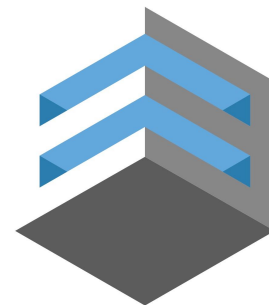


Englist.me



Vocabulary Builder Reference from...

Emma Hart: Self-assembling robots and the potential of artificial evolution | TED Talk

https://www.ted.com/talks/emma_hart_self_assembling_robots_and_the_potential_of_artificial_evolution

All Words

IMPORTANT

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Session 1: Word List

explore

v. to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it

synonym: analyze, delve into, examine

(1) **explore** the world, (2) **explore** our options

The management must **explore** strategies to increase office security.

faraway

adj. located at a geographically distant place; remote or separated by distance; distant or not easily accessible

synonym: distant, remote, far-off

(1) **faraway** land, (2) **faraway** dream

The view from the **faraway** hilltop was breathtakingly beautiful.

geography

n. a field of science devoted to the study of the lands, features, inhabitants, and phenomena of the Earth

synonym: landscape, terrain, topography

(1) **geography** class, (2) economic **geography**

She did well on her **geography** exam.

inhospitable

adj. harsh and difficult to stay in or grow; unfriendly and unwelcoming towards people who visit you

synonym: sterile, unfriendly, unwelcoming

(1) **inhospitable** environment, (2) in an **inhospitable** manner

He trekked across some of the most **inhospitable** mountains in the world.

suitable

adj. fit or appropriate; proper; adapted

synonym: appropriate, fitting, proper

(1) **suitable** amount, (2) date **suitable** to both groups

The dress was **suitable** for the formal occasion.

evolve

v. to develop gradually, or to cause the development of something or someone gradually

synonym: develop, mature, grow

(1) **evolve**, (2) **evolve** over the past decade

Eyeless fish **evolved** in dark caves.

adapt

v. to make fit for or change to suit a new purpose or environment

synonym: adjust, acclimate, accustom

(1) **adapt** fully to the environment, (2) **adapt** as needed

I advised him to **adapt** to his new surroundings.

surround

v. to be all around something or somebody

synonym: encircle, encompass, envelop

(1) **surround** a town, (2) a stone wall **surrounds** the palace

On three sides, mountains **surround** the settlement.

collaborate

v. to work with someone else to produce or achieve something

synonym: cooperate, unite, get together

(1) **collaborate** with the police, (2) **collaborate** on a press release

She agreed to **collaborate** with him in creating new artwork.

radical

adj. relating to the essential aspects of anything; far beyond the norm, mainly used of opinions and actions

synonym: extreme, revolutionary

(1) a **radical** flaw in the plan, (2) a **radical** cure

The government established by the coup was more **radical** than before.

reproduce

v. to make a copy of something such as a picture, piece of text, music, etc.; to produce offspring through a sexual or asexual process

synonym: duplicate, breed, imitate

(1) **reproduce** the painting, (2) **reproduce** by myself

By dividing and creating copies of themselves, bacteria **reproduce**.

fabricate

v. to make something, especially by assembling parts or constructing it from raw materials; to invent and present something false as true or real to deceive someone

synonym: manufacture, assemble, falsify

(1) **fabricate** a chemical, (2) **fabricate** an excuse

The detective discovered that the witness had **fabricated** her story about the crime.

engineer

n. a person whose job is designing, building, or maintaining something such as machines, structures, or software

synonym: architect, creator, builder

(1) a civil **engineer**, (2) **engineer** shortage

The **engineer** will repair my telephone tomorrow morning.

perspective

n. a confident attitude toward something; a particular style of thinking about something

synonym: viewpoint, standpoint, outlook

(1) a **perspective** view, (2) the **perspective** of the battle

His father's death changed his whole **perspective** on life.

stack

n. a pile of something arranged or laid one on top of another; a large tall chimney through which combustion

gases and smoke can be evacuated

synonym: accumulation, heap, pile

(1) high **stack**, (2) a large **stack** of paper

The earthquake caused a **stack** of lumber to crumble noisily.

relative

adj. considered and evaluated through comparison with something else

synonym: comparative, proximate, congeneric

(1) a remote **relative**, (2) **relative** factors

Most countries prohibit sexual activity between certain close **relatives**.

straightforward

adj. easy to do or understand, or simple; free from ambiguity

synonym: honest, candid, forthright

(1) **straightforward** manner, (2) make a **straightforward** dash

The defendant gave a **straightforward** and accurate description of the accident.

operate

v. to work in a particular way; to supervise something

synonym: work, use, employ

(1) **operate** 24 hours a day, (2) manually **operate** a machine

This machine is too difficult to **operate** for me.

nuclear

adj. of or relating to or constituting the nucleus of an atom; deriving destructive energy from the release of atomic energy

synonym: atomic

(1) **nuclear** fusion, (2) use of **nuclear** power

Many countries have now agreed to a treaty banning the use of **nuclear** weapons.

react

v. to take action in response to something

synonym: respond, reply, oppose

(1) **react** at a high temperature, (2) **react** against his way of

thinking

How did he **react** to your idea?

mineral

n. a solid inorganic substance occurring in nature having a definite chemical composition

(1) vitamin and **minerals**, (2) **mineral** rights

The robust economy of the country is based on its **mineral** resources.

trench

n. a long, deep ditch made in the ground, usually parallel to a plate boundary and marking a subduction zone; a long ditch built in the ground for carrying away water

synonym: aqueduct, ditch, channel

(1) deep-sea **trench**, (2) **trench** excavator

A **trench** was being dug alongside the road by workers.

asteroid

n. a small rocky body orbiting the sun, typically in the region between Mars and Jupiter

synonym: minor planet, planetoid, rocky planetesimal

(1) **asteroid** mining, (2) **asteroid** explorer

Scientists are studying the composition and origins of the **asteroid** belt to understand the early solar system better.

frustrate

v. to hinder or prevent efforts, plans, or desires from doing, succeeding, or being fulfilled; to make someone feel upset or annoyed because they are unable to change or achieve something

synonym: hinder, thwart, dishearten

(1) **frustrate** the advancement, (2) **frustrate** other team members

The coach explained a strategy to **frustrate** the opponent's schemes to the players.

suddenly

adv. quickly and unexpectedly

synonym: abruptly, unexpectedly, unawares

(1) **suddenly** attacked by an enemy, (2) die **suddenly**

Who answers **suddenly** knows little.

drill *n.* a tool or machine used for making round holes or driving fasteners; a training or practice
synonym: exercise, routine, training
(1) the **drill** hit the well, (2) fire **drill**
Several military **drill** programs have become popular methods of exercise.

clamber *v.* to climb or move in an awkward, laborious, or ungraceful way, often using one's hands and feet
synonym: climb, scramble, crawl
(1) **clamber** up the ladder, (2) **clamber** over a boulder
I had to **clamber** over the rocks to reach the cave.

cliff *n.* a steep rock face, especially one at the edge of the sea or a river
synonym: crag, escarpment, precipice
(1) a bold **cliff**, (2) **cliff** diving
He stood at the edge of the **cliff** and looked out to sea.

locomotion *n.* the action or ability to move from one place to another
synonym: movement, travel, mobility
(1) **locomotion** system, (2) **locomotion** control
The **locomotion** of the robotic arm was smooth and precise.

optimize *v.* to make the best or most effective use of something
synonym: advance, amend, improve
(1) **optimize** a process, (2) **optimize** control for cooling
The essence of economics is to **optimize** the allocation of limited resources.

situ *adj.* short for "situated," meaning located or placed in a particular position or circumstance
synonym: situational, contextual, circumstantial
(1) ex- **situ** conservation, (2) in- **situ** control

Melanoma in **situ** is considered the earliest stage of melanoma and has a high cure rate with appropriate treatment.

environment

n. the natural world such as air, water, and land in which humans, animals, and plants live

synonym: atmosphere, surroundings, climate

(1) **environment** affairs, (2) chaotic **environment**

Every human is responsible for taking care of the Earth's **environment**.

uniquely

adv. in a way that is different from all others; in a way that is not shared by others

synonym: singularly, exclusively, distinctively

(1) play a **uniquely** important role, (2) **uniquely** different

The painting is **uniquely** painted with a combination of watercolors and oils.

biology

n. the scientific study of life and the natural processes of living things

(1) evolutionary **biology**, (2) cell and molecular **biology**

In junior high school, we had to dissect a frog in **biology** class.

adaptation

n. the action or process of changing to suit different conditions

synonym: adaption, adjustment, transformation

(1) **adaptation** ability, (2) language **adaptation**

The company's **adaptation** approach has been highly effective.

thrive

v. to grow vigorously; to make steady progress

synonym: bloom, flourish, prosper

(1) **thrive** in a society, (2) **thrive** on pressure

Without investment, a business cannot **thrive**.

rainforest

n. a forest rich in biodiversity that is generally found in tropical settings with heavy annual rainfall

(1) **rainforest** destruction, (2) tropical **rainforest**

The destruction of the **rainforest** is a ticking time bomb for the Earth.

vine

n. a climbing plant that produces grapes; any plant with a growth habit of trailing or climbing stems

(1) a green **vine**, (2) **vine** of ore

A **vine** remains productive throughout the year.

satellite

n. an electronic device that is sent up into space and moves around the Earth or another planet, used for gathering information or communicating by radio, television, etc.

synonym: orbiter, asteroid, moon

(1) a GPS **satellite**, (2) a meteorological **satellite**

Launching an artificial **satellite** contributed to the technological development of our country.

bat

n. a nocturnal animal with wings that flies and feeds at night, similar to a mouse; a piece of wood with a handle used for hitting the ball in sports including baseball, cricket, and table tennis

synonym: cane, rod, stick

(1) **bat** cave, (2) **bat** an eye

The cave was a habitat for **bats**.

amplify

v. to enhance something, particularly sound or brightness

synonym: intensify, boost, argument

(1) **amplify** a signal, (2) **amplify** the effect

You might need to **amplify** this point.

improvisation

n. the act of making something up on the spot or creating or performing something without preparation

synonym: spontaneity, ad-lib, extemporization

(1) **improvisation** on stage, (2) jazz **improvisation**

He created a beautiful piece of music using only **improvisation**.

pollination

n. the transfer of pollen from the male reproductive organs of one flower to the female reproductive organs of another flower, resulting in fertilization and the production of seeds

synonym: flowering, fertilization, cross-fertilization

(1) **pollination** by insect, (2) the cross- **pollination** of the arts

The **pollination** process is crucial for the growth and reproduction of many plants.

evolution

n. a gradual process of transformation of living things

synonym: elaboration, expansion, transition

(1) human **evolution**, (2) **evolution** theory

They study the **evolution** of the universe.

mimicry

n. the act or skill of copying the sounds or behavior of a particular person or animal, often to make people laugh

synonym: imitation, apery

(1) vocal **mimicry**, (2) floral **mimicry**

Some insects use **mimicry** to avoid detection by predators.

observe

v. to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion

synonym: watch, monitor, scrutinize

(1) **observe** a tradition, (2) **observe** wildlife

It is important to **observe** safety procedures in the workplace to prevent accidents.

harness

v. to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object

synonym: rein in, control, (noun) belt

(1) **harness** a horse to a carriage, (2) put a **harness** on my pet

People have been exploring ways to **harness** natural forces and resources since ancient times.

creative

adj. relating to or involving the use of skill and original and unusual ideas to create something

synonym: imaginative, innovative, inventive

(1) **creative** writing, (2) barren of **creative** spirit

All the supervisor has to do is assign tasks that make his subordinates more **creative**.

discovery

n. the act or process of finding information, a place, or an object, or learning about something that was previously not known

synonym: finding, uncovering, detection

(1) a scientific **discovery**, (2) the great **discovery** of the century

Her research team made an important **discovery**.

conceive

v. to have or develop an idea, a plan, etc. in mind; to become pregnant

synonym: imagine, envision, concoct

(1) **conceive** of an idea, (2) **conceive** a child

I can't **conceive** he'd want to harm us.

evolutionary

adj. relating to or denoting how living things develop or change from earlier forms

synonym: developmental, mutative, transformative

(1) ecology and **evolutionary** biology, (2) the **evolutionary** process

Evolutionary algorithms can find ways to optimize that humans do not anticipate.

autonomous

adj. capable of governing or controlling its affairs

synonym: independent, self-governing, self-reliant

(1) development of **autonomous** vehicles, (2) an **autonomous** judiciary

Five of the six provinces will become **autonomous** regions under the new federal system of government.

breed

v. to keep animals for producing offspring in a regulated manner

synonym: raise, multiply, reproduce

(1) **breed** horses, (2) **breed** suspicion

This animal **breeds** in northern latitudes.

drought

n. a long period of time during which there is very little or no rain, leading to a shortage of water and often causing damage to crops and other vegetation

synonym: dryness, aridity, water shortage

(1) periods of **drought**, (2) **drought** conditions

The region has been experiencing a severe **drought**, leading to water shortages and crop failures.

resistance

n. the act of defending oneself from an aggressor or refusing to accept something

synonym: opposition, antagonism, defiance

(1) **resistance** movement, (2) **resistance** to insulin

The bill to increase the consumption tax had passed despite much **resistance** from the public.

squeeze

v. to apply pressure from two or more sides; to hold someone or something tightly in your arms, usually with fondness

synonym: compress, crush, clamp

(1) **squeeze** a lemon, (2) **squeeze** a confession

She **squeezed** the toothpaste tube from the middle to get the last bit out.

- gap**
- n.* a conspicuous disparity or difference separates something such as a figure, people, their opinions, situation, etc.
- synonym*: opening, lacuna, spread
- (1) the **gap** between ideal and reality, (2) distance **gap**
- Many people are working together to close the gender **gap**.
- imitate**
- v.* to copy the speech, behavior, appearance, etc. of someone or something
- synonym*: mimic, emulate, replicate
- (1) **imitate** painting styles, (2) **imitate** animal sounds
- He **imitated** the modus operandi of the famous phantom thief.
- algorithm**
- n.* a set of rules or rigorous instructions typically used to solve a specific problem or to perform a computation
- synonym*: logic, method, rule
- (1) the RSA **algorithm**, (2) **algorithm** for image processing
- We can evaluate the performance of an **algorithm** in terms of computation time.
- turbine**
- n.* a machine that rotates to generate power from fluids such as water or gas
- synonym*: engine, generator, power plant
- (1) **turbine** energy, (2) **turbine** aerofoil
- The wind **turbines** were spinning rapidly, generating clean energy for the nearby town.
- blade**
- n.* the flat part of a knife, weapon, or machine with a very thin edge used for cutting
- synonym*: knife, sword, cutter
- (1) a **blade** of grass, (2) the **blade** of a turbine
- The **blade** of the katana itself is still in excellent condition.
- communicate**
- v.* to share or exchange information with others by speaking, writing, moving your body, or using other signals

synonym: convey, share, transmit

(1) **communicate** his anxieties to the psychiatrist,

(2) **communicate** well with my advisor

Dolphins use sound to **communicate** with each other.

antenna

n. an electrical device that sends or receives radio or television signals; (biology) one of one or more pairs of appendages used for sensing in insects

synonym: feeler, receiver

(1) **antenna** of insect, (2) extend the TV **antenna**

He had a special **antenna** for public relations

brain

n. the organ inside the head that is responsible for one's movement, thought, memory, and feeling

synonym: intellect, mind, encephalon

(1) basic **brain** function, (2) permanent **brain** damage

X-rays revealed a small tumor in his **brain**.

translate

v. to convert or change words into another language

synonym: convert, transcribe, render

(1) **translate** a document into English, (2) **translate** the emotion to a movement

Translate the text from Italian into English.

appropriate

adj. suitable or proper in the circumstances; fitting

synonym: fitting, suitable, proper

(1) **appropriate** behavior, (2) an **appropriate** time

It would be **appropriate** to dress nicely for the wedding.

surprisingly

adv. in a way that causes amazement or wonder

synonym: exceptionally, notably, unusually

(1) **surprisingly** advanced culture, (2) have **surprisingly** little effect

The exam was **surprisingly** tricky for everyone.

ingredient

n. one of the things used to make something, especially one of the foods used to make a particular dish

synonym: element, component

(1) secret **ingredients**, (2) compound the **ingredients**

Greed is the primary **ingredient** in the making of criminals.

individual

n. a single person or thing, as distinct from a group

synonym: person, being, self

(1) a private **individual**, (2) **individual** freedom

As an **individual**, he had the right to make his own decisions and live his life as he saw fit.

exhibit

v. to show something in public for people to enjoy or to provide them with information

synonym: display, expose, show

(1) **exhibit** a bad attitude, (2) **exhibit** a great talent

Other technology industries **exhibit** similarly explosive growth.

variation

n. the act or state of changing; a difference or change in the way something is done, made or said

synonym: fluctuation, change, variation

(1) **variation** of temperature, (2) gene **variation**

There is a lot of **variation** in the colors of flowers in the garden.

reproduction

n. the process by which organisms create offspring; the production of something similar to an original work

synonym: procreation, replication, duplication

(1) **reproduction** rate, (2) **reproduction** system

The **reproduction** of the plant depends on the pollinators.

offspring

n. descendant; any immature animal or plant

synonym: children, descendants, heirs

(1) female **offspring**, (2) produce **offspring**

How many **offspring** does the average lion have?

inherit

v. to receive money, property, or a title from someone after they have died

synonym: obtain, gain, acquire

(1) **inherit** estate, (2) **inherit** ancestral property

After his death, his sons **inherited** his business.

trait

n. a particular feature of your nature

synonym: attribute, feature, quality

(1) chemical **trait**, (2) personality **traits**

Multiple genes may influence behavioral **traits** concurrently.

occasionally

adv. now and then; sometimes but not often

synonym: periodically, sometimes, from time to time

(1) **occasionally** dine with friends, (2) **occasionally** change the routine

She still **occasionally** writes a short romance novel.

acquire

v. to buy or obtain something such as an asset, object, knowledge, etc., for oneself

synonym: attain, earn, catch

(1) **acquire** knowledge, (2) **acquire** a new company

Children **acquire** language at a fantastic rate.

mutation

n. the way in which genes of a person, plant, animal, or other organism change and produce permanent differences

synonym: metamorphosis, transformation, alteration

(1) **mutation** of DNA, (2) hereditary **mutation**

Radiation often promotes genetic **mutations** in plants and animals.

mixture

n. a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties

synonym: blend, amalgam, concoction

(1) **mixture** of emotions, (2) perfect **mixture**

The paint was a **mixture** of different pigments to achieve the desired color.

hardware

n. durable tools, machinery, and other equipment; the physical and electronic parts of a computer or other electronic systems

synonym: gear, apparatus, gadget

(1) the **hardware** department, (2) a vast inventory of **hardware**

The mouse and keyboard are essential **hardware** for operating a PC.

software

n. a set of computer programs and associated documentation and data for doing particular computational jobs

synonym: program, system, operating system

(1) **software** architect, (2) copyrighted **software**

The company specializes in both hardware and **software**.

digital

adj. processing or storing information as a succession of 1 and 0 to show that a signal is present or missing; relating to the use of computer technology, especially the internet

synonym: numerical, computerized, cyber

(1) a **digital** watch, (2) **digital** electronic signature

Sensors convert physical phenomena into **digital** signals.

blueprint

n. a photographic print of an early plan for a building or machine

synonym: draft, prototype, sketch

(1) **blueprint** for economic reform, (2) architect's **blueprint**

A business plan is a **blueprint** for your success.

sensory

adj. of or relating to the physical senses

synonym: receptive, sensuous, neural

(1) a **sensory** organ, (2) a child with **sensory** issues

Sharks have highly developed **sensory** systems and are

extremely sensitive creatures.

mechanism

n. a part of a machine, or a set of parts that performs a task; a natural or established process that occurs during a specific situation or reaction

synonym: means, method, system

(1) the **mechanism** for DNA replication, (2) defense **mechanism**

He discovered unique **mechanisms** for photochemical reactions.

random

adj. made, done, or happening without method, conscious decision, or any regular pattern

synonym: incidental, arbitrary, unanticipated

(1) a **random** choice, (2) bombs fell at **random**

To find drunk drivers, police conduct **random** tests.

generate

v. to produce or create something; to make offspring by reproduction

synonym: create, yield, produce

(1) **generate** more electricity, (2) **generate** \$100 a month

The economic stimulation program would **generate** a lot of new jobs.

initial

adj. of or happening at the beginning; (noun) the first letter of a word, especially a person's name

synonym: basic, primary, beginning

(1) **initial** velocity, (2) an **initial** letter

They took the **initial** step toward reconciliation.

kick-start

v. to start something by providing an initial burst of energy or enthusiasm

synonym: initiate, start, launch

(1) **kick-start** the project, (2) **kick-start** the economy

She needed to **kick-start** her weight loss journey.

process

- n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products

synonym: procedure, method, system

(1) **process** improvement, (2) decision-making **process**

The **process** for applying for a visa can be lengthy and complicated.

skeleton

- n.* the structure of bones in a human or animal body, or a framework of bones or other material that supports a plant

synonym: bones, frame, structure

(1) the steel **skeleton** of a building, (2) **skeleton** hand

Scientists studied the ancient **skeleton** to learn more about the creature's anatomy.

automated

- adj.* carried out by machines or computers to replace or decrease human labor

synonym: computerized, mechanical, laborsaving

(1) **automated** manual transmission, (2) **automated** way

The plant will continue operating through an **automated** system 24 hours a day.

assembly

- n.* a group of people who have been elected, especially one that meets regularly and makes decisions or laws for a specific region or country

synonym: crowd, gathering, mass

(1) **assembly** line, (2) **assembly** hall

This company's **assembly** plant is an enormous facility.

electron

- n.* a tiny particle with the negative electrical charge

synonym: negatron

(1) flow of **electrons**, (2) beam of **electrons**

The outermost **electron** shell determines the chemical properties of an atom.

equivalent

n. having the same value, quality, meaning, purpose, etc.

synonym: equal, counterpart, match

(1) **equivalent** amounts, (2) **equivalent** in meaning

The European Central Bank is Europe's **equivalent** of the Federal Reserve.

kindergarten

n. a school or class for young children, usually between the ages of four and six

synonym: preschool, nursery school, daycare

(1) **kindergarten** class, (2) **kindergarten** teacher

The **kindergarten** students were having a good time playing with toys.

refine

v. to make something more pure, polished, cultured, or effective; to improve, perfect, or enhance through a process of purification or development

synonym: purify, process, improve

(1) **refine** oil, (2) **refine** a language

The company is working to **refine** its production process to be more efficient.

motor

n. a device that converts electricity, fuel, etc. into movement and makes a machine, vehicle, etc. work

synonym: actuator, engine, machine

(1) a **motor** mechanic, (2) DC **motor** control

Energy-efficient **motors** are needed to maximize the cruising distance of electric vehicles.

mimic

v. to imitate someone's speech, movement, or behavior, especially to make others laugh

synonym: mirror, imitate, ape

(1) **mimic** a human voice, (2) **mimic** numerous instruments

He is very popular at school because he can **mimic** all the teachers' accents.

conduct

v. to organize and carry out a particular activity

synonym: behave, lead, carry on

(1) **conduct** a background check, (2) **conduct** research
Police will **conduct** random breath testing for drunk driving.

decide

v. to make up someone's mind about something; to come to a conclusion or judgment after considering options

synonym: choose, determine, settle

(1) **decide** a question, (2) **decide** on a course of action
She couldn't **decide** whether to order the pizza or the pasta for dinner.

characteristic

n. a typical feature or quality that can identify, tell apart, or describe something or somebody

synonym: feature, quality, attribute

(1) stripes **characteristic** of the zebra, (2) my friend's **characteristic** laugh

Bananas have their **characteristic** taste and odor.

cycle

n. an interval during which a recurring sequence of events occurs; a bicycle or motorcycle

synonym: revolution, rotation, bike

(1) the **cycle** of the seasons, (2) go to the workplace by **cycle**

The food chain causes a material **cycle**.

generation

n. all the people born and living at about the same time, regarded collectively; the production of heat or electricity

synonym: cohort, age group, era

(1) **generation** gap, (2) the **generation** of electricity

The younger **generation** has different values and beliefs than the older one.

gradual

adj. happening slowly over a long period of time or distance; not steep or abrupt

synonym: incremental, gradational, piecemeal

(1) a **gradual** process, (2) a **gradual** change

The country experienced a **gradual** increase in population.

frame

n. a strong border or structure of the wood, metal, etc. that surrounds something such as a picture, door, or window

synonym: body, skeleton, scaffolding

(1) a picture **frame**, (2) the **frame** of the policy

The detective looked for fingerprints on the window **frame**.

modern

adj. of or belonging to the present time or recent times

synonym: contemporary, stylish, current

(1) **modern** poetry, (2) pre- **modern** agricultural society

Their headquarters are in a **modern** skyscraper.

artifact

n. a person-made object, especially one of historical or cultural interest

synonym: antique, relic, heirloom

(1) paleolithic **artifacts**, (2) Peruvian **artifacts**

The museum has a vast collection of Greek **artifacts**.

complexity

n. the state or quality of being complicated or intricate and difficult to understand

synonym: intricacy, sophistication, elaboration

(1) cognitive **complexity**, (2) **complexity** theory

The project's **complexity** made it difficult for the team to complete it on time.

simulate

v. to make a pretense of someone's behavior or looks; to reproduce something that exists in real life using computers, models, etc., usually for study or training purposes

synonym: pretend, imitate, mimic

(1) **simulate** climate change, (2) **simulate** a future scenario

He had painted the wood to **simulate** stone.

virtual

adj. being actually such in almost every respect; existing in essence or effect though not in actual fact

synonym: practical

(1) a **virtual** image, (2) trading of **virtual** currencies

She is the **virtual** president of the company.

accurate

adj. correct and exact in all details

synonym : exact, precise, proper

(1) provide **accurate** information, (2) **accurate** measurements

The official transcript contains **accurate** academic records.

representation

n. the act of speaking, acting, or being present on behalf of someone officially; a statement of facts and reasons made in appealing or protesting

synonym : delegacy, manifestation, expression

(1) sales **representation**, (2) binary **representation**

A person who has been declared incompetent should have legal **representation**.

advantage

n. a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has

synonym : benefit, edge, asset

(1) score an **advantage**, (2) take **advantage** of his weak points

One of the main **advantages** of the new product is its increased efficiency.

configuration

n. the arrangement or pattern of something or a group of related things

synonym : arrangement, composition, formatting

(1) **configuration** of the system, (2) engine **configuration**

The **configuration** of molecules in steel changes significantly with temperature.

rough

adj. not quite exact or correct; having or caused by an irregular surface

synonym : inelegant, coarse, barbarian

(1) **rough** and tough, (2) **rough** estimation

The vehicle bounced along the **rough** mountain road.

estimate

v. to guess or calculate the cost, size, value, etc. of something

synonym: calculate, gauge, evaluate

(1) **estimate** a fair value, (2) **estimate** this chicken to weigh three pounds

We **estimated** the season's total trade deficit at \$50 billion.

physically

adv. in a way related to a person's body or appearance rather than their mind

(1) **physically** and mentally, (2) stay **physically** fit

Having a **physically** healthy physique is essential for a great life.

predict

v. to state beforehand that something will happen in the future, mainly based on knowledge or experience

synonym: forecast, anticipate, foresee

(1) **predict** the future, (2) **predict** when she will arrive

It's notoriously challenging to **predict** birth rates.

novel

n. an extended fictional work in prose; usually in the form of a story; (adjective) original and of a kind not seen before

synonym: fiction, story, (adjective) innovative

(1) historical **novel**, (2) **novel** effect

The **novel** has largely gotten positive feedback.

cousin

n. the child of your aunt or uncle

synonym: relative

(1) cross- **cousin** marriage, (2) **cousin's** family

I used to play with my younger male **cousins** when I was a little girl.

refined

adj. made pure by having impurities or unwanted elements removed by processing

synonym: cultured, purified, tasteful

(1) adopt a **refined** attitude, (2) a lot of **refined** sugar

She was highly **refined** in her choice of apparel.

fiction

n. the type of book or story, especially novels, that describes imaginary events and people; anything made up or imagined that is not true

synonym: fantasy, fable, invention

(1) stuff of science **fiction**, (2) non- **fiction** bestseller

Truth is stranger than **fiction**.

pursue

v. to do something or attempt to attain something over time; to follow or seek someone or something, especially in trying to catch them

synonym: seek, hunt, chase

(1) **pursue** a goal, (2) **pursue** freedoms

She intends to **pursue** a political career.

quest

n. a long or challenging search for something

synonym: exploration, inquisition, pursuit

(1) the **quest** for truth, (2) on a **quest** for happiness

That adventurer traveled in **quest** of buried treasure.

exoplanet

n. a planet that orbits a star outside of the solar system

(1) the closest **exoplanet** to Earth, (2) **exoplanet** mission

The **exoplanet** Kepler-186f is located 500 light-years from Earth and is believed to be habitable.

exploration

n. the activity of searching and finding out about something through a place

synonym: inquiry, quest, investigation

(1) future of space **exploration**, (2) an Arctic **exploration**

He called for a careful **exploration** of the consequences.

pragmatic

adj. practical rather than idealistic

synonym: practical, realistic, down-to-earth

(1) **pragmatic** approach, (2) **pragmatic** politics

He was a **pragmatic** leader who made decisions based on

what was practical rather than ideal.

climate

n. the weather in a particular location averaged over some long period

synonym: atmosphere, weather, environment

(1) a cold **climate**, (2) effects of **climate** change

Climate and weather have an impact on every part of our lifestyles.

pace

n. the speed at which someone or something moves, or the rate at which something happens or changes

synonym: gait, rate, speed

(1) at your own **pace**, (2) the runner's **pace**

The economy is growing at a supercharged **pace**.

rethink

v. to consider again a plan, idea, etc., especially to change it

synonym: reexplore, review, reconsider

(1) **rethink** a marketing plan, (2) **rethink** the role of the manager

We have to **rethink** our company's product lineup for further growth.

robotic

adj. of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots

synonym: automated, mechanical, laborsaving

(1) **robotic** arm, (2) **robotic** guide operation

The surgeon removed the tumor using **robotic** video assistance.

ecology

n. the study of the relationships between living organisms, including humans, and their physical environment

(1) science of **ecology**, (2) the **ecology** of the island

Many companies are now enthusiastically embracing the knowledge of **ecology** for sustainable development.

footprint

n. a mark of a foot, shoe, or animal's foot left on a surface

synonym: footmark, imprint, impression

(1) **footprints** in the snow, (2) the **footprints** of an earlier civilization

We choose transportation that has a smaller carbon **footprint**.

sustainable

adj. able to continue or be continued for a long time

synonym: continuable, enduring, tolerable

(1) **sustainable** alternative fuel, (2) principles of **sustainable** development

The government should do more to support environmentally **sustainable** agriculture.

recycle

v. to sort and collect things to process them and produce valuable materials that can be used again

synonym: reclaim, reuse, reprocess

(1) **recycle** the cardboard boxes, (2) **recycle** milk packaging into new paper

We largely **recycle** the circuit board of cell phones because they contain a lot of valuable metals.

unfettered

adj. not constrained or restricted by limitations or rules; free, unrestricted, unbridled

synonym: unrestricted, free, unchained

(1) **unfettered** access, (2) **unfettered** capitalism

The athlete felt **unfettered** by her recent injury and performed with ease.

constraint

n. a limit or restriction on something, such as an action, behavior, or thought

synonym: limitation, restriction, bound

(1) **constraint** on business activity, (2) strict time **constraints**

The budget **constraint** forced them to make difficult decisions.

impose

v. to officially force a new law, tax, duty, etc. to be obeyed or received

synonym: charge, levy, foist

(1) **impose** harsher sanctions, (2) **impose** tariffs

The problem with achievement tests is the narrowness they **impose** on students.

Session 2: Spelling

- | | |
|---|--|
| 1. a bold cl__f | <i>n.</i> a steep rock face, especially one at the edge of the sea or a river |
| 2. cl__f diving | <i>n.</i> a steep rock face, especially one at the edge of the sea or a river |
| 3. tr_____te the emotion to a movement | <i>v.</i> to convert or change words into another language |
| 4. ob_____e a tradition | <i>v.</i> to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion |
| 5. a di_____l watch | <i>adj.</i> processing or storing information as a succession of 1 and 0 to show that a signal is present or missing; relating to the use of computer technology, especially the internet |
| 6. rep_____ion system | <i>n.</i> the process by which organisms create offspring; the production of something similar to an original work |
| 7. the cross-pol_____on of the arts | <i>n.</i> the transfer of pollen from the male reproductive organs of one flower to the female reproductive organs of another flower, resulting in fertilization and the production of seeds |
| 8. re_____e milk packaging into new paper | <i>v.</i> to sort and collect things to process them and produce valuable materials that can be used again |

ANSWERS: 1. cliff, 2. cliff, 3. translate, 4. observe, 5. digital, 6. reproduction, 7. pollination, 8. recycle

- | | |
|--|---|
| 9. a ra_____l cure | <i>adj.</i> relating to the essential aspects of anything; far beyond the norm, mainly used of opinions and actions |
| 10. ev_____e over the past decade | <i>v.</i> to develop gradually, or to cause the development of something or someone gradually |
| 11. chaotic env_____nt | <i>n.</i> the natural world such as air, water, and land in which humans, animals, and plants live |
| 12. stay phy_____ly fit | <i>adv.</i> in a way related to a person's body or appearance rather than their mind |
| 13. on a qu__t for happiness | <i>n.</i> a long or challenging search for something |
| 14. date su_____le to both groups | <i>adj.</i> fit or appropriate; proper; adapted |
| 15. es_____te this chicken to weigh three pounds | <i>v.</i> to guess or calculate the cost, size, value, etc. of something |
| 16. con_____nt on business activity | <i>n.</i> a limit or restriction on something, such as an action, behavior, or thought |
| 17. the qu__t for truth | <i>n.</i> a long or challenging search for something |
| 18. co_____ve of an idea | <i>v.</i> to have or develop an idea, a plan, etc. in mind; to become pregnant |
| 19. op_____ze a process | <i>v.</i> to make the best or most effective use of something |
| 20. decision-making pr_____s | <i>n.</i> a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products |

ANSWERS: 9. radical, 10. evolve, 11. environment, 12. physically, 13. quest, 14. suitable, 15. estimate, 16. constraint, 17. quest, 18. conceive, 19. optimize, 20. process

21. al_____hm for image processing	<i>n.</i> a set of rules or rigorous instructions typically used to solve a specific problem or to perform a computation
22. a private ind_____al	<i>n.</i> a single person or thing, as distinct from a group
23. si_____te climate change	<i>v.</i> to make a pretense of someone's behavior or looks; to reproduce something that exists in real life using computers, models, etc., usually for study or training purposes
24. a green v___e	<i>n.</i> a climbing plant that produces grapes; any plant with a growth habit of trailing or climbing stems
25. ex_____t a great talent	<i>v.</i> to show something in public for people to enjoy or to provide them with information
26. tropical rai_____st	<i>n.</i> a forest rich in biodiversity that is generally found in tropical settings with heavy annual rainfall
27. pu_____e freedoms	<i>v.</i> to do something or attempt to attain something over time; to follow or seek someone or something, especially in trying to catch them
28. ecology and evo_____ary biology	<i>adj.</i> relating to or denoting how living things develop or change from earlier forms
29. ex_____et mission	<i>n.</i> a planet that orbits a star outside of the solar system
30. cr_____ve writing	<i>adj.</i> relating to or involving the use of skill and original and unusual ideas to create something

ANSWERS: 21. algorithm, 22. individual, 23. simulate, 24. vine, 25. exhibit, 26. rainforest, 27. pursue, 28. evolutionary, 29. exoplanet, 30. creative

31. development of aut_____us vehicles	<i>adj.</i> capable of governing or controlling its affairs
32. va_____on of temperature	<i>n.</i> the act or state of changing; a difference or change in the way something is done, made or said
33. co_____t a background check	<i>v.</i> to organize and carry out a particular activity
34. im_____e tariffs	<i>v.</i> to officially force a new law, tax, duty, etc. to be obeyed or received
35. br__d suspicion	<i>v.</i> to keep animals for producing offspring in a regulated manner
36. loc_____on system	<i>n.</i> the action or ability to move from one place to another
37. stuff of science fi_____n	<i>n.</i> the type of book or story, especially novels, that describes imaginary events and people; anything made up or imagined that is not true
38. ac_____te measurements	<i>adj.</i> correct and exact in all details
39. sk_____on hand	<i>n.</i> the structure of bones in a human or animal body, or a framework of bones or other material that supports a plant
40. have sur_____gly little effect	<i>adv.</i> in a way that causes amazement or wonder
41. sur_____gly advanced culture	<i>adv.</i> in a way that causes amazement or wonder
42. a per_____ve view	<i>n.</i> a confident attitude toward something; a particular style of thinking about something

ANSWERS: 31. autonomous, 32. variation, 33. conduct, 34. impose, 35. breed, 36. locomotion, 37. fiction, 38. accurate, 39. skeleton, 40. surprisingly, 41. surprisingly, 42. perspective

43. pr_____ic politics	<i>adj.</i> practical rather than idealistic
44. unf_____ed capitalism	<i>adj.</i> not constrained or restricted by limitations or rules; free, unrestricted, unbridled
45. chemical tr__t	<i>n.</i> a particular feature of your nature
46. unf_____ed access	<i>adj.</i> not constrained or restricted by limitations or rules; free, unrestricted, unbridled
47. as_____id explorer	<i>n.</i> a small rocky body orbiting the sun, typically in the region between Mars and Jupiter
48. sq_____e a confession	<i>v.</i> to apply pressure from two or more sides; to hold someone or something tightly in your arms, usually with fondness
49. evolutionary bi_____y	<i>n.</i> the scientific study of life and the natural processes of living things
50. occ_____lly change the routine	<i>adv.</i> now and then; sometimes but not often
51. fr_____te the advancement	<i>v.</i> to hinder or prevent efforts, plans, or desires from doing, succeeding, or being fulfilled; to make someone feel upset or annoyed because they are unable to change or achieve something
52. env_____nt affairs	<i>n.</i> the natural world such as air, water, and land in which humans, animals, and plants live
53. jazz imp_____ion	<i>n.</i> the act of making something up on the spot or creating or performing something without preparation

ANSWERS: 43. pragmatic, 44. unfettered, 45. trait, 46. unfettered, 47. asteroid, 48. squeeze, 49. biology, 50. occasionally, 51. frustrate, 52. environment, 53. improvisation

54. score an ad_____ge	<i>n.</i> a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has
55. ada_____on ability	<i>n.</i> the action or process of changing to suit different conditions
56. es_____te a fair value	<i>v.</i> to guess or calculate the cost, size, value, etc. of something
57. br__d horses	<i>v.</i> to keep animals for producing offspring in a regulated manner
58. future of space exp_____on	<i>n.</i> the activity of searching and finding out about something through a place
59. pr_____t when she will arrive	<i>v.</i> to state beforehand that something will happen in the future, mainly based on knowledge or experience
60. th___e in a society	<i>v.</i> to grow vigorously; to make steady progress
61. the dr__l hit the well	<i>n.</i> a tool or machine used for making round holes or driving fasteners; a training or practice
62. su_____le amount	<i>adj.</i> fit or appropriate; proper; adapted
63. stripes cha_____tic of the zebra	<i>n.</i> a typical feature or quality that can identify, tell apart, or describe something or somebody
64. the RSA al_____hm	<i>n.</i> a set of rules or rigorous instructions typically used to solve a specific problem or to perform a computation
65. DC mo__r control	<i>n.</i> a device that converts electricity, fuel, etc. into movement and makes a machine, vehicle, etc. work

ANSWERS: 54. advantage, 55. adaptation, 56. estimate, 57. breed, 58. exploration, 59. predict, 60. thrive, 61. drill, 62. suitable, 63. characteristic, 64. algorithm, 65. motor

- | | |
|---------------------------------------|---|
| 66. economic ge_____hy | <i>n.</i> a field of science devoted to the study of the lands, features, inhabitants, and phenomena of the Earth |
| 67. ro_____c arm | <i>adj.</i> of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots |
| 68. ex_____e our options | <i>v.</i> to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it |
| 69. as_____id mining | <i>n.</i> a small rocky body orbiting the sun, typically in the region between Mars and Jupiter |
| 70. gene va_____on | <i>n.</i> the act or state of changing; a difference or change in the way something is done, made or said |
| 71. the steel sk_____on of a building | <i>n.</i> the structure of bones in a human or animal body, or a framework of bones or other material that supports a plant |
| 72. an in_____l letter | <i>adj.</i> of or happening at the beginning; (noun) the first letter of a word, especially a person's name |
| 73. a civil en_____er | <i>n.</i> a person whose job is designing, building, or maintaining something such as machines, structures, or software |
| 74. a gr_____l change | <i>adj.</i> happening slowly over a long period of time or distance; not steep or abrupt |
| 75. ro__h and tough | <i>adj.</i> not quite exact or correct; having or caused by an irregular surface |

ANSWERS: 66. geography, 67. robotic, 68. explore, 69. asteroid, 70. variation, 71. skeleton, 72. initial, 73. engineer, 74. gradual, 75. rough

76. ev___e
v. to develop gradually, or to cause the development of something or someone gradually
77. a ra_____l flaw in the plan
adj. relating to the essential aspects of anything; far beyond the norm, mainly used of opinions and actions
78. occ_____lly dine with friends
adv. now and then; sometimes but not often
79. mi__c a human voice
v. to imitate someone's speech, movement, or behavior, especially to make others laugh
80. vocal mi_____y
n. the act or skill of copying the sounds or behavior of a particular person or animal, often to make people laugh
81. am_____y a signal
v. to enhance something, particularly sound or brightness
82. ac_____e knowledge
v. to buy or obtain something such as an asset, object, knowledge, etc., for oneself
83. res_____ce to insulin
n. the act of defending oneself from an aggressor or refusing to accept something
84. an app_____te time
adj. suitable or proper in the circumstances; fitting
85. en_____er shortage
n. a person whose job is designing, building, or maintaining something such as machines, structures, or software
86. trading of vi_____l currencies
adj. being actually such in almost every respect; existing in essence or effect though not in actual fact

ANSWERS: 76. evolve, 77. radical, 78. occasionally, 79. mimic, 80. mimicry, 81. amplify, 82. acquire, 83. resistance, 84. appropriate, 85. engineer, 86. virtual

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|--------------------------------|--|
| 87. architect's bl_____nt | <i>n.</i> a photographic print of an early plan for a building or machine |
| 88. a large st__k of paper | <i>n.</i> a pile of something arranged or laid one on top of another; a large tall chimney through which combustion gases and smoke can be evacuated |
| 89. a scientific di_____ry | <i>n.</i> the act or process of finding information, a place, or an object, or learning about something that was previously not known |
| 90. mi_____e of emotions | <i>n.</i> a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties |
| 91. rep_____ion rate | <i>n.</i> the process by which organisms create offspring; the production of something similar to an original work |
| 92. paleolithic ar_____cts | <i>n.</i> a person-made object, especially one of historical or cultural interest |
| 93. strict time con_____nts | <i>n.</i> a limit or restriction on something, such as an action, behavior, or thought |
| 94. effects of cl_____e change | <i>n.</i> the weather in a particular location averaged over some long period |
| 95. adopt a re_____d attitude | <i>adj.</i> made pure by having impurities or unwanted elements removed by processing |
| 96. bombs fell at ra____m | <i>adj.</i> made, done, or happening without method, conscious decision, or any regular pattern |

ANSWERS: 87. blueprint, 88. stack, 89. discovery, 90. mixture, 91. reproduction, 92. artifact, 93. constraint, 94. climate, 95. refined, 96. random

- | | |
|----------------------------------|--|
| 97. re___e a language | <i>v.</i> to make something more pure, polished, cultured, or effective; to improve, perfect, or enhance through a process of purification or development |
| 98. go to the workplace by cy__e | <i>n.</i> an interval during which a recurring sequence of events occurs; a bicycle or motorcycle |
| 99. si_____te a future scenario | <i>v.</i> to make a pretense of someone's behavior or looks; to reproduce something that exists in real life using computers, models, etc., usually for study or training purposes |
| 100. at your own p__e | <i>n.</i> the speed at which someone or something moves, or the rate at which something happens or changes |
| 101. re_____ce by myself | <i>v.</i> to make a copy of something such as a picture, piece of text, music, etc.; to produce offspring through a sexual or asexual process |
| 102. a ra___m choice | <i>adj.</i> made, done, or happening without method, conscious decision, or any regular pattern |
| 103. in_____t ancestral property | <i>v.</i> to receive money, property, or a title from someone after they have died |
| 104. fire dr__l | <i>n.</i> a tool or machine used for making round holes or driving fasteners; a training or practice |
| 105. copyrighted so_____re | <i>n.</i> a set of computer programs and associated documentation and data for doing particular computational jobs |

ANSWERS: 97. refine, 98. cycle, 99. simulate, 100. pace, 101. reproduce, 102. random, 103. inherit, 104. drill, 105. software

106. ad__t fully to the environment	<i>v.</i> to make fit for or change to suit a new purpose or environment
107. vitamin and mi____ls	<i>n.</i> a solid inorganic substance occurring in nature having a definite chemical composition
108. su____nd a town	<i>v.</i> to be all around something or somebody
109. a bl__e of grass	<i>n.</i> the flat part of a knife, weapon, or machine with a very thin edge used for cutting
110. a GPS sa____te	<i>n.</i> an electronic device that is sent up into space and moves around the Earth or another planet, used for gathering information or communicating by radio, television, etc.
111. pr____ic approach	<i>adj.</i> practical rather than idealistic
112. an aut____us judiciary	<i>adj.</i> capable of governing or controlling its affairs
113. extend the TV an____a	<i>n.</i> an electrical device that sends or receives radio or television signals; (biology) one of one or more pairs of appendages used for sensing in insects
114. ob____e wildlife	<i>v.</i> to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion
115. di____l electronic signature	<i>adj.</i> processing or storing information as a succession of 1 and 0 to show that a signal is present or missing; relating to the use of computer technology, especially the internet

ANSWERS: 106. adapt, 107. mineral, 108. surround, 109. blade, 110. satellite, 111. pragmatic, 112. autonomous, 113. antenna, 114. observe, 115. digital

116. historical no__l	<i>n.</i> an extended fictional work in prose; usually in the form of a story; (adjective) original and of a kind not seen before
117. kic_____rt the project	<i>v.</i> to start something by providing an initial burst of energy or enthusiasm
118. a vi_____l image	<i>adj.</i> being actually such in almost every respect; existing in essence or effect though not in actual fact
119. re___e oil	<i>v.</i> to make something more pure, polished, cultured, or effective; to improve, perfect, or enhance through a process of purification or development
120. im_____e painting styles	<i>v.</i> to copy the speech, behavior, appearance, etc. of someone or something
121. kin_____ten class	<i>n.</i> a school or class for young children, usually between the ages of four and six
122. ex-s__u conservation	<i>adj.</i> short for "situated," meaning located or placed in a particular position or circumstance
123. my friend's cha_____tic laugh	<i>n.</i> a typical feature or quality that can identify, tell apart, or describe something or somebody
124. op_____e 24 hours a day	<i>v.</i> to work in a particular way; to supervise something
125. ge_____te more electricity	<i>v.</i> to produce or create something; to make offspring by reproduction
126. equ_____nt in meaning	<i>n.</i> having the same value, quality, meaning, purpose, etc.

ANSWERS: 116. novel, 117. kick-start, 118. virtual, 119. refine, 120. imitate, 121. kindergarten, 122. situ, 123. characteristic, 124. operate, 125. generate, 126. equivalent

127. pre-mo___n agricultural society	<i>adj.</i> of or belonging to the present time or recent times
128. app_____te behavior	<i>adj.</i> suitable or proper in the circumstances; fitting
129. de___e on a course of action	<i>v.</i> to make up someone's mind about something; to come to a conclusion or judgment after considering options
130. str_____ard manner	<i>adj.</i> easy to do or understand, or simple; free from ambiguity
131. die su_____ly	<i>adv.</i> quickly and unexpectedly
132. pu___e a goal	<i>v.</i> to do something or attempt to attain something over time; to follow or seek someone or something, especially in trying to catch them
133. put a ha_____s on my pet	<i>v.</i> to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object
134. a stone wall su_____nds the palace	<i>v.</i> to be all around something or somebody
135. principles of sus_____le development	<i>adj.</i> able to continue or be continued for a long time
136. im_____e animal sounds	<i>v.</i> to copy the speech, behavior, appearance, etc. of someone or something
137. play a un_____ly important role	<i>adv.</i> in a way that is different from all others; in a way that is not shared by others

ANSWERS: 127. modern, 128. appropriate, 129. decide, 130. straightforward, 131. suddenly, 132. pursue, 133. harness, 134. surround, 135. sustainable, 136. imitate, 137. uniquely

138. deep-sea tr___h	<i>n.</i> a long, deep ditch made in the ground, usually parallel to a plate boundary and marking a subduction zone; a long ditch built in the ground for carrying away water
139. nu____r fusion	<i>adj.</i> of or relating to or constituting the nucleus of an atom; deriving destructive energy from the release of atomic energy
140. in____t estate	<i>v.</i> to receive money, property, or a title from someone after they have died
141. cell and molecular bi____y	<i>n.</i> the scientific study of life and the natural processes of living things
142. in____l velocity	<i>adj.</i> of or happening at the beginning; (noun) the first letter of a word, especially a person's name
143. com_____te well with my advisor	<i>v.</i> to share or exchange information with others by speaking, writing, moving your body, or using other signals
144. the ec____y of the island	<i>n.</i> the study of the relationships between living organisms, including humans, and their physical environment
145. Peruvian ar____cts	<i>n.</i> a person-made object, especially one of historical or cultural interest
146. com_____te his anxieties to the psychiatrist	<i>v.</i> to share or exchange information with others by speaking, writing, moving your body, or using other signals
147. personality tr__ts	<i>n.</i> a particular feature of your nature
148. an Arctic exp_____on	<i>n.</i> the activity of searching and finding out about something through a place

ANSWERS: 138. trench, 139. nuclear, 140. inherit, 141. biology, 142. initial, 143. communicate, 144. ecology, 145. artifact, 146. communicate, 147. trait, 148. exploration

149. the runner's p__e	<i>n.</i> the speed at which someone or something moves, or the rate at which something happens or changes
150. ev_____on theory	<i>n.</i> a gradual process of transformation of living things
151. tr___h excavator	<i>n.</i> a long, deep ditch made in the ground, usually parallel to a plate boundary and marking a subduction zone; a long ditch built in the ground for carrying away water
152. ex_____e the world	<i>v.</i> to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it
153. a child with se_____y issues	<i>adj.</i> of or relating to the physical senses
154. au_____ed manual transmission	<i>adj.</i> carried out by machines or computers to replace or decrease human labor
155. permanent br__n damage	<i>n.</i> the organ inside the head that is responsible for one's movement, thought, memory, and feeling
156. mi__c numerous instruments	<i>v.</i> to imitate someone's speech, movement, or behavior, especially to make others laugh
157. the g_p between ideal and reality	<i>n.</i> a conspicuous disparity or difference separates something such as a figure, people, their opinions, situation, etc.
158. ex_____t a bad attitude	<i>v.</i> to show something in public for people to enjoy or to provide them with information

ANSWERS: 149. pace, 150. evolution, 151. trench, 152. explore, 153. sensory, 154. automated, 155. brain, 156. mimic, 157. gap, 158. exhibit

159. manually op_____e a machine	<i>v.</i> to work in a particular way; to supervise something
160. no__l effect	<i>n.</i> an extended fictional work in prose; usually in the form of a story; (adjective) original and of a kind not seen before
161. gen_____on gap	<i>n.</i> all the people born and living at about the same time, regarded collectively; the production of heat or electricity
162. phy_____ly and mentally	<i>adv.</i> in a way related to a person's body or appearance rather than their mind
163. female of_____ng	<i>n.</i> descendant; any immature animal or plant
164. perfect mi_____e	<i>n.</i> a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties
165. a se_____y organ	<i>adj.</i> of or relating to the physical senses
166. co_____ve a child	<i>v.</i> to have or develop an idea, a plan, etc. in mind; to become pregnant
167. co_____t research	<i>v.</i> to organize and carry out a particular activity
168. un_____ly different	<i>adv.</i> in a way that is different from all others; in a way that is not shared by others
169. pol_____on by insect	<i>n.</i> the transfer of pollen from the male reproductive organs of one flower to the female reproductive organs of another flower, resulting in fertilization and the production of seeds

ANSWERS: 159. operate, 160. novel, 161. generation, 162. physically, 163. offspring, 164. mixture, 165. sensory, 166. conceive, 167. conduct, 168. uniquely, 169. pollination

170. language ada_____on	<i>n.</i> the action or process of changing to suit different conditions
171. ad__t as needed	<i>v.</i> to make fit for or change to suit a new purpose or environment
172. the gen_____on of electricity	<i>n.</i> all the people born and living at about the same time, regarded collectively; the production of heat or electricity
173. b_t cave	<i>n.</i> a nocturnal animal with wings that flies and feeds at night, similar to a mouse; a piece of wood with a handle used for hitting the ball in sports including baseball, cricket, and table tennis
174. the bl__e of a turbine	<i>n.</i> the flat part of a knife, weapon, or machine with a very thin edge used for cutting
175. kin_____ten teacher	<i>n.</i> a school or class for young children, usually between the ages of four and six
176. fr_____te other team members	<i>v.</i> to hinder or prevent efforts, plans, or desires from doing, succeeding, or being fulfilled; to make someone feel upset or annoyed because they are unable to change or achieve something
177. ro_____c guide operation	<i>adj.</i> of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots
178. science of ec_____y	<i>n.</i> the study of the relationships between living organisms, including humans, and their physical environment

ANSWERS: 170. adaptation, 171. adapt, 172. generation, 173. bat, 174. blade, 175. kindergarten, 176. frustrate, 177. robotic, 178. ecology

179. sales rep_____ion	<i>n.</i> the act of speaking, acting, or being present on behalf of someone officially; a statement of facts and reasons made in appealing or protesting
180. sus_____le alternative fuel	<i>adj.</i> able to continue or be continued for a long time
181. re__t at a high temperature	<i>v.</i> to take action in response to something
182. the cy__e of the seasons	<i>n.</i> an interval during which a recurring sequence of events occurs; a bicycle or motorcycle
183. fa_____te a chemical	<i>v.</i> to make something, especially by assembling parts or constructing it from raw materials; to invent and present something false as true or real to deceive someone
184. high st__k	<i>n.</i> a pile of something arranged or laid one on top of another; a large tall chimney through which combustion gases and smoke can be evacuated
185. de___e a question	<i>v.</i> to make up someone's mind about something; to come to a conclusion or judgment after considering options
186. inh_____ble environment	<i>adj.</i> harsh and difficult to stay in or grow; unfriendly and unwelcoming towards people who visit you
187. a cold cl____e	<i>n.</i> the weather in a particular location averaged over some long period
188. the fo_____nts of an earlier civilization	<i>n.</i> a mark of a foot, shoe, or animal's foot left on a surface

ANSWERS: 179. representation, 180. sustainable, 181. react, 182. cycle, 183. fabricate, 184. stack, 185. decide, 186. inhospitable, 187. climate, 188. footprint

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| 189. periods of dr____t | <i>n.</i> a long period of time during which there is very little or no rain, leading to a shortage of water and often causing damage to crops and other vegetation |
| 190. a lot of re____d sugar | <i>adj.</i> made pure by having impurities or unwanted elements removed by processing |
| 191. the closest ex____et to Earth | <i>n.</i> a planet that orbits a star outside of the solar system |
| 192. a picture fr__e | <i>n.</i> a strong border or structure of the wood, metal, etc. that surrounds something such as a picture, door, or window |
| 193. fa____y land | <i>adj.</i> located at a geographically distant place; remote or separated by distance; distant or not easily accessible |
| 194. take ad____ge of his weak points | <i>n.</i> a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has |
| 195. au____ed way | <i>adj.</i> carried out by machines or computers to replace or decrease human labor |
| 196. com____ty theory | <i>n.</i> the state or quality of being complicated or intricate and difficult to understand |
| 197. the fr__e of the policy | <i>n.</i> a strong border or structure of the wood, metal, etc. that surrounds something such as a picture, door, or window |
| 198. an____a of insect | <i>n.</i> an electrical device that sends or receives radio or television signals; (biology) one of one or more pairs of appendages used for sensing in insects |

ANSWERS: 189. drought, 190. refined, 191. exoplanet, 192. frame, 193. faraway, 194. advantage, 195. automated, 196. complexity, 197. frame, 198. antenna

199. fa____y dream	<i>adj.</i> located at a geographically distant place; remote or separated by distance; distant or not easily accessible
200. so____re architect	<i>n.</i> a set of computer programs and associated documentation and data for doing particular computational jobs
201. re____ve factors	<i>adj.</i> considered and evaluated through comparison with something else
202. mu____on of DNA	<i>n.</i> the way in which genes of a person, plant, animal, or other organism change and produce permanent differences
203. ind____al freedom	<i>n.</i> a single person or thing, as distinct from a group
204. the great di____ry of the century	<i>n.</i> the act or process of finding information, a place, or an object, or learning about something that was previously not known
205. human ev____on	<i>n.</i> a gradual process of transformation of living things
206. beam of el____ons	<i>n.</i> a tiny particle with the negative electrical charge
207. loc____on control	<i>n.</i> the action or ability to move from one place to another
208. ro__h estimation	<i>adj.</i> not quite exact or correct; having or caused by an irregular surface
209. v__e of ore	<i>n.</i> a climbing plant that produces grapes; any plant with a growth habit of trailing or climbing stems
210. a meteorological sa____te	<i>n.</i> an electronic device that is sent up into space and moves around the Earth or another planet, used for gathering information or communicating by radio, television, etc.

ANSWERS: 199. faraway, 200. software, 201. relative, 202. mutation, 203. individual, 204. discovery, 205. evolution, 206. electron, 207. locomotion, 208. rough, 209. vine, 210. satellite

211. hereditary mu____on	<i>n.</i> the way in which genes of a person, plant, animal, or other organism change and produce permanent differences
212. am____y the effect	<i>v.</i> to enhance something, particularly sound or brightness
213. tr____te a document into English	<i>v.</i> to convert or change words into another language
214. cross-co____n marriage	<i>n.</i> the child of your aunt or uncle
215. the evo____ary process	<i>adj.</i> relating to or denoting how living things develop or change from earlier forms
216. co____n's family	<i>n.</i> the child of your aunt or uncle
217. make a str____ard dash	<i>adj.</i> easy to do or understand, or simple; free from ambiguity
218. secret ing____nts	<i>n.</i> one of the things used to make something, especially one of the foods used to make a particular dish
219. equ____nt amounts	<i>n.</i> having the same value, quality, meaning, purpose, etc.
220. fo____nts in the snow	<i>n.</i> a mark of a foot, shoe, or animal's foot left on a surface
221. re____ce the painting	<i>v.</i> to make a copy of something such as a picture, piece of text, music, etc.; to produce offspring through a sexual or asexual process
222. tu____e energy	<i>n.</i> a machine that rotates to generate power from fluids such as water or gas
223. cognitive com____ty	<i>n.</i> the state or quality of being complicated or intricate and difficult to understand

ANSWERS: 211. mutation, 212. amplify, 213. translate, 214. cousin, 215. evolutionary, 216. cousin, 217. straightforward, 218. ingredient, 219. equivalent, 220. footprint, 221. reproduce, 222. turbine, 223. complexity

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| 224. as_____ly line | <i>n.</i> a group of people who have been elected, especially one that meets regularly and makes decisions or laws for a specific region or country |
| 225. pr_____s improvement | <i>n.</i> a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products |
| 226. re_____e the cardboard boxes | <i>v.</i> to sort and collect things to process them and produce valuable materials that can be used again |
| 227. compound the ing_____nts | <i>n.</i> one of the things used to make something, especially one of the foods used to make a particular dish |
| 228. mi_____l rights | <i>n.</i> a solid inorganic substance occurring in nature having a definite chemical composition |
| 229. fa_____te an excuse | <i>v.</i> to make something, especially by assembling parts or constructing it from raw materials; to invent and present something false as true or real to deceive someone |
| 230. distance g_p | <i>n.</i> a conspicuous disparity or difference separates something such as a figure, people, their opinions, situation, etc. |
| 231. the per_____ve of the battle | <i>n.</i> a confident attitude toward something; a particular style of thinking about something |

ANSWERS: 224. assembly, 225. process, 226. recycle, 227. ingredient, 228. mineral, 229. fabricate, 230. gap, 231. perspective

232. th___e on pressure	<i>v.</i> to grow vigorously; to make steady progress
233. sq_____e a lemon	<i>v.</i> to apply pressure from two or more sides; to hold someone or something tightly in your arms, usually with fondness
234. bl_____nt for economic reform	<i>n.</i> a photographic print of an early plan for a building or machine
235. res_____ce movement	<i>n.</i> the act of defending oneself from an aggressor or refusing to accept something
236. as_____ly hall	<i>n.</i> a group of people who have been elected, especially one that meets regularly and makes decisions or laws for a specific region or country
237. a mo___r mechanic	<i>n.</i> a device that converts electricity, fuel, etc. into movement and makes a machine, vehicle, etc. work
238. mo___n poetry	<i>adj.</i> of or belonging to the present time or recent times
239. ha_____s a horse to a carriage	<i>v.</i> to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object
240. tu_____e aerofoil	<i>n.</i> a machine that rotates to generate power from fluids such as water or gas
241. in-s__u control	<i>adj.</i> short for "situated," meaning located or placed in a particular position or circumstance

ANSWERS: 232. thrive, 233. squeeze, 234. blueprint, 235. resistance, 236. assembly, 237. motor, 238. modern, 239. harness, 240. turbine, 241. situ

242. barren of cr____ve spirit	<i>adj.</i> relating to or involving the use of skill and original and unusual ideas to create something
243. cl____r up the ladder	<i>v.</i> to climb or move in an awkward, laborious, or ungraceful way, often using one's hands and feet
244. ac____e a new company	<i>v.</i> to buy or obtain something such as an asset, object, knowledge, etc., for oneself
245. re____k a marketing plan	<i>v.</i> to consider again a plan, idea, etc., especially to change it
246. a gr____l process	<i>adj.</i> happening slowly over a long period of time or distance; not steep or abrupt
247. con_____ion of the system	<i>n.</i> the arrangement or pattern of something or a group of related things
248. the me_____sm for DNA replication	<i>n.</i> a part of a machine, or a set of parts that performs a task; a natural or established process that occurs during a specific situation or reaction
249. a remote re____ve	<i>adj.</i> considered and evaluated through comparison with something else
250. col_____te with the police	<i>v.</i> to work with someone else to produce or achieve something
251. produce of_____ng	<i>n.</i> descendant; any immature animal or plant
252. floral mi____y	<i>n.</i> the act or skill of copying the sounds or behavior of a particular person or animal, often to make people laugh
253. pr____t the future	<i>v.</i> to state beforehand that something will happen in the future, mainly based on knowledge or experience

ANSWERS: 242. creative, 243. clamber, 244. acquire, 245. rethink, 246. gradual, 247. configuration, 248. mechanism, 249. relative, 250. collaborate, 251. offspring, 252. mimicry, 253. predict

254. re____k the role of the manager	<i>v.</i> to consider again a plan, idea, etc., especially to change it
255. a vast inventory of ha____re	<i>n.</i> durable tools, machinery, and other equipment; the physical and electronic parts of a computer or other electronic systems
256. op____ze control for cooling	<i>v.</i> to make the best or most effective use of something
257. dr____t conditions	<i>n.</i> a long period of time during which there is very little or no rain, leading to a shortage of water and often causing damage to crops and other vegetation
258. re__t against his way of thinking	<i>v.</i> to take action in response to something
259. flow of el____ons	<i>n.</i> a tiny particle with the negative electrical charge
260. provide ac____te information	<i>adj.</i> correct and exact in all details
261. engine con_____ion	<i>n.</i> the arrangement or pattern of something or a group of related things
262. ge____te \$100 a month	<i>v.</i> to produce or create something; to make offspring by reproduction
263. basic br__n function	<i>n.</i> the organ inside the head that is responsible for one's movement, thought, memory, and feeling
264. the ha____re department	<i>n.</i> durable tools, machinery, and other equipment; the physical and electronic parts of a computer or other electronic systems
265. im____e harsher sanctions	<i>v.</i> to officially force a new law, tax, duty, etc. to be obeyed or received

ANSWERS: 254. rethink, 255. hardware, 256. optimize, 257. drought, 258. react, 259. electron, 260. accurate, 261. configuration, 262. generate, 263. brain, 264. hardware, 265. impose

266. kic_____rt the economy	<i>v.</i>	to start something by providing an initial burst of energy or enthusiasm
267. col_____te on a press release	<i>v.</i>	to work with someone else to produce or achieve something
268. non-fi_____n bestseller	<i>n.</i>	the type of book or story, especially novels, that describes imaginary events and people; anything made up or imagined that is not true
269. rai_____st destruction	<i>n.</i>	a forest rich in biodiversity that is generally found in tropical settings with heavy annual rainfall
270. b_t an eye	<i>n.</i>	a nocturnal animal with wings that flies and feeds at night, similar to a mouse; a piece of wood with a handle used for hitting the ball in sports including baseball, cricket, and table tennis
271. su_____ly attacked by an enemy	<i>adv.</i>	quickly and unexpectedly
272. ge_____hy class	<i>n.</i>	a field of science devoted to the study of the lands, features, inhabitants, and phenomena of the Earth
273. cl_____r over a boulder	<i>v.</i>	to climb or move in an awkward, laborious, or ungraceful way, often using one's hands and feet
274. binary rep_____ion	<i>n.</i>	the act of speaking, acting, or being present on behalf of someone officially; a statement of facts and reasons made in appealing or protesting
275. defense me_____sm	<i>n.</i>	a part of a machine, or a set of parts that performs a task; a natural or established process that occurs during a specific situation or reaction

ANSWERS: 266. kick-start, 267. collaborate, 268. fiction, 269. rainforest, 270. bat, 271. suddenly, 272. geography, 273. clamber, 274. representation, 275. mechanism

276. imp_____ion on stage

n. the act of making something up on the spot or creating or performing something without preparation

277. use of nu_____r power

adj. of or relating to or constituting the nucleus of an atom; deriving destructive energy from the release of atomic energy

278. in an inh_____ble manner

adj. harsh and difficult to stay in or grow; unfriendly and unwelcoming towards people who visit you

ANSWERS: 276. improvisation, 277. nuclear, 278. inhospitable

Session 3: Fill in the Blanks

1. The _____ of the plant depends on the pollinators.
n. the process by which organisms create offspring; the production of something similar to an original work
2. I had to _____ over the rocks to reach the cave.
v. to climb or move in an awkward, laborious, or ungraceful way, often using one's hands and feet
3. The country experienced a _____ increase in population.
adj. happening slowly over a long period of time or distance; not steep or abrupt
4. The vehicle bounced along the _____ mountain road.
adj. not quite exact or correct; having or caused by an irregular surface
5. By dividing and creating copies of themselves, bacteria _____.
v. to make a copy of something such as a picture, piece of text, music, etc.; to produce offspring through a sexual or asexual process
6. We _____ the season's total trade deficit at \$50 billion.
v. to guess or calculate the cost, size, value, etc. of something
7. _____ the text from Italian into English.
v. to convert or change words into another language
8. The project's _____ made it difficult for the team to complete it on time.
n. the state or quality of being complicated or intricate and difficult to understand

ANSWERS: 1. reproduction, 2. clamber, 3. gradual, 4. rough, 5. reproduce, 6. estimated, 7. Translate, 8. complexity

9. He created a beautiful piece of music using only _____.
- n.* the act of making something up on the spot or creating or performing something without preparation
10. The _____ of the robotic arm was smooth and precise.
- n.* the action or ability to move from one place to another
11. I advised him to _____ to his new surroundings.
- v.* to make fit for or change to suit a new purpose or environment
12. People have been exploring ways to _____ natural forces and resources since ancient times.
- v.* to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object
13. To find drunk drivers, police conduct _____ tests.
- adj.* made, done, or happening without method, conscious decision, or any regular pattern
14. The _____ of molecules in steel changes significantly with temperature.
- n.* the arrangement or pattern of something or a group of related things
15. They study the _____ of the universe.
- n.* a gradual process of transformation of living things
16. The _____ has largely gotten positive feedback.
- n.* an extended fictional work in prose; usually in the form of a story; (adjective) original and of a kind not seen before

ANSWERS: 9. improvisation, 10. locomotion, 11. adapt, 12. harness, 13. random, 14. configuration, 15. evolution, 16. novel

17. He _____ the modus operandi of the famous phantom thief.
v. to copy the speech, behavior, appearance, etc. of someone or something
18. I can't _____ he'd want to harm us.
v. to have or develop an idea, a plan, etc. in mind; to become pregnant
19. The government established by the coup was more _____ than before.
adj. relating to the essential aspects of anything; far beyond the norm, mainly used of opinions and actions
20. It is important to _____ safety procedures in the workplace to prevent accidents.
v. to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion
21. The destruction of the _____ is a ticking time bomb for the Earth.
n. a forest rich in biodiversity that is generally found in tropical settings with heavy annual rainfall
22. Dolphins use sound to _____ with each other.
v. to share or exchange information with others by speaking, writing, moving your body, or using other signals
23. The _____ of the katana itself is still in excellent condition.
n. the flat part of a knife, weapon, or machine with a very thin edge used for cutting
24. His father's death changed his whole _____ on life.
n. a confident attitude toward something; a particular style of thinking about something

ANSWERS: 17. imitated, 18. conceive, 19. radical, 20. observe, 21. rainforest, 22. communicate, 23. blade, 24. perspective

25. Scientists are studying the composition and origins of the _____ belt to understand the early solar system better.
- n.* a small rocky body orbiting the sun, typically in the region between Mars and Jupiter
26. The younger _____ has different values and beliefs than the older one.
- n.* all the people born and living at about the same time, regarded collectively; the production of heat or electricity
27. The defendant gave a _____ and accurate description of the accident.
- adj.* easy to do or understand, or simple; free from ambiguity
28. The exam was _____ tricky for everyone.
- adv.* in a way that causes amazement or wonder
29. He had painted the wood to _____ stone.
- v.* to make a pretense of someone's behavior or looks; to reproduce something that exists in real life using computers, models, etc., usually for study or training purposes
30. She intends to _____ a political career.
- v.* to do something or attempt to attain something over time; to follow or seek someone or something, especially in trying to catch them
31. We largely _____ the circuit board of cell phones because they contain a lot of valuable metals.
- v.* to sort and collect things to process them and produce valuable materials that can be used again

ANSWERS: 25. asteroid, 26. generation, 27. straightforward, 28. surprisingly, 29. simulate, 30. pursue, 31. recycle

32. How many _____ does the average lion have?
n. descendant; any immature animal or plant
33. The mouse and keyboard are essential _____ for operating a PC.
n. durable tools, machinery, and other equipment; the physical and electronic parts of a computer or other electronic systems
34. The bill to increase the consumption tax had passed despite much _____ from the public.
n. the act of defending oneself from an aggressor or refusing to accept something
35. In junior high school, we had to dissect a frog in _____ class.
n. the scientific study of life and the natural processes of living things
36. He trekked across some of the most _____ mountains in the world.
adj. harsh and difficult to stay in or grow; unfriendly and unwelcoming towards people who visit you
37. X-rays revealed a small tumor in his _____.
n. the organ inside the head that is responsible for one's movement, thought, memory, and feeling
38. She agreed to _____ with him in creating new artwork.
v. to work with someone else to produce or achieve something
39. A business plan is a _____ for your success.
n. a photographic print of an early plan for a building or machine
40. The _____ students were having a good time playing with toys.
n. a school or class for young children, usually between the ages of four and six

ANSWERS: 32. offspring, 33. hardware, 34. resistance, 35. biology, 36. inhospitable, 37. brain, 38. collaborate, 39. blueprint, 40. kindergarten

41. There is a lot of _____ in the colors of flowers in the garden.

- n.* the act or state of changing; a difference or change in the way something is done, made or said

42. The _____ process is crucial for the growth and reproduction of many plants.

- n.* the transfer of pollen from the male reproductive organs of one flower to the female reproductive organs of another flower, resulting in fertilization and the production of seeds

43. Having a _____ healthy physique is essential for a great life.

- adv.* in a way related to a person's body or appearance rather than their mind

44. One of the main _____ of the new product is its increased efficiency.

- n.* a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has

45. She is the _____ president of the company.

- adj.* being actually such in almost every respect; existing in essence or effect though not in actual fact

46. Truth is stranger than _____.

- n.* the type of book or story, especially novels, that describes imaginary events and people; anything made up or imagined that is not true

47. A _____ remains productive throughout the year.

- n.* a climbing plant that produces grapes; any plant with a growth habit of trailing or climbing stems

48. Most countries prohibit sexual activity between certain close _____.

- adj.* considered and evaluated through comparison with something else

ANSWERS: 41. variation, 42. pollination, 43. physically, 44. advantages, 45. virtual, 46. fiction, 47. vine, 48. relatives

49. This animal _____ in northern latitudes.

v. to keep animals for producing offspring in a regulated manner

50. As an _____ he had the right to make his own decisions and live his life as he saw fit.

n. a single person or thing, as distinct from a group

51. That adventurer traveled in _____ of buried treasure.

n. a long or challenging search for something

52. Who answers _____ knows little.

adv. quickly and unexpectedly

53. He is very popular at school because he can _____ all the teachers' accents.

v. to imitate someone's speech, movement, or behavior, especially to make others laugh

54. The government should do more to support environmentally _____ agriculture.

adj. able to continue or be continued for a long time

55. The _____ will repair my telephone tomorrow morning.

n. a person whose job is designing, building, or maintaining something such as machines, structures, or software

56. Many people are working together to close the gender ____.

n. a conspicuous disparity or difference separates something such as a figure, people, their opinions, situation, etc.

ANSWERS: 49. breeds, 50. individual, 51. quest, 52. suddenly, 53. mimic, 54. sustainable, 55. engineer, 56. gap

57. Melanoma in _____ is considered the earliest stage of melanoma and has a high cure rate with appropriate treatment.

adj. short for "situated," meaning located or placed in a particular position or circumstance

58. He had a special _____ for public relations

n. an electrical device that sends or receives radio or television signals; (biology) one of one or more pairs of appendages used for sensing in insects

59. This company's _____ plant is an enormous facility.

n. a group of people who have been elected, especially one that meets regularly and makes decisions or laws for a specific region or country

60. Many companies are now enthusiastically embracing the knowledge of _____ for sustainable development.

n. the study of the relationships between living organisms, including humans, and their physical environment

61. The dress was _____ for the formal occasion.

adj. fit or appropriate; proper; adapted

62. Sharks have highly developed _____ systems and are extremely sensitive creatures.

adj. of or relating to the physical senses

63. Radiation often promotes genetic _____ in plants and animals.

n. the way in which genes of a person, plant, animal, or other organism change and produce permanent differences

64. He called for a careful _____ of the consequences.

n. the activity of searching and finding out about something through a place

ANSWERS: 57. situ, 58. antenna, 59. assembly, 60. ecology, 61. suitable, 62. sensory, 63. mutations, 64. exploration

65. The paint was a _____ of different pigments to achieve the desired color.
- n.* a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties
66. A _____ was being dug alongside the road by workers.
- n.* a long, deep ditch made in the ground, usually parallel to a plate boundary and marking a subduction zone; a long ditch built in the ground for carrying away water
67. Their headquarters are in a _____ skyscraper.
- adj.* of or belonging to the present time or recent times
68. The surgeon removed the tumor using _____ video assistance.
- adj.* of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots
69. Energy-efficient _____ are needed to maximize the cruising distance of electric vehicles.
- n.* a device that converts electricity, fuel, etc. into movement and makes a machine, vehicle, etc. work
70. Sensors convert physical phenomena into _____ signals.
- adj.* processing or storing information as a succession of 1 and 0 to show that a signal is present or missing; relating to the use of computer technology, especially the internet
71. This machine is too difficult to _____ for me.
- v.* to work in a particular way; to supervise something

ANSWERS: 65. mixture, 66. trench, 67. modern, 68. robotic, 69. motors, 70. digital, 71. operate

72. The coach explained a strategy to _____ the opponent's schemes to the players.
- v.* to hinder or prevent efforts, plans, or desires from doing, succeeding, or being fulfilled; to make someone feel upset or annoyed because they are unable to change or achieve something
73. The economic stimulation program would _____ a lot of new jobs.
- v.* to produce or create something; to make offspring by reproduction
74. The economy is growing at a supercharged _____.
- n.* the speed at which someone or something moves, or the rate at which something happens or changes
75. _____ algorithms can find ways to optimize that humans do not anticipate.
- adj.* relating to or denoting how living things develop or change from earlier forms
76. Every human is responsible for taking care of the Earth's _____.
- n.* the natural world such as air, water, and land in which humans, animals, and plants live
77. The painting is _____ painted with a combination of watercolors and oils.
- adv.* in a way that is different from all others; in a way that is not shared by others
78. I used to play with my younger male _____ when I was a little girl.
- n.* the child of your aunt or uncle
79. The _____ Kepler-186f is located 500 light-years from Earth and is believed to be habitable.
- n.* a planet that orbits a star outside of the solar system

ANSWERS: 72. frustrate, 73. generate, 74. pace, 75. Evolutionary, 76. environment, 77. uniquely, 78. cousins, 79. exoplanet

80. Police will _____ random breath testing for drunk driving.

v. to organize and carry out a particular activity

81. Bananas have their _____ taste and odor.

n. a typical feature or quality that can identify, tell apart, or describe something or somebody

82. All the supervisor has to do is assign tasks that make his subordinates more _____.

adj. relating to or involving the use of skill and original and unusual ideas to create something

83. Five of the six provinces will become _____ regions under the new federal system of government.

adj. capable of governing or controlling its affairs

84. Some insects use _____ to avoid detection by predators.

n. the act or skill of copying the sounds or behavior of a particular person or animal, often to make people laugh

85. Greed is the primary _____ in the making of criminals.

n. one of the things used to make something, especially one of the foods used to make a particular dish

86. She did well on her _____ exam.

n. a field of science devoted to the study of the lands, features, inhabitants, and phenomena of the Earth

87. The plant will continue operating through an _____ system 24 hours a day.

adj. carried out by machines or computers to replace or decrease human labor

ANSWERS: 80. conduct, 81. characteristic, 82. creative, 83. autonomous, 84. mimicry, 85. ingredient, 86. geography, 87. automated

88. Eyeless fish _____ in dark caves.

- v.* to develop gradually, or to cause the development of something or someone gradually

89. The management must _____ strategies to increase office security.

- v.* to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it

90. Multiple genes may influence behavioral _____ concurrently.

- n.* a particular feature of your nature

91. We have to _____ our company's product lineup for further growth.

- v.* to consider again a plan, idea, etc., especially to change it

92. Her research team made an important _____.

- n.* the act or process of finding information, a place, or an object, or learning about something that was previously not known

93. The wind _____ were spinning rapidly, generating clean energy for the nearby town.

- n.* a machine that rotates to generate power from fluids such as water or gas

94. The robust economy of the country is based on its _____ resources.

- n.* a solid inorganic substance occurring in nature having a definite chemical composition

95. The company specializes in both hardware and _____.

- n.* a set of computer programs and associated documentation and data for doing particular computational jobs

ANSWERS: 88. evolved, 89. explore, 90. traits, 91. rethink, 92. discovery, 93. turbines, 94. mineral, 95. software

96. On three sides, mountains _____ the settlement.

v. to be all around something or somebody

97. The European Central Bank is Europe's _____ of the Federal Reserve.

n. having the same value, quality, meaning, purpose, etc.

98. She couldn't _____ whether to order the pizza or the pasta for dinner.

v. to make up someone's mind about something; to come to a conclusion or judgment after considering options

99. The cave was a habitat for _____.

n. a nocturnal animal with wings that flies and feeds at night, similar to a mouse; a piece of wood with a handle used for hitting the ball in sports including baseball, cricket, and table tennis

100. We choose transportation that has a smaller carbon _____.

n. a mark of a foot, shoe, or animal's foot left on a surface

101. It would be _____ to dress nicely for the wedding.

adj. suitable or proper in the circumstances; fitting

102. The earthquake caused a _____ of lumber to crumble noisily.

n. a pile of something arranged or laid one on top of another; a large tall chimney through which combustion gases and smoke can be evacuated

103. The region has been experiencing a severe _____ leading to water shortages and crop failures.

n. a long period of time during which there is very little or no rain, leading to a shortage of water and often causing damage to crops and other vegetation

ANSWERS: 96. surround, 97. equivalent, 98. decide, 99. bats, 100. footprint, 101. appropriate, 102. stack, 103. drought,

104. Launching an artificial _____ contributed to the technological development of our country.

- n.* an electronic device that is sent up into space and moves around the Earth or another planet, used for gathering information or communicating by radio, television, etc.

105. She still _____ writes a short romance novel.

- adv.* now and then; sometimes but not often

106. She needed to _____ her weight loss journey.

- v.* to start something by providing an initial burst of energy or enthusiasm

107. He was a _____ leader who made decisions based on what was practical rather than ideal.

- adj.* practical rather than idealistic

108. The outermost _____ shell determines the chemical properties of an atom.

- n.* a tiny particle with the negative electrical charge

109. How did he _____ to your idea?

- v.* to take action in response to something

110. Many countries have now agreed to a treaty banning the use of _____ weapons.

- adj.* of or relating to or constituting the nucleus of an atom; deriving destructive energy from the release of atomic energy

111. The detective looked for fingerprints on the window _____.

- n.* a strong border or structure of the wood, metal, etc. that surrounds something such as a picture, door, or window

ANSWERS: 104. satellite, 105. occasionally, 106. kick-start, 107. pragmatic, 108. electron, 109. react, 110. nuclear, 111. frame

112. The athlete felt _____ by her recent injury and performed with ease.

adj. not constrained or restricted by limitations or rules; free, unrestricted, unbridled

113. We can evaluate the performance of an _____ in terms of computation time.

n. a set of rules or rigorous instructions typically used to solve a specific problem or to perform a computation

114. Scientists studied the ancient _____ to learn more about the creature's anatomy.

n. the structure of bones in a human or animal body, or a framework of bones or other material that supports a plant

115. The _____ for applying for a visa can be lengthy and complicated.

n. a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products

116. The company is working to _____ its production process to be more efficient.

v. to make something more pure, polished, cultured, or effective; to improve, perfect, or enhance through a process of purification or development

117. It's notoriously challenging to _____ birth rates.

v. to state beforehand that something will happen in the future, mainly based on knowledge or experience

118. After his death, his sons _____ his business.

v. to receive money, property, or a title from someone after they have died

ANSWERS: 112. unfettered, 113. algorithm, 114. skeleton, 115. process, 116. refine, 117. predict, 118. inherited

119. The museum has a vast collection of Greek _____.

n. a person-made object, especially one of historical or cultural interest

120. He discovered unique _____ for photochemical reactions.

n. a part of a machine, or a set of parts that performs a task; a natural or established process that occurs during a specific situation or reaction

121. You might need to _____ this point.

v. to enhance something, particularly sound or brightness

122. A person who has been declared incompetent should have legal _____.

n. the act of speaking, acting, or being present on behalf of someone officially; a statement of facts and reasons made in appealing or protesting

123. They took the _____ step toward reconciliation.

adj. of or happening at the beginning; (noun) the first letter of a word, especially a person's name

124. The view from the _____ hilltop was breathtakingly beautiful.

adj. located at a geographically distant place; remote or separated by distance; distant or not easily accessible

125. The company's _____ approach has been highly effective.

n. the action or process of changing to suit different conditions

126. The essence of economics is to _____ the allocation of limited resources.

v. to make the best or most effective use of something

ANSWERS: 119. artifacts, 120. mechanisms, 121. amplify, 122. representation, 123. initial, 124. faraway, 125. adaptation, 126. optimize

127. Several military _____ programs have become popular methods of exercise.
n. a tool or machine used for making round holes or driving fasteners; a training or practice
128. The official transcript contains _____ academic records.
adj. correct and exact in all details
129. The budget _____ forced them to make difficult decisions.
n. a limit or restriction on something, such as an action, behavior, or thought
130. Children _____ language at a fantastic rate.
v. to buy or obtain something such as an asset, object, knowledge, etc., for oneself
131. The detective discovered that the witness had _____ her story about the crime.
v. to make something, especially by assembling parts or constructing it from raw materials; to invent and present something false as true or real to deceive someone
132. The food chain causes a material _____.
n. an interval during which a recurring sequence of events occurs; a bicycle or motorcycle
133. She _____ the toothpaste tube from the middle to get the last bit out.
v. to apply pressure from two or more sides; to hold someone or something tightly in your arms, usually with fondness
134. Without investment, a business cannot _____.
v. to grow vigorously; to make steady progress

ANSWERS: 127. drill, 128. accurate, 129. constraint, 130. acquire, 131. fabricated, 132. cycle, 133. squeezed, 134. thrive

135. She was highly _____ in her choice of apparel.

adj. made pure by having impurities or unwanted elements removed by processing

136. _____ and weather have an impact on every part of our lifestyles.

n. the weather in a particular location averaged over some long period

137. The problem with achievement tests is the narrowness they _____ on students.

v. to officially force a new law, tax, duty, etc. to be obeyed or received

138. He stood at the edge of the _____ and looked out to sea.

n. a steep rock face, especially one at the edge of the sea or a river

139. Other technology industries _____ similarly explosive growth.

v. to show something in public for people to enjoy or to provide them with information

ANSWERS: 135. refined, 136. Climate, 137. impose, 138. cliff, 139. exhibit