

# Englist.me



## Vocabulary Builder Reference from...

*Matt Russo: What does the universe sound like? A musical tour | TED Talk*

[https://www.ted.com/talks/matt\\_russo\\_what\\_does\\_the\\_universe\\_sound\\_like\\_a\\_musical\\_tour](https://www.ted.com/talks/matt_russo_what_does_the_universe_sound_like_a_musical_tour)

### All Words

#### IMPORTANT

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## Session 1: Word List

### pitch

*n.* the property of sound that varies with variation in the frequency of vibration; the degree of a slope, especially of a roof; short presentation for selling or sharing something

*synonym* : angle, gradient, slope

(1) make a **pitch** for a new product, (2) a low- **pitched** sound

Her voice gradually increased in **pitch**.

### constellation

*n.* a group of stars that form a recognizable pattern and have a name; a group of related or similar ideas, things, or people

*synonym* : asterism, array, pattern

(1) the stars of the Scorpion **constellation**, (2) northern **constellation**

Navigators still use the Little Bear **constellation** at sea.

### melody

*n.* a succession of musical tones forming part of a larger piece of music

*synonym* : tune, song, piece

(1) a simple **melody**, (2) the **melody** of a tune

This harmonious **melody** immortalized its composer.

- ram** v. to strike or push forcefully, often to cause damage; to batter or break open a door or barrier using brute force  
*synonym*: crash, collide, slam  
(1) **ram** the door open, (2) **ram** into the ice  
The car **rammed** into the wall, causing significant damage.
- hunt** v. to go after and try to catch wild animals to kill them for food, sport, or profit  
*synonym*: chase, pursuit, quest  
(1) **hunt** a job, (2) **hunt** after knowledge  
Hounds **hunt** their prey by using their keen scent.
- bull** n. a male bovine animal; an investor who has a positive outlook on the market or a particular investment and buys with the expectation of prices increasing  
*synonym*: bovine, cattle, bruiser  
(1) **bull** market, (2) **bull** fighter  
The farmer raised a **bull** on his ranch for breeding purposes.
- 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.
- 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.
- astrophysics** n. the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe  
(1) **astrophysics** research, (2) neutrino **astrophysics**

He was studying **astrophysics** in an attempt to understand the origins of the universe.

## impressive

*adj.* arousing admiration due to size, quality, or skill

*synonym* : impactful, remarkable, exceptional

(1) **impressive** performances, (2) an **impressive** array of facts

The budget reduction was an **impressive** feat for our nation.

## astronomy

*n.* the scientific study of objects and matter outside the Earth's atmosphere, especially the positions, motions, and evolution of celestial bodies

*synonym* : astrophysics, stargazing, cosmology

(1) **astronomy** science, (2) a branch of **astronomy**

He had a deep passion for extragalactic **astronomy** and spent hours observing the night sky.

## theorem

*n.* a statement or proposition that can be demonstrated or proved to be true, typically by logical or mathematical reasoning

*synonym* : proof, proposition, formula

(1) corollary **theorem**, (2) Pythagorean **theorem**

Gödel's incompleteness **theorems** prove the limitations of formal systems, including mathematical ones.

## geometry

*n.* the area of pure mathematics that deals with the points, lines, curves, and surfaces

(1) Euclidean **geometry**, (2) spherical **geometry**

The mathematician pioneered fractal **geometry**.

## humming

*adj.* producing a continuous, low, vibrating sound like that of the bee

*synonym* : buzzing, droning, vibrating

(1) **humming** sound, (2) **humming** bird

The **humming** of the bees filled the air as she walked through the garden.

## string

*n.* long, thin material used for tying things together, composed of several twisted threads

*synonym* : line, wire, rope

(1) retie the **string** and make it strong, (2) tense piano **strings**

She wore a **string** of pearls around her neck.

## sphere

*n.* a round object or geometric shape that is three-dimensional and symmetrical around a central point; a particular aspect or scope of life or activity

*synonym* : ball, globe, scope

(1) **sphere** of influence, (2) business **sphere**

The **sphere** of the earth is divided into several layers including the crust, mantle, and core.

## 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.

## celestial

*adj.* relating to the sky or the heavens; of or like the sky or the heavens

*synonym* : heavenly, divine, ethereal

(1) **celestial** bliss, (2) **celestial** navigation

The **celestial** bodies in the night sky were beautiful to behold.

## harmonious

*adj.* characterized by harmony or agreement; free from conflict or disagreement; pleasing or soothing in sound or tone

*synonym* : concordant, consistent, melodious

(1) **harmonious** relationship, (2) **harmonious** blend

The painting's **harmonious** composition and balance of colors made it a masterpiece.

## silent

*adj.* without any or little sound

*synonym* : quiet, hushed, mute

(1) **silent** reading, (2) give **silent** consent

The politician remained **silent** despite intense media scrutiny.

## annoying

*adj.* making someone feel slightly angry

*synonym* : aggravating, bothersome, irksome

(1) **annoying** banner ad, (2) **annoying** habit

The phone call is an **annoying** interruption.

## refrigerator

*n.* an appliance or device used for preserving and cooling food and beverages by maintaining a low temperature within a closed compartment

*synonym* : fridge, cooler, icebox

(1) **refrigerator** magnet, (2) empty **refrigerator**

Don't forget to put the eggs in the **refrigerator** after you've used them.

## paraphrase

*v.* to restate or reword a passage in one's own words, often to clarify or simplify the original meaning

*synonym* : rephrase, reword, reinterpret

(1) **paraphrase** a poem into prose, (2) **paraphrase** the meaning

He **paraphrased** the article in his own words to avoid being accused of plagiarism.

## vast

*adj.* enormous in size, number, amount, or quantity

*synonym* : expansive, extended, boundless

(1) **vast** majority, (2) **vast** desert

A **vast** audience viewed the broadcast.

## heaven

*n.* (of various religious and mythological traditions) a place or state of existence considered to be the abode of the divine, the afterlife, or a higher realm of being; a state of great happiness, contentment, or beauty

*synonym* : paradise, nirvana, utopia

(1) ascend to **heaven**, (2) **heaven** on earth

He felt like **heaven** when he tasted the delicious chocolate cake.

## audible

*adj.* able to be heard; loud enough to be heard clearly

*synonym* : hearable, perceptible, loud enough

(1) **audible** sound, (2) **audible** words

An **audible** sigh from the back of the room broke the silence.

## shatter

*v.* to break suddenly into many pieces

*synonym* : break, crash, destroy

(1) **shatter** the plate, (2) **shatter** a world record

Her husband's death **shattered** her life entirely.

## 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**.

## 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**.

## consonant

*n.* a speech sound that is produced by completely or partially blocking the airflow through the mouth; a letter or group of letters representing a consonant sound, for example, "b," "c," "d," etc.

*synonym* : agreement, harmony, concord

(1) **consonant** blends, (2) a medial **consonant**

The **consonant** sounds at the beginning and end of the word made it easy to pronounce.

## tense

*adj.* unable to relax because of being nervous or worried; stretched tight or rigid

*synonym* : tight, stretched, strained

(1) **tense** atmosphere, (2) have a **tense** face

This story makes me **tense**.

## dissonant

*adj.* sounds that are not in harmony or are in conflict with one another; an uncomfortable or tense feeling caused by conflicting ideas or emotions

*synonym* : discordant, harsh, inharmonious

(1) a **dissonant** voice, (2) **dissonant** note

The **dissonant** sound from the poorly tuned instruments was painful to listen to.

## 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.

## bow

*v.* to bend your knee or body, or lower your head; (noun) a weapon made of a curved piece of wood or other flexible material, strung with a cord and used to shoot arrows

*synonym* : bend, curve, arch

(1) **bow** and greet, (2) a **bow** wave

She **bowed** to the audience after her performance.

## oscillate

*v.* to swing or move back and forth like a pendulum or a wave; to fluctuate or alternate between two points or states; to hesitate or be indecisive

*synonym* : fluctuate, swing, vibrate

(1) **oscillate** back and forth, (2) **oscillate** between joy and anger

The fan in the room **oscillates**, making the airflow more evenly.

## relate

*v.* to establish a connection or association between two or more things; to narrate or tell about an event,

experience, or relationship; to empathize or feel sympathy with someone or something

*synonym* : connect, link, associate

(1) **relate** a story, (2) **relate** a message

He tried to **relate** his experience to the group, but they couldn't understand.

## harmony

*n.* the combination of simultaneous musical notes to produce a pleasing effect; an attractive combination of related things and their properties

*synonym* : balance, accord, congruence

(1) a **harmony** of colors, (2) break a **harmony**

We worked in perfect **harmony**.

## ratio

*n.* the relative size or amount of one thing to another, typically expressed in the form of a fraction or decimal

*synonym* : proportion, rate, quota

(1) debt-to-income **ratio**, (2) **ratio** of boys to girls

The **ratio** of water to sugar in the recipe is 1:2.

## 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.

## interplay

*n.* the way in which two or more things interact or influence each other

*synonym* : interaction, give-and-take, interconnection

(1) **interplay** among neurons, (2) complex **interplay**

The **interplay** of light and shadow creates a dramatic effect in the painting.

## release

*v.* to set free or allow to escape from confinement

*synonym* : free, let go, discharge



(1) **release** a prisoner, (2) **release** CO2 into the air  
The animal rights group worked to **release** the dolphins back into the wild.

## consonance

*n.* agreement or compatibility between opinions, actions, or characters; the repetition of similar sounds, especially consonants, in a phrase or verse, especially to create a pleasing effect

*synonym*: harmony, agreement, concord

(1) imperfect **consonance**, (2) bring into **consonance**  
The **consonance** between the speaker's words and their body language made it clear that they were being sincere.

## dissonance

*n.* a lack of harmony or agreement between people or things; a harsh or discordant combination of sounds

*synonym*: conflict, disharmony, disagreement

(1) cognitive **dissonance**, (2) musical **dissonance**  
The **dissonance** between the two melodies created a sense of tension in the music.

## feat

*n.* a notable or impressive achievement, especially one that requires great skill or bravery

*synonym*: achievement, accomplishment, exploit

(1) intellectual **feat**, (2) **feat** accomplishment  
It is an incredible **feat** to climb Mount Everest, the highest mountain in the world.

## rhythm

*n.* a strong regular repeated pattern of sounds, words, or musical notes that are used in music, poetry, and dancing

*synonym*: beat, cadence, tempo

(1) in samba **rhythm**, (2) irregular heart **rhythm**  
He beat out a jazz **rhythm** on the cajones.

## 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.

**flip** *v.* to turn over into a different position quickly; to throw or toss with a light motion  
*synonym*: throw, jump

(1) **flip** over the pork chop, (2) **flip** a coin  
He **flipped** when he heard that he had been accepted into the university.

**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.

**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**.

**excite** *v.* to make someone feel suddenly enthusiastic or eager  
*synonym*: thrill, exhilarate, animate

(1) **excite** the crowd, (2) **excite** rebellion  
The news of her promotion **excited** her.

**orbit** *n.* the path of an object around a celestial body, especially a planet, star, or moon, under the influence of gravity.  
*synonym*: path, course, trajectory

(1) the **orbit** of the moon, (2) a planetary **orbit**  
The rocket engine is used to put the satellite into **orbit**.

**dwarf** *n.* a person or animal that is much smaller than usual or expected for its type; a celestial body, especially a planet, that is smaller and less massive than a star

*synonym* : midget, lilliputian, pygmy

(1) a potted **dwarf** tree, (2) a wise old **dwarf**

The **dwarf** planet Pluto is much smaller than earth and orbits the sun.

## 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.

## 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.

## detect

*v.* to find or recognize something, especially something difficult to see, hear, etc.

*synonym* : catch, observe, notice

(1) **detect** a bad event, (2) **detect** smuggling across borders

The security camera has **detected** four intruders.

## 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**.

## oxygen

*n.* the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live

(1) the hydrogen binds the **oxygen**, (2) lack of **oxygen**

The passenger grabbed for the **oxygen** mask.

## methane

*n.* a chemical compound with the chemical formula CH<sub>4</sub> 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.

## rocky

*adj.* full of or abounding in rocks; of, relating to, or made of rock

*synonym*: stony, boulder-strewn, rough

(1) **rocky** terrain, (2) **rocky** relationship

The **rocky** road made it difficult to drive on.

## mercury

*n.* a heavy, silvery-white metal that is liquid at room temperature and is used in thermometers, electrical equipment, and other devices; (Mercury) the smallest planet and the nearest to the sun

*synonym*: quicksilver, hydrargyrum, Hg

(1) **mercury** poisoning, (2) **Mercury** Plan

The **mercury** in the thermometer had risen to the boiling point.

## Venus

*n.* the planet second in order from the sun

(1) **Venus** orbiter, (2) surface of **Venus**

They launched a rocket toward **Venus**.

## 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.

## tuck

*v.* to push a stray piece of clothing or material into a particular area or position, especially to make it more orderly or comfortable

*synonym* : insert, wrap, pinch

(1) **tuck** a baby in the blanket, (2) **tuck** into another cigarette

You should **tuck** your shirt into your trousers.

## expand

v. to increase or to make something greater in size, number, or importance

*synonym* : extend, grow, boost

(1) **expand** a lineup, (2) **expand** agricultural output

They hope to **expand** their business worldwide.

## 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.

## render

v. to bring someone or something into a particular state; to provide something such as service, help, etc.

*synonym* : deliver, give, provide

(1) **render** an assessment, (2) **render** the contract void

The jury must **render** a decision on this complex case.

## dive

v. to jump into the water with your head and arms going in first, or to move down to a deeper level underwater

*synonym* : dip, leap, plunge

(1) **dive** into anime communities, (2) **dive** off a cliff

The sperm whale can **dive** to 1,000 meters.

## 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.

## **sunset**

*n.* the time in the evening at which the sun begins to fall below the horizon; (verb) to expire or be terminated automatically at the end of a fixed period

*synonym* : evening, sundown, dusk

(1) **sunset** this function, (2) spectacular **sunset** views  
He is in the **sunset** of his life.

## **molten**

*adj.* in a liquid state as a result of being heated

*synonym* : melted, liquefied, fused

(1) a **molten** image, (2) **molten** lava

The **molten** metal was poured into the mold.

## **lava**

*n.* molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material

*synonym* : molten rock, magma, volcanic rock

(1) **lava** flow, (2) molten **lava**

The volcano's eruption caused a **lava** river to flow down the mountainside.

## **dam**

*n.* a wall constructed over a river to block the flow of water, mainly used to generate energy

*synonym* : barricade, barrier, embankment

(1) **dam-building** program, (2) **dam** collapsing

The break in the **dam** threatened the valley.

## **X-ray**

*n.* a type of electromagnetic radiation that has a wavelength shorter than visible light allowing hidden objects such as bones and organs inside the body to be photographed

*synonym* : roentgenogram, photon radiography

(1) **X-ray** scan, (2) an **X-ray** of arteries

The doctor ordered an **X-ray** to see if there was any damage to the bones.

## **sterilize**

*v.* to make something free of all forms of life, especially bacteria or viruses, by using heat, chemicals, or

radiation

*synonym* : disinfect, sanitize, cleanse

(1) **sterilize** chemically, (2) **sterilize** surfaces

The nurse **sterilized** the instruments before the surgery to prevent any infections.

**strip**

*v.* to remove the surface from something; (noun) a sizeable narrow piece of something such as paper, metal, cloth, etc., or area of land, sea, etc.

*synonym* : deprive, undress, (noun) ribbon

(1) **strip** a tire off, (2) coast **strip**

The doctor advised him to **strip** down for a check.

**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.

**exciting**

*adj.* causing a lot of interest or excitement

*synonym* : exhilarating, stimulating, thrilling

(1) **exciting** football player, (2) **exciting** news

The findings of the experiment were both **exciting** and unexpected.

**resonant**

*adj.* tending to reinforce or prolong sound by sympathetic vibration; having a quality that elicits a similar response or feeling

*synonym* : echoing, reverberating, resonating

(1) **resonant** with the sound, (2) **resonant** cavity

The **resonant** frequency of the guitar string was measured with a tuner.

**chain**

*n.* a series of connected links or objects; a system or group of interconnected elements; a restraint or shackle

*synonym* : series, string, link

(1) **chain** reaction, (2) supply **chain**

The **chain** on my bike broke, leaving me stranded.

## align

v. to put or arrange two or more things in a straight line or to form a straight line

*synonym*: coordinate, regulate, adjust

(1) **align** the economic interest of each other, (2) **align** with a historical trend

Both parties are now entirely ideologically **aligned**.

## gravitational

*adj.* relating to or caused by gravity (= the force that attracts objects towards one another)

*synonym*: weighty, heavy, earthbound

(1) **gravitational** energy, (2) **gravitational** waves

The **gravitational** force of the black hole was so strong that nothing, not even light, could escape.

## tug

v. to pull something quickly and hard, often several times

*synonym*: draw, jerk, pull

(1) **tug** a rope, (2) **tug** at his hand

This movie **tugs** at everyone's heartstrings.

## convert

v. to have a talk with someone; (adjective) reversed in order, relation, or action

*synonym*: alter, remake, transform

(1) **convert** fat into energy, (2) **convert** base 10 to base 16

I want to **convert** my sadness into strength.

## analogy

n. a comparison between similar things that have similar aspects, often used to help explain a principle or concept

*synonym*: metaphor, comparison, parallel

(1) draw **analogy**, (2) historical **analogy**

Some kinds of machine learning models show an **analogy** to how people learn.



## orchestra

*n.* a large group of musicians who play classical music together, usually with instruments such as strings, woodwinds, brass, and percussion

*synonym* : ensemble, symphony, band

(1) full **orchestra**, (2) **orchestra** conductor

The accomplished **orchestra** will give two more performances this week.

## instrument

*n.* an object used to make musical sounds, such as a piano, guitar, or drum; a tool or device used for a specific activity, particularly in specialist or scientific work

*synonym* : apparatus, tool, device

(1) musical **instruments**, (2) surgical **instruments**

This electronic **instrument** is required to undergo periodic inspections to ensure precision.

## resonate

*v.* to be filled with a deep echoing sound

*synonym* : echo, reverberate, resound

(1) deeply **resonate** with the consumers, (2) **resonate** in the same frequency

The sound **resonates** well in this theater.

## disk

*n.* a flat, circular plate, typically made of metal, glass, or plastic, used for storing data or playing music

*synonym* : record, platter, plate

(1) **disk** drive, (2) **disk** space

The computer's hard **disk** was full, so she had to delete some files.

## slide

*v.* to move or cause to move smoothly along a surface without interruption

*synonym* : glide, drift, drop

(1) **slide** a card across the table, (2) **slide** a glance

If necessary, you can **slide** the front seats forward.

## adjust

v. to make a minor modification to something to make it more suited for a new set of conditions or to make it function better.

*synonym* : adapt, alter, acclimate

(1) **adjust** a schedule, (2) **adjust** the rearview mirror

You have to **adjust** your content to the age of the audience.

## compact

*adj.* closely and firmly united or packed together, using very little space; smaller than is usual

*synonym* : packed, tight, consolidated

(1) a **compact** camera, (2) extremely **compact** device

Two countries acted together as if by **compact**.

## mass

*n.* a large amount of a substance with no definite shape or form; a large number of people or things grouped or crowded together

*synonym* : abundance, crowd, mob

(1) a **mass** of molten rock, (2) critical **mass**

The **mass** of people who do not own property is politically impotent.

## tight

*adj.* fixed, fastened, or kept together firmly or closely

*synonym* : closed, secured, cramped

(1) a **tight** game, (2) student on a **tight** budget

The national election was held amid **tight** security.

## aspect

*n.* one part or feature of a situation, problem, subject, etc.

*synonym* : characteristic, element, factor

(1) nontechnical **aspects** of the job, (2) **aspects** of social, political, and economic life

His professional experience includes all **aspects** of media production.

## disrupt

v. to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance

*synonym* : interrupt, disturb, break into

(1) **disrupt** a well-ordered condition, (2) **disrupt** sleep  
I'm so sorry to **disrupt** you when you're pretty busy.

## destroy

v. to ruin or damage severely or completely; to eradicate or eliminate completely

*synonym*: demolish, ruin, obliterate

(1) **destroy** the ecosystem, (2) **destroyed** evidence

The building was **destroyed** in the fire and had to be rebuilt.

## inhabitant

n. a person or an animal that lives in a particular place

*synonym*: dweller, occupant, resident

(1) the early **inhabitants** of Europe, (2) **inhabitant** tax

His family is the oldest **inhabitant** of the island.

## 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.

## fascinate

v. to attract and hold the attention of someone deeply and irresistibly

*synonym*: captivate, intrigue, mesmerize

(1) **fascinate** the public, (2) **fascinate** the young

The magic tricks **fascinated** the children.

## structure

n. the way of construction of something and the arrangement of its parts, or a complex thing constructed of many parts

*synonym*: construction, architecture, establishment

(1) the **structure** of a machine, (2) **structure** and function of the brain

The organizational **structure** of start-ups is often flat and straightforward.

## propose

v. to make a proposal, declare a plan for something

*synonym*:

suggest, offer, recommend

(1) **propose** the amendment, (2) **propose** changes  
I want to **propose** a toast in honor of our longstanding relationship.

## 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.

## planetarium

*n.* a building or facility that is designed to display the positions and movements of stars, planets, and other celestial bodies on a dome-shaped surface using a projection system

(1) optical **planetarium** projector, (2) inflatable **planetarium**  
The **planetarium's** digital projection system provides an immersive experience of outer space.

## vision

*n.* the ability to think about or see the future with imagination and intelligence; the faculty of being able to see

*synonym* : sight, image, concept

(1) a prodigious **vision**, (2) telescopic **vision**  
Driving is difficult for me because of my poor **vision**.

## cosmos

*n.* another name for the universe, mainly used when it is thought of as an ordered system

*synonym* : universe, macrocosm

(1) exploration of **cosmos**, (2) origin of the **cosmos**  
Supercomputers enable scientists to create computational models of the **cosmos**.

## gorgeous

*adj.* wonderful and attractive

*synonym* : beautiful, stunning, attractive

(1) a **gorgeous** meal, (2) **gorgeous** sunset

She wore a **gorgeous** dress to the party, which everyone admired.

## 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**.

## deface

*v.* to mar or spoil the surface or appearance of something, typically by drawing or writing on it

*synonym*: disfigure, blemish, wreck

(1) **deface** private property, (2) **deface** the wall with graffiti

The teacher warned the boys not to **deface** public property.

## observable

*adj.* that can be noticed or seen

*synonym*: visible, perceptible, detectable

(1) **observable** change, (2) experimentally **observable**

Any theorem relies on both **observable** fact and assumption.

## odyssey

*n.* a long wandering and eventful journey; a Greek epic poem attributed to Homer, describing the journey of Odysseus after the fall of Troy

(1) go on a serious **odyssey**, (2) cross-country **odyssey**

He continued the extraordinary **odyssey** with his brother.

## Session 2: Spelling

- |                                   |  |
|-----------------------------------|--|
| 1. the closest ex_____et to Earth | <i>n.</i> a planet that orbits a star outside of the solar system  |
| 2. corollary th_____m             | <i>n.</i> a statement or proposition that can be demonstrated or proved to be true, typically by logical or mathematical reasoning   |
| 3. co_____nt blends               | <i>n.</i> a speech sound that is produced by completely or partially blocking the airflow through the mouth; a letter or group of letters representing a consonant sound, for example, "b," "c," "d," etc. |
| 4. de_____yed evidence            | <i>v.</i> to ruin or damage severely or completely; to eradicate or eliminate completely   |
| 5. pr_____e the amendment         | <i>v.</i> to make a proposal, declare a plan for something   |
| 6. a b_w wave                     | <i>v.</i> to bend your knee or body, or lower your head; (noun) a weapon made of a curved piece of wood or other flexible material, strung with a cord and used to shoot arrows                            |
| 7. ch__n reaction                 | <i>n.</i> a series of connected links or objects; a system or group of interconnected elements; a restraint or shackle   |
| 8. gra_____nal energy             | <i>adj.</i> relating to or caused by gravity (= the force that attracts objects towards one another)   |

ANSWERS: 1. exoplanet, 2. theorem, 3. consonant, 4. destroy, 5. propose, 6. bow, 7. chain, 8. gravitational

9. sp\_\_\_e of influence *n.* a round object or geometric shape that is three-dimensional and symmetrical around a central point; a particular aspect or scope of life or activity
10. gra\_\_\_\_\_nal waves *adj.* relating to or caused by gravity (= the force that attracts objects towards one another)
11. imp\_\_\_\_\_ve performances *adj.* arousing admiration due to size, quality, or skill
12. an imp\_\_\_\_\_ve array of facts *adj.* arousing admiration due to size, quality, or skill
13. permanent br\_\_n damage *n.* the organ inside the head that is responsible for one's movement, thought, memory, and feeling
14. an X-\_\_y of arteries *n.* a type of electromagnetic radiation that has a wavelength shorter than visible light allowing hidden objects such as bones and organs inside the body to be photographed
15. ce\_\_\_\_\_al bliss *adj.* relating to the sky or the heavens; of or like the sky or the heavens
16. au\_\_\_\_\_e sound *adj.* able to be heard; loud enough to be heard clearly
17. musical dis\_\_\_\_\_ce *n.* a lack of harmony or agreement between people or things; a harsh or discordant combination of sounds
18. extreme tem\_\_\_\_\_res *n.* the degree of hotness or coldness of a thing or place
19. d\_m-building program *n.* a wall constructed over a river to block the flow of water, mainly used to generate energy

ANSWERS: 9. sphere, 10. gravitational, 11. impressive, 12. impressive, 13. brain, 14. X-ray, 15. celestial, 16. audible, 17. dissonance, 18. temperature, 19. dam

20. a go\_\_\_\_us meal *adj.* wonderful and attractive
21. a simple me\_\_\_\_y *n.* a succession of musical tones forming part of a larger piece of music
22. a medial co\_\_\_\_\_nt *n.* a speech sound that is produced by completely or partially blocking the airflow through the mouth; a letter or group of letters representing a consonant sound, for example, "b," "c," "d," etc.
23. re\_\_\_\_r an assessment *v.* to bring someone or something into a particular state; to provide something such as service, help, etc.
24. d\_\_k space *n.* a flat, circular plate, typically made of metal, glass, or plastic, used for storing data or playing music
25. har\_\_\_\_\_us relationship *adj.* characterized by harmony or agreement; free from conflict or disagreement; pleasing or soothing in sound or tone
26. ex\_\_\_\_e rebellion *v.* to make someone feel suddenly enthusiastic or eager
27. supply ch\_\_n *n.* a series of connected links or objects; a system or group of interconnected elements; a restraint or shackle
28. Jo\_\_\_\_n planet *adj.* relating to Jupiter or its characteristics
29. ex\_\_\_\_d a lineup *v.* to increase or to make something greater in size, number, or importance
30. he\_\_\_\_n on earth *n.* (of various religious and mythological traditions) a place or state of existence considered to be the abode of the divine, the afterlife, or a higher realm of being; a state of great happiness, contentment, or beauty

ANSWERS: 20. gorgeous, 21. melody, 22. consonant, 23. render, 24. disk, 25. harmonious, 26. excite, 27. chain, 28. Jovian, 29. expand, 30. heaven



31. a ti\_\_t game *adj.* fixed, fastened, or kept together firmly or closely
32. spherical ge\_\_\_\_ry *n.* the area of pure mathematics that deals with the points, lines, curves, and surfaces
33. a lot of re\_\_\_\_d sugar *adj.* made pure by having impurities or unwanted elements removed by processing
34. ce\_\_\_\_al navigation *adj.* relating to the sky or the heavens; of or like the sky or the heavens
35. sl\_\_e a glance *v.* to move or cause to move smoothly along a surface without interruption
36. re\_\_\_\_e CO2 into the air *v.* to set free or allow to escape from confinement
37. re\_\_\_\_nt cavity *adj.* tending to reinforce or prolong sound by sympathetic vibration; having a quality that elicits a similar response or feeling
38. historical an\_\_\_\_y *n.* a comparison between similar things that have similar aspects, often used to help explain a principle or concept
39. d\_\_k drive *n.* a flat, circular plate, typically made of metal, glass, or plastic, used for storing data or playing music
40. give si\_\_\_\_t consent *adj.* without any or little sound
41. a ha\_\_\_\_y of colors *n.* the combination of simultaneous musical notes to produce a pleasing effect; an attractive combination of related things and their properties

ANSWERS: 31. tight, 32. geometry, 33. refined, 34. celestial, 35. slide, 36. release, 37. resonant, 38. analogy, 39. disk, 40. silent, 41. harmony

42. surface of Ve\_\_s                      *n.*    the planet second in order from the sun
43. f\_\_p a coin                              *v.*    to turn over into a different position quickly; to throw or toss with a light motion
44. 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
45. am\_\_\_\_g advances                   *adj.* extremely surprising, especially in a way that you like or admire
46. sl\_\_e a card across the table       *v.*    to move or cause to move smoothly along a surface without interruption
47. a branch of as\_\_\_\_my                *n.*    the scientific study of objects and matter outside the Earth's atmosphere, especially the positions, motions, and evolution of celestial bodies
48. m\_r the reputation                   *v.*    to damage or spoil the appearance or surface of something
49. 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
50. a wise old dw\_\_f                      *n.*    a person or animal that is much smaller than usual or expected for its type; a celestial body, especially a planet, that is smaller and less massive than a star
51. de\_\_\_t smuggling across borders   *v.*    to find or recognize something, especially something difficult to see, hear, etc.

ANSWERS: 42. Venus, 43. flip, 44. universe, 45. amazing, 46. slide, 47. astronomy, 48. mar, 49. tune, 50. dwarf, 51. detect

52. m\_r a proper relationship      *v.* to damage or spoil the appearance or surface of something
53. sh\_\_\_\_r the plate      *v.* to break suddenly into many pieces
54. the or\_\_t of the moon      *n.* the path of an object around a celestial body, especially a planet, star, or moon, under the influence of gravity.
55. adopt a re\_\_\_\_d attitude      *adj.* made pure by having impurities or unwanted elements removed by processing
56. make a pi\_\_h for a new product      *n.* the property of sound that varies with variation in the frequency of vibration; the degree of a slope, especially of a roof; short presentation for selling or sharing something
57. co\_\_\_\_t base 10 to base 16      *v.* to have a talk with someone; (adjective) reversed in order, relation, or action
58. empty ref\_\_\_\_tor      *n.* an appliance or device used for preserving and cooling food and beverages by maintaining a low temperature within a closed compartment
59. imperfect con\_\_\_\_ce      *n.* agreement or compatibility between opinions, actions, or characters; the repetition of similar sounds, especially consonants, in a phrase or verse, especially to create a pleasing effect
60. st\_\_\_\_ze chemically      *v.* to make something free of all forms of life, especially bacteria or viruses, by using heat, chemicals, or radiation

ANSWERS: 52. mar, 53. shatter, 54. orbit, 55. refined, 56. pitch, 57. convert, 58. refrigerator, 59. consonance, 60. sterilize

61. extremely co\_\_\_\_\_t device *adj.* closely and firmly united or packed together, using very little space; smaller than is usual
62. lack of ox\_\_\_\_n *n.* the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live
63. the great di\_\_\_\_\_ry of the century *n.* the act or process of finding information, a place, or an object, or learning about something that was previously not known
64. reduce me\_\_\_\_\_e emissions *n.* a chemical compound with the chemical formula CH<sub>4</sub> with no smell or color, often used as a fuel
65. par\_\_\_\_\_se the meaning *v.* to restate or reword a passage in one's own words, often to clarify or simplify the original meaning
66. ex\_\_\_\_\_ng news *adj.* causing a lot of interest or excitement
67. b\_w and greet *v.* to bend your knee or body, or lower your head; (noun) a weapon made of a curved piece of wood or other flexible material, strung with a cord and used to shoot arrows
68. a potted dw\_\_f tree *n.* a person or animal that is much smaller than usual or expected for its type; a celestial body, especially a planet, that is smaller and less massive than a star
69. a scientific di\_\_\_\_\_ry *n.* the act or process of finding information, a place, or an object, or learning about something that was previously not known

ANSWERS: 61. compact, 62. oxygen, 63. discovery, 64. methane, 65. paraphrase, 66. exciting, 67. bow, 68. dwarf, 69. discovery

70. full or\_\_\_\_\_ra *n.* a large group of musicians who play classical music together, usually with instruments such as strings, woodwinds, brass, and percussion
71. origin of the co\_\_\_\_s *n.* another name for the universe, mainly used when it is thought of as an ordered system
72. in\_\_\_\_\_ay among neurons *n.* the way in which two or more things interact or influence each other
73. par\_\_\_\_\_se a poem into prose *v.* to restate or reword a passage in one's own words, often to clarify or simplify the original meaning
74. the hydrogen binds the ox\_\_\_\_n *n.* the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live
75. t\_g at his hand *v.* to pull something quickly and hard, often several times
76. re\_\_\_\_e a story *v.* to establish a connection or association between two or more things; to narrate or tell about an event, experience, or relationship; to empathize or feel sympathy with someone or something
77. the stars of the Scorpion  
con\_\_\_\_\_ion *n.* a group of stars that form a recognizable pattern and have a name; a group of related or similar ideas, things, or people
78. ra\_\_o of boys to girls *n.* the relative size or amount of one thing to another, typically expressed in the form of a fraction or decimal

ANSWERS: 70. orchestra, 71. cosmos, 72. interplay, 73. paraphrase, 74. oxygen, 75. tug, 76. relate, 77. constellation, 78. ratio

79. 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
80. debt-to-income ra\_\_o      *n.* the relative size or amount of one thing to another, typically expressed in the form of a fraction or decimal
81. di\_\_\_\_\_t a well-ordered condition      *v.* to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
82. h\_\_t after knowledge      *v.* to go after and try to catch wild animals to kill them for food, sport, or profit
83. de\_\_\_e private property      *v.* to mar or spoil the surface or appearance of something, typically by drawing or writing on it
84. critical m\_\_s      *n.* a large amount of a substance with no definite shape or form; a large number of people or things grouped or crowded together
85. Ve\_\_s orbiter      *n.* the planet second in order from the sun
86. ex\_\_\_\_\_et mission      *n.* a planet that orbits a star outside of the solar system
87. fa\_\_\_\_\_te the public      *v.* to attract and hold the attention of someone deeply and irresistibly
88. de\_\_\_t a bad event      *v.* to find or recognize something, especially something difficult to see, hear, etc.
89. Me\_\_\_\_\_y Plan      *n.* a heavy, silvery-white metal that is liquid at room temperature and is used in thermometers, electrical equipment, and other devices; (Mercury) the smallest planet and the nearest to the sun

ANSWERS: 79. atmosphere, 80. ratio, 81. disrupt, 82. hunt, 83. deface, 84. mass, 85. Venus, 86. exoplanet, 87. fascinate, 88. detect, 89. mercury

90. cross-country od\_\_\_\_\_y      *n.* a long wandering and eventful journey; a Greek epic poem attributed to Homer, describing the journey of Odysseus after the fall of Troy
91. retie the st\_\_\_\_g and make it strong      *n.* long, thin material used for tying things together, composed of several twisted threads
92. pr\_\_\_\_\_e changes      *v.* to make a proposal, declare a plan for something
93. nontechnical as\_\_\_\_ts of the job      *n.* one part or feature of a situation, problem, subject, etc.
94. t\_\_k into another cigarette      *v.* to push a stray piece of clothing or material into a particular area or position, especially to make it more orderly or comfortable
95. 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
96. an\_\_\_\_\_ng banner ad      *adj.* making someone feel slightly angry
97. d\_m collapsing      *n.* a wall constructed over a river to block the flow of water, mainly used to generate energy
98. 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
99. mo\_\_\_\_n lava      *adj.* in a liquid state as a result of being heated

ANSWERS: 90. odyssey, 91. string, 92. propose, 93. aspect, 94. tuck, 95. tune, 96. annoying, 97. dam, 98. planet, 99. molten

100. neutrino ast\_\_\_\_\_ics      *n.* the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe
101. a mo\_\_\_n image      *adj.* in a liquid state as a result of being heated
102. st\_\_p a tire off      *v.* to remove the surface from something; (noun) a sizeable narrow piece of something such as paper, metal, cloth, etc., or area of land, sea, etc.
103. as\_\_\_ts of social, political, and economic life      *n.* one part or feature of a situation, problem, subject, etc.
104. b\_\_l market      *n.* a male bovine animal; an investor who has a positive outlook on the market or a particular investment and buys with the expectation of prices increasing
105. b\_\_l fighter      *n.* a male bovine animal; an investor who has a positive outlook on the market or a particular investment and buys with the expectation of prices increasing
106. telescopic vi\_\_\_n      *n.* the ability to think about or see the future with imagination and intelligence; the faculty of being able to see
107. 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
108. su\_\_\_t this function      *n.* the time in the evening at which the sun begins to fall below the horizon; (verb) to expire or be terminated automatically at the end of a fixed period

ANSWERS: 100. astrophysics, 101. molten, 102. strip, 103. aspect, 104. bull, 105. bull, 106. vision, 107. planet, 108. sunset





118. 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
119. os\_\_\_\_\_te back and forth      *v.* to swing or move back and forth like a pendulum or a wave; to fluctuate or alternate between two points or states; to hesitate or be indecisive
120. a gr\_\_\_\_\_l change      *adj.* happening slowly over a long period of time or distance; not steep or abrupt
121. colorless li\_\_\_\_d      *n.* a substance, such as water or oil that flows freely and is neither a solid nor a gas
122. te\_\_e atmosphere      *adj.* unable to relax because of being nervous or worried; stretched tight or rigid
123. in samba rh\_\_\_\_m      *n.* a strong regular repeated pattern of sounds, words, or musical notes that are used in music, poetry, and dancing
124. st\_\_\_\_\_ze surfaces      *v.* to make something free of all forms of life, especially bacteria or viruses, by using heat, chemicals, or radiation
125. ro\_\_y terrain      *adj.* full of or abounding in rocks; of, relating to, or made of rock
126. the per\_\_\_\_\_ve of the battle      *n.* a confident attitude toward something; a particular style of thinking about something
127. look through a te\_\_\_\_\_pe      *n.* a device like a tube in shape containing lenses used to magnify and observe distant objects

ANSWERS: 118. atmosphere, 119. oscillate, 120. gradual, 121. liquid, 122. tense, 123. rhythm, 124. sterilize, 125. rocky, 126. perspective, 127. telescope

128. hu\_\_\_\_g bird *adj.* producing a continuous, low, vibrating sound like that of the bee
129. intellectual f\_\_t *n.* a notable or impressive achievement, especially one that requires great skill or bravery
130. obs\_\_\_\_\_le change *adj.* that can be noticed or seen
131. ex\_\_\_\_\_ng football player *adj.* causing a lot of interest or excitement
132. cognitive com\_\_\_\_\_ty *n.* the state or quality of being complicated or intricate and difficult to understand
133. a planetary or\_\_t *n.* the path of an object around a celestial body, especially a planet, star, or moon, under the influence of gravity.
134. l\_\_a flow *n.* molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material
135. di\_\_\_\_\_t sleep *v.* to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
136. ro\_\_y relationship *adj.* full of or abounding in rocks; of, relating to, or made of rock
137. binary rep\_\_\_\_\_ion *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
138. surgical ins\_\_\_\_\_nts *n.* an object used to make musical sounds, such as a piano, guitar, or drum; a tool or device used for a specific activity, particularly in specialist or scientific work

ANSWERS: 128. humming, 129. feat, 130. observable, 131. exciting, 132. complexity, 133. orbit, 134. lava, 135. disrupt, 136. rocky, 137. representation, 138. instrument

139. or\_\_\_\_\_ra conductor *n.* a large group of musicians who play classical music together, usually with instruments such as strings, woodwinds, brass, and percussion
140. os\_\_\_\_\_te between joy and anger *v.* to swing or move back and forth like a pendulum or a wave; to fluctuate or alternate between two points or states; to hesitate or be indecisive
141. re\_\_\_\_\_ve factors *adj.* considered and evaluated through comparison with something else
142. co\_\_\_\_\_t fat into energy *v.* to have a talk with someone; (adjective) reversed in order, relation, or action
143. r\_m into the ice *v.* to strike or push forcefully, often to cause damage; to batter or break open a door or barrier using brute force
144. a gr\_\_\_\_\_l process *adj.* happening slowly over a long period of time or distance; not steep or abrupt
145. ex\_\_\_d agricultural output *v.* to increase or to make something greater in size, number, or importance
146. d\_\_e into anime communities *v.* to jump into the water with your head and arms going in first, or to move down to a deeper level underwater
147. al\_\_n the economic interest of each other *v.* to put or arrange two or more things in a straight line or to form a straight line
148. bring into con\_\_\_\_\_ce *n.* agreement or compatibility between opinions, actions, or characters; the repetition of similar sounds, especially consonants, in a phrase or verse, especially to create a pleasing effect

ANSWERS: 139. orchestra, 140. oscillate, 141. relative, 142. convert, 143. ram, 144. gradual, 145. expand, 146. dive, 147. align, 148. consonance

149. musical ins\_\_\_\_\_nts      *n.* an object used to make musical sounds, such as a piano, guitar, or drum; a tool or device used for a specific activity, particularly in specialist or scientific work
150. a di\_\_\_\_\_nt voice      *adj.* sounds that are not in harmony or are in conflict with one another; an uncomfortable or tense feeling caused by conflicting ideas or emotions
151. t\_g a rope      *v.* to pull something quickly and hard, often several times
152. f\_\_t accomplishment      *n.* a notable or impressive achievement, especially one that requires great skill or bravery
153. a remote re\_\_\_\_\_ve      *adj.* considered and evaluated through comparison with something else
154. break a ha\_\_\_\_\_y      *n.* the combination of simultaneous musical notes to produce a pleasing effect; an attractive combination of related things and their properties
155. the st\_\_\_\_\_re of a machine      *n.* the way of construction of something and the arrangement of its parts, or a complex thing constructed of many parts
156. t\_\_k a baby in the blanket      *v.* to push a stray piece of clothing or material into a particular area or position, especially to make it more orderly or comfortable
157. de\_\_\_e the wall with graffiti      *v.* to mar or spoil the surface or appearance of something, typically by drawing or writing on it

ANSWERS: 149. instrument, 150. dissonant, 151. tug, 152. feat, 153. relative, 154. harmony, 155. structure, 156. tuck, 157. deface

158. ascend to he\_\_\_n *n.* (of various religious and mythological traditions) a place or state of existence considered to be the abode of the divine, the afterlife, or a higher realm of being; a state of great happiness, contentment, or beauty
159. hazardous li\_\_\_d *n.* a substance, such as water or oil that flows freely and is neither a solid nor a gas
160. student on a ti\_\_t budget *adj.* fixed, fastened, or kept together firmly or closely
161. fa\_\_\_\_\_te the young *v.* to attract and hold the attention of someone deeply and irresistibly
162. go on a serious od\_\_\_\_\_y *n.* a long wandering and eventful journey; a Greek epic poem attributed to Homer, describing the journey of Odysseus after the fall of Troy
163. atmospheric me\_\_\_\_\_e *n.* a chemical compound with the chemical formula CH<sub>4</sub> with no smell or color, often used as a fuel
164. have a te\_\_e face *adj.* unable to relax because of being nervous or worried; stretched tight or rigid
165. ad\_\_\_t the rearview mirror *v.* to make a minor modification to something to make it more suited for a new set of conditions or to make it function better.
166. tense piano st\_\_\_gs *n.* long, thin material used for tying things together, composed of several twisted threads

ANSWERS: 158. heaven, 159. liquid, 160. tight, 161. fascinate, 162. odyssey, 163. methane, 164. tense, 165. adjust, 166. string

167. re\_\_\_e a message *v.* to establish a connection or association between two or more things; to narrate or tell about an event, experience, or relationship; to empathize or feel sympathy with someone or something
168. X-\_\_y scan *n.* a type of electromagnetic radiation that has a wavelength shorter than visible light allowing hidden objects such as bones and organs inside the body to be photographed
169. the early inh\_\_\_\_\_nts of Europe *n.* a person or an animal that lives in a particular place
170. au\_\_\_\_\_e words *adj.* able to be heard; loud enough to be heard clearly
171. al\_\_n with a historical trend *v.* to put or arrange two or more things in a straight line or to form a straight line
172. re\_\_\_\_\_e a prisoner *v.* to set free or allow to escape from confinement
173. a low-pi\_\_hed sound *n.* the property of sound that varies with variation in the frequency of vibration; the degree of a slope, especially of a roof; short presentation for selling or sharing something
174. the most am\_\_\_\_\_g feeling *adj.* extremely surprising, especially in a way that you like or admire
175. northern con\_\_\_\_\_ion *n.* a group of stars that form a recognizable pattern and have a name; a group of related or similar ideas, things, or people

ANSWERS: 167. relate, 168. X-ray, 169. inhabitant, 170. audible, 171. align, 172. release, 173. pitch, 174. amazing, 175. constellation

176. v\_\_t majority *adj.* enormous in size, number, amount, or quantity
177. the atmospheric tem\_\_\_\_\_re *n.* the degree of hotness or coldness of a thing or place
178. h\_\_t a job *v.* to go after and try to catch wild animals to kill them for food, sport, or profit
179. Euclidean ge\_\_\_\_\_ry *n.* the area of pure mathematics that deals with the points, lines, curves, and surfaces
180. a per\_\_\_\_\_ve view *n.* a confident attitude toward something; a particular style of thinking about something
181. Pythagorean th\_\_\_\_\_m *n.* a statement or proposition that can be demonstrated or proved to be true, typically by logical or mathematical reasoning
182. Jo\_\_\_\_n satellites *adj.* relating to Jupiter or its characteristics
183. ad\_\_\_\_t a schedule *v.* to make a minor modification to something to make it more suited for a new set of conditions or to make it function better.
184. basic br\_\_\_\_n function *n.* the organ inside the head that is responsible for one's movement, thought, memory, and feeling
185. an\_\_\_\_\_ng habit *adj.* making someone feel slightly angry
186. a co\_\_\_\_\_t camera *adj.* closely and firmly united or packed together, using very little space; smaller than is usual

ANSWERS: 176. vast, 177. temperature, 178. hunt, 179. geometry, 180. perspective, 181. theorem, 182. Jovian, 183. adjust, 184. brain, 185. annoying, 186. compact



187. d\_\_e off a cliff *v.* to jump into the water with your head and arms going in first, or to move down to a deeper level underwater
188. com\_\_\_\_\_ty theory *n.* the state or quality of being complicated or intricate and difficult to understand
189. ex\_\_\_e the crowd *v.* to make someone feel suddenly enthusiastic or eager
190. hu\_\_\_\_\_g sound *adj.* producing a continuous, low, vibrating sound like that of the bee
191. har\_\_\_\_\_us blend *adj.* characterized by harmony or agreement; free from conflict or disagreement; pleasing or soothing in sound or tone
192. v\_\_t desert *adj.* enormous in size, number, amount, or quantity
193. st\_\_\_\_\_re and function of the brain *n.* the way of construction of something and the arrangement of its parts, or a complex thing constructed of many parts
194. sh\_\_\_\_\_r a world record *v.* to break suddenly into many pieces
195. irregular heart rh\_\_\_m *n.* a strong regular repeated pattern of sounds, words, or musical notes that are used in music, poetry, and dancing
196. ast\_\_\_\_\_ics research *n.* the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe
197. bombs fell at ra\_\_\_m *adj.* made, done, or happening without method, conscious decision, or any regular pattern

ANSWERS: 187. dive, 188. complexity, 189. excite, 190. humming, 191. harmonious, 192. vast, 193. structure, 194. shatter, 195. rhythm, 196. astrophysics, 197. random

198. f\_\_p over the pork chop      *v.* to turn over into a different position quickly; to throw or toss with a light motion
199. r\_m the door open      *v.* to strike or push forcefully, often to cause damage; to batter or break open a door or barrier using brute force
200. a m\_\_s of molten rock      *n.* a large amount of a substance with no definite shape or form; a large number of people or things grouped or crowded together
201. as\_\_\_\_\_my science      *n.* the scientific study of objects and matter outside the Earth's atmosphere, especially the positions, motions, and evolution of celestial bodies
202. a binocular te\_\_\_\_\_pe      *n.* a device like a tube in shape containing lenses used to magnify and observe distant objects
203. inflatable pla\_\_\_\_\_um      *n.* a building or facility that is designed to display the positions and movements of stars, planets, and other celestial bodies on a dome-shaped surface using a projection system
204. go\_\_\_\_\_us sunset      *adj.* wonderful and attractive
205. molten l\_\_a      *n.* molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material
206. ref\_\_\_\_\_tor magnet      *n.* an appliance or device used for preserving and cooling food and beverages by maintaining a low temperature within a closed compartment

ANSWERS: 198. flip, 199. ram, 200. mass, 201. astronomy, 202. telescope, 203. planetarium, 204. gorgeous, 205. lava, 206. refrigerator

207. si\_\_\_t reading *adj.* without any or little sound
208. re\_\_\_\_\_te in the same frequency *v.* to be filled with a deep echoing sound
209. experimentally obs\_\_\_\_\_le *adj.* that can be noticed or seen
210. 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
211. di\_\_\_\_\_nt note *adj.* sounds that are not in harmony or are in conflict with one another; an uncomfortable or tense feeling caused by conflicting ideas or emotions
212. cognitive dis\_\_\_\_\_ce *n.* a lack of harmony or agreement between people or things; a harsh or discordant combination of sounds
213. draw an\_\_\_\_\_y *n.* a comparison between similar things that have similar aspects, often used to help explain a principle or concept
214. exploration of co\_\_\_s *n.* another name for the universe, mainly used when it is thought of as an ordered system
215. the me\_\_\_y of a tune *n.* a succession of musical tones forming part of a larger piece of music
216. re\_\_\_\_\_nt with the sound *adj.* tending to reinforce or prolong sound by sympathetic vibration; having a quality that elicits a similar response or feeling
217. spectacular su\_\_\_t views *n.* the time in the evening at which the sun begins to fall below the horizon; (verb) to expire or be terminated automatically at the end of a fixed period

ANSWERS: 207. silent, 208. resonate, 209. observable, 210. universe, 211. dissonant, 212. dissonance, 213. analogy, 214. cosmos, 215. melody, 216. resonant, 217. sunset

218. a ra\_\_\_m choice

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

219. optical pla\_\_\_\_\_um projector

*n.* a building or facility that is designed to display the positions and movements of stars, planets, and other celestial bodies on a dome-shaped surface using a projection system

220. inh\_\_\_\_\_nt tax

*n.* a person or an animal that lives in a particular place

ANSWERS: 218. random, 219. planetarium, 220. inhabitant

## Session 3: Fill in the Blanks

1. Her voice gradually increased in \_\_\_\_\_.  
*n.* the property of sound that varies with variation in the frequency of vibration; the degree of a slope, especially of a roof; short presentation for selling or sharing something
2. The \_\_\_\_\_ of light and shadow creates a dramatic effect in the painting.  
*n.* the way in which two or more things interact or influence each other
3. She wore a \_\_\_\_\_ of pearls around her neck.  
*n.* long, thin material used for tying things together, composed of several twisted threads
4. Her husband's death \_\_\_\_\_ her life entirely.  
*v.* to break suddenly into many pieces
5. The \_\_\_\_\_ in the thermometer had risen to the boiling point.  
*n.* a heavy, silvery-white metal that is liquid at room temperature and is used in thermometers, electrical equipment, and other devices; (Mercury) the smallest planet and the nearest to the sun
6. Both parties are now entirely ideologically \_\_\_\_\_.  
*v.* to put or arrange two or more things in a straight line or to form a straight line
7. The mathematician pioneered fractal \_\_\_\_\_.  
*n.* the area of pure mathematics that deals with the points, lines, curves, and surfaces

ANSWERS: 1. pitch, 2. interplay, 3. string, 4. shattered, 5. mercury, 6. aligned, 7. geometry

8. The car \_\_\_\_\_ into the wall, causing significant damage.
- v.* to strike or push forcefully, often to cause damage; to batter or break open a door or barrier using brute force
9. The \_\_\_\_\_ digital projection system provides an immersive experience of outer space.
- n.* a building or facility that is designed to display the positions and movements of stars, planets, and other celestial bodies on a dome-shaped surface using a projection system
10. He beat out a jazz \_\_\_\_\_ on the cajones.
- n.* a strong regular repeated pattern of sounds, words, or musical notes that are used in music, poetry, and dancing
11. You have to \_\_\_\_\_ your content to the age of the audience.
- v.* to make a minor modification to something to make it more suited for a new set of conditions or to make it function better.
12. His father's death changed his whole \_\_\_\_\_ on life.
- n.* a confident attitude toward something; a particular style of thinking about something
13. The ignition of \_\_\_\_\_ gas in the plant killed five employees.
- n.* a chemical compound with the chemical formula CH<sub>4</sub> with no smell or color, often used as a fuel
14. His family is the oldest \_\_\_\_\_ of the island.
- n.* a person or an animal that lives in a particular place
15. The building was \_\_\_\_\_ in the fire and had to be rebuilt.
- v.* to ruin or damage severely or completely; to eradicate or eliminate completely

ANSWERS: 8. rammed, 9. planetarium's, 10. rhythm, 11. adjust, 12. perspective, 13. methane, 14. inhabitant, 15. destroyed

16. The teacher warned the boys not to \_\_\_\_\_ public property.  
*v.* to mar or spoil the surface or appearance of something, typically by drawing or writing on it
17. The \_\_\_\_\_ of the bees filled the air as she walked through the garden.  
*adj.* producing a continuous, low, vibrating sound like that of the bee
18. 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
19. They hope to \_\_\_\_\_ their business worldwide.  
*v.* to increase or to make something greater in size, number, or importance
20. The \_\_\_\_\_ frequency of the guitar string was measured with a tuner.  
*adj.* tending to reinforce or prolong sound by sympathetic vibration; having a quality that elicits a similar response or feeling
21. The jury must \_\_\_\_\_ a decision on this complex case.  
*v.* to bring someone or something into a particular state; to provide something such as service, help, etc.
22. You should \_\_\_\_\_ your shirt into your trousers.  
*v.* to push a stray piece of clothing or material into a particular area or position, especially to make it more orderly or comfortable
23. The break in the \_\_\_\_\_ threatened the valley.  
*n.* a wall constructed over a river to block the flow of water, mainly used to generate energy

ANSWERS: 16. deface, 17. humming, 18. brain, 19. expand, 20. resonant, 21. render, 22. tuck, 23. dam

24. The volcano's eruption caused a \_\_\_\_\_ river to flow down the mountainside.  
*n.* molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material
25. The sperm whale can \_\_\_\_\_ to 1,000 meters.  
*v.* to jump into the water with your head and arms going in first, or to move down to a deeper level underwater
26. An \_\_\_\_\_ sigh from the back of the room broke the silence.  
*adj.* able to be heard; loud enough to be heard clearly
27. The magic tricks \_\_\_\_\_ the children.  
*v.* to attract and hold the attention of someone deeply and irresistibly
28. 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
29. The organizational \_\_\_\_\_ of start-ups is often flat and straightforward.  
*n.* the way of construction of something and the arrangement of its parts, or a complex thing constructed of many parts
30. She \_\_\_\_\_ to the audience after her performance.  
*v.* to bend your knee or body, or lower your head; (noun) a weapon made of a curved piece of wood or other flexible material, strung with a cord and used to shoot arrows
31. The country experienced a \_\_\_\_\_ increase in population.  
*adj.* happening slowly over a long period of time or distance; not steep or abrupt

ANSWERS: 24. lava, 25. dive, 26. audible, 27. fascinated, 28. discovery, 29. structure, 30. bowed, 31. gradual



32. The \_\_\_\_\_ sounds at the beginning and end of the word made it easy to pronounce.
- n.* a speech sound that is produced by completely or partially blocking the airflow through the mouth; a letter or group of letters representing a consonant sound, for example, "b," "c," "d," etc.
33. He \_\_\_\_\_ the article in his own words to avoid being accused of plagiarism.
- v.* to restate or reword a passage in one's own words, often to clarify or simplify the original meaning
34. The \_\_\_\_\_ force of the black hole was so strong that nothing, not even light, could escape.
- adj.* relating to or caused by gravity (= the force that attracts objects towards one another)
35. He was studying \_\_\_\_\_ in an attempt to understand the origins of the universe.
- n.* the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe
36. I want to \_\_\_\_\_ a toast in honor of our longstanding relationship.
- v.* to make a proposal, declare a plan for something
37. This movie \_\_\_\_\_ at everyone's heartstrings.
- v.* to pull something quickly and hard, often several times
38. Supercomputers enable scientists to create computational models of the \_\_\_\_\_.
- n.* another name for the universe, mainly used when it is thought of as an ordered system

ANSWERS: 32. consonant, 33. paraphrased, 34. gravitational, 35. astrophysics, 36. propose, 37. tugs, 38. cosmos

39. Most countries prohibit sexual activity between certain close \_\_\_\_\_.

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

40. The national election was held amid \_\_\_\_\_ security.

*adj.* fixed, fastened, or kept together firmly or closely

41. The painting's \_\_\_\_\_ composition and balance of colors made it a masterpiece.

*adj.* characterized by harmony or agreement; free from conflict or disagreement; pleasing or soothing in sound or tone

42. He continued the extraordinary \_\_\_\_\_ with his brother.

*n.* a long wandering and eventful journey; a Greek epic poem attributed to Homer, describing the journey of Odysseus after the fall of Troy

43. A \_\_\_\_\_ audience viewed the broadcast.

*adj.* enormous in size, number, amount, or quantity

44. He \_\_\_\_\_ when he heard that he had been accepted into the university.

*v.* to turn over into a different position quickly; to throw or toss with a light motion

45. The \_\_\_\_\_ metal was poured into the mold.

*adj.* in a liquid state as a result of being heated

46. The politician remained \_\_\_\_\_ despite intense media scrutiny.

*adj.* without any or little sound

47. It is an incredible \_\_\_\_\_ to climb Mount Everest, the highest mountain in the world.

*n.* a notable or impressive achievement, especially one that requires great skill or bravery

ANSWERS: 39. relatives, 40. tight, 41. harmonious, 42. odyssey, 43. vast, 44. flipped, 45. molten, 46. silent, 47. feat

48. The \_\_\_\_\_ of water to sugar in the recipe is 1:2.

- n.* the relative size or amount of one thing to another, typically expressed in the form of a fraction or decimal

49. The fan in the room \_\_\_\_\_ making the airflow more evenly.

- v.* to swing or move back and forth like a pendulum or a wave; to fluctuate or alternate between two points or states; to hesitate or be indecisive

50. 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

51. 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

52. This story makes me \_\_\_\_\_.

- adj.* unable to relax because of being nervous or worried; stretched tight or rigid

53. 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

54. The security camera has \_\_\_\_\_ four intruders.

- v.* to find or recognize something, especially something difficult to see, hear, etc.

55. This electronic \_\_\_\_\_ is required to undergo periodic inspections to ensure precision.

- n.* an object used to make musical sounds, such as a piano, guitar, or drum; a tool or device used for a specific activity, particularly in specialist or scientific work

ANSWERS: 48. ratio, 49. oscillates, 50. universe, 51. complexity, 52. tense, 53. exoplanet, 54. detected, 55. instrument

56. The farmer raised a \_\_\_\_\_ on his ranch for breeding purposes.

- n.* a male bovine animal; an investor who has a positive outlook on the market or a particular investment and buys with the expectation of prices increasing

57. The \_\_\_\_\_ bodies in the night sky were beautiful to behold.

- adj.* relating to the sky or the heavens; of or like the sky or the heavens

58. The rocket engine is used to put the satellite into \_\_\_\_\_.

- n.* the path of an object around a celestial body, especially a planet, star, or moon, under the influence of gravity.

59. She wore a \_\_\_\_\_ dress to the party, which everyone admired.

- adj.* wonderful and attractive

60. Driving is difficult for me because of my poor \_\_\_\_\_.

- n.* the ability to think about or see the future with imagination and intelligence; the faculty of being able to see

61. He felt like \_\_\_\_\_ when he tasted the delicious chocolate cake.

- n.* (of various religious and mythological traditions) a place or state of existence considered to be the abode of the divine, the afterlife, or a higher realm of being; a state of great happiness, contentment, or beauty

62. Any theorem relies on both \_\_\_\_\_ fact and assumption.

- adj.* that can be noticed or seen

63. The \_\_\_\_\_ planet Pluto is much smaller than earth and orbits the sun.

- n.* a person or animal that is much smaller than usual or expected for its type; a celestial body, especially a planet, that is smaller and less massive than a star

ANSWERS: 56. bull, 57. celestial, 58. orbit, 59. gorgeous, 60. vision, 61. heaven, 62. observable, 63. dwarf

64. His professional experience includes all \_\_\_\_\_ of media production.  
*n.* one part or feature of a situation, problem, subject, etc.
65. The \_\_\_\_\_ of people who do not own property is politically impotent.  
*n.* a large amount of a substance with no definite shape or form; a large number of people or things grouped or crowded together
66. They launched a rocket toward \_\_\_\_\_.  
*n.* the planet second in order from the sun
67. 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
68. The news of her promotion \_\_\_\_\_ her.  
*v.* to make someone feel suddenly enthusiastic or eager
69. The golfer recorded an \_\_\_\_\_ distance.  
*adj.* extremely surprising, especially in a way that you like or admire
70. The nurse \_\_\_\_\_ the instruments before the surgery to prevent any infections.  
*v.* to make something free of all forms of life, especially bacteria or viruses, by using heat, chemicals, or radiation
71. The \_\_\_\_\_ road made it difficult to drive on.  
*adj.* full of or abounding in rocks; of, relating to, or made of rock

ANSWERS: 64. aspects, 65. mass, 66. Venus, 67. representation, 68. excited, 69. amazing, 70. sterilized, 71. rocky

72. The doctor advised him to \_\_\_\_\_ down for a check.

- v.* to remove the surface from something; (noun) a sizeable narrow piece of something such as paper, metal, cloth, etc., or area of land, sea, etc.

73. We worked in perfect \_\_\_\_\_.

- n.* the combination of simultaneous musical notes to produce a pleasing effect; an attractive combination of related things and their properties

74. The budget reduction was an \_\_\_\_\_ feat for our nation.

- adj.* arousing admiration due to size, quality, or skill

75. The phone call is an \_\_\_\_\_ interruption.

- adj.* making someone feel slightly angry

76. Gödel's incompleteness \_\_\_\_\_ prove the limitations of formal systems, including mathematical ones.

- n.* a statement or proposition that can be demonstrated or proved to be true, typically by logical or mathematical reasoning

77. The \_\_\_\_\_ moon Europa is believed to have an ocean beneath its icy surface.

- adj.* relating to Jupiter or its characteristics

78. Navigators still use the Little Bear \_\_\_\_\_ at sea.

- n.* a group of stars that form a recognizable pattern and have a name; a group of related or similar ideas, things, or people

79. He is in the \_\_\_\_\_ of his life.

- n.* the time in the evening at which the sun begins to fall below the horizon; (verb) to expire or be terminated automatically at the end of a fixed period

ANSWERS: 72. strip, 73. harmony, 74. impressive, 75. annoying, 76. theorems, 77. Jovian, 78. constellation, 79. sunset

80. Hounds \_\_\_\_\_ their prey by using their keen scent.

*v.* to go after and try to catch wild animals to kill them for food, sport, or profit

81. The \_\_\_\_\_ sound from the poorly tuned instruments was painful to listen to.

*adj.* sounds that are not in harmony or are in conflict with one another; an uncomfortable or tense feeling caused by conflicting ideas or emotions

82. The passenger grabbed for the \_\_\_\_\_ mask.

*n.* the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live

83. 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

84. The sound \_\_\_\_\_ well in this theater.

*v.* to be filled with a deep echoing sound

85. 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

86. Don't forget to put the eggs in the \_\_\_\_\_ after you've used them.

*n.* an appliance or device used for preserving and cooling food and beverages by maintaining a low temperature within a closed compartment

87. The scratches on the car \_\_\_\_\_ its otherwise perfect appearance.

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

ANSWERS: 80. hunt, 81. dissonant, 82. oxygen, 83. tune, 84. resonates, 85. liquid, 86. refrigerator, 87. marred

88. Two countries acted together as if by \_\_\_\_\_.

*adj.* closely and firmly united or packed together, using very little space; smaller than is usual

89. He tried to \_\_\_\_\_ his experience to the group, but they couldn't understand.

*v.* to establish a connection or association between two or more things; to narrate or tell about an event, experience, or relationship; to empathize or feel sympathy with someone or something

90. The computer's hard \_\_\_\_\_ was full, so she had to delete some files.

*n.* a flat, circular plate, typically made of metal, glass, or plastic, used for storing data or playing music

91. This harmonious \_\_\_\_\_ immortalized its composer.

*n.* a succession of musical tones forming part of a larger piece of music

92. To find drunk drivers, police conduct \_\_\_\_\_ tests.

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

93. The \_\_\_\_\_ between the speaker's words and their body language made it clear that they were being sincere.

*n.* agreement or compatibility between opinions, actions, or characters; the repetition of similar sounds, especially consonants, in a phrase or verse, especially to create a pleasing effect

94. The animal rights group worked to \_\_\_\_\_ the dolphins back into the wild.

*v.* to set free or allow to escape from confinement

95. Some kinds of machine learning models show an \_\_\_\_\_ to how people learn.

*n.* a comparison between similar things that have similar aspects, often used to help explain a principle or concept

ANSWERS: 88. compact, 89. relate, 90. disk, 91. melody, 92. random, 93. consonance, 94. release, 95. analogy



96. He had a deep passion for extragalactic \_\_\_\_\_ and spent hours observing the night sky.

- n.* the scientific study of objects and matter outside the Earth's atmosphere, especially the positions, motions, and evolution of celestial bodies

97. Cities around the world set records for highest \_\_\_\_\_ this summer.

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

98. The \_\_\_\_\_ between the two melodies created a sense of tension in the music.

- n.* a lack of harmony or agreement between people or things; a harsh or discordant combination of sounds

99. 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

100. The doctor ordered an \_\_\_\_\_ to see if there was any damage to the bones.

- n.* a type of electromagnetic radiation that has a wavelength shorter than visible light allowing hidden objects such as bones and organs inside the body to be photographed

101. She was highly \_\_\_\_\_ in her choice of apparel.

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

102. 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

103. I want to \_\_\_\_\_ my sadness into strength.

- v.* to have a talk with someone; (adjective) reversed in order, relation, or action

ANSWERS: 96. astronomy, 97. temperatures, 98. dissonance, 99. telescope, 100. X-ray, 101. refined, 102. planet, 103. convert

104. The \_\_\_\_\_ on my bike broke, leaving me stranded.

- n.* a series of connected links or objects; a system or group of interconnected elements; a restraint or shackle

105. I'm so sorry to \_\_\_\_\_ you when you're pretty busy.

- v.* to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance

106. 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

107. If necessary, you can \_\_\_\_\_ the front seats forward.

- v.* to move or cause to move smoothly along a surface without interruption

108. The findings of the experiment were both \_\_\_\_\_ and unexpected.

- adj.* causing a lot of interest or excitement

109. The \_\_\_\_\_ of the earth is divided into several layers including the crust, mantle, and core.

- n.* a round object or geometric shape that is three-dimensional and symmetrical around a central point; a particular aspect or scope of life or activity

110. The accomplished \_\_\_\_\_ will give two more performances this week.

- n.* a large group of musicians who play classical music together, usually with instruments such as strings, woodwinds, brass, and percussion

ANSWERS: 104. chain, 105. disrupt, 106. atmosphere, 107. slide, 108. exciting, 109. sphere, 110. orchestra