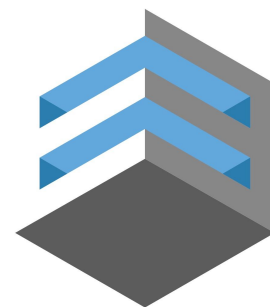


Englist.me



Vocabulary Builder Reference from...

John C. Mather: How the James Webb Space Telescope will unfold the universe | TED Talk
https://www.ted.com/talks/john_c_mather_how_the_james_webb_space_telescope_will_unfold_the_universe

All Words

IMPORTANT

This material is a commentary and does not contain any copyrighted material of the reference source. We strongly recommend accessing/buying the reference source at the same time.

Session 1: Word List

- chromosome** *n.* a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like
synonym : DNA
(1) a sex **chromosome**, (2) the end of **chromosome**
Human females normally have two X **chromosomes**.
- amazing** *adj.* extremely surprising, especially in a way that you like or admire
synonym : exceptional, extraordinary, wonderful
(1) **amazing** advances, (2) the most **amazing** feeling
The golfer recorded an **amazing** distance.
- mysterious** *adj.* difficult to understand, explain, or identify; having an aura of secrecy, intrigue, or puzzlement
synonym : enigmatic, cryptic, puzzling
(1) **mysterious** object, (2) **mysterious** stranger
The **mysterious** disappearance of the ship remains unsolved.
- chemical** *adj.* relating to or connected with chemistry;
synonym : chemic, synthetic

(1) toxic **chemicals**, (2) a **chemical** compound
The firm has grown into a large **chemical** manufacturing.

explode

v. to burst or break open violently and noisily; to cause something to burst or break open

synonym: detonate, blast, rupture

(1) **explode** in anger, (2) **explode** in popularity

The old building **exploded** in a fiery inferno.

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.

bang

v. to hit or cause to hit something in a way that makes a loud noise

synonym: crash, hit, smash

(1) **bang** his fist on a desk, (2) **bang** a phone down

My father tried to **bang** mathematics into my head since childhood.

cosmic

adj. relating to the universe or cosmos; vast or limitless

synonym: astronomical, celestial, outer-space

(1) second **cosmic** velocity, (2) **cosmic** background radiation

Cosmic rays are high-energy particles that originate from outside the solar system.

microwave

n. a form of electromagnetic radiation with wavelengths ranging from about one millimeter to one meter and frequencies between 300 MHz (0.3 GHz) and 300 GHz; an electric oven that cooks food by exposing it to high-frequency electromagnetic radiation, which causes the food molecules to vibrate and heat up quickly

synonym : oven, waveguide, radar range

(1) **microwave** radiation, (2) **microwave** popcorn

I heated my leftover food in the **microwave** oven, which tasted just as good as freshly cooked.

background

n. the details of a person's social heritage, such as family, vocational or educational experience; past information that is essential to understanding a situation or problem

synonym : ground, experience, backdrop

(1) a **background** color, (2) a criminal **background**

The company's hiring criteria emphasize personality, not a person's **background**.

radiation

n. the energy that comes from a nuclear reaction in the form of rays, waves, or particles and that can be hazardous to health

synonym : dissemination, emission, irradiation

(1) exposure to **radiation**, (2) electromagnetic **radiation**

He tried every possible treatment, including chemotherapy and **radiation** therapy.

wrap

v. to cover or enclose something entirely with paper, cloth, or other material

synonym : surround, cover, bandage

(1) **wrap** a fish in foil, (2) **wrap** up a meeting

Wrap the bandage tightly around the injured arm.

oval

adj. having the shape of an egg, rounded at one end and pointed at the other, or having the general outline of an egg

synonym : elliptical, rounded, circular

(1) an **oval** astronomical orbit, (2) an **oval-shaped** object

The **oval** shape of the table made it easier for everyone to see each other.

spot

n. a particular location or place; a small round or roundish area, differing in color or feels from the surface around it

synonym : dot, mark, place

(1) beauty **spot**, (2) a **spot** on his honor

This remote **spot** is rarely visited.

galaxy

n. an independent group of stars, interstellar gas, dark matter, etc., in the universe, bound together by gravity

synonym : star cluster, nebula, star system

(1) elliptic **galaxy**, (2) a **galaxy** of famous actors

The Milky Way **galaxy** has numerous water-bearing planets.

planet

n. any of the nine large celestial bodies that circle in the solar system; any celestial body that revolves around a star

synonym : earth, world, globe

(1) **planet** like the Earth, (2) save the **planet**

Mercury is the closest **planet** to the sun.

eventually

adv. finally, particularly after a long time or a lot of struggle, complications, and so on

synonym : finally, someday, ultimately

(1) **eventually** become obsolete, (2) **eventually** succeed

The corporation **eventually** dominated the entire tobacco business.

telescope

n. a device like a tube in shape containing lenses used to magnify and observe distant objects

(1) a binocular **telescope**, (2) look through a **telescope**

This facility has the largest astronomical **telescope** in the country.

diameter

n. the length of a straight line passing through the center of a circle and connecting two points on the circumference

synonym : diam, width

(1) **diameter** of an oval, (2) a particle **diameter**

Draw a circle five centimeters in **diameter**.

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.

visible

adj. capable of being seen; or open to easy view

synonym: clear, observable, seeable

(1) **visible** stars, (2) **visible** by X-ray

My home is easily **visible** from the shore.

thrill

n. a feeling of extreme and sudden excitement and pleasure; to cause someone to feel sudden intense sensation or emotion

synonym: exhilaration, delight, rush

(1) the **thrill** of speed, (2) incredible **thrill**

Skydiving is an overwhelming **thrill** for many people.

distant

adj. far away in space, time, or where you are; far apart in relevance, relationship, or kinship

synonym: far, isolated, remote

(1) a **distant** memory, (2) **distant** ancestors

The sun set over the crest of **distant** hills.

infrared

adj. relating to or denoting electromagnetic radiation with a wavelength just longer than that of red light but shorter than that of microwave radiation, used for sensing heat and for remote control

synonym: thermal, warm, radiant

(1) an **infrared** lamp, (2) **infrared** radiation

The **infrared** camera revealed a hidden image on the surface.

universe

n. everything that exists, especially all physical matter, including planets, stars, galaxies, and all other forms of matter and energy

synonym : cosmos, macrocosm

(1) theory of the **universe**, (2) expansion of the **universe**
The **universe** is about 13.8 billion years old.

stretch

v. to make or be capable of making anything longer or broader without hurting or breaking

synonym : lengthen, prolong, extend

(1) **stretch** along the coast, (2) **stretch** a story
Some herds have been observed to **stretch** hundreds of kilometers.

expansion

n. the process of becoming larger or more extensive, or the result of this process

synonym : growth, enlargement, development

(1) industrial **expansion**, (2) **expansion** project
The company is undergoing an **expansion**, opening new locations in several states.

astronomer

n. a physicist who studies astronomy

synonym : stargazer, cosmologist, astrophysicist

(1) amateur **astronomer**, (2) solar **astronomer**
This question has fascinated solar **astronomers** for decades.

gigantic

adj. extremely large

synonym : huge, enormous, immense

(1) **gigantic** proportions, (2) **gigantic** monsters
He was so hungry from the long journey that he had a **gigantic** appetite.

hexagon

n. a six-sided polygon with six angles and six sides of equal length

synonym : hexahedron, six-sided figure, six-gon

(1) **hexagon** head bolt, (2) **hexagon** pattern

The honeycomb structure of a beehive is made up of **hexagons**.

layer

n. a sheet, quantity, or thickness of the material, typically one of several, covering a surface or body; a level or part within a system or set of ideas

synonym : stratum, sheet, coating

(1) **layer** cake, (2) **layer** of paint

The **layer** of frost on the ground was so thick it was difficult to walk on.

sunshade

n. a device or material used to protect someone or something from the sun's rays, particularly a parasol or umbrella; a structure or covering that shades a window or outdoor area

synonym : umbrella, awning, parasol

(1) **sunshade** canopy, (2) car **sunshade**

The beach umbrella provided a **sunshade** for us during the hot summer day.

rocket

n. a large tube-shaped object that moves very fast by a stream of gases let out behind it, used for space travel or as a weapon

synonym : projectile, missile

(1) **rocket** attack against the enemy, (2) **rocket** fuel

The **rocket** launch platform is visible from this hill.

origami

n. the Japanese art or practice of folding paper into decorative shapes and figures

synonym : paper folding, paper art

(1) **origami** paper, (2) **origami** art

I love making **origami** cranes during my free time.

incredible

adj. unbelievable; enormous

synonym : unbelievable, fantastical, inconceivable

(1) **incredible** amount, (2) at **incredible** speed

Her response revealed **incredible** idiocy.

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.

accomplishment

n. the successful completion of a task or goal; an ability that has been acquired by training

synonym: success, achievement, complete

(1) proud of his **accomplishments**, (2) the

accomplishment of a social goal

Graduating from college was a major **accomplishment** for her.

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.

launch

v. to send or propel something into the air or space using a device such as a rocket, missile, or spacecraft; to make something available or on sale for the first time

synonym: start, initiate, begin

(1) **launch** a spaceship into orbit, (2) **launch** a big attack

The company is set to **launch** its new product line next month.

straight

adj. extending or moving in one direction without bending or curving; having no deviations

synonym: linear, honest, consecutive

(1) a **straight** line, (2) **straight** for two months

He was sick for five **straight** days.

operational

adj. relating to a particular process or series of actions for achieving a result

synonym: functional, active, working

(1) introduce **operational** software, (2) build **operational** excellence

The machine should be **operational** by Friday afternoon.

observation

n. the act or activity of carefully examining or monitoring something or someone

synonym: watching, notice, reflection

(1) class **observation** day, (2) **observation** instrument

In the hospital, she will remain under constant **observation**.

tropical

adj. originating in, located in, or characteristic of the tropics

synonym: equatorial, tropic

(1) **tropical** cyclones, (2) **tropical** islands

Tropical storm Marco is making his way along the coast of Florida.

vacuum

n. a space empty of matter; a device or tool used for cleaning or removing debris by creating suction

synonym: void, emptiness, gap

(1) **vacuum** cleaner, (2) **vacuum** packing

Please use the **vacuum** to clean up the mess on the floor.

unfold

v. to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown

synonym: open, spread out, expose

(1) **unfold** the story, (2) **unfold** the stroller

The mystery **unfolded** as the detectives gathered more clues.

panel

n. a square or rectangular and flat piece of something that forms a distinct section or component of something; a small group of specialists who discuss particular topics or give their advice or opinion about something

synonym: board, commission, discussion

(1) **panel** discussion, (2) cost of solar **panels**

A **panel** of economic advisers from the United States visited the country to help rebuild its economy.

transmitter

n. a piece of equipment used for generating and sending electronic signals, especially radio or television signals

synonym: sender

(1) a **transmitter** of a family line, (2) radio **transmitter**

This substance acts as a neural **transmitter** substance.

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

compress

v. to press or squeeze together to make something take up less space

synonym: condense, constrict, squeeze

(1) **compress** the chest, (2) **compress** gas

She **compressed** the files into a single ZIP archive to save space on her computer.

miracle

n. an act or occurrence that is not explicable by natural or scientific laws and is therefore believed to be caused by God

synonym: wonder, marvel, phenomenon

(1) **miracle** person, (2) economic **miracle**

The doctors said that her recovery was a **miracle**.

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.

complicated

adj. involving a lot of different things or parts in a way that is difficult to understand or analyze

synonym : complex, convoluted, intricate

(1) a **complicated** process, (2) become increasingly **complicated**

He did **complicated** pen-and-ink drawings in just a few days.

glow

v. to give out a steady, strong light

synonym : shine, radiate, beam

(1) **glow** a pale orange, (2) **glow** gold in the light

The sun was setting, and the sky **glowed** with beautiful colors.

emit

v. to give off or send out something such as light, heat, sound, gas, etc.

synonym : give off, radiate, expel

(1) **emit** a gamma ray, (2) **emit** air pollution

During the unloading, the container box **emits** a clicking sound.

unroll

v. to unwind or unfurl something that has been rolled up, such as a carpet or banner; to reveal or make visible something that was previously concealed or hidden

synonym : unwind, unfurl, wind off

(1) **unroll** the gift wrap, (2) **unroll** paper

I **unroll** the mat before starting my yoga practice.

rehearse

v. to practice or repeat something, such as a performance, speech, or action, to prepare for an event or to improve one's skills; to go through the motions of a planned activity before executing it

synonym : practice, recite, drill

(1) **rehearse** an opera, (2) **rehearse** a speech

The actors needed to **rehearse** their lines before the performance.

argument

n. a set of statements or reasons used to support or refute a proposition or theory; a verbal or physical fight or dispute

synonym : debate, discourse, discussion

(1) a blazing **argument**, (2) the **argument** against capital punishment

The **argument** between the two sides over the proposed policy was heated.

temperature

n. the degree of hotness or coldness of a thing or place

synonym : climate, warmth, degree

(1) extreme **temperatures**, (2) the atmospheric **temperature**

Cities around the world set records for highest **temperatures** this summer.

setup

n. the arrangement or organization of something, often with a specific purpose or intention; a scheme or plan that is intended to deceive or trick someone

synonym : arrangement, installation, organization

(1) office **setup**, (2) network **setup**

The **setup** for the conference was impressive and professional.

umbrella

n. a device consisting of a circular canopy of cloth on a central pole used as protection against rain or sometimes against the sun

synonym : parasol, canopy, sunshade

(1) **umbrella** coverage, (2) **umbrella** ban

She opened her **umbrella** to protect herself from the rain.

fuzzy

adj. having a soft and indistinct outline or covered with fine, soft, and hairlike fibers

synonym : hazy, blurry, indistinct

(1) **fuzzy** logic, (2) **fuzzy** memory

The picture was **fuzzy** because it was taken with an old camera.

calculate

v. to judge or find out the amount or number of something by using mathematics

synonym: compute, figure, estimate

(1) **calculate** the distance, (2) **calculate** his credit score

He couldn't **calculate** the actual value of the artwork.

sensitivity

n. the ability to perceive or respond to subtle differences or changes; the ability to understand and respond to the needs and feelings of others

synonym: alertness, attentiveness, sympathy

(1) **sensitivity** analysis, (2) become full of **sensitivity**

The instrument has a high **sensitivity** to temperature changes.

bumblebee

n. a large, furry bee with black and yellow bands on its body that is known for its loud buzzing sound and its important role in pollinating plants

synonym: bee, honeybee, pollinator

(1) **bumblebee** pollination, (2) protecting **bumblebees**

The sound of the **bumblebee's** wings was soothing to listen to.

centimeter

n. a unit of measurement of length in the metric system, equivalent to one-hundredth of a meter

(1) **centimeter** measurement, (2) thirty **centimeters** tall

The room was only one **centimeter** wider than the piano, making it a tight fit.

hover

v. to stay in one place in the air

synonym: hang, float over, drift

(1) **hover** between life and death, (2) **hover** around the table

Two birds were **hovering** overhead.

distance

n. the amount of space between two points, measured in units such as miles, meters, or kilometers; the extent, scope, or range between two things, such as distance or

emotional distance

synonym : space, gap, span

(1) driving **distance**, (2) social **distance**

The marathon runner covered a long **distance** in a short amount of time.

sunlight

n. the light emitted by the sun; the rays of the sun

synonym : daylight, rays, sunshine

(1) a glare of **sunlight**, (2) in direct **sunlight**

Radiation from **sunlight** has a different wavelength.

glowing

adj. highly enthusiastic; greatly praised

synonym : burning, bright, flaming

(1) **glowing** reviews, (2) **glowing** cheeks

The western sky was **glowing** pink.

mar

v. to damage or spoil the appearance or surface of something

synonym : damage, deface, disfigure

(1) **mar** a proper relationship, (2) **mar** the reputation

The scratches on the car **marred** its otherwise perfect appearance.

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.

Jovian

adj. relating to Jupiter or its characteristics

synonym : Jupiter, giant planet

(1) **Jovian** satellites, (2) **Jovian** planet

The **Jovian** moon Europa is believed to have an ocean

beneath its icy surface.

liquid

n. a substance, such as water or oil that flows freely and is neither a solid nor a gas

synonym: fluid

(1) colorless **liquid**, (2) hazardous **liquid**

The sponge takes up the **liquid** well.

probe

n. a tool used for testing or examining, especially for medical or scientific purposes, or an exploratory mission to a planet or other celestial body; (verb) to investigate, examine, or search into something

synonym: investigation, inquiry, examination

(1) a lunar **probe**, (2) **probe** for inside information

NASA sent a **probe** to study the atmosphere of Jupiter.

crack

v. to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking

synonym: snap, burst, break

(1) **crack** an eggshell, (2) a **crack** in a board

He that would eat the kernel must **crack** the nut.

jet

n. a type of aircraft that is powered by one or more jet engines and can fly at high speeds, typically over long distances

synonym: plane, aircraft, flier

(1) private **jet**, (2) commercial **jet**

The **jet** flew over the ocean at high speed, reaching its destination in hours.

organic

adj. of or derived from biological substance; producing plants and animals for food and other items without the use of synthetic chemicals

synonym: biological

(1) **organic** soils, (2) eat **organic** food

The kidney is an **organic** component of the body.

molecule

n. a group of two or more atoms held together by attractive forces known as chemical bonds

synonym : particle, element, atom

(1) small **molecules**, (2) **molecule** behavior

The shape of the DNA **molecule** is a double helix.

titanic

adj. of or having a great size, power, or influence; of or relating to Titanium (= a light, strong grey, lustrous, corrosion-resistant metallic element)

synonym : colossal, massive, immense

(1) **titanic** battle, (2) **titanic** compound

The **titanic** ship sank on its maiden voyage.

atmosphere

n. the mass of air that surrounds the Earth; the pervading tone or mood of a place, situation, or creative work

synonym : air, ambiance, circumstances

(1) carbon dioxide in the **atmosphere**, (2) a convivial **atmosphere**

The spaceship began to burn up as it approached the Earth's **atmosphere**.

hydrocarbon

n. an organic compound consisting entirely of hydrogen and carbon

(1) **hydrocarbon** production, (2) **hydrocarbon** molecules in crude oil

Burning **hydrocarbons** releases water vapor and carbon dioxide.

methane

n. a chemical compound with the chemical formula CH₄ with no smell or color, often used as a fuel

(1) atmospheric **methane**, (2) reduce **methane** emissions

The ignition of **methane** gas in the plant killed five employees.

ethane

n. a colorless, odorless hydrocarbon gas with the molecular formula C₂H₆ that is a basic component of natural gas and is used as a fuel source and in the

production of chemicals

synonym : natural gas, methane, propane

(1) **ethane** production, (2) **ethane** gas

Ethane combustion is an important energy source for heating and electricity generation.

fuel

n. a substance that is typically burned to generate heat or energy

synonym : energy, power, gas

(1) biomass **fuel**, (2) smokeless **fuel**

The **fuel** scarcity most severely impacted the manufacturing sector

examine

v. to study or consider a person or object attentively and thoroughly to learn something about them

synonym : study, probe, analyze

(1) **examine** the data studiously, (2) **examine** the issue

Initially, we must **examine** all project-related expenses.

helicopter

n. a type of aircraft that is capable of hovering in place and moving vertically, as well as flying horizontally; often used for emergency medical services, military operations, and transport in areas with limited access

synonym : chopper, copter, whirlybird

(1) **helicopter** ride, (2) police **helicopter**

The company's CEO arrived at the meeting via **helicopter** to avoid traffic congestion

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.

solid

adj. hard or firm; characterized by good substantial quality

synonym : stable, reliable, hard

(1) **solid** ally, (2) **solid** employment measures

The **solid-state** of water is called ice.

solvent

adj. capable of dissolving other substances; having sufficient money to pay all outstanding debts; (noun) a liquid substance capable of dissolving other substances

synonym : (noun) solution, (noun) dissolver

(1) a **solvent** liquid, (2) chemical **solvents**

The company was able to remain **solvent** throughout the economic downturn.

starlight

n. the light emitted or reflected by stars, often observed in the night sky; the radiant energy emitted by stars

synonym : twinkle, starshine, stardust

(1) **starlight** sky, (2) romantic **starlight**

The romantic couple had a picnic under the **starlight**.

analyze

v. to think about in-depth and evaluate to discover essential features or meaning

synonym : explore, examine, investigate

(1) **analyze** a chemical compound, (2) **analyze** your real motives

The teacher attempted to **analyze** the root cause of our mistake.

chemistry

n. the branch of the natural sciences dealing with the composition of substances and their properties and reactions

(1) professor of **chemistry**, (2) the **chemistry** of soil

He is familiar with **chemistry** and biology.

tune

n. a musical composition or set of musical notes that are played or sung; (verb) to adjust or set something to a specific condition or standard

synonym : melody, harmony, (verb) adjust

(1) the **tune** of a song, (2) **tune** a piano

The band played a beautiful **tune** on their instruments.

imaginary

adj. existing only in someone's mind

synonym: fictional, ideal, fantastical

(1) **imaginary** number, (2) **imaginary** pregnancy

Little children tend to have **imaginary** friends.

Session 2: Spelling

1. et___e gas
n. a colorless, odorless hydrocarbon gas with the molecular formula C₂H₆ that is a basic component of natural gas and is used as a fuel source and in the production of chemicals
2. exposure to ra_____on
n. the energy that comes from a nuclear reaction in the form of rays, waves, or particles and that can be hazardous to health
3. introduce ope_____al software
adj. relating to a particular process or series of actions for achieving a result
4. solar ast_____er
n. a physicist who studies astronomy
5. im_____ry pregnancy
adj. existing only in someone's mind
6. re_____se an opera
v. to practice or repeat something, such as a performance, speech, or action, to prepare for an event or to improve one's skills; to go through the motions of a planned activity before executing it
7. un___d the stroller
v. to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown
8. cost of solar pa__ls
n. a square or rectangular and flat piece of something that forms a distinct section or component of something; a small group of specialists who discuss particular topics or give their advice or opinion about something

ANSWERS: 1. ethane, 2. radiation, 3. operational, 4. astronomer, 5. imaginary, 6. rehearse, 7. unfold, 8. panel

- | | |
|----------------------------------|--|
| 9. gi____ic proportions | <i>adj.</i> extremely large |
| 10. an____e a chemical compound | <i>v.</i> to think about in-depth and evaluate to discover essential features or meaning |
| 11. extreme tem_____res | <i>n.</i> the degree of hotness or coldness of a thing or place |
| 12. cr__k an eggshell | <i>v.</i> to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking |
| 13. 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 |
| 14. fu__y memory | <i>adj.</i> having a soft and indistinct outline or covered with fine, soft, and hairlike fibers |
| 15. ex____e the data studiously | <i>v.</i> to study or consider a person or object attentively and thoroughly to learn something about them |
| 16. co____c background radiation | <i>adj.</i> relating to the universe or cosmos; vast or limitless |
| 17. Jo____n satellites | <i>adj.</i> relating to Jupiter or its characteristics |
| 18. smokeless f__l | <i>n.</i> a substance that is typically burned to generate heat or energy |
| 19. ex____e the issue | <i>v.</i> to study or consider a person or object attentively and thoroughly to learn something about them |
| 20. b__g a phone down | <i>v.</i> to hit or cause to hit something in a way that makes a loud noise |

ANSWERS: 9. gigantic, 10. analyze, 11. temperature, 12. crack, 13. explore, 14. fuzzy, 15. examine, 16. cosmic, 17. Jovian, 18. fuel, 19. examine, 20. bang

21. tr____al cyclones
adj. originating in, located in, or characteristic of the tropics
22. et___e production
n. a colorless, odorless hydrocarbon gas with the molecular formula C₂H₆ that is a basic component of natural gas and is used as a fuel source and in the production of chemicals
23. fu__y logic
adj. having a soft and indistinct outline or covered with fine, soft, and hairlike fibers
24. sen____ty analysis
n. the ability to perceive or respond to subtle differences or changes; the ability to understand and respond to the needs and feelings of others
25. in____ed radiation
adj. relating to or denoting electromagnetic radiation with a wavelength just longer than that of red light but shorter than that of microwave radiation, used for sensing heat and for remote control
26. second co___c velocity
adj. relating to the universe or cosmos; vast or limitless
27. become full of sen____ty
n. the ability to perceive or respond to subtle differences or changes; the ability to understand and respond to the needs and feelings of others
28. ti____c battle
adj. of or having a great size, power, or influence; of or relating to Titanium (= a light, strong grey, lustrous, corrosion-resistant metallic element)
29. biomass f__l
n. a substance that is typically burned to generate heat or energy

ANSWERS: 21. tropical, 22. ethane, 23. fuzzy, 24. sensitivity, 25. infrared, 26. cosmic, 27. sensitivity, 28. titanic, 29. fuel

30. industrial ex_____on *n.* the process of becoming larger or more extensive, or the result of this process
31. carbon dioxide in the atm_____re *n.* the mass of air that surrounds the Earth; the pervading tone or mood of a place, situation, or creative work
32. um_____la ban *n.* a device consisting of a circular canopy of cloth on a central pole used as protection against rain or sometimes against the sun
33. an_____a of insect *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
34. en_____er shortage *n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software
35. g__w gold in the light *v.* to give out a steady, strong light
36. ex_____e the world *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
37. he_____n pattern *n.* a six-sided polygon with six angles and six sides of equal length
38. ca_____te his credit score *v.* to judge or find out the amount or number of something by using mathematics
39. st_____h a story *v.* to make or be capable of making anything longer or broader without hurting or breaking

ANSWERS: 30. expansion, 31. atmosphere, 32. umbrella, 33. antenna, 34. engineer, 35. glow, 36. explore, 37. hexagon, 38. calculate, 39. stretch

40. a di_____t memory *adj.* far away in space, time, or where you are; far apart in relevance, relationship, or kinship
41. ro____t fuel *n.* a large tube-shaped object that moves very fast by a stream of gases let out behind it, used for space travel or as a weapon
42. tr_____al islands *adj.* originating in, located in, or characteristic of the tropics
43. st_____ht for two months *adj.* extending or moving in one direction without bending or curving; having no deviations
44. small mo_____les *n.* a group of two or more atoms held together by attractive forces known as chemical bonds
45. a lunar pr__e *n.* a tool used for testing or examining, especially for medical or scientific purposes, or an exploratory mission to a planet or other celestial body; (verb) to investigate, examine, or search into something
46. vi_____e by X-ray *adj.* capable of being seen; or open to easy view
47. la__r cake *n.* a sheet, quantity, or thickness of the material, typically one of several, covering a surface or body; a level or part within a system or set of ideas
48. mys_____us object *adj.* difficult to understand, explain, or identify; having an aura of secrecy, intrigue, or puzzlement

ANSWERS: 40. distant, 41. rocket, 42. tropical, 43. straight, 44. molecule, 45. probe, 46. visible, 47. layer, 48. mysterious

49. la__r of paint *n.* a sheet, quantity, or thickness of the material, typically one of several, covering a surface or body; a level or part within a system or set of ideas
50. driving di____ce *n.* the amount of space between two points, measured in units such as miles, meters, or kilometers; the extent, scope, or range between two things, such as distance or emotional distance
51. la___h a big attack *v.* to send or propel something into the air or space using a device such as a rocket, missile, or spacecraft; to make something available or on sale for the first time
52. a meteorological sa____te *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.
53. car su____de *n.* a device or material used to protect someone or something from the sun's rays, particularly a parasol or umbrella; a structure or covering that shades a window or outdoor area
54. become increasingly com____ed *adj.* involving a lot of different things or parts in a way that is difficult to understand or analyze
55. a ch____al compound *adj.* relating to or connected with chemistry;
56. a so____t liquid *adj.* capable of dissolving other substances; having sufficient money to pay all outstanding debts; (noun) a liquid substance capable of dissolving other substances

ANSWERS: 49. layer, 50. distance, 51. launch, 52. satellite, 53. sunshade, 54. complicated, 55. chemical, 56. solvent

57. a sex chr_____me
n. a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like
58. at inc_____le speed
adj. unbelievable; enormous
59. im_____ry number
adj. existing only in someone's mind
60. re_____se a speech
v. to practice or repeat something, such as a performance, speech, or action, to prepare for an event or to improve one's skills; to go through the motions of a planned activity before executing it
61. hel_____er ride
n. a type of aircraft that is capable of hovering in place and moving vertically, as well as flying horizontally; often used for emergency medical services, military operations, and transport in areas with limited access
62. extend the TV an_____a
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
63. gl_____g reviews
adj. highly enthusiastic; greatly praised
64. pre-mo____n agricultural society
adj. of or belonging to the present time or recent times
65. co_____ve a child
v. to have or develop an idea, a plan, etc. in mind; to become pregnant
66. a glare of su_____ht
n. the light emitted by the sun; the rays of the sun

ANSWERS: 57. chromosome, 58. incredible, 59. imaginary, 60. rehearse, 61. helicopter, 62. antenna, 63. glowing, 64. modern, 65. conceive, 66. sunlight

75. toxic ch____als *adj.* relating to or connected with chemistry;
76. so__d ally *adj.* hard or firm; characterized by good substantial quality
77. m_r the reputation *v.* to damage or spoil the appearance or surface of something
78. romantic st_____ht *n.* the light emitted or reflected by stars, often observed in the night sky; the radiant energy emitted by stars
79. su_____de canopy *n.* a device or material used to protect someone or something from the sun's rays, particularly a parasol or umbrella; a structure or covering that shades a window or outdoor area
80. an_____e your real motives *v.* to think about in-depth and evaluate to discover essential features or meaning
81. un___l paper *v.* to unwind or unfurl something that has been rolled up, such as a carpet or banner; to reveal or make visible something that was previously concealed or hidden
82. gl_____g cheeks *adj.* highly enthusiastic; greatly praised
83. e__t air pollution *v.* to give off or send out something such as light, heat, sound, gas, etc.
84. mi_____ve radiation *n.* a form of electromagnetic radiation with wavelengths ranging from about one millimeter to one meter and frequencies between 300 MHz (0.3 GHz) and 300 GHz; an electric oven that cooks food by exposing it to high-frequency electromagnetic radiation, which causes the food molecules to vibrate and heat up quickly

ANSWERS: 75. chemical, 76. solid, 77. mar, 78. starlight, 79. sunshade, 80. analyze, 81. unroll, 82. glowing, 83. emit, 84. microwave

85. ca_____te the distance
v. to judge or find out the amount or number of something by using mathematics
86. gi_____ic monsters
adj. extremely large
87. va_____m cleaner
n. a space empty of matter; a device or tool used for cleaning or removing debris by creating suction
88. a criminal bac_____nd
n. the details of a person's social heritage, such as family, vocational or educational experience; past information that is essential to understanding a situation or problem
89. expansion of the un_____se
n. everything that exists, especially all physical matter, including planets, stars, galaxies, and all other forms of matter and energy
90. the t__e of a song
n. a musical composition or set of musical notes that are played or sung; (verb) to adjust or set something to a specific condition or standard
91. inc_____le amount
adj. unbelievable; enormous
92. office se__p
n. the arrangement or organization of something, often with a specific purpose or intention; a scheme or plan that is intended to deceive or trick someone
93. bu_____ee pollination
n. a large, furry bee with black and yellow bands on its body that is known for its loud buzzing sound and its important role in pollinating plants

ANSWERS: 85. calculate, 86. gigantic, 87. vacuum, 88. background, 89. universe, 90. tune, 91. incredible, 92. setup, 93. bumblebee

94. an o__l astronomical orbit *adj.* having the shape of an egg, rounded at one end and pointed at the other, or having the general outline of an egg
95. eve_____ly become obsolete *adv.* finally, particularly after a long time or a lot of struggle, complications, and so on
96. reduce me_____e emissions *n.* a chemical compound with the chemical formula CH₄ with no smell or color, often used as a fuel
97. re_____e milk packaging into new paper *v.* to sort and collect things to process them and produce valuable materials that can be used again
98. the most am_____g feeling *adj.* extremely surprising, especially in a way that you like or admire
99. ex_____on project *n.* the process of becoming larger or more extensive, or the result of this process
100. or_____i art *n.* the Japanese art or practice of folding paper into decorative shapes and figures
101. a cr__k in a board *v.* to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking
102. pl____t like the Earth *n.* any of the nine large celestial bodies that circle in the solar system; any celestial body that revolves around a star
103. cen_____er measurement *n.* a unit of measurement of length in the metric system, equivalent to one-hundredth of a meter

ANSWERS: 94. oval, 95. eventually, 96. methane, 97. recycle, 98. amazing, 99. expansion, 100. origami, 101. crack, 102. planet, 103. centimeter

104. thirty cen_____ers tall *n.* a unit of measurement of length in the metric system, equivalent to one-hundredth of a meter
105. ti_____c compound *adj.* of or having a great size, power, or influence; of or relating to Titanium (= a light, strong grey, lustrous, corrosion-resistant metallic element)
106. a civil en_____er *n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software
107. look through a te_____pe *n.* a device like a tube in shape containing lenses used to magnify and observe distant objects
108. the acc_____ent of a social goal *n.* the successful completion of a task or goal; an ability that has been acquired by training
109. economic mi_____e *n.* an act or occurrence that is not explicable by natural or scientific laws and is therefore believed to be caused by God
110. beauty s__t *n.* a particular location or place; a small round or roundish area, differing in color or feels from the surface around it
111. the end of chr_____me *n.* a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like
112. ho__r around the table *v.* to stay in one place in the air
113. um_____la coverage *n.* a device consisting of a circular canopy of cloth on a central pole used as protection against rain or sometimes against the sun

ANSWERS: 104. centimeter, 105. titanic, 106. engineer, 107. telescope, 108. accomplishment, 109. miracle, 110. spot, 111. chromosome, 112. hover, 113. umbrella

114. g__w a pale orange *v.* to give out a steady, strong light
115. a tra_____er of a family line *n.* a piece of equipment used for generating and sending electronic signals, especially radio or television signals
116. incredible th___l *n.* a feeling of extreme and sudden excitement and pleasure; to cause someone to feel sudden intense sensation or emotion
117. police hel_____er *n.* a type of aircraft that is capable of hovering in place and moving vertically, as well as flying horizontally; often used for emergency medical services, military operations, and transport in areas with limited access
118. a st_____ht line *adj.* extending or moving in one direction without bending or curving; having no deviations
119. protecting bu_____ees *n.* a large, furry bee with black and yellow bands on its body that is known for its loud buzzing sound and its important role in pollinating plants
120. elliptic ga___y *n.* an independent group of stars, interstellar gas, dark matter, etc., in the universe, bound together by gravity
121. am_____g advances *adj.* extremely surprising, especially in a way that you like or admire
122. a GPS sa_____te *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.

ANSWERS: 114. glow, 115. transmitter, 116. thrill, 117. helicopter, 118. straight, 119. bumblebee, 120. galaxy, 121. amazing, 122. satellite

123. class obs_____on day *n.* the act or activity of carefully examining or monitoring something or someone
124. mi_____e person *n.* an act or occurrence that is not explicable by natural or scientific laws and is therefore believed to be caused by God
125. an in_____ed lamp *adj.* relating to or denoting electromagnetic radiation with a wavelength just longer than that of red light but shorter than that of microwave radiation, used for sensing heat and for remote control
126. w__p a fish in foil *v.* to cover or enclose something entirely with paper, cloth, or other material
127. commercial j_t *n.* a type of aircraft that is powered by one or more jet engines and can fly at high speeds, typically over long distances
128. a blazing ar_____nt *n.* a set of statements or reasons used to support or refute a proposition or theory; a verbal or physical fight or dispute
129. professor of ch_____ry *n.* the branch of the natural sciences dealing with the composition of substances and their properties and reactions
130. mo____n poetry *adj.* of or belonging to the present time or recent times
131. an o__l-shaped object *adj.* having the shape of an egg, rounded at one end and pointed at the other, or having the general outline of an egg

ANSWERS: 123. observation, 124. miracle, 125. infrared, 126. wrap, 127. jet, 128. argument, 129. chemistry, 130. modern, 131. oval

132. va___m packing *n.* a space empty of matter; a device or tool used for cleaning or removing debris by creating suction
133. st_____ht sky *n.* the light emitted or reflected by stars, often observed in the night sky; the radiant energy emitted by stars
134. a ga___y of famous actors *n.* an independent group of stars, interstellar gas, dark matter, etc., in the universe, bound together by gravity
135. pr__e for inside information *n.* a tool used for testing or examining, especially for medical or scientific purposes, or an exploratory mission to a planet or other celestial body; (verb) to investigate, examine, or search into something
136. hyd_____on molecules in crude oil *n.* an organic compound consisting entirely of hydrogen and carbon
137. mys_____us stranger *adj.* difficult to understand, explain, or identify; having an aura of secrecy, intrigue, or puzzlement
138. he_____n head bolt *n.* a six-sided polygon with six angles and six sides of equal length
139. pa__l discussion *n.* a square or rectangular and flat piece of something that forms a distinct section or component of something; a small group of specialists who discuss particular topics or give their advice or opinion about something
140. la___h a spaceship into orbit *v.* to send or propel something into the air or space using a device such as a rocket, missile, or spacecraft; to make something available or on sale for the first time

ANSWERS: 132. vacuum, 133. starlight, 134. galaxy, 135. probe, 136. hydrocarbon, 137. mysterious, 138. hexagon, 139. panel, 140. launch

141. t__e a piano *n.* a musical composition or set of musical notes that are played or sung; (verb) to adjust or set something to a specific condition or standard
142. colorless li___d *n.* a substance, such as water or oil that flows freely and is neither a solid nor a gas
143. ob_____e a tradition *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
144. hyd_____on production *n.* an organic compound consisting entirely of hydrogen and carbon
145. the ch_____ry of soil *n.* the branch of the natural sciences dealing with the composition of substances and their properties and reactions
146. the th___l of speed *n.* a feeling of extreme and sudden excitement and pleasure; to cause someone to feel sudden intense sensation or emotion
147. private j_t *n.* a type of aircraft that is powered by one or more jet engines and can fly at high speeds, typically over long distances
148. di_____t ancestors *adj.* far away in space, time, or where you are; far apart in relevance, relationship, or kinship
149. amateur ast_____er *n.* a physicist who studies astronomy

ANSWERS: 141. tune, 142. liquid, 143. observe, 144. hydrocarbon, 145. chemistry, 146. thrill, 147. jet, 148. distant, 149. astronomer

150. or_____i paper *n.* the Japanese art or practice of folding paper into decorative shapes and figures
151. st_____h along the coast *v.* to make or be capable of making anything longer or broader without hurting or breaking
152. mo_____le behavior *n.* a group of two or more atoms held together by attractive forces known as chemical bonds
153. network se__p *n.* the arrangement or organization of something, often with a specific purpose or intention; a scheme or plan that is intended to deceive or trick someone
154. a binocular te_____pe *n.* a device like a tube in shape containing lenses used to magnify and observe distant objects
155. so__d employment measures *adj.* hard or firm; characterized by good substantial quality
156. eat or_____c food *adj.* of or derived from biological substance; producing plants and animals for food and other items without the use of synthetic chemicals
157. co_____ss the chest *v.* to press or squeeze together to make something take up less space
158. or_____c soils *adj.* of or derived from biological substance; producing plants and animals for food and other items without the use of synthetic chemicals
159. save the pl____t *n.* any of the nine large celestial bodies that circle in the solar system; any celestial body that revolves around a star

ANSWERS: 150. origami, 151. stretch, 152. molecule, 153. setup, 154. telescope, 155. solid, 156. organic, 157. compress, 158. organic, 159. planet

160. re_____e the cardboard boxes *v.* to sort and collect things to process them and produce valuable materials that can be used again
161. atmospheric me_____e *n.* a chemical compound with the chemical formula CH₄ with no smell or color, often used as a fuel
162. un____l the gift wrap *v.* to unwind or unfurl something that has been rolled up, such as a carpet or banner; to reveal or make visible something that was previously concealed or hidden
163. ex_____e in popularity *v.* to burst or break open violently and noisily; to cause something to burst or break open
164. w__p up a meeting *v.* to cover or enclose something entirely with paper, cloth, or other material
165. mi_____ve popcorn *n.* a form of electromagnetic radiation with wavelengths ranging from about one millimeter to one meter and frequencies between 300 MHz (0.3 GHz) and 300 GHz; an electric oven that cooks food by exposing it to high-frequency electromagnetic radiation, which causes the food molecules to vibrate and heat up quickly
166. ho__r between life and death *v.* to stay in one place in the air
167. obs_____on instrument *n.* the act or activity of carefully examining or monitoring something or someone
168. theory of the un_____se *n.* everything that exists, especially all physical matter, including planets, stars, galaxies, and all other forms of matter and energy

ANSWERS: 160. recycle, 161. methane, 162. unroll, 163. explode, 164. wrap, 165. microwave, 166. hover, 167. observation, 168. universe

169. the atmospheric tem_____re *n.* the degree of hotness or coldness of a thing or place
170. build ope_____al excellence *adj.* relating to a particular process or series of actions for achieving a result
171. b__g his fist on a desk *v.* to hit or cause to hit something in a way that makes a loud noise
172. hazardous li____d *n.* a substance, such as water or oil that flows freely and is neither a solid nor a gas
173. di_____er of an oval *n.* the length of a straight line passing through the center of a circle and connecting two points on the circumference
174. un____d the story *v.* to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown
175. proud of his acc_____ents *n.* the successful completion of a task or goal; an ability that has been acquired by training
176. e__t a gamma ray *v.* to give off or send out something such as light, heat, sound, gas, etc.
177. electromagnetic ra_____on *n.* the energy that comes from a nuclear reaction in the form of rays, waves, or particles and that can be hazardous to health
178. vi_____e stars *adj.* capable of being seen; or open to easy view
179. ex_____e in anger *v.* to burst or break open violently and noisily; to cause something to burst or break open

ANSWERS: 169. temperature, 170. operational, 171. bang, 172. liquid, 173. diameter, 174. unfold, 175. accomplishment, 176. emit, 177. radiation, 178. visible, 179. explode

180. a convivial atm_____re
n. the mass of air that surrounds the Earth; the pervading tone or mood of a place, situation, or creative work
181. a com_____ed process
adj. involving a lot of different things or parts in a way that is difficult to understand or analyze
182. m_r a proper relationship
v. to damage or spoil the appearance or surface of something
183. Jo___n planet
adj. relating to Jupiter or its characteristics
184. co_____ve of an idea
v. to have or develop an idea, a plan, etc. in mind; to become pregnant
185. radio tra_____er
n. a piece of equipment used for generating and sending electronic signals, especially radio or television signals
186. eve_____ly succeed
adv. finally, particularly after a long time or a lot of struggle, complications, and so on
187. a s__t on his honor
n. a particular location or place; a small round or roundish area, differing in color or feels from the surface around it
188. a bac_____nd color
n. the details of a person's social heritage, such as family, vocational or educational experience; past information that is essential to understanding a situation or problem

ANSWERS: 180. atmosphere, 181. complicated, 182. mar, 183. Jovian, 184. conceive, 185. transmitter, 186. eventually, 187. spot, 188. background

Session 3: Fill in the Blanks

1. I can't _____ he'd want to harm us.
v. to have or develop an idea, a plan, etc. in mind; to become pregnant
2. She _____ the files into a single ZIP archive to save space on her computer.
v. to press or squeeze together to make something take up less space
3. This substance acts as a neural _____ substance.
n. a piece of equipment used for generating and sending electronic signals, especially radio or television signals
4. The ignition of _____ gas in the plant killed five employees.
n. a chemical compound with the chemical formula CH₄ with no smell or color, often used as a fuel
5. I love making _____ cranes during my free time.
n. the Japanese art or practice of folding paper into decorative shapes and figures
6. The sound of the _____ wings was soothing to listen to.
n. a large, furry bee with black and yellow bands on its body that is known for its loud buzzing sound and its important role in pollinating plants
7. The romantic couple had a picnic under the _____.
n. the light emitted or reflected by stars, often observed in the night sky; the radiant energy emitted by stars
8. He did _____ pen-and-ink drawings in just a few days.
adj. involving a lot of different things or parts in a way that is difficult to understand or analyze

ANSWERS: 1. conceive, 2. compressed, 3. transmitter, 4. methane, 5. origami, 6. bumblebee's, 7. starlight, 8. complicated

9. The _____ between the two sides over the proposed policy was heated.
- n.* a set of statements or reasons used to support or refute a proposition or theory; a verbal or physical fight or dispute
10. _____ combustion is an important energy source for heating and electricity generation.
- n.* a colorless, odorless hydrocarbon gas with the molecular formula C₂H₆ that is a basic component of natural gas and is used as a fuel source and in the production of chemicals
11. The company is set to _____ its new product line next month.
- v.* to send or propel something into the air or space using a device such as a rocket, missile, or spacecraft; to make something available or on sale for the first time
12. Burning _____ releases water vapor and carbon dioxide.
- n.* an organic compound consisting entirely of hydrogen and carbon
13. I _____ the mat before starting my yoga practice.
- v.* to unwind or unfurl something that has been rolled up, such as a carpet or banner; to reveal or make visible something that was previously concealed or hidden
14. During the unloading, the container box _____ a clicking sound.
- v.* to give off or send out something such as light, heat, sound, gas, etc.
15. Cities around the world set records for highest _____ this summer.
- n.* the degree of hotness or coldness of a thing or place
16. The _____ of frost on the ground was so thick it was difficult to walk on.
- n.* a sheet, quantity, or thickness of the material, typically one of several, covering a surface or body; a level or part within a system or set of ideas

ANSWERS: 9. argument, 10. Ethane, 11. launch, 12. hydrocarbons, 13. unroll, 14. emits, 15. temperatures, 16. layer

17. He was so hungry from the long journey that he had a _____ appetite.

adj. extremely large

18. The room was only one _____ wider than the piano, making it a tight fit.

n. a unit of measurement of length in the metric system, equivalent to one-hundredth of a meter

19. The picture was _____ because it was taken with an old camera.

adj. having a soft and indistinct outline or covered with fine, soft, and hairlike fibers

20. Human females normally have two X _____.

n. a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like

21. Skydiving is an overwhelming _____ for many people.

n. a feeling of extreme and sudden excitement and pleasure; to cause someone to feel sudden intense sensation or emotion

22. 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

23. I heated my leftover food in the _____ oven, which tasted just as good as freshly cooked.

n. a form of electromagnetic radiation with wavelengths ranging from about one millimeter to one meter and frequencies between 300 MHz (0.3 GHz) and 300 GHz; an electric oven that cooks food by exposing it to high-frequency electromagnetic radiation, which causes the food molecules to vibrate and heat up quickly

ANSWERS: 17. gigantic, 18. centimeter, 19. fuzzy, 20. chromosomes, 21. thrill, 22. recycle, 23. microwave

24. The shape of the DNA _____ is a double helix.

n. a group of two or more atoms held together by attractive forces known as chemical bonds

25. The kidney is an _____ component of the body.

adj. of or derived from biological substance; producing plants and animals for food and other items without the use of synthetic chemicals

26. The sponge takes up the _____ well.

n. a substance, such as water or oil that flows freely and is neither a solid nor a gas

27. 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

28. The sun set over the crest of _____ hills.

adj. far away in space, time, or where you are; far apart in relevance, relationship, or kinship

29. The sun was setting, and the sky _____ with beautiful colors.

v. to give out a steady, strong light

30. My father tried to _____ mathematics into my head since childhood.

v. to hit or cause to hit something in a way that makes a loud noise

31. Mercury is the closest _____ to the sun.

n. any of the nine large celestial bodies that circle in the solar system; any celestial body that revolves around a star

ANSWERS: 24. molecule, 25. organic, 26. liquid, 27. antenna, 28. distant, 29. glowed, 30. bang, 31. planet

32. 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
33. Graduating from college was a major _____ for her.
- n.* the successful completion of a task or goal; an ability that has been acquired by training
34. The _____ shape of the table made it easier for everyone to see each other.
- adj.* having the shape of an egg, rounded at one end and pointed at the other, or having the general outline of an egg
35. The _____ is about 13.8 billion years old.
- n.* everything that exists, especially all physical matter, including planets, stars, galaxies, and all other forms of matter and energy
36. The mystery _____ as the detectives gathered more clues.
- v.* to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown
37. The _____ camera revealed a hidden image on the surface.
- adj.* relating to or denoting electromagnetic radiation with a wavelength just longer than that of red light but shorter than that of microwave radiation, used for sensing heat and for remote control
38. The corporation _____ dominated the entire tobacco business.
- adv.* finally, particularly after a long time or a lot of struggle, complications, and so on
39. Draw a circle five centimeters in _____.
- n.* the length of a straight line passing through the center of a circle and connecting two points on the circumference

ANSWERS: 32. explore, 33. accomplishment, 34. oval, 35. universe, 36. unfolded, 37. infrared, 38. eventually, 39. diameter

40. Some herds have been observed to _____ hundreds of kilometers.
v. to make or be capable of making anything longer or broader without hurting or breaking
41. Little children tend to have _____ friends.
adj. existing only in someone's mind
42. A _____ of economic advisers from the United States visited the country to help rebuild its economy.
n. a square or rectangular and flat piece of something that forms a distinct section or component of something; a small group of specialists who discuss particular topics or give their advice or opinion about something
43. The company was able to remain _____ throughout the economic downturn.
adj. capable of dissolving other substances; having sufficient money to pay all outstanding debts; (noun) a liquid substance capable of dissolving other substances
44. The _____ disappearance of the ship remains unsolved.
adj. difficult to understand, explain, or identify; having an aura of secrecy, intrigue, or puzzlement
45. The firm has grown into a large _____ manufacturing.
adj. relating to or connected with chemistry;
46. My home is easily _____ from the shore.
adj. capable of being seen; or open to easy view
47. The _____ for the conference was impressive and professional.
n. the arrangement or organization of something, often with a specific purpose or intention; a scheme or plan that is intended to deceive or trick someone

ANSWERS: 40. stretch, 41. imaginary, 42. panel, 43. solvent, 44. mysterious, 45. chemical, 46. visible, 47. setup

48. The honeycomb structure of a beehive is made up of _____.
- n.* a six-sided polygon with six angles and six sides of equal length
49. The western sky was _____ pink.
- adj.* highly enthusiastic; greatly praised
50. Initially, we must _____ all project-related expenses.
- v.* to study or consider a person or object attentively and thoroughly to learn something about them
51. The company is undergoing an _____ opening new locations in several states.
- n.* the process of becoming larger or more extensive, or the result of this process
52. Their headquarters are in a _____ skyscraper.
- adj.* of or belonging to the present time or recent times
53. Her response revealed _____ idiocy.
- adj.* unbelievable; enormous
54. The company's CEO arrived at the meeting via _____ to avoid traffic congestion
- n.* a type of aircraft that is capable of hovering in place and moving vertically, as well as flying horizontally; often used for emergency medical services, military operations, and transport in areas with limited access
55. He was sick for five _____ days.
- adj.* extending or moving in one direction without bending or curving; having no deviations

ANSWERS: 48. hexagons, 49. glowing, 50. examine, 51. expansion, 52. modern, 53. incredible, 54. helicopter, 55. straight

56. The machine should be _____ by Friday afternoon.

adj. relating to a particular process or series of actions for achieving a result

57. The golfer recorded an _____ distance.

adj. extremely surprising, especially in a way that you like or admire

58. The teacher attempted to _____ the root cause of our mistake.

v. to think about in-depth and evaluate to discover essential features or meaning

59. Please use the _____ to clean up the mess on the floor.

n. a space empty of matter; a device or tool used for cleaning or removing debris by creating suction

60. The company's hiring criteria emphasize personality, not a person's _____.

n. the details of a person's social heritage, such as family, vocational or educational experience; past information that is essential to understanding a situation or problem

61. The _____ will repair my telephone tomorrow morning.

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

62. The instrument has a high _____ to temperature changes.

n. the ability to perceive or respond to subtle differences or changes; the ability to understand and respond to the needs and feelings of others

63. The spaceship began to burn up as it approached the Earth's _____.

n. the mass of air that surrounds the Earth; the pervading tone or mood of a place, situation, or creative work

ANSWERS: 56. operational, 57. amazing, 58. analyze, 59. vacuum, 60. background, 61. engineer, 62. sensitivity, 63. atmosphere

64. The _____ moon Europa is believed to have an ocean beneath its icy surface.

adj. relating to Jupiter or its characteristics

65. He is familiar with _____ and biology.

n. the branch of the natural sciences dealing with the composition of substances and their properties and reactions

66. He tried every possible treatment, including chemotherapy and _____ therapy.

n. the energy that comes from a nuclear reaction in the form of rays, waves, or particles and that can be hazardous to health

67. _____ storm Marco is making his way along the coast of Florida.

adj. originating in, located in, or characteristic of the tropics

68. This facility has the largest astronomical _____ in the country.

n. a device like a tube in shape containing lenses used to magnify and observe distant objects

69. 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

70. The scratches on the car _____ its otherwise perfect appearance.

v. to damage or spoil the appearance or surface of something

71. The Milky Way _____ has numerous water-bearing planets.

n. an independent group of stars, interstellar gas, dark matter, etc., in the universe, bound together by gravity

ANSWERS: 64. Jovian, 65. chemistry, 66. radiation, 67. Tropical, 68. telescope, 69. observe, 70. marred, 71. galaxy

72. He couldn't _____ the actual value of the artwork.

- v.* to judge or find out the amount or number of something by using mathematics

73. This remote _____ is rarely visited.

- n.* a particular location or place; a small round or roundish area, differing in color or feels from the surface around it

74. He that would eat the kernel must _____ the nut.

- v.* to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking

75. _____ the bandage tightly around the injured arm.

- v.* to cover or enclose something entirely with paper, cloth, or other material

76. The _____ scarcity most severely impacted the manufacturing sector

- n.* a substance that is typically burned to generate heat or energy

77. The _____ of water is called ice.

- adj.* hard or firm; characterized by good substantial quality

78. The band played a beautiful _____ on their instruments.

- n.* a musical composition or set of musical notes that are played or sung; (verb) to adjust or set something to a specific condition or standard

79. The old building _____ in a fiery inferno.

- v.* to burst or break open violently and noisily; to cause something to burst or break open

80. The _____ launch platform is visible from this hill.

- n.* a large tube-shaped object that moves very fast by a stream of gases let out behind it, used for space travel or as a weapon

ANSWERS: 72. calculate, 73. spot, 74. crack, 75. Wrap, 76. fuel, 77. solid-state, 78. tune, 79. exploded, 80. rocket

81. The beach umbrella provided a _____ for us during the hot summer day.
- n.* a device or material used to protect someone or something from the sun's rays, particularly a parasol or umbrella; a structure or covering that shades a window or outdoor area
82. The marathon runner covered a long _____ in a short amount of time.
- n.* the amount of space between two points, measured in units such as miles, meters, or kilometers; the extent, scope, or range between two things, such as distance or emotional distance
83. This question has fascinated solar _____ for decades.
- n.* a physicist who studies astronomy
84. The _____ ship sank on its maiden voyage.
- adj.* of or having a great size, power, or influence; of or relating to Titanium (= a light, strong grey, lustrous, corrosion-resistant metallic element)
85. Two birds were _____ overhead.
- v.* to stay in one place in the air
86. The ____ flew over the ocean at high speed, reaching its destination in hours.
- n.* a type of aircraft that is powered by one or more jet engines and can fly at high speeds, typically over long distances
87. NASA sent a _____ to study the atmosphere of Jupiter.
- n.* a tool used for testing or examining, especially for medical or scientific purposes, or an exploratory mission to a planet or other celestial body; (verb) to investigate, examine, or search into something
88. Radiation from _____ has a different wavelength.
- n.* the light emitted by the sun; the rays of the sun

ANSWERS: 81. sunshade, 82. distance, 83. astronomers, 84. titanic, 85. hovering, 86. jet, 87. probe, 88. sunlight

89. 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.

90. _____ rays are high-energy particles that originate from outside the solar system.

- adj.* relating to the universe or cosmos; vast or limitless

91. The doctors said that her recovery was a _____.

- n.* an act or occurrence that is not explicable by natural or scientific laws and is therefore believed to be caused by God

92. The actors needed to _____ their lines before the performance.

- v.* to practice or repeat something, such as a performance, speech, or action, to prepare for an event or to improve one's skills; to go through the motions of a planned activity before executing it

93. She opened her _____ to protect herself from the rain.

- n.* a device consisting of a circular canopy of cloth on a central pole used as protection against rain or sometimes against the sun

94. In the hospital, she will remain under constant _____.

- n.* the act or activity of carefully examining or monitoring something or someone

ANSWERS: 89. satellite, 90. Cosmic, 91. miracle, 92. rehearse, 93. umbrella, 94. observation