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Vocabulary Builder Reference from...

James Gillies: Dark matter: The matter we can't see | TED Talk

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

All Words

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Session 1: Word List

ancient

adj. relating to the long ago, particularly the historical period preceding the fall of the Western Roman Empire; very old

synonym : archaic, age-old, obsolete

(1) pre-Christian **ancient**, (2) **ancient** stories

They have been living near water since **ancient** times.

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.

simplicity

n. the quality or condition of being natural and plain or easy to understand or do

synonym : easiness, plainness, modesty

(1) a life of **simplicity**, (2) refined **simplicity**

He liked the car because of the **simplicity** of the design.

elegance

n. the quality of being graceful and stylish in appearance or manner

synonym : grace, refinement, poise

(1) austere **elegance**, (2) natural **elegance**

The **elegance** of her dress was breathtaking.

combine

v. to join or merge to form a single thing or group

synonym: coalesce, cohere, blend

(1) **combine** chemically with another substance,

(2) **combine** augmented reality

Hydrogen and oxygen **combine** to form water.

diversity

n. the quality or fact of many different types of things or people being included in something; a range of different things or people

synonym: variety, multiplicity, variousness

(1) the **diversity** policy of the university, (2) lingual **diversity**

He was impressed by the range and **diversity** of the collection.

predict

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

synonym: forecast, anticipate, foresee

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

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

basis

n. the most important facts, ideas, or events from which something is developed; the way how things are organized or arranged

synonym: foundation, base, ground

(1) on an equal **basis**, (2) **basis** for calculation

This evidence will form the **basis** for our discussion.

experimental

adj. relating to or based on new ideas, forms, methods, etc. that have not been tried before, usually to find out what effect they have

synonym: empirical, exploratory, observed

(1) **experimental** data, (2) **experimental** design

The product is still in the **experimental** stage.

indivisible

adj. unable to be divided or separated; not subject to alteration or change

synonym : undividable, inseparable

(1) **indivisible** identity, (2) **indivisible** parts

Liberty and justice for all are **indivisible** concepts.

atom

n. the smallest unit of ordinary matter that forms a chemical element, composed of a nucleus and one or more electrons bound to the nucleus

synonym : particle, element, fraction

(1) oxygen **atom**, (2) neutral hydrogen **atoms**

The outermost electron shell of an **atom** determines its chemical characteristics.

elegant

adj. pleasing and graceful in appearance or manner, or showing good taste and refinement

synonym : refined, sophisticated, graceful

(1) **elegant** design, (2) write **elegant** sentences

She wore an **elegant** evening gown to the gala.

advantage

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

synonym : benefit, edge, asset

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

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

experiment

n. the scientific test conducted to observe what happens and gain new knowledge

synonym : experimentation, investigation

(1) **experiment** design, (2) series of **experiments**

His **experiments** showed highly positive results.

hydrogen

n. the chemical element that is the lightest gas is colorless, odorless, tasteless, and combines with oxygen to form

water

(1) **hydrogen** gas, (2) heavy **hydrogen**

The **hydrogen** and the oxygen react and then form water.

carbon

n. a chemical element that can be found in pure form as diamond or graphite, and it is also an essential part of coal and oil and is found in all plants and animals

(1) **carbon** dioxide, (2) **carbon** emission

Trees absorb **carbon** dioxide and give off oxygen.

recognizable

adj. easy to become aware of or identify

synonym: noticeable, perceptible, definite

(1) to a **recognizable** degree, (2) **recognizable** landmark

His car was easily **recognizable** in the parking lot.

divisible

adj. able to be divided into parts, usually with nothing left over

synonym: separable, splittable, partitionable

(1) a **divisible** number, (2) exactly **divisible**

The class was divided into groups of four, with each group being **divisible** by two.

ordinary

adj. not different, exceptional, or unexpected in any way, especially in quality, ability, size, or degree

synonym: mundane, prosaic, average

(1) an **ordinary** school, (2) **ordinary** annual revenue

The **ordinary** session of the Diet opened.

physicist

n. a scientist who specializes in the field of physics

(1) talented **physicist**, (2) theoretical **physicist**

Einstein was an outstanding and famous **physicist** of the 20th century.

simplistic

adj. oversimplified or lacking in complexity or depth; characterized by an attempt to explain something complex or multifaceted with overly vague or simple

terms

synonym: basic, uncomplicated, elementary

(1) **simplistic** approach, (2) **simplistic** design

The politician's solution to the problem was too **simplistic** to solve the underlying issue.

profound

adj. extremely great; sensed or experienced very strongly; displaying a high level of knowledge or comprehension

synonym: deep, unsounded, far-reaching

(1) a **profound** book, (2) the **profound** depths of the sea

My mother's illness had a **profound** impact on us all.

visible

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

synonym: clear, observable, seeable

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

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

bounce

v. to cause to move up or away after hitting a surface; to spring back

synonym: bound, leap, spring

(1) **bounce** across the floor, (2) **bounce** back from failure

They will **bounce** between various emotional states.

galaxy

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

synonym: star cluster, nebula, star system

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

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

spiral

n. a curve that coils around a central point and gets progressively farther away from it as it goes around

synonym: coil, helix, twist

(1) **spiral** staircase, (2) **spiral** design

The leaves of the fern were arranged in a **spiral** pattern.

spinning

n. the act of rotating rapidly around an axis; in the context of textiles, the process of twisting fibers together to form thread or yarn

synonym : whirling, rotating, spinning wheel

(1) **spinning** machine, (2) **spinning** wheel

She took a **spinning** class at the gym to improve her cardiovascular fitness.

grace

n. a quality of being pleasing, especially in appearance or manner; a temporary exemption, especially an extended period granted as a special favor; a short prayer of thanks before a meal

synonym : charm, poise, elegance

(1) say a **grace**, (2) end of the **grace** period

The old oak tree stood with **grace** and majesty in the park's center.

weigh

v. to have a particular weight; to carefully evaluate things before making a conclusion

synonym : consider, cogitate, count

(1) **weigh** heavily on stock prices, (2) **weigh** a cargo

The baby **weighs** 1 pound 3 oz.

individual

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

synonym : person, being, self

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

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

confirm

v. to support or establish the truth or certainty of something previously believed or suspected to be the case

synonym : affirm, verify, assure

(1) **confirm** the diagnosis, (2) **confirm** a transaction

Please write to **confirm** your reservation.

puzzling

adj. confusing or difficult to understand; mysterious

synonym : baffling, confusing, enigmatic

(1) **puzzling** behavior, (2) **puzzling** questions

The detective found the clues **puzzling** and couldn't solve the case immediately.

gravity

n. the force that attracts a body towards the center of the earth or towards any other physical body having mass; a manner that is solemn

synonym : heaviness, attraction, weight

(1) the attraction of **gravity**, (2) preserve my **gravity**

The astronaut felt weightless in space due to the absence of **gravity**.

cosmic

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

synonym : astronomical, celestial, outer-space

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

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

microwave

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

synonym : oven, waveguide, radar range

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

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

background

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

synonym : ground, experience, backdrop

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

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

afterglow

n. a period of time following an event or experience during which a feeling of pleasure, satisfaction, or contentment persists; a lingering glow or light that remains after an object has disappeared from view

synonym: glow, sunset, twilight

(1) concert **afterglow**, (2) romantic **afterglow**

The **afterglow** of the sunset was a beautiful end to a long day.

bang

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

synonym: crash, hit, smash

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

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

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.

revolve

v. to rotate around a central point

synonym: rotate, spin, orbit

(1) **revolve** at high speed, (2) **revolve** around a central axis

The Earth **revolves** around the Sun in an elliptical orbit.

resident

n. a person who lives in a particular place or has their home in a place

synonym: dweller, inhabitant, inhabitant

(1) a **resident** of the city, (2) **resident** tax

Visa renewal for **resident** foreigners in this country is once every five years.

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.

orbit

n. the path of an object around a celestial body, especially a planet, star, or moon, under the influence of gravity; (of medicine) the bony cavity in the skull that houses the eyeball and its associated structures, like muscles, nerves, and blood vessels

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**.

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**.

fraction

n. a small part or item forming a piece of a whole; the quotient of two rational numbers

synonym : piece, part, fragment

(1) a **fractional** share of the vote, (2) a numerator in a **fraction**

He spent only a **fraction** of his earnings.

dense

adj. containing a large number of people or something with little space between them

synonym : heavy, thick, idiotic

(1) nutrient- **dense** foods, (2) **dense** forests

The entire mountain is covered in **dense** rainforest.

expansion

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

synonym : growth, enlargement, development

(1) industrial **expansion**, (2) **expansion** project

The company is undergoing an **expansion**, opening new locations in several states.

accelerate

v. to make something faster or earlier; to cause to develop or progress more quickly

synonym : speed up, quicken, rev

(1) **accelerate** a chemical reaction, (2) **accelerate** the car

The government tried to **accelerate** the commercialization of this development.

acceleration

n. a rate of increase in velocity; the rate of change of velocity with respect to time

synonym : speed up, quicken, hastening

(1) a unit of **acceleration**, (2) **acceleration** of an object

The car's **acceleration** was impressive, going from 0 to 60 mph in just 5 seconds.

symmetry

n. balance or proportion in design or structure, with elements arranged evenly on either side of an axis

synonym : balance, proportion, harmoniousness

(1) bilateral **symmetry**, (2) axial **symmetry**

The building had a **symmetry** pattern that was pleasing to the eye.

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.

speculate

v. to form a theory or conjecture or guess about a subject without solid evidence

synonym : assume, conjecture, infer

(1) **speculate** about the reason, (2) **speculate** on the outcome

He **speculated** that this investment would lead to success.

stem

n. the central part of something from which other parts can develop or grow; the part of a word common to all its inflected variants; (verb) to grow out of, have roots in, or originate in

synonym: branch, limb, (verb) come from

(1) **stem** from a belief, (2) the **stem** of a matchstick

A rose has thorns on its **stem**.

vibrate

v. to move or cause anything to move fast and in small increments from side to side

synonym: oscillate, convulse, jerk

(1) **vibrate** at a regular frequency, (2) **vibrate** with anger

During the flight, the wings of the plane **vibrate**.

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.

harmonic

adj. relating to the production of sound waves with a frequency that is an integral multiple of the frequency of the original wave; having a pleasing, pleasing, or agreeable sound.

synonym: melodic, balanced, harmonious

(1) **harmonic** oscillator, (2) a natural **harmonic** quality

The violin's sound was so pure and **harmonic** that it gave me chills.

unfortunately

adv. by bad luck; unluckily

synonym: regrettably, unluckily, alas

(1) **unfortunately** caught in a shower, (2) even more

unfortunately

The treatments were done but, **unfortunately**, were unsuccessful.

stake

n. a share or financial investment in something such as a business; a wooden or metal post set up to mark something

synonym : share, interest, post

(1) execution by burning at a **stake**, (2) buy the company's **stake**

The **stake** of the company is too high nowadays.

marvel

n. someone something that causes feelings of wonder or surprise

synonym : wonder, phenomenon, amazement

(1) a **marvel** of beauty, (2) technical **marvel**

The space shuttle is a modern engineering **marvel**.

grasp

v. to take hold of something or someone quickly and firmly

synonym : grab, clasp, grip

(1) **grasp** his hand, (2) **grasp** a chance

They spent a lot of time trying to **grasp** the current situation.

explode

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

synonym : detonate, blast, rupture

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

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

Session 2: Spelling

1. sp____ng wheel *n.* the act of rotating rapidly around an axis; in the context of textiles, the process of twisting fibers together to form thread or yarn
2. elliptic ga____y *n.* an independent group of stars, interstellar gas, dark matter, etc., in the universe, bound together by gravity
3. neutral hydrogen a__ms *n.* the smallest unit of ordinary matter that forms a chemical element, composed of a nucleus and one or more electrons bound to the nucleus
4. an or____ry school *adj.* not different, exceptional, or unexpected in any way, especially in quality, ability, size, or degree
5. lingual di_____ty *n.* the quality or fact of many different types of things or people being included in something; a range of different things or people
6. bo____e across the floor *v.* to cause to move up or away after hitting a surface; to spring back
7. take ad_____ge of his weak points *n.* a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has
8. a ma____l of beauty *n.* someone something that causes feelings of wonder or surprise
9. theoretical ph_____st *n.* a scientist who specializes in the field of physics

ANSWERS: 1. spinning, 2. galaxy, 3. atom, 4. ordinary, 5. diversity, 6. bounce, 7. advantage, 8. marvel, 9. physicist

10. ha____ic oscillator *adj.* relating to the production of sound waves with a frequency that is an integral multiple of the frequency of the original wave; having a pleasing, pleasing, or agreeable sound.
11. 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
12. de__e forests *adj.* containing a large number of people or something with little space between them
13. ba__s for calculation *n.* the most important facts, ideas, or events from which something is developed; the way how things are organized or arranged
14. vi____e by X-ray *adj.* capable of being seen; or open to easy view
15. heavy hy____en *n.* the chemical element that is the lightest gas is colorless, odorless, tasteless, and combines with oxygen to form water
16. co____m the diagnosis *v.* to support or establish the truth or certainty of something previously believed or suspected to be the case
17. pr____t when she will arrive *v.* to state beforehand that something will happen in the future, mainly based on knowledge or experience
18. sp____ng machine *n.* the act of rotating rapidly around an axis; in the context of textiles, the process of twisting fibers together to form thread or yarn

ANSWERS: 10. harmonic, 11. discovery, 12. dense, 13. basis, 14. visible, 15. hydrogen, 16. confirm, 17. predict, 18. spinning

19. re_____nt tax *n.* a person who lives in a particular place or has their home in a place
20. unf_____ely caught in a shower *adv.* by bad luck; unluckily
21. a bac_____nd color *n.* the details of a person's social heritage, such as family, vocational or educational experience; past information that is essential to understanding a situation or problem
22. the pr_____nd depths of the sea *adj.* extremely great; sensed or experienced very strongly; displaying a high level of knowledge or comprehension
23. el_____t design *adj.* pleasing and graceful in appearance or manner, or showing good taste and refinement
24. 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
25. oxygen a__m *n.* the smallest unit of ordinary matter that forms a chemical element, composed of a nucleus and one or more electrons bound to the nucleus
26. exp_____nt design *n.* the scientific test conducted to observe what happens and gain new knowledge
27. a criminal bac_____nd *n.* the details of a person's social heritage, such as family, vocational or educational experience; past information that is essential to understanding a situation or problem

ANSWERS: 19. resident, 20. unfortunately, 21. background, 22. profound, 23. elegant, 24. planet, 25. atom, 26. experiment, 27. background

28. industrial ex_____on *n.* the process of becoming larger or more extensive, or the result of this process
29. gr__p a chance *v.* to take hold of something or someone quickly and firmly
30. hy_____en gas *n.* the chemical element that is the lightest gas is colorless, odorless, tasteless, and combines with oxygen to form water
31. the s__m of a matchstick *n.* the central part of something from which other parts can develop or grow; the part of a word common to all its inflected variants; (verb) to grow out of, have roots in, or originate in
32. sp___l staircase *n.* a curve that coils around a central point and gets progressively farther away from it as it goes around
33. write el_____t sentences *adj.* pleasing and graceful in appearance or manner, or showing good taste and refinement
34. acc_____ion of an object *n.* a rate of increase in velocity; the rate of change of velocity with respect to time
35. austere el_____ce *n.* the quality of being graceful and stylish in appearance or manner
36. 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
37. 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: 28. expansion, 29. grasp, 30. hydrogen, 31. stem, 32. spiral, 33. elegant, 34. acceleration, 35. elegance, 36. universe, 37. planet

38. the di_____ty policy of the university *n.* the quality or fact of many different types of things or people being included in something; a range of different things or people
39. buy the company's st__e *n.* a share or financial investment in something such as a business; a wooden or metal post set up to mark something
40. retie the st___g and make it strong *n.* long, thin material used for tying things together, composed of several twisted threads
41. charged pa_____le *n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance
42. score an ad_____ge *n.* a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has
43. concert af_____ow *n.* a period of time following an event or experience during which a feeling of pleasure, satisfaction, or contentment persists; a lingering glow or light that remains after an object has disappeared from view
44. bilateral sy_____ry *n.* balance or proportion in design or structure, with elements arranged evenly on either side of an axis
45. vi_____e at a regular frequency *v.* to move or cause anything to move fast and in small increments from side to side

ANSWERS: 38. diversity, 39. stake, 40. string, 41. particle, 42. advantage, 43. afterglow, 44. symmetry, 45. vibrate

46. 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; (of medicine) the bony cavity in the skull that houses the eyeball and its associated structures, like muscles, nerves, and blood vessels
47. re____e at high speed *v.* to rotate around a central point
48. execution by burning at a st__e *n.* a share or financial investment in something such as a business; a wooden or metal post set up to mark something
49. axial sy____ry *n.* balance or proportion in design or structure, with elements arranged evenly on either side of an axis
50. second co____c velocity *adj.* relating to the universe or cosmos; vast or limitless
51. sim____ic approach *adj.* oversimplified or lacking in complexity or depth; characterized by an attempt to explain something complex or multifaceted with overly vague or simple terms
52. acc____te a chemical reaction *v.* to make something faster or earlier; to cause to develop or progress more quickly
53. 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

ANSWERS: 46. orbit, 47. revolve, 48. stake, 49. symmetry, 50. cosmic, 51. simplistic, 52. accelerate, 53. universe

54. ind_____le parts *adj.* unable to be divided or separated; not subject to alteration or change
55. b__g his fist on a desk *v.* to hit or cause to hit something in a way that makes a loud noise
56. co_____e chemically with another substance *v.* to join or merge to form a single thing or group
57. exactly di_____le *adj.* able to be divided into parts, usually with nothing left over
58. on an equal ba__s *n.* the most important facts, ideas, or events from which something is developed; the way how things are organized or arranged
59. natural el_____ce *n.* the quality of being graceful and stylish in appearance or manner
60. a natural ha_____ic quality *adj.* relating to the production of sound waves with a frequency that is an integral multiple of the frequency of the original wave; having a pleasing, pleasing, or agreeable sound.
61. ca____n emission *n.* a chemical element that can be found in pure form as diamond or graphite, and it is also an essential part of coal and oil and is found in all plants and animals
62. ex_____e in anger *v.* to burst or break open violently and noisily; to cause something to burst or break open
63. romantic af_____ow *n.* a period of time following an event or experience during which a feeling of pleasure, satisfaction, or contentment persists; a lingering glow or light that remains after an object has disappeared from view

ANSWERS: 54. indivisible, 55. bang, 56. combine, 57. divisible, 58. basis, 59. elegance, 60. harmonic, 61. carbon, 62. explode, 63. afterglow

64. sp___l design *n.* a curve that coils around a central point and gets progressively farther away from it as it goes around
65. sp_____te about the reason *v.* to form a theory or conjecture or guess about a subject without solid evidence
66. technical ma___l *n.* someone something that causes feelings of wonder or surprise
67. vi_____e with anger *v.* to move or cause anything to move fast and in small increments from side to side
68. co_____e augmented reality *v.* to join or merge to form a single thing or group
69. series of exp_____nts *n.* the scientific test conducted to observe what happens and gain new knowledge
70. a di_____le number *adj.* able to be divided into parts, usually with nothing left over
71. ex_____on project *n.* the process of becoming larger or more extensive, or the result of this process
72. a fr_____onal share of the vote *n.* a small part or item forming a piece of a whole; the quotient of two rational numbers
73. s__m from a belief *n.* the central part of something from which other parts can develop or grow; the part of a word common to all its inflected variants; (verb) to grow out of, have roots in, or originate in
74. the attraction of gr_____y *n.* the force that attracts a body towards the center of the earth or towards any other physical body having mass; a manner that is solemn

ANSWERS: 64. spiral, 65. speculate, 66. marvel, 67. vibrate, 68. combine, 69. experiment, 70. divisible, 71. expansion, 72. fraction, 73. stem, 74. gravity

75. b__g a phone down *v.* to hit or cause to hit something in a way that makes a loud noise
76. or____ry annual revenue *adj.* not different, exceptional, or unexpected in any way, especially in quality, ability, size, or degree
77. sim_____ic design *adj.* oversimplified or lacking in complexity or depth; characterized by an attempt to explain something complex or multifaceted with overly vague or simple terms
78. exp_____tal design *adj.* relating to or based on new ideas, forms, methods, etc. that have not been tried before, usually to find out what effect they have
79. ind_____le identity *adj.* unable to be divided or separated; not subject to alteration or change
80. rec_____ble landmark *adj.* easy to become aware of or identify
81. acc_____te the car *v.* to make something faster or earlier; to cause to develop or progress more quickly
82. exp_____tal data *adj.* relating to or based on new ideas, forms, methods, etc. that have not been tried before, usually to find out what effect they have
83. ind_____al freedom *n.* a single person or thing, as distinct from a group
84. a ga___y of famous actors *n.* an independent group of stars, interstellar gas, dark matter, etc., in the universe, bound together by gravity

ANSWERS: 75. bang, 76. ordinary, 77. simplistic, 78. experimental, 79. indivisible, 80. recognizable, 81. accelerate, 82. experimental, 83. individual, 84. galaxy

85. even more unf_____ely *adv.* by bad luck; unluckily
86. we__h a cargo *v.* to have a particular weight; to carefully evaluate things before making a conclusion
87. a numerator in a fr_____on *n.* a small part or item forming a piece of a whole; the quotient of two rational numbers
88. tense piano st____gs *n.* long, thin material used for tying things together, composed of several twisted threads
89. end of the gr__e period *n.* a quality of being pleasing, especially in appearance or manner; a temporary exemption, especially an extended period granted as a special favor; a short prayer of thanks before a meal
90. say a gr__e *n.* a quality of being pleasing, especially in appearance or manner; a temporary exemption, especially an extended period granted as a special favor; a short prayer of thanks before a meal
91. 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; (of medicine) the bony cavity in the skull that houses the eyeball and its associated structures, like muscles, nerves, and blood vessels
92. a pr_____nd book *adj.* extremely great; sensed or experienced very strongly; displaying a high level of knowledge or comprehension

ANSWERS: 85. unfortunately, 86. weigh, 87. fraction, 88. string, 89. grace, 90. grace, 91. orbit, 92. profound

93. to a rec_____ble degree *adj.* easy to become aware of or identify
94. 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
95. a private ind_____al *n.* a single person or thing, as distinct from a group
96. talented ph_____st *n.* a scientist who specializes in the field of physics
97. re_____e around a central axis *v.* to rotate around a central point
98. gr__p his hand *v.* to take hold of something or someone quickly and firmly
99. bo___e back from failure *v.* to cause to move up or away after hitting a surface; to spring back
100. an_____t stories *adj.* relating to the long ago, particularly the historical period preceding the fall of the Western Roman Empire; very old
101. we__h heavily on stock prices *v.* to have a particular weight; to carefully evaluate things before making a conclusion
102. 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
103. co___c background radiation *adj.* relating to the universe or cosmos; vast or limitless

ANSWERS: 93. recognizable, 94. heaven, 95. individual, 96. physicist, 97. revolve, 98. grasp, 99. bounce, 100. ancient, 101. weigh, 102. discovery, 103. cosmic

104. pr_____t the future *v.* to state beforehand that something will happen in the future, mainly based on knowledge or experience
105. vi_____e stars *adj.* capable of being seen; or open to easy view
106. co_____m a transaction *v.* to support or establish the truth or certainty of something previously believed or suspected to be the case
107. 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
108. refined sim_____ty *n.* the quality or condition of being natural and plain or easy to understand or do
109. pre-Christian an_____t *adj.* relating to the long ago, particularly the historical period preceding the fall of the Western Roman Empire; very old
110. a re_____nt of the city *n.* a person who lives in a particular place or has their home in a place
111. pu_____ng behavior *adj.* confusing or difficult to understand; mysterious
112. mi_____ve popcorn *n.* a form of electromagnetic radiation with wavelengths ranging from about one millimeter to one meter and frequencies between 300 MHz (0.3 GHz) and 300 GHz; an electric oven that cooks food by exposing it to high-frequency electromagnetic radiation, which causes the food molecules to vibrate and heat up quickly

ANSWERS: 104. predict, 105. visible, 106. confirm, 107. heaven, 108. simplicity, 109. ancient, 110. resident, 111. puzzling, 112. microwave

113. nutrient-de__e foods *adj.* containing a large number of people or something with little space between them
114. sp_____te on the outcome *v.* to form a theory or conjecture or guess about a subject without solid evidence
115. a life of sim_____ty *n.* the quality or condition of being natural and plain or easy to understand or do
116. mi_____ve radiation *n.* a form of electromagnetic radiation with wavelengths ranging from about one millimeter to one meter and frequencies between 300 MHz (0.3 GHz) and 300 GHz; an electric oven that cooks food by exposing it to high-frequency electromagnetic radiation, which causes the food molecules to vibrate and heat up quickly
117. a unit of acc_____ion *n.* a rate of increase in velocity; the rate of change of velocity with respect to time
118. ex_____e in popularity *v.* to burst or break open violently and noisily; to cause something to burst or break open
119. pa_____le energy *n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance
120. ca____n dioxide *n.* a chemical element that can be found in pure form as diamond or graphite, and it is also an essential part of coal and oil and is found in all plants and animals
121. pu_____ng questions *adj.* confusing or difficult to understand; mysterious

ANSWERS: 113. dense, 114. speculate, 115. simplicity, 116. microwave, 117. acceleration, 118. explode, 119. particle, 120. carbon, 121. puzzling

122. preserve my gr_____y

n. the force that attracts a body towards the center of the earth or towards any other physical body having mass; a manner that is solemn

ANSWERS: 122. gravity

Session 3: Fill in the Blanks

1. The violin's sound was so pure and _____ that it gave me chills.
adj. relating to the production of sound waves with a frequency that is an integral multiple of the frequency of the original wave; having a pleasing, pleasing, or agreeable sound.
2. The space shuttle is a modern engineering _____.
n. someone something that causes feelings of wonder or surprise
3. My home is easily _____ from the shore.
adj. capable of being seen; or open to easy view
4. 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
5. The _____ and the oxygen react and then form water.
n. the chemical element that is the lightest gas is colorless, odorless, tasteless, and combines with oxygen to form water
6. They will _____ between various emotional states.
v. to cause to move up or away after hitting a surface; to spring back
7. It's notoriously challenging to _____ birth rates.
v. to state beforehand that something will happen in the future, mainly based on knowledge or experience

ANSWERS: 1. harmonic, 2. marvel, 3. visible, 4. heaven, 5. hydrogen, 6. bounce, 7. predict

8. They spent a lot of time trying to _____ the current situation.
- v.* to take hold of something or someone quickly and firmly
9. This evidence will form the _____ for our discussion.
- n.* the most important facts, ideas, or events from which something is developed; the way how things are organized or arranged
10. The company's hiring criteria emphasize personality, not a person's _____.
- n.* the details of a person's social heritage, such as family, vocational or educational experience; past information that is essential to understanding a situation or problem
11. He liked the car because of the _____ of the design.
- n.* the quality or condition of being natural and plain or easy to understand or do
12. The government tried to _____ the commercialization of this development.
- v.* to make something faster or earlier; to cause to develop or progress more quickly
13. He was impressed by the range and _____ of the collection.
- n.* the quality or fact of many different types of things or people being included in something; a range of different things or people
14. The _____ of the sunset was a beautiful end to a long day.
- n.* a period of time following an event or experience during which a feeling of pleasure, satisfaction, or contentment persists; a lingering glow or light that remains after an object has disappeared from view
15. During the flight, the wings of the plane _____.
- v.* to move or cause anything to move fast and in small increments from side to side

ANSWERS: 8. grasp, 9. basis, 10. background, 11. simplicity, 12. accelerate, 13. diversity, 14. afterglow, 15. vibrate

16. His _____ showed highly positive results.
n. the scientific test conducted to observe what happens and gain new knowledge
17. One of the main _____ of the new product is its increased efficiency.
n. a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has
18. The detective found the clues _____ and couldn't solve the case immediately.
adj. confusing or difficult to understand; mysterious
19. The astronaut felt weightless in space due to the absence of _____.
n. the force that attracts a body towards the center of the earth or towards any other physical body having mass; a manner that is solemn
20. The Milky Way _____ has numerous water-bearing planets.
n. an independent group of stars, interstellar gas, dark matter, etc., in the universe, bound together by gravity
21. The class was divided into groups of four, with each group being _____ by two.
adj. able to be divided into parts, usually with nothing left over
22. Einstein was an outstanding and famous _____ of the 20th century.
n. a scientist who specializes in the field of physics
23. The _____ of her dress was breathtaking.
n. the quality of being graceful and stylish in appearance or manner

ANSWERS: 16. experiments, 17. advantages, 18. puzzling, 19. gravity, 20. galaxy, 21. divisible, 22. physicist, 23. elegance

24. The old building _____ in a fiery inferno.

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

25. His car was easily _____ in the parking lot.

- adj.* easy to become aware of or identify

26. The _____ of the company is too high nowadays.

- n.* a share or financial investment in something such as a business; a wooden or metal post set up to mark something

27. The _____ session of the Diet opened.

- adj.* not different, exceptional, or unexpected in any way, especially in quality, ability, size, or degree

28. The product is still in the _____ stage.

- adj.* relating to or based on new ideas, forms, methods, etc. that have not been tried before, usually to find out what effect they have

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

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

30. The outermost electron shell of an _____ determines its chemical characteristics.

- n.* the smallest unit of ordinary matter that forms a chemical element, composed of a nucleus and one or more electrons bound to the nucleus

ANSWERS: 24. exploded, 25. recognizable, 26. stake, 27. ordinary, 28. experimental, 29. microwave, 30. atom

31. They have been living near water since _____ times.

adj. relating to the long ago, particularly the historical period preceding the fall of the Western Roman Empire; very old

32. Trees absorb _____ dioxide and give off oxygen.

n. a chemical element that can be found in pure form as diamond or graphite, and it is also an essential part of coal and oil and is found in all plants and animals

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

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

34. The car's _____ was impressive, going from 0 to 60 mph in just 5 seconds.

n. a rate of increase in velocity; the rate of change of velocity with respect to time

35. The leaves of the fern were arranged in a _____ pattern.

n. a curve that coils around a central point and gets progressively farther away from it as it goes around

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

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

37. Liberty and justice for all are _____ concepts.

adj. unable to be divided or separated; not subject to alteration or change

38. 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: 31. ancient, 32. carbon, 33. individual, 34. acceleration, 35. spiral, 36. Cosmic, 37. indivisible, 38. particles

39. 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

40. The old oak tree stood with _____ and majesty in the park's center.

- n.* a quality of being pleasing, especially in appearance or manner; a temporary exemption, especially an extended period granted as a special favor; a short prayer of thanks before a meal

41. He spent only a _____ of his earnings.

- n.* a small part or item forming a piece of a whole; the quotient of two rational numbers

42. A rose has thorns on its _____.

- n.* the central part of something from which other parts can develop or grow; the part of a word common to all its inflected variants; (verb) to grow out of, have roots in, or originate in

43. Visa renewal for _____ foreigners in this country is once every five years.

- n.* a person who lives in a particular place or has their home in a place

44. The politician's solution to the problem was too _____ to solve the underlying issue.

- adj.* oversimplified or lacking in complexity or depth; characterized by an attempt to explain something complex or multifaceted with overly vague or simple terms

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

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

46. 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

ANSWERS: 39. planet, 40. grace, 41. fraction, 42. stem, 43. resident, 44. simplistic, 45. bang, 46. discovery

47. The entire mountain is covered in _____ rainforest.

adj. containing a large number of people or something with little space between them

48. 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; (of medicine) the bony cavity in the skull that houses the eyeball and its associated structures, like muscles, nerves, and blood vessels

49. Please write to _____ your reservation.

v. to support or establish the truth or certainty of something previously believed or suspected to be the case

50. She wore a _____ of pearls around her neck.

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

51. The baby _____ 1 pound 3 oz.

v. to have a particular weight; to carefully evaluate things before making a conclusion

52. He _____ that this investment would lead to success.

v. to form a theory or conjecture or guess about a subject without solid evidence

53. The building had a _____ pattern that was pleasing to the eye.

n. balance or proportion in design or structure, with elements arranged evenly on either side of an axis

54. She wore an _____ evening gown to the gala.

adj. pleasing and graceful in appearance or manner, or showing good taste and refinement

ANSWERS: 47. dense, 48. orbit, 49. confirm, 50. string, 51. weighs, 52. speculated, 53. symmetry, 54. elegant

55. The treatments were done but, _____ were unsuccessful.
adv. by bad luck; unluckily
56. Hydrogen and oxygen _____ to form water.
v. to join or merge to form a single thing or group
57. 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
58. She took a _____ class at the gym to improve her cardiovascular fitness.
n. the act of rotating rapidly around an axis; in the context of textiles, the process of twisting fibers together to form thread or yarn
59. My mother's illness had a _____ impact on us all.
adj. extremely great; sensed or experienced very strongly; displaying a high level of knowledge or comprehension
60. The Earth _____ around the Sun in an elliptical orbit.
v. to rotate around a central point
61. The company is undergoing an _____ opening new locations in several states.
n. the process of becoming larger or more extensive, or the result of this process

ANSWERS: 55. unfortunately, 56. combine, 57. universe, 58. spinning, 59. profound, 60. revolves, 61. expansion,