

# Englist.me



## Vocabulary Builder Reference from...

*Fabio Pacucci: Can a black hole be destroyed? | TED Talk*

[https://www.ted.com/talks/fabio\\_pacucci\\_can\\_a\\_black\\_hole\\_be\\_destroyed](https://www.ted.com/talks/fabio_pacucci_can_a_black_hole_be_destroyed)

### All Words

#### IMPORTANT

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## Session 1: Word List

### destructive

*adj.* causing or able to cause tremendous and irreparable damage

*synonym*: destroying, harmful, disastrous

(1) lead to **destructive** behavior, (2) a habit **destructive** to health

It was the most **destructive** storm in decades.

### 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.

### singularity

*n.* (of black holes) a point or region in space-time where the gravitational field is infinite, and matter and energy are infinitely dense; the state, fact, quality, or condition of being one of a kind

*synonym*: black hole, individualism, uniqueness

(1) black hole **singularity**, (2) the **singularity** of the Divine  
Scientists have predicted that the universe will end in a **singularity**, where all matter will collapse into an infinitely dense point.

## asteroid

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

*synonym* : minor planet, planetoid, rocky planetesimal

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

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

## 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.

## extreme

*adj.* very great in amount or degree

*synonym* : farthestmost, outermost, fierce

(1) **extreme** sports, (2) **extreme** weather events

Solar gravity creates **extreme** pressures and temperatures.

## 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.

## horizon

*n.* the line at which the earth's surface and the sky appear to meet; the range of interest or activity that can be anticipated

*synonym* : skyline, view, visible boundary

(1) the event **horizon** of a black hole, (2) business **horizon**

As the sun set, the colors of the sky merged with the **horizon**, creating a beautiful orange and pink hue.

## disappear

*v.* to cease to exist or be visible

*synonym* : fade, evaporate, vanish

(1) **disappear** without a trace, (2) **disappear** after a week

They watched the train **disappear** into the distance.

## emerge

*v.* to move out of or away from something and become visible

*synonym*: arise, occur, appear

(1) **emerge** as a butterfly, (2) **emerge** from poverty

During colonial eras, new migratory patterns **emerged**.

## 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.

## 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.

## radial

*adj.* of or relating to rays or the radii of a circle; spreading out from a central point

*synonym*: concentric, central, spoke-like

(1) **radial** symmetry, (2) in a **radial** direction

The **radial** design of the wheel allows for maximum strength and stability.

## process

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

*synonym*: procedure, method, system

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

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

complicated.

## damage

v. to harm or cause injury to something or someone, often resulting in decreased value or functionality; to impair or negatively affect something, such as a reputation or relationship; (noun) harm or injury that is caused to a person, thing, or entity

*synonym*: harm, impair, injure

(1) **damage** a relationship, (2) **damage** assessment

During the surgery, the doctor had to be extremely cautious not to **damage** a blood vessel.

## 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.

## merge

v. to combine or integrate things, or to cause this to happen

*synonym*: combine, join, coalesce

(1) **merge** into a new party, (2) **merge** those systems into a new one

This consulting firm decided to **merge** the two companies into one.

## 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.

## 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.

## consist

*v.* to be composed or made up of

*synonym*: lie in, comprise, exist

(1) **consist** mainly of cells, (2) **consist** only in knowing facts

This examination **consists** of five problems to solve.

## entirely

*adv.* completely

*synonym*: completely, fully, totally

(1) **entirely** satisfied with the meal, (2) he was **entirely** to blame

Later, his claim was found to be **entirely** false.

## 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.

## evaporate

*v.* to turn a liquid into a gas; to become less intense and disappear gradually

*synonym*: vaporize, disappear, vanish

(1) **evaporate** the water, (2) **evaporate** almost overnight

The sun will **evaporate** the mist.

## hawk

*n.* a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations

*synonym*: militarist, jingo, aggressor

(1) cast off a **hawk**, (2) congressional **hawk**

That team signed a center forward who was a ball- **hawk**.

## 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.

## 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.

## well-established

*adj.* firmly established and widely recognized; having a long history of success or acceptance in a particular field or industry

*synonym* : recognized, conventional

(1) **well-established** company, (2) **well-established** tradition

The restaurant is **well-established** in the community, having been open for over 50 years.

## phenomenon

*n.* something that exists and can be perceptible, especially one that is not fully understood

*synonym* : marvel, wonder, splendor

(1) natural **phenomenon**, (2) historical **phenomenon**

A rainbow is a natural **phenomenon**.

## quantum

*n.* the smallest amount or unit of something, especially (electromagnetic) energy

(1) probabilistic **quantum** theory, (2) laws of **quantum** mechanics

Big techs are now eager to develop **quantum** computers.

## fluctuation

*n.* a change, or the process of changing, that frequently happens, especially from one extreme to another; the quality of being unsteady and subject to changes

*synonym* : change, instability, flux

(1) price **fluctuations**, (2) **fluctuation** of water level

Temperature **fluctuations** are often milder in oceanfront

areas.

## 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.

## accord

*n.* an official agreement or treaty between two organizations, countries, etc.; (verb) allow to have

*synonym*: alliance, pact, agreement

(1) **accord** with public opinion, (2) binational **accord**

The organization finally signed a peace **accord**.

## mechanics

*n.* the branch of physics that deals with the study of motion, forces, and energy; (mechanic) someone whose occupation is repairing and maintaining automobiles

*synonym*: kinematics, dynamics

(1) **mechanics** equation, (2) **mechanics** of the game

He studied **mechanics** in college and now works as an engineer.

## spacetime

*n.* a four-dimensional continuum consisting of three dimensions of space and one dimension of time, used to describe the physical universe according to Einstein's theory of general relativity

(1) **spacetime** continuum, (2) quantum **spacetime**

The curvature of **spacetime** is affected by the presence of mass and energy.

## fluctuate

*v.* to rise and fall irregularly or unexpectedly; to vary or change often and unpredictably

*synonym*: vary, oscillate, sway

(1) **fluctuate** prices, (2) **fluctuate** rapidly

Stock prices **fluctuate** daily based on market demand and supply.

## continuous

*adj.* occurring or existing without a pause or interruption  
*synonym*: ceaseless, regular, repeated

(1) **continuous** improvement, (2) a **continuous** row of warehouses

The heavy snow has been **continuous** since last morning.

## destruction

*n.* the act of causing so much damage to something  
*synonym*: devastation, annihilation, ruin

(1) path of **destruction**, (2) cyclonic **destruction**

The extinction of several subspecies has been linked to climate change and habitat **destruction**.

## virtual

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

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

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

## particle

*n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance  
*synonym*: atom, grain, bit

(1) charged **particle**, (2) **particle** energy

We can calculate the position of the **particles** statistically.

## opposition

*n.* the act of disagreeing or resisting; the state of strong disagreement  
*synonym*: resistance, hostility, antagonism

(1) **opposition** campaign, (2) meet with **opposition**

The **opposition** party strongly disagreed with the government's proposed legislation.

## antiparticle

*n.* a subatomic particle that has the same mass and opposite charge as its corresponding particle (e.g., a positron is the antiparticle of an electron)  
*synonym*: opposite, antimatter, anti-substance

(1) **antiparticle** physics, (2) **antiparticle** collisions



When an **antiparticle** meets its corresponding particle, the two annihilate.

## normally

*adv.* usually; under normal conditions

*synonym*: commonly, generally, naturally

(1) complete **normally**, (2) not **normally** drink much

I don't **normally** take a vacation in the middle of summer.

## collide

*v.* to hit something violently when moving

*synonym*: clash, slam, contradict

(1) **collide** head-on, (2) **collide** in midair

The interests of the two countries **collide**.

## annihilate

*v.* to destroy completely; to cause something to cease to exist

*synonym*: destroy, obliterate, eradicate

(1) **annihilate** the enemy, (2) **annihilate** all doubts

The virus had the potential to **annihilate** entire populations if left unchecked.

## preserve

*v.* to keep or maintain a particular quality, feature, etc., especially to prevent it from decaying, being damaged, or being destroyed

*synonym*: conserve, care for, maintain

(1) **preserve** my strength, (2) **preserve** a country's heritage

They worked hard to **preserve** the nature of their native lands.

## counterpart

*n.* a person or thing that corresponds to or has the same function as another person or thing

*synonym*: equivalent, analogue, match

(1) **counterpart** agreement, (2) negotiating **counterpart**

His **counterpart** in the other company is responsible for marketing.

## observer

*n.* a person who watches or notices someone or something but has no active part in it

*synonym* : spectator, onlooker, watcher

(1) a shrewd **observer**, (2) an **observer** in the region

According to the theory of relativity, time is different for each **observer**.

## 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.

## absorb

*v.* to take in a fluid or other substance gradually

*synonym* : consume, soak, ingest

(1) **absorb** energy, (2) **absorb** a shock

The sponge **absorbs** water well.

## addition

*n.* the act or process of adding something to something else; the process of adding numbers

*synonym* : accumulation, expansion, addendum

(1) chemical **addition**, (2) **addition** of vectors

In **addition**, private corporations provide healthcare services.

## excruciating

*adj.* extremely painful, intense, or distressing; causing great physical or emotional suffering

*synonym* : agonizing, unbearable, torturous

(1) **excruciating** ordeal, (2) **excruciating** embarrassment

The **excruciating** pain in his ankle made it difficult to walk.

## branch

*n.* a division of a tree or woody shrub that grows out from the trunk or a main stem; a division of some larger or more complex organization

*synonym* : limb, twig, bough

(1) **branch** office, (2) a **branch** pipe

The **branch** of the tree had fallen and blocked the road.

## physics

*n.* the science of matter and energy and their interactions

(1) nuclear **physics**, (2) laws of **physics**

He studied the **physics** of radiation.

## thermodynamics

*n.* the area of physics that deals with heat, work, and temperature and their relation to energy, entropy, and the physical properties of matter and radiation

(1) applied **thermodynamics**, (2) the laws of **thermodynamics**

The second law of **thermodynamics** denies the existence of a perpetual motion engine.

## 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.

## environment

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

*synonym*: atmosphere, surroundings, climate

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

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

## perceive

*v.* to become aware or conscious of something through the senses

*synonym*: sense, discern, feel

(1) **perceive** a threat, (2) **perceive** light

Australia is widely **perceived** as having low levels of corruption.

## emission

*n.* the act of production or sending out gas, heat, light, etc.

*synonym*: emanation, radiation, discharge

(1) global **emissions** of greenhouse gases, (2) the **emission** of light

There are five distinct **emissions** at five unique wavelengths.

## 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.

## similarly

*adv.* in almost the same way  
*synonym*: also, likewise, ditto

(1) **similarly** situated, (2) have **similarly** great abilities

We argue that wages for temporary workers should **similarly** rise.

## define

*v.* to state or explain precisely the nature, scope, or meaning of something  
*synonym*: characterize, depict, express

(1) **define** a word, (2) **define** my position

To advance this discussion, we must **define** "success" rigorously.

## massive

*adj.* enormous amount; very heavy and solid  
*synonym*: enormous, giant, immense

(1) **massive** amounts, (2) **massive** stars

The recent economic downturn has resulted in **massive** layoffs.

## absolute

*adj.* perfect or complete or to the most considerable degree possible

*synonym*: complete, infrangible, indisputable

(1) **absolute** loyalty, (2) an **absolute** must

Gandhi had an **absolute** zeal for nonviolence.

## degree

*n.* a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment

*synonym* : level, qualification, diploma

(1) bachelor's **degree**, (2) **degree** centigrade

She received her **degree** in psychology from the university.

## breath

*n.* the air that is taken into and expelled from your lungs; the process of taking into and expelling air from your lungs

*synonym* : air, puff, whiff

(1) hold your **breath**, (2) **breath** of wind

He bated his **breath** when talking about this affair.

## accrete

*v.* to accumulate or grow by gradual addition or accumulation; to form into a larger mass or body over time; to increase or expand naturally or organically

*synonym* : accumulate, grow, build up

(1) **accrete** material, (2) **accrete** into a larger entity

Over the years, the layers of sediment gradually **accrete** and form new rock formations.

## magnitude

*n.* the extent, level, importance, or amount of something

*synonym* : size, extent, level

(1) a star of the first **magnitude**, (2) the **magnitude** of the disaster

The **magnitude** of the earthquake was measured at 7.8 on the Richter scale.

## metric

*adj.* using or relating to the meter as a unit of length; a system of related measures that facilitates the quantification of some particular characteristic

*synonym* : metrical, measured

(1) **metric** units, (2) key performance **metrics**

In the **metric** system, measurements are made in meters and liters.

## increasingly

*adv.* more and more

*synonym* : more and more, progressively

(1) **increasingly** become common, (2) face **increasingly** complicated challenges

Our company found it **increasingly** difficult to keep up with the competition.

## 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.

## gamma

*n.* the third letter of the Greek alphabet; a type of radiation having the shortest wavelength and highest energy of electromagnetic waves

*synonym* : ray, radiation, emission

(1) **gamma** radiation, (2) **gamma** particles

**Gamma** rays are a type of high-energy radiation that can be harmful to living organisms.

## ray

*n.* a narrow line of light, heat, or another form of energy

*synonym* : beam, light, glimmer

(1) opaque to X- **rays**, (2) effect of cosmic **rays**

Gamma **rays** penetrate body tissues and cause cell damage.

## flash

*n.* a sudden intense burst of radiant energy; a momentary brightness

*synonym* : sparkle, gleam, glimmer

(1) a **flash** of lightning, (2) brilliant **flash**

These heavy rains caused **flash** floods on several islands.

## 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.

## trace

*v.* to find or discover someone or something that was lost

*synonym* : seek, follow, depict

(1) **trace** a telephone call, (2) **trace** back to medieval times  
Let's **trace** the origins of some familiar foreign words.

## primordial

*adj.* existing from the beginning of time or the start of a particular process; relating to the earliest stage of the universe

*synonym* : ancient, original, primary

(1) **primordial** forms of life, (2) **primordial** gas

The discovery of the **primordial** soup was a crucial step in understanding the origins of life on Earth.

## dawn

*n.* the time of day when the sun's light starts to show in the sky

*synonym* : daybreak, sunrise, advent

(1) the wan light of **dawn**, (2) crack of **dawn**

Missile assaults on the capital continued around **dawn**.

## inconceivable

*adj.* hard to imagine or believe

*synonym* : unimaginable, impossible, unthinkable

(1) **inconceivable** pain, (2) **inconceivable** ideas

It would be **inconceivable** for him to alter his behavior.

## terrifying

*adj.* very frightening or intimidating

*synonym* : frightening, intimidating, alarming

(1) **terrifying** experience, (2) **terrifying** events

Large earthquakes often generate **terrifying** tsunamis.

## impervious

*adj.* unable to be affected by something; not allowing something to pass through, especially fluid; unresponsive or indifferent to criticism or persuasion

*synonym* : impregnable, invulnerable, indestructible

(1) **impervious** to criticism, (2) **impervious** material  
The jacket is **impervious** to water and will keep you dry in the rain.

## **blaze**

*v.* to burst into flame or light up intensely; to move in a trailblazing manner; to shine brightly or conspicuously  
*synonym*: burn, flame, ignite

(1) **blaze** a trail, (2) **blaze** with fury

The forest fire continued to **blaze** out of control, threatening nearby homes.

## **glory**

*n.* great honor or success won by notable achievements  
*synonym*: acclaim, credit, recognition

(1) greatest **glory**, (2) former **glory**

It is preferable to die in **glory** than to live in dishonor.



## Session 2: Spelling

1. ant\_\_\_\_\_cle physics *n.* a subatomic particle that has the same mass and opposite charge as its corresponding particle (e.g., a positron is the antiparticle of an electron)
  
2. decision-making pr\_\_\_\_\_s *n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products
  
3. key performance me\_\_\_\_\_cs *adj.* using or relating to the meter as a unit of length; a system of related measures that facilitates the quantification of some particular characteristic
  
4. de\_\_\_\_\_yed evidence *v.* to ruin or damage severely or completely; to eradicate or eliminate completely
  
5. crack of d\_\_n *n.* the time of day when the sun's light starts to show in the sky
  
6. ant\_\_\_\_\_cle collisions *n.* a subatomic particle that has the same mass and opposite charge as its corresponding particle (e.g., a positron is the antiparticle of an electron)
  
7. the wan light of d\_\_n *n.* the time of day when the sun's light starts to show in the sky

ANSWERS: 1. antiparticle, 2. process, 3. metric, 4. destroy, 5. dawn, 6. antiparticle, 7. dawn

8. ann\_\_\_\_\_te the enemy      *v.* to destroy completely; to cause something to cease to exist
9. ob\_\_\_\_\_e wildlife      *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
10. nuclear ph\_\_\_\_\_s      *n.* the science of matter and energy and their interactions
11. pr\_\_\_\_\_ve my strength      *v.* to keep or maintain a particular quality, feature, etc., especially to prevent it from decaying, being damaged, or being destroyed
12. wel\_\_\_\_\_hed company      *adj.* firmly established and widely recognized; having a long history of success or acceptance in a particular field or industry
13. me\_\_\_c units      *adj.* using or relating to the meter as a unit of length; a system of related measures that facilitates the quantification of some particular characteristic
14. extreme tem\_\_\_\_\_res      *n.* the degree of hotness or coldness of a thing or place
15. me\_\_\_\_\_cs of the game      *n.* the branch of physics that deals with the study of motion, forces, and energy; (mechanic) someone whose occupation is repairing and maintaining automobiles
16. en\_\_\_\_\_ly satisfied with the meal      *adv.* completely

ANSWERS: 8. annihilate, 9. observe, 10. physics, 11. preserve, 12. well-established, 13. metric, 14. temperature, 15. mechanics, 16. entirely

17. the em\_\_\_\_on of light *n.* the act of production or sending out gas, heat, light, etc.
18. an ab\_\_\_\_te must *adj.* perfect or complete or to the most considerable degree possible
19. inc\_\_\_\_ble ideas *adj.* hard to imagine or believe
20. exc\_\_\_\_ing embarrassment *adj.* extremely painful, intense, or distressing; causing great physical or emotional suffering
21. me\_\_e into a new party *v.* to combine or integrate things, or to cause this to happen
22. ab\_\_\_\_b energy *v.* to take in a fluid or other substance gradually
23. ex\_\_\_\_e sports *adj.* very great in amount or degree
24. natural phe\_\_\_\_on *n.* something that exists and can be perceptible, especially one that is not fully understood
25. chaotic env\_\_\_\_nt *n.* the natural world such as air, water, and land in which humans, animals, and plants live
26. di\_\_\_\_ar after a week *v.* to cease to exist or be visible
27. va\_\_\_\_m packing *n.* a space empty of matter; a device or tool used for cleaning or removing debris by creating suction
28. lead to des\_\_\_\_ve behavior *adj.* causing or able to cause tremendous and irreparable damage
29. cast off a h\_\_k *n.* a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations

ANSWERS: 17. emission, 18. absolute, 19. inconceivable, 20. excruciating, 21. merge, 22. absorb, 23. extreme, 24. phenomenon, 25. environment, 26. disappear, 27. vacuum, 28. destructive, 29. hawk

30. the atmospheric tem\_\_\_\_\_re      *n.* the degree of hotness or coldness of a thing or place
31. 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
32. quantum sp\_\_\_\_\_me      *n.* a four-dimensional continuum consisting of three dimensions of space and one dimension of time, used to describe the physical universe according to Einstein's theory of general relativity
33. ce\_\_\_\_\_al bliss      *adj.* relating to the sky or the heavens; of or like the sky or the heavens
34. co\_\_\_\_\_t only in knowing facts      *v.* to be composed or made up of
35. br\_\_\_\_h of wind      *n.* the air that is taken into and expelled from your lungs; the process of taking into and expelling air from your lungs
36. de\_\_\_\_\_y the ecosystem      *v.* to ruin or damage severely or completely; to eradicate or eliminate completely
37. env\_\_\_\_\_nt affairs      *n.* the natural world such as air, water, and land in which humans, animals, and plants live
38. 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
39. ma\_\_\_\_\_e stars      *adj.* enormous amount; very heavy and solid

ANSWERS: 30. temperature, 31. radiation, 32. spacetime, 33. celestial, 34. consist, 35. breath, 36. destroy, 37. environment, 38. mass, 39. massive

40. a di\_\_\_\_t memory *adj.* far away in space, time, or where you are; far apart in relevance, relationship, or kinship
41. e\_\_t air pollution *v.* to give off or send out something such as light, heat, sound, gas, etc.
42. 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
43. the laws of the\_\_\_\_\_ics *n.* the area of physics that deals with heat, work, and temperature and their relation to energy, entropy, and the physical properties of matter and radiation
44. de\_\_\_e a word *v.* to state or explain precisely the nature, scope, or meaning of something
45. re\_\_\_\_\_e a prisoner *v.* to set free or allow to escape from confinement
46. bl\_\_e a trail *v.* to burst into flame or light up intensely; to move in a trailblazing manner; to shine brightly or conspicuously
47. gra\_\_\_\_\_nal waves *adj.* relating to or caused by gravity (= the force that attracts objects towards one another)
48. tr\_\_e a telephone call *v.* to find or discover someone or something that was lost
49. 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

ANSWERS: 40. distant, 41. emit, 42. universe, 43. thermodynamics, 44. define, 45. release, 46. blaze, 47. gravitational, 48. trace, 49. radiation

50. co\_\_\_\_\_e head-on                      *v.* to hit something violently when moving
51. historical phe\_\_\_\_\_on                      *n.* something that exists and can be perceptible, especially one that is not fully understood
52. cyclonic des\_\_\_\_\_on                      *n.* the act of causing so much damage to something
53. de\_\_\_e my position                      *v.* to state or explain precisely the nature, scope, or meaning of something
54. co\_\_\_\_\_t mainly of cells                      *v.* to be composed or made up of
55. em\_\_\_e as a butterfly                      *v.* to move out of or away from something and become visible
56. me\_\_\_e those systems into a new one                      *v.* to combine or integrate things, or to cause this to happen
57. ac\_\_\_d with public opinion                      *n.* an official agreement or treaty between two organizations, countries, etc.; (verb) allow to have
58. pe\_\_\_\_\_ve light                      *v.* to become aware or conscious of something through the senses
59. wel\_\_\_\_\_hed tradition                      *adj.* firmly established and widely recognized; having a long history of success or acceptance in a particular field or industry
60. re\_\_\_\_\_e CO2 into the air                      *v.* to set free or allow to escape from confinement
61. imp\_\_\_\_\_us material                      *adj.* unable to be affected by something; not allowing something to pass through, especially fluid; unresponsive or indifferent to criticism or persuasion

ANSWERS: 50. collide, 51. phenomenon, 52. destruction, 53. define, 54. consist, 55. emerge, 56. merge, 57. accord, 58. perceive, 59. well-established, 60. release, 61. impervious

62. 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
63. bachelor's de\_\_\_e *n.* a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment
64. fl\_\_\_\_\_te prices *v.* to rise and fall irregularly or unexpectedly; to vary or change often and unpredictably
65. 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
66. a habit des\_\_\_\_\_ve to health *adj.* causing or able to cause tremendous and irreparable damage
67. ad\_\_\_\_\_on of vectors *n.* the act or process of adding something to something else; the process of adding numbers
68. ab\_\_\_\_\_te loyalty *adj.* perfect or complete or to the most considerable degree possible
69. effect of cosmic r\_ys *n.* a narrow line of light, heat, or another form of energy
70. as\_\_\_\_\_id explorer *n.* a small rocky body orbiting the sun, typically in the region between Mars and Jupiter
71. global em\_\_\_\_\_ons of greenhouse gases *n.* the act of production or sending out gas, heat, light, etc.

ANSWERS: 62. planet, 63. degree, 64. fluctuate, 65. universe, 66. destructive, 67. addition, 68. absolute, 69. ray, 70. asteroid, 71. emission

72. ce\_\_\_\_\_al navigation *adj.* relating to the sky or the heavens; of or like the sky or the heavens
73. ga\_\_a radiation *n.* the third letter of the Greek alphabet; a type of radiation having the shortest wavelength and highest energy of electromagnetic waves
74. e\_\_t a gamma ray *v.* to give off or send out something such as light, heat, sound, gas, etc.
75. former gl\_\_y *n.* great honor or success won by notable achievements
76. laws of qu\_\_\_\_\_m mechanics *n.* the smallest amount or unit of something, especially (electromagnetic) energy
77. ter\_\_\_\_\_ng events *adj.* very frightening or intimidating
78. an ob\_\_\_\_\_er in the region *n.* a person who watches or notices someone or something but has no active part in it
79. inc\_\_\_\_\_ble pain *adj.* hard to imagine or believe
80. eve\_\_\_\_\_ly succeed *adv.* finally, particularly after a long time or a lot of struggle, complications, and so on
81. ex\_\_\_\_\_e weather events *adj.* very great in amount or degree
82. gra\_\_\_\_\_nal energy *adj.* relating to or caused by gravity (= the force that attracts objects towards one another)
83. da\_\_\_e assessment *v.* to harm or cause injury to something or someone, often resulting in decreased value or functionality; to impair or negatively affect something, such as a reputation or relationship; (noun) harm or injury that is caused to a person, thing, or entity

ANSWERS: 72. celestial, 73. gamma, 74. emit, 75. glory, 76. quantum, 77. terrifying, 78. observer, 79. inconceivable, 80. eventually, 81. extreme, 82. gravitational, 83. damage



84. ex\_\_\_d agricultural output      *v.* to increase or to make something greater in size, number, or importance
85. bl\_\_e with fury      *v.* to burst into flame or light up intensely; to move in a trailblazing manner; to shine brightly or conspicuously
86. pr\_\_\_\_ve a country's heritage      *v.* to keep or maintain a particular quality, feature, etc., especially to prevent it from decaying, being damaged, or being destroyed
87. ab\_\_\_b a shock      *v.* to take in a fluid or other substance gradually
88. con\_\_\_\_\_us improvement      *adj.* occurring or existing without a pause or interruption
89. pe\_\_\_\_ve a threat      *v.* to become aware or conscious of something through the senses
90. in a ra\_\_\_l direction      *adj.* of or relating to rays or the radii of a circle; spreading out from a central point
91. laws of ph\_\_\_\_s      *n.* the science of matter and energy and their interactions
92. ac\_\_\_\_e material      *v.* to accumulate or grow by gradual addition or accumulation; to form into a larger mass or body over time; to increase or expand naturally or organically
93. pr\_\_\_\_s improvement      *n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products

ANSWERS: 84. expand, 85. blaze, 86. preserve, 87. absorb, 88. continuous, 89. perceive, 90. radial, 91. physics, 92. accrete, 93. process

94. not no\_\_\_\_\_ly drink much *adv.* usually; under normal conditions
95. probabilistic qu\_\_\_\_\_m theory *n.* the smallest amount or unit of something, especially (electromagnetic) energy
96. binational ac\_\_\_\_d *n.* an official agreement or treaty between two organizations, countries, etc.; (verb) allow to have
97. fl\_\_\_\_\_te rapidly *v.* to rise and fall irregularly or unexpectedly; to vary or change often and unpredictably
98. a gr\_\_\_\_\_l change *adj.* happening slowly over a long period of time or distance; not steep or abrupt
99. pri\_\_\_\_\_al forms of life *adj.* existing from the beginning of time or the start of a particular process; relating to the earliest stage of the universe
100. a br\_\_\_\_h pipe *n.* a division of a tree or woody shrub that grows out from the trunk or a main stem; a division of some larger or more complex organization
101. applied the\_\_\_\_\_ics *n.* the area of physics that deals with heat, work, and temperature and their relation to energy, entropy, and the physical properties of matter and radiation
102. br\_\_\_\_h office *n.* a division of a tree or woody shrub that grows out from the trunk or a main stem; a division of some larger or more complex organization
103. eve\_\_\_\_\_ly become obsolete *adv.* finally, particularly after a long time or a lot of struggle, complications, and so on

ANSWERS: 94. normally, 95. quantum, 96. accord, 97. fluctuate, 98. gradual, 99. primordial, 100. branch, 101. thermodynamics, 102. branch, 103. eventually

104. va\_\_\_m cleaner *n.* a space empty of matter; a device or tool used for cleaning or removing debris by creating suction
105. the sin\_\_\_\_\_ty of the Divine *n.* (of black holes) a point or region in space-time where the gravitational field is infinite, and matter and energy are infinitely dense; the state, fact, quality, or condition of being one of a kind
106. di\_\_\_\_\_ar without a trace *v.* to cease to exist or be visible
107. cou\_\_\_\_\_rt agreement *n.* a person or thing that corresponds to or has the same function as another person or thing
108. me\_\_\_\_\_cs equation *n.* the branch of physics that deals with the study of motion, forces, and energy; (mechanic) someone whose occupation is repairing and maintaining automobiles
109. ac\_\_\_\_\_e into a larger entity *v.* to accumulate or grow by gradual addition or accumulation; to form into a larger mass or body over time; to increase or expand naturally or organically
110. de\_\_\_e centigrade *n.* a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment
111. 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

ANSWERS: 104. vacuum, 105. singularity, 106. disappear, 107. counterpart, 108. mechanics, 109. accrete, 110. degree, 111. planet

112. ter\_\_\_\_\_ng experience *adj.* very frightening or intimidating
113. pri\_\_\_\_\_al gas *adj.* existing from the beginning of time or the start of a particular process; relating to the earliest stage of the universe
114. 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
115. a star of the first ma\_\_\_\_\_de *n.* the extent, level, importance, or amount of something
116. sp\_\_\_\_\_me continuum *n.* a four-dimensional continuum consisting of three dimensions of space and one dimension of time, used to describe the physical universe according to Einstein's theory of general relativity
117. a con\_\_\_\_\_us row of warehouses *adj.* occurring or existing without a pause or interruption
118. ga\_\_a particles *n.* the third letter of the Greek alphabet; a type of radiation having the shortest wavelength and highest energy of electromagnetic waves
119. congressional h\_\_k *n.* a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations
120. the ma\_\_\_\_\_de of the disaster *n.* the extent, level, importance, or amount of something

ANSWERS: 112. terrifying, 113. primordial, 114. observe, 115. magnitude, 116. spacetime, 117. continuous, 118. gamma, 119. hawk, 120. magnitude

121. black hole sin\_\_\_\_\_ty      *n.* (of black holes) a point or region in space-time where the gravitational field is infinite, and matter and energy are infinitely dense; the state, fact, quality, or condition of being one of a kind
122. a gr\_\_\_\_\_l process      *adj.* happening slowly over a long period of time or distance; not steep or abrupt
123. hold your br\_\_\_\_\_h      *n.* the air that is taken into and expelled from your lungs; the process of taking into and expelling air from your lungs
124. a shrewd ob\_\_\_\_\_er      *n.* a person who watches or notices someone or something but has no active part in it
125. inc\_\_\_\_\_gly become common      *adv.* more and more
126. de\_\_\_\_\_t a bad event      *v.* to find or recognize something, especially something difficult to see, hear, etc.
127. charged pa\_\_\_\_\_le      *n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance
128. di\_\_\_\_\_t ancestors      *adj.* far away in space, time, or where you are; far apart in relevance, relationship, or kinship
129. de\_\_\_\_\_t smuggling across borders      *v.* to find or recognize something, especially something difficult to see, hear, etc.
130. co\_\_\_\_\_e in midair      *v.* to hit something violently when moving
131. price flu\_\_\_\_\_ons      *n.* a change, or the process of changing, that frequently happens, especially from one extreme to another; the quality of being unsteady and subject to changes

ANSWERS: 121. singularity, 122. gradual, 123. breath, 124. observer, 125. increasingly, 126. detect, 127. particle, 128. distant, 129. detect, 130. collide, 131. fluctuation

132. flu\_\_\_\_\_on of water level *n.* a change, or the process of changing, that frequently happens, especially from one extreme to another; the quality of being unsteady and subject to changes
133. imp\_\_\_\_\_us to criticism *adj.* unable to be affected by something; not allowing something to pass through, especially fluid; unresponsive or indifferent to criticism or persuasion
134. tr\_\_e back to medieval times *v.* to find or discover someone or something that was lost
135. si\_\_\_\_\_ly situated *adv.* in almost the same way
136. ev\_\_\_\_\_te the water *v.* to turn a liquid into a gas; to become less intense and disappear gradually
137. chemical ad\_\_\_\_\_on *n.* the act or process of adding something to something else; the process of adding numbers
138. as\_\_\_\_\_id mining *n.* a small rocky body orbiting the sun, typically in the region between Mars and Jupiter
139. greatest gl\_\_y *n.* great honor or success won by notable achievements
140. trading of vi\_\_\_\_\_l currencies *adj.* being actually such in almost every respect; existing in essence or effect though not in actual fact
141. business ho\_\_\_\_\_n *n.* the line at which the earth's surface and the sky appear to meet; the range of interest or activity that can be anticipated
142. have si\_\_\_\_\_ly great abilities *adv.* in almost the same way

ANSWERS: 132. fluctuation, 133. impervious, 134. trace, 135. similarly, 136. evaporate, 137. addition, 138. asteroid, 139. glory, 140. virtual, 141. horizon, 142. similarly

143. a fl\_\_h of lightning *n.* a sudden intense burst of radiant energy; a momentary brightness
144. a vi\_\_\_\_l image *adj.* being actually such in almost every respect; existing in essence or effect though not in actual fact
145. face inc\_\_\_\_\_gly complicated challenges *adv.* more and more
146. 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
147. path of des\_\_\_\_\_on *n.* the act of causing so much damage to something
148. complete no\_\_\_\_\_ly *adv.* usually; under normal conditions
149. brilliant fl\_\_h *n.* a sudden intense burst of radiant energy; a momentary brightness
150. the event ho\_\_\_\_\_n of a black hole *n.* the line at which the earth's surface and the sky appear to meet; the range of interest or activity that can be anticipated
151. he was en\_\_\_\_\_ly to blame *adv.* completely
152. ra\_\_\_l symmetry *adj.* of or relating to rays or the radii of a circle; spreading out from a central point
153. exc\_\_\_\_\_ing ordeal *adj.* extremely painful, intense, or distressing; causing great physical or emotional suffering
154. ev\_\_\_\_\_te almost overnight *v.* to turn a liquid into a gas; to become less intense and disappear gradually

ANSWERS: 143. flash, 144. virtual, 145. increasingly, 146. mass, 147. destruction, 148. normally, 149. flash, 150. horizon, 151. entirely, 152. radial, 153. excruciating, 154. evaporate

155. opp\_\_\_\_\_on campaign *n.* the act of disagreeing or resisting; the state of strong disagreement
156. meet with opp\_\_\_\_\_on *n.* the act of disagreeing or resisting; the state of strong disagreement
157. ann\_\_\_\_\_te all doubts *v.* to destroy completely; to cause something to cease to exist
158. ex\_\_\_d a lineup *v.* to increase or to make something greater in size, number, or importance
159. da\_\_\_e a relationship *v.* to harm or cause injury to something or someone, often resulting in decreased value or functionality; to impair or negatively affect something, such as a reputation or relationship; (noun) harm or injury that is caused to a person, thing, or entity
160. opaque to X-r\_ys *n.* a narrow line of light, heat, or another form of energy
161. em\_\_\_e from poverty *v.* to move out of or away from something and become visible
162. pa\_\_\_\_\_le energy *n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance
163. ma\_\_\_\_\_e amounts *adj.* enormous amount; very heavy and solid
164. negotiating cou\_\_\_\_\_rt *n.* a person or thing that corresponds to or has the same function as another person or thing

ANSWERS: 155. opposition, 156. opposition, 157. annihilate, 158. expand, 159. damage, 160. ray, 161. emerge, 162. particle, 163. massive, 164. counterpart



## Session 3: Fill in the Blanks

1. Missile assaults on the capital continued around \_\_\_\_\_.  
*n.* the time of day when the sun's light starts to show in the sky
2. The \_\_\_\_\_ pain in his ankle made it difficult to walk.  
*adj.* extremely painful, intense, or distressing; causing great physical or emotional suffering
3. Gandhi had an \_\_\_\_\_ zeal for nonviolence.  
*adj.* perfect or complete or to the most considerable degree possible
4. We argue that wages for temporary workers should \_\_\_\_\_ rise.  
*adv.* in almost the same way
5. The security camera has \_\_\_\_\_ four intruders.  
*v.* to find or recognize something, especially something difficult to see, hear, etc.
6. This consulting firm decided to \_\_\_\_\_ the two companies into one.  
*v.* to combine or integrate things, or to cause this to happen
7. They watched the train \_\_\_\_\_ into the distance.  
*v.* to cease to exist or be visible
8. Big techs are now eager to develop \_\_\_\_\_ computers.  
*n.* the smallest amount or unit of something, especially (electromagnetic) energy
9. She is the \_\_\_\_\_ president of the company.  
*adj.* being actually such in almost every respect; existing in essence or effect though not in actual fact

ANSWERS: 1. dawn, 2. excruciating, 3. absolute, 4. similarly, 5. detected, 6. merge, 7. disappear, 8. quantum, 9. virtual

10. The animal rights group worked to \_\_\_\_\_ the dolphins back into the wild.  
*v.* to set free or allow to escape from confinement
11. I don't \_\_\_\_\_ take a vacation in the middle of summer.  
*adv.* usually; under normal conditions
12. This examination \_\_\_\_\_ of five problems to solve.  
*v.* to be composed or made up of
13. During the surgery, the doctor had to be extremely cautious not to \_\_\_\_\_ a blood vessel.  
*v.* to harm or cause injury to something or someone, often resulting in decreased value or functionality; to impair or negatively affect something, such as a reputation or relationship; (noun) harm or injury that is caused to a person, thing, or entity
14. 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
15. Solar gravity creates \_\_\_\_\_ pressures and temperatures.  
*adj.* very great in amount or degree
16. That team signed a center forward who was a ball-\_\_\_\_\_.  
*n.* a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations
17. During colonial eras, new migratory patterns \_\_\_\_\_.  
*v.* to move out of or away from something and become visible

ANSWERS: 10. release, 11. normally, 12. consists, 13. damage, 14. radiation, 15. extreme, 16. hawk, 17. emerged

18. During the unloading, the container box \_\_\_\_\_ a clicking sound.  
*v.* to give off or send out something such as light, heat, sound, gas, etc.
19. It would be \_\_\_\_\_ for him to alter his behavior.  
*adj.* hard to imagine or believe
20. Cities around the world set records for highest \_\_\_\_\_ this summer.  
*n.* the degree of hotness or coldness of a thing or place
21. The sponge \_\_\_\_\_ water well.  
*v.* to take in a fluid or other substance gradually
22. 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
23. It is preferable to die in \_\_\_\_\_ than to live in dishonor.  
*n.* great honor or success won by notable achievements
24. As the sun set, the colors of the sky merged with the \_\_\_\_\_ creating a beautiful orange and pink hue.  
*n.* the line at which the earth's surface and the sky appear to meet; the range of interest or activity that can be anticipated
25. The interests of the two countries \_\_\_\_\_.  
*v.* to hit something violently when moving
26. The \_\_\_\_\_ for applying for a visa can be lengthy and complicated.  
*n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products

ANSWERS: 18. emits, 19. inconceivable, 20. temperatures, 21. absorbs, 22. planet, 23. glory, 24. horizon, 25. collide, 26. process

27. It was the most \_\_\_\_\_ storm in decades.

*adj.* causing or able to cause tremendous and irreparable damage

28. He bated his \_\_\_\_\_ when talking about this affair.

*n.* the air that is taken into and expelled from your lungs; the process of taking into and expelling air from your lungs

29. Our company found it \_\_\_\_\_ difficult to keep up with the competition.

*adv.* more and more

30. 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)

31. Over the years, the layers of sediment gradually \_\_\_\_\_ and form new rock formations.

*v.* to accumulate or grow by gradual addition or accumulation; to form into a larger mass or body over time; to increase or expand naturally or organically

32. Australia is widely \_\_\_\_\_ as having low levels of corruption.

*v.* to become aware or conscious of something through the senses

33. 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

34. When an \_\_\_\_\_ meets its corresponding particle, the two annihilate.

*n.* a subatomic particle that has the same mass and opposite charge as its corresponding particle (e.g., a positron is the antiparticle of an electron)

ANSWERS: 27. destructive, 28. breath, 29. increasingly, 30. gravitational, 31. accrete, 32. perceived, 33. vacuum, 34. antiparticle

35. According to the theory of relativity, time is different for each \_\_\_\_\_.
- n.* a person who watches or notices someone or something but has no active part in it
36. The \_\_\_\_\_ design of the wheel allows for maximum strength and stability.
- adj.* of or relating to rays or the radii of a circle; spreading out from a central point
37. The organization finally signed a peace \_\_\_\_\_.
- n.* an official agreement or treaty between two organizations, countries, etc.;
  - (verb) allow to have
38. The recent economic downturn has resulted in \_\_\_\_\_ layoffs.
- adj.* enormous amount; very heavy and solid
39. The second law of \_\_\_\_\_ denies the existence of a perpetual motion engine.
- n.* the area of physics that deals with heat, work, and temperature and their relation to energy, entropy, and the physical properties of matter and radiation
40. Every human is responsible for taking care of the Earth's \_\_\_\_\_.
- n.* the natural world such as air, water, and land in which humans, animals, and plants live
41. They worked hard to \_\_\_\_\_ the nature of their native lands.
- v.* to keep or maintain a particular quality, feature, etc., especially to prevent it from decaying, being damaged, or being destroyed
42. Scientists are studying the composition and origins of the \_\_\_\_\_ belt to understand the early solar system better.
- n.* a small rocky body orbiting the sun, typically in the region between Mars and Jupiter

ANSWERS: 35. observer, 36. radial, 37. accord, 38. massive, 39. thermodynamics, 40. environment, 41. preserve, 42. asteroid

43. Later, his claim was found to be \_\_\_\_\_ false.  
*adv.* completely
44. Temperature \_\_\_\_\_ are often milder in oceanfront areas.  
*n.* a change, or the process of changing, that frequently happens, especially from one extreme to another; the quality of being unsteady and subject to changes
45. The sun will \_\_\_\_\_ the mist.  
*v.* to turn a liquid into a gas; to become less intense and disappear gradually
46. The building was \_\_\_\_\_ in the fire and had to be rebuilt.  
*v.* to ruin or damage severely or completely; to eradicate or eliminate completely
47. She received her \_\_\_\_\_ in psychology from the university.  
*n.* a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment
48. The corporation \_\_\_\_\_ dominated the entire tobacco business.  
*adv.* finally, particularly after a long time or a lot of struggle, complications, and so on
49. The virus had the potential to \_\_\_\_\_ entire populations if left unchecked.  
*v.* to destroy completely; to cause something to cease to exist
50. Scientists have predicted that the universe will end in a \_\_\_\_\_ where all matter will collapse into an infinitely dense point.  
*n.* (of black holes) a point or region in space-time where the gravitational field is infinite, and matter and energy are infinitely dense; the state, fact, quality, or condition of being one of a kind

ANSWERS: 43. entirely, 44. fluctuations, 45. evaporate, 46. destroyed, 47. degree, 48. eventually, 49. annihilate, 50. singularity,

51. Gamma \_\_\_\_\_ penetrate body tissues and cause cell damage.  
*n.* a narrow line of light, heat, or another form of energy
52. In \_\_\_\_\_ private corporations provide healthcare services.  
*n.* the act or process of adding something to something else; the process of adding numbers
53. The discovery of the \_\_\_\_\_ soup was a crucial step in understanding the origins of life on Earth.  
*adj.* existing from the beginning of time or the start of a particular process; relating to the earliest stage of the universe
54. 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
55. His \_\_\_\_\_ in the other company is responsible for marketing.  
*n.* a person or thing that corresponds to or has the same function as another person or thing
56. To advance this discussion, we must \_\_\_\_\_ "success" rigorously.  
*v.* to state or explain precisely the nature, scope, or meaning of something
57. They hope to \_\_\_\_\_ their business worldwide.  
*v.* to increase or to make something greater in size, number, or importance
58. \_\_\_\_\_ rays are a type of high-energy radiation that can be harmful to living organisms.  
*n.* the third letter of the Greek alphabet; a type of radiation having the shortest wavelength and highest energy of electromagnetic waves

ANSWERS: 51. rays, 52. addition, 53. primordial, 54. universe, 55. counterpart, 56. define, 57. expand, 58. Gamma

59. In the \_\_\_\_\_ system, measurements are made in meters and liters.  
*adj.* using or relating to the meter as a unit of length; a system of related measures that facilitates the quantification of some particular characteristic
60. Stock prices \_\_\_\_\_ daily based on market demand and supply.  
*v.* to rise and fall irregularly or unexpectedly; to vary or change often and unpredictably
61. The \_\_\_\_\_ of the tree had fallen and blocked the road.  
*n.* a division of a tree or woody shrub that grows out from the trunk or a main stem; a division of some larger or more complex organization
62. The forest fire continued to \_\_\_\_\_ out of control, threatening nearby homes.  
*v.* to burst into flame or light up intensely; to move in a trailblazing manner; to shine brightly or conspicuously
63. 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
64. 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
65. Large earthquakes often generate \_\_\_\_\_ tsunamis.  
*adj.* very frightening or intimidating
66. We can calculate the position of the \_\_\_\_\_ statistically.  
*n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance

ANSWERS: 59. metric, 60. fluctuate, 61. branch, 62. blaze, 63. celestial, 64. observe, 65. terrifying, 66. particles



67. 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

68. A rainbow is a natural \_\_\_\_\_.

*n.* something that exists and can be perceptible, especially one that is not fully understood

69. There are five distinct \_\_\_\_\_ at five unique wavelengths.

*n.* the act of production or sending out gas, heat, light, etc.

70. The country experienced a \_\_\_\_\_ increase in population.

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

71. He studied \_\_\_\_\_ in college and now works as an engineer.

*n.* the branch of physics that deals with the study of motion, forces, and energy; (mechanic) someone whose occupation is repairing and maintaining automobiles

72. The jacket is \_\_\_\_\_ to water and will keep you dry in the rain.

*adj.* unable to be affected by something; not allowing something to pass through, especially fluid; unresponsive or indifferent to criticism or persuasion

73. The restaurant is \_\_\_\_\_ in the community, having been open for over 50 years.

*adj.* firmly established and widely recognized; having a long history of success or acceptance in a particular field or industry

74. He studied the \_\_\_\_\_ of radiation.

*n.* the science of matter and energy and their interactions

ANSWERS: 67. distant, 68. phenomenon, 69. emissions, 70. gradual, 71. mechanics, 72. impervious, 73. well-established, 74. physics

75. The heavy snow has been \_\_\_\_\_ since last morning.

*adj.* occurring or existing without a pause or interruption

76. 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

77. The \_\_\_\_\_ party strongly disagreed with the government's proposed legislation.

*n.* the act of disagreeing or resisting; the state of strong disagreement

78. The extinction of several subspecies has been linked to climate change and habitat \_\_\_\_\_.

*n.* the act of causing so much damage to something

79. Let's \_\_\_\_\_ the origins of some familiar foreign words.

*v.* to find or discover someone or something that was lost

80. These heavy rains caused \_\_\_\_\_ floods on several islands.

*n.* a sudden intense burst of radiant energy; a momentary brightness

81. The curvature of \_\_\_\_\_ is affected by the presence of mass and energy.

*n.* a four-dimensional continuum consisting of three dimensions of space and one dimension of time, used to describe the physical universe according to Einstein's theory of general relativity

82. The \_\_\_\_\_ of the earthquake was measured at 7.8 on the Richter scale.

*n.* the extent, level, importance, or amount of something

ANSWERS: 75. continuous, 76. mass, 77. opposition, 78. destruction, 79. trace, 80. flash, 81. spacetime, 82. magnitude

ANSWERS: