difficulty of defining a country.

assumption /ə'sʌmpʃn/ (noun) something believed to be true without proof

This discovery challenges the previous assumption that these asteroids were completely dry and could explain the origin and distribution of water in our solar system.

concept /'kɒnsept/ (noun) an idea of what something is or should be

For a start, we need to change our concept of 'retirement', and we need to change mind-sets arising from earlier government policy which, in the face of high unemployment levels, encouraged mature workers to take early retirement.

conviction /kən'vɪkʃn/ (noun) a strong belief or opinion

But a book on 'Risk' by my colleague John Adams has made me re-examine my deeply held convictions.

decisive /dɪ'saɪsɪv/ (adjective) firm and producing a clear result

We need decisive action if we are remedying this worsening situation.

distinguish /dɪ'stɪŋɡwɪʃ/ (verb) to mark something as different from others

Scientists have discovered 118 chemical elements, distinguished by the number of protons in their nuclei.

latter /'lætə/ (noun) the second of two things just mentioned

The former involves communicating a clear vision and persuading subordinates to follow it, while the latter involves seeking input and feedback from subordinates to create a shared goal.

Science and environment

characteristic /ˌkærəktə'rɪstɪk/ (noun) a typical quality or feature of something

Coastal pollution refers to the introduction of substances or any form of energy in the coastal environment, which results or is likely to result in adverse effects in the ecosystem due to changes in its physical, chemical, and biological characteristics.

species /'spiːʃiːz/ (noun) a group of living things of the same kind

When humans began farming some 12,000 years ago, they altered the future of our species forever.

preserve /prɪ'zɜːv/ (verb) to keep something safe from harm or change

Without access to chemical fertilizers, medieval farmers developed and relied heavily on the system of crop rotation to preserve the health of their arable land.

phenomenon /fə'nɒmɪnən/ (noun) something that happens or exists, often unusual

Riverbank erosion is an inevitable natural phenomenon of any floodplain region.

exposure /ɪk'spəʊʒə/ (noun) being in contact with something, often harmful

Studies have found that exposure to air pollution is linked to a greater risk of depression and suicide.

chronic /'krɒnɪk/ (adjective) lasting a long time (of an illness or problem)

People are living longer but with more chronic disease and disability.

degradation /ˌdeɡrə'deɪʃn/ (noun) damage that makes something worse in quality

Ecological consequences of coastal pollution include degradation of habitats and biodiversity, and alteration of environmental functions and processes, resulting in a greater susceptibility to disturbances and in the decline of ecosystem services.

convert /kən'vɜːt/ (verb) to change something into a different form

Through specialized cells containing chlorophyll, plants convert sunlight into chemical energy, releasing oxygen as a byproduct.

evolutionary /ˌiːvə'lʊːʃənri/ (adjective) relating to how species develop over long periods

These communities still live by hunting and gathering, as most humans did over evolutionary history.

release /rɪ'liːs/ (verb) to let something out or go free

Those antibodies then cause certain cells in the body to release chemicals into the bloodstream, one of which is histamine (pronounced: HIS-tuh-meen).

diversity /daɪ'vɜːsəti/ (noun) a wide variety of different things or people

These distinct regions, each with its own unique weather patterns and characteristics, play a crucial role in shaping the diversity of life on our planet.

emission /i'mɪʃn/ (noun) gas or other substance sent out into the air

Using less energy saves money and lowers greenhouse gas emissions.

habitat /'hæbɪtæt/ (noun) the natural home of an animal or plant

These studies unveil the secrets of amphibian survival strategies in dense rainforests and the intricate relationships between species and their habitats.

regulate /'regjuleɪt/ (verb) to control the level or amount of something

It can also be found in barometers, which are used to measure air pressure and show changes in weather, and thermostats, which regulate the temperature of buildings.

substance /'sʌbstəns/ (noun) a particular type of solid, liquid or gas

Lava is an incredibly hot substance that forms when magma from the Earth's depths rises to the surface, and erupts through a volcano.

diagnosis /ˌdaɪəgˈnəʊsɪs/ (noun) identifying what illness or problem someone has

There is often a lack of awareness and understanding of dementia, resulting in stigmatization and barriers to diagnosis and care.

restore /rɪˈstɔː/ (verb) to bring back to a former good condition

At the disease sites, they will reduce gut inflammation and restore the bacterial community there.

susceptible /səˈseptəbl/ (adjective) easily affected or harmed by something

It's a country very susceptible to the impacts of the climate crisis.

sustainable /səˈsteɪnəbl/ (adjective) able to continue without harming the environment

Ecotourism and other forms of sustainable travel have their origins with the environmental movement of the 1970s.

transmit /trænzˈmɪt/ (verb) to pass something from one person or thing to another

Plague is an infectious disease and is transmitted between animals via their fleas.

compound /ˈkɒmpaʊnd/ (noun) a substance made of two or more elements

Vitamins are distinct in several ways from other biologically important compounds such as proteins, carbohydrates, and lipids.

deficiency /dɪˈfɪjnsi/ (noun) a lack of something that is needed

Dry lips are a common problem that can have various causes, including nutrient deficiencies, medications, weather, and other factors.

deplete /dɪˈpliːt/ (verb) to greatly reduce the amount of something

The Colorado River is the lifeblood of the US Southwest, but today, it is drastically depleted due to overuse, megadrought, and climate change.

intake /ˈɪnteɪk/ (noun) the amount of food or drink taken in

Between March and September, men consumed about 17 per cent more calories per day than they did during the rest of the year, while women's food intake stayed about the same.

resistant /rɪˈzɪstənt/ (adjective) not easily damaged or affected by something

In addition, changes made to the construction codes in Los Angeles during the last 20 years have strengthened the city's buildings and highways, making them more resistant to quakes.

stimulus /ˈstɪmjələs/ (noun) something that causes a reaction in a living thing

Robots may soon be able to sense and avoid potentially harmful stimuli, thanks to a system that mimics the human pain response.

Change and trends

emerge /ɪˈmɜːdʒ/ (verb) to appear or become known

A couple of key insights emerged about milkshake buyers.

shift /ʃɪft/ (verb) to change from one thing or direction to another

That means shifting to renewable sources of energy - and, importantly, decarbonizing transportation, a sector that is now responsible for about a quarter of the world's carbon dioxide emissions.

adapt /əˈdæpt/ (verb) to change to suit new conditions

The agricultural sector must adapt to shifting weather patterns and increased extreme events, which requires an understanding of both climatology and plant science.

occur /əˈkɜː/ (verb) to happen

Archaeological sites on six of these isles - part of a 1,200-kilometer-long chain - indicate that migrations to the islands occurred 35,000 to 30,000 years ago, both from the south via Taiwan and from the north via the Japanese island of Kyushu.

advent /ˈædvent/ (noun) the arrival or start of something important

With the advent of agriculture and homesteading, people began settling down.

evolve /ɪˈvɒlv/ (verb) to develop or change gradually over time

The stock of Australia's dwellings is evolving, with current homes having more bedrooms on average than homes ten years ago.

accelerate /əkˈseləreɪt/ (verb) to make something happen faster

It is either one or the other, because significant expansion of employment in a super-tight labor market will accelerate wages, and therefore prices.

advance /ədˈvɑːns/ (noun) progress or a new development

All parts of these organizations invest heavily in building and showcasing impressive features and product advances, which are the areas in which these companies prefer to compete.

tend /tend/ (verb) to usually do or be something

Higher education graduates are less likely to be unemployed and tend to have higher incomes than those without such qualifications.

witness /'wɪtnəs/ (verb) to see something happen; be the time when it happens

The late 20th century witnessed a resurgence of sign languages, recognized as complete and complex systems with rich grammar and expressive power.

decline /dɪ'klaɪn/ (noun) a gradual decrease in amount or quality

This decline in sleep quality and quantity for adults persists until the child is about six years old.

unprecedented /ʌn'presɪdɪntɪd/ (adjective) never having happened or existed before

The current generation of adolescents is growing up at a time of unprecedented change.

enhance /ɪn'hɑːns/ (verb) to improve the quality or value of something

Does the increase in the older population create an economic burden on society or can older people be mobilized to enhance the productivity of communities in which they work and live?

exceed /ɪk'siːd/ (verb) to be more than a particular amount or limit

Around the age of 6 months, an infant's need for energy and nutrients starts to exceed what is provided by breast milk, and complementary foods are necessary to meet those needs.

influx /'ɪnflʌks/ (noun) a large number of people or things arriving

It also spins revenue from the influx of tourists, participants and Olympic related paraphernalia.

pace /peɪs/ (noun) the speed at which something happens

The pace of life seems to have accelerated, with the expectation of instant communication and the constant flow of information shaping a new cultural norm of immediacy.

prevalent /'prevələnt/ (adjective) common or widespread at a particular time

Ecotourism itself did not become prevalent as a travel concept until the late 1980s.

transform /træns'fɔːm/ (verb) to change something completely

Diabetes and obesity rates can be reduced by transforming towns and cities into places where it is safe and convenient to walk, cycle or take public transport rather than drive.

diverge /daɪ'vɜːdʒ/ (verb) to separate and develop in different directions

When I meet old friends who are now physicians and surgeons, I sense how our views on medical problems have diverged.

forefront /'fɔːfrʌnt/ (noun) the leading or most important position

Researchers in this field are at the forefront of developing resilient agricultural systems that can withstand the impacts of a changing climate.

radical /'rædɪkl/ (adjective) new and very different from what is usual

Early impressionist painters were considered radical in their time because they broke many of the rules of the picture-making that had been set by earlier generations.

thrive /θraɪv/ (verb) to grow, develop or succeed very well

The results are delicious: they are not just surviving but thriving.

transition /træn'zɪʃn/ (noun) a change from one state or condition to another

Bold, fast, and wide-ranging action needs to be taken by governments and businesses, but the transition to a low-carbon world also requires the participation of citizens.

undergo /ʌndə'gəʊ/ (verb) to experience a process or change

But before leaving his home country to study at the UK's Royal College of Art seven years ago, he underwent a traditional and highly technical education in Seoul National University.

Economy and work

consume /kən'sjuːm/ (verb) to eat, drink or use up something

Most people are aware that excessive and chronic drinking can severely impact their physical and mental health, but the exact effects will depend on the amount of alcohol consumed and how frequently someone drinks it.

implement /'ɪmplɪment/ (verb) to put a plan or decision into action

Leadership skills are needed to set the vision, and management skills are needed to implement a plan to achieve that vision.

boost /buːst/ (verb) to increase or improve something

UBI entails giving every citizen a regular, unconditional payment to provide a financial safety net and boost the economy.

demand /dɪ'mɑːnd/ (noun) people's need or desire to buy or have something

Demand is so high that 40 species are now under threat, including white agave worms.

competitive /kəm'petətɪv/ (adjective) where people try hard to be better than others

Preparing for a career is very important for young people in today's competitive society.

satisfy /'sætɪsfaɪ/ (verb) to meet a need or want

A market can be defined as a group of potential buyers with needs and wants and the purchasing power to satisfy them.

pursue /pə'sjuː/ (verb) to try to achieve something over time

Many companies will help fund employees' education who want to pursue advanced degrees or certifications in their field.

collaborative /kə'læbəreɪtɪv/ (adjective) involving people working together

The faculty enjoys collaborative relationships with local museums, numerous galleries and a variety of other art organizations.

generate /'dʒenəreɪt/ (verb) to produce or create something

She says the exercise has generated significant interest from trade unions and government.

stimulate /'stɪmjuleɪt/ (verb) to encourage something to grow or become active

This, in turn, will stimulate further investment due to the multiplier effect and significant rural-to-urban migration.

distribute /dɪ'strɪbjʊːt/ (verb) to share or spread something among people

The number of poor people in a country and the average quality of life depend on how equally or unequally income is distributed across the population.

incentive /ɪn'sentɪv/ (noun) something that encourages you to do something

A control group just tried to lose weight without any economic incentive.

yield /jiːld/ (noun) the amount produced, for example by crops

Climate change poses significant challenges to agriculture, affecting crop yields and farming practices worldwide.