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# Vocabulary Builder Reference from...

Zohreh Davoudi: Are we living in a simulation? | TED Talk

https://www.ted.com/talks/zohreh\_davoudi\_are\_we\_living\_in\_a\_simulation



# All Words

#### **IMPORTANT**

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# **Session 1: Word List**

vast

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

synonym: expansive, extended, boundless

(1) vast majority, (2) vast desert

A **vast** audience viewed the broadcast.

universe

 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.

planet

 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.

evolve

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

synonym: develop, mature, grow

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

# Eyeless fish evolved in dark caves.

# proliferate

v. to grow or increase rapidly in number; to reproduce or spread rapidly, especially in an uncontrolled manner

synonym: multiply, spread, propagate

(1) proliferate cells, (2) proliferate weeds

The number of COVID cases continued to **proliferate** in many countries worldwide.

#### radiate

v. to spread out or emit something, such as light or heat, in all directions

synonym: give off, scatter, beam

(1) radiate an aura, (2) radiate in all directions

Roads **radiate** from the famous building in the center of the city.

#### incredible

adj. unbelievable; enormous

synonym: unbelievable, fantastical, inconceivable

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

Her response revealed incredible idiocy.

# ray

- n. a narrow line of light, heat, or another form of energysynonym: beam, light, glimmer
- opaque to X- rays,
   effect of cosmic rays
   Gamma rays penetrate body tissues and cause cell damage.

# complexity

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

synonym: intricacy, sophistication, elaboration

(1) cognitive complexity, (2) complexity theory

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

#### inanimate

adj. not having life or spirit; not animate

synonym: lifeless, inert, passive

(1) **inanimate** nature, (2) **inanimate** matter

The **inanimate** object was not capable of movement or feeling.

# microscopic

adj. tiny; exceedingly precise and detail-oriented; of or used in microscopy

synonym: infinitesimal, tiny, atomic

(1) **microscopic** inquiry, (2) **microscopic** analysis Inspectors noticed **microscopic** cracks in the submarine's hull.

#### cosmic

adj. relating to the universe or cosmos; vast or limitlesssynonym: 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.

# govern

- v. to legally control and direct a country, city, group of people, etc. and be responsible for introducing new laws, organizing and maintaining public services
- synonym: control, rule, preside
- (1) a nation's right to **govern**, (2) **govern** a public enterprise The regulations **governing** medical malpractice claims are rigorous.

## mathematics

 the science dealing with the logic of quantities, shapes, spaces, and arrangement

synonym: arithmetic, calculation, calculus

(1) a good grounding in **mathematics**, (2) **mathematics** competition

He has a flair for mathematics.

# apparently

adv. based on what you have heard or read synonym: evidently, obviously, supposedly

(1) **apparently** simple, (2) **apparently** unrelated The police **apparently** believed this explanation was

# plausible.

# arbitrary

adj. based on chance, or individual whim rather than any reason

synonym: autocratic, dictatorial, whimsical

(1) **arbitrary** size and shape, (2) the **arbitrary** rule of a dictator

He collected data to avoid **arbitrary** decisions.

#### constant

adj. happening repeatedly or all the timesynonym: ceaseless, stable, unchanging

(1) a **constant** wind, (2) a **constant** temperature **Constant** dropping wears away the stone.

#### simulate

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

synonym: pretend, imitate, mimic

(1) **simulate** climate change, (2) **simulate** a future scenario He had painted the wood to **simulate** stone.

# incredibly

adv. in a way that is very difficult to believe; exceedingly or extremely

synonym: enormously, exceptionally, extraordinarily

(1) **incredibly** cheerful character, (2) get **incredibly** insecure

Several cities are experiencing **incredibly** high unemployment rates.

#### advance

- v. to go or move forward; to develop in a positive way synonym: progress, boost, come along
- (1) **advance** the technology, (2) **advance** a cooperative relationship

Scientific knowledge will **advance** significantly with the power of AI.

#### fiction

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

synonym: fantasy, fable, invention

(1) stuff of science **fiction**, (2) non- **fiction** bestseller Truth is stranger than **fiction**.

# inquiry

 n. the act or process of asking a question or asking for information; an official process of investigating a matter of public interest

synonym: question, research, exploration

(1) **inquiry** about the product, (2) launch an **inquiry**Our tech support responds to the first **inquiry** exceptionally promptly.

# philosophy

- n. the study of general and fundamental questions, such as those about existence, reason, knowledge, values, mind synonym: doctrine, attitude, creed
- (1) **philosophy** of education, (2) western **philosophy** Ethics is a branch of **philosophy**.

#### nick

- n. a small cut, notch, or indentation in a surface or an edgesynonym: incision, dent, indentation
- (1) a **nick** on the fender of a car, (2) **nick** on my hand. The interviewer arrived in a **nick** of time.

# compelling

 adj. arousing strong and irresistible interest, attention, or admiration

synonym: tempting, captivating, influential

(1) tell a **compelling** story, (2) new and **compelling** evidence

His **compelling** presentation deeply moved everyone.

# argument

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

synonym: debate, discourse, discussion

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

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

# possibility

- n. a chance that something may happen or be truesynonym: chance, prospect, likelihood
- (1) **possibility** for growth, (2) **possibility** of a major earthquake

The **possibility** of getting the disease will drastically increase.

# 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

experimental data, (2) experimental design
 The product is still in the experimental stage.

# hypothesize

v. to form or present a theory or explanation without sufficient evidence; to speculate

synonym: speculate, theorize, conjecture

(1) **hypothesize** as to outcomes, (2) **hypothesize** what could have happened

Scientists **hypothesize** that the new fish species evolved to survive in deep-sea environments.

#### constraint

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

synonym: limitation, restriction, bound

constraint on business activity, (2) strict time
 constraints

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

#### detectable

*adj.* capable of being discovered or identified *synonym*: perceptible, noticeable, observable

(1) a barely **detectable** change, (2) **detectable** by the human ear

The object is **detectable** at ultraviolet wavelengths.

# glitch

 a minor problem or malfunction, especially in a computer program, system, or machine

synonym: malfunction, bug, fault

(1) computer **glitch**, (2) unanticipated **glitch**The computer system had a minor **glitch** that caused a delay.

#### accumulate

v. to collect or acquire a large number of things over a long period of time

synonym: amass, stash, earn

(1) **accumulate** cash value, (2) **accumulate** evidence He has **accumulated** his wealth through real estate investments.

adjust

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

synonym: adapt, alter, acclimate

(1) **adjust** a schedule, (2) **adjust** the rearview mirror You have to **adjust** your content to the age of the audience.

shift

- n. a slight transition in position, direction, or trendsynonym: transition, change, modification
- (1) Doppler **shift**, (2) major paradigm **shift** Could you help me **shift** some furniture?

#### instance

- n. a particular example or single occurrence of somethingsynonym: example, sample, illustration
- (1) for **instance**, (2) notable **instance**

These articles cite five instances of climate change.

## accuracy

the state or degree of being exact or correct; the ability to perform something with proficiency and without mistake

synonym: precision, exactness, truthfulness

(1) degree of **accuracy**, (2) the **accuracy** of his compass To assure **accuracy**, I recommend investing in high-quality test kits.

# steady

adj. firmly fixed, supported, or balanced; not shaking or moving

synonym: stable, solid, secure

(1) **steady** increase, (2) take a **steady** job The patient's vital signs are **steady**, indicating a stable condition.

#### drift

to move smoothly and slowly in water or air, especially as a result of outside forces, with no control over the direction

synonym: float, wander, freewheel

(1) **drift** down the stream, (2) **drift** away on a raft I drifted around for years in Europe before going to university.

# precision

- the quality or condition of being exact and accurate synonym: accuracy, exactness, rigor
- (1) a **precision** instrument, (2) speak with **precision** This operation requires both patience and **precision**.

#### detect

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.

# slight

adj. very small in degree or amount synonym: feeble, nuanced, subtle

(1) feel a **slight** concern, (2) **slight** increase

We made **slight** modifications to reflect the views of both sides.

# concept

- n. an idea or principle associated with something abstractsynonym: idea, notion, vision
- (1) learn new concepts,(2) concept carOne such rapidly growing concept is quantum cryptography.

#### finite

adj. having a limit or restriction of size, time, etc. synonym: delimited, defined, limited

(1) **finite** resources, (2) **finite** decimal Human beings have a **finite** lifespan, so we yearn for the

# compute

v. to make a mathematical calculation synonym: calculate

idea of immortality.

(1) **compute** an average score, (2) **compute** the value I tried to **compute** the efficiency of the investment.

# infinity

n. the state or quality of having no end or limit;
 (mathematics) a number greater than any natural number

synonym: endlessness, boundlessness, continuity

the infinity of the universe, (2) negative infinity
 That investor saw an infinity of possibilities in this company.

#### 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.

#### infinite

adj. unlimited or very great; impossible to measuresynonym: boundless, countless, limitless

infinite appetite, (2) infinite in supply
 The battle had an infinite impact on the nation.

## represent

v. to speak, act, or be present on behalf of another person or group; to form or constitute

synonym: depict, express, describe

(1) **represent** by a diagram, (2) the characters that **represent** numbers

We elected him to **represent** us at the international conference.

# incomprehensible

adj. impossible to understand or explain; not able to be grasped or comprehended

synonym: unintelligible, unfathomable, inexplicable

(1) **incomprehensible** jargon, (2) **incomprehensible** math problem

The mathematical formula was **incomprehensible** to most of the students.

#### atomic

adj. of or relating to atom (= the smallest component of an element)

synonym: tiny, microscopic, nuclear

(1) atomic nucleus, (2) atomic bomb

Carbon has an **atomic** mass of 12.

# particle

- 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.

# probe

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

synonym: investigation, inquiry, examination

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a lunar probe,
 probe for inside information
 NASA sent a probe to study the atmosphere of Jupiter.

# principle

*n.* a fundamental law or truth that explains or controls how something happens or works

synonym: rule, creed, code

(1) **principle** of treatment, (2) **principle** in business Efficiency isn't an essential **principle** here; fairness is.

#### sensitive

adj. able to notice slight changes, signals, or influences; able to feel or perceive other's feelings; susceptible to the things people say or do

synonym: exposed, susceptible, keen

- (1) **sensitive** documents, (2) baby with **sensitive** skin The teacher is very **sensitive** to children's feelings.
- v. to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance

synonym: interrupt, disturb, break into

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

# pothole

disrupt

 a hole or depression in a road surface, usually caused by wear, weathering, or erosion; can be dangerous to drivers and cause damage to vehicles

*synonym*: chuckhole, pit, depression

(1) deep **pothole**, (2) **pothole** repair
The car hit a **pothole** and caused a flat tire.

#### skate

n. a type of footwear that has a blade attached to its sole for skating on ice or other hard surfaces; an activity or sport that involves gliding on skates on ice or other hard surfaces

synonym: blade, runner, sled

(1) skate park, (2) roller skate

She has been practicing an ice **skate** routine for months

#### visible

adj. capable of being seen; or open to easy viewsynonym: clear, observable, seeable

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

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

#### molecule

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

synonym: particle, element, atom

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

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

#### 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.

#### electron

- n. a tiny particle with the negative electrical chargesynonym: negatron
- (1) flow of electrons, (2) beam of electrons

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

# discovery

 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**.

# shifting

*adj.* constantly changing or moving *synonym*: unfirm, shifty, fluctuating

(1) **shifting** balance, (2) continuously **shifting** landscape Trends in the fashion industry are so **shifting** that it is challenging to keep up with them.

# explanation

 the information or arguments that someone provides to make something understandable or clear

synonym: description, elucidation, account

(1) the **explanation** for the failure, (2) detailed **explanation** The following **explanation** is currently being used to explain the phenomenon in question.

# hypothesis

 a proposed idea or explanation that is based on a few known facts but has not yet been proven to be true or accurate

synonym: assumption, conjecture, theory

(1) test my **hypothesis**, (2) a bold **hypothesis**. This evidence supports the big-bang **hypothesis**.

#### assume

 to think or accept something to be true without having proof of it; to take or begin to have power; to begin to exhibit a specific quality or appearance

synonym: guess, presume, suppose

(1) **assume** a lousy attitude to his boss, (2) **assume** an important role

The following example **assumes** that the capacity of each battery is the same.

# 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.

#### **Planck**

- a unit of measurement used in physics to quantify the smallest possible amounts of energy, typically associated with subatomic particles and other quantum phenomena
- (1) Planck mass, (2) Planck length

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**Planck's** constant is a fundamental constant of nature used in quantum mechanics.

#### observable

adj. that can be noticed or seen

*synonym*: visible, perceptible, detectable

(1) **observable** change, (2) experimentally **observable**Any theorem relies on both **observable** fact and assumption.

# investigate

v. to conduct a systematic or formal inquiry to identify and evaluate the facts of a crime, problem, statement, etc. to establish the truth

synonym: examine, analyze, look into

(1) **investigate** the matter, (2) **investigate** a data leak The committee **investigated** several apparent inconsistencies.

# 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.

#### lifetime

- n. the duration of someone's life or something's existence;synonym: lifespan, duration
- (1) **lifetime** benefits, (2) **lifetime** ban from the sport She had lived through two world wars in her **lifetime**.

#### millennium

- n. a span of 1000 years, or the 1000th anniversary (plural: millennia)
- (1) past **millennium**, (2) **millennium** bottle of wine Our world is in the third **millennium**.

#### bias

 a strong feeling in favor of or against one group of people, an idea, or thing, often not based on fair judgment

synonym: inclination, partiality, predilection

(1) **bias** against a big company, (2) have a **bias** toward socialism

She researched gender **bias** in politics.

#### calculation

 the act or process of using numbers to judge an amount of something

synonym: analysis, computation, estimate

(1) make a **calculation**, (2) **calculation** of loss and gain The error in the **calculation** was attributable to rounding.

# computation

- n. the act or process of calculating something, especially an answer or amount, by using a machine or calculator synonym: calculation, estimation, arithmetic
- (1) parallel **computation**, (2) theory of **computation**The researcher demonstrated the superiority of quantum **computation** in several mathematical tasks.

# alien

 a person who comes from a different country, race, or group; a form of life assumed to exist outside the Earth or its atmosphere

synonym: foreigner, unfamiliar, unknown

(1) alien fungi, (2) resident aliens

**Alien** species have drastically altered the ecosystem in this area.

#### conclusive

- adj. serving to settle an issue or put an end to doubt or uncertainty; irrefutable and leaves no room for doubtsynonym: decisive, definitive, convincing
- (1) **conclusive** information, (2) **conclusive** statement The research provided **conclusive** evidence that the new treatment was effective.

# pursue

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

synonym: seek, hunt, chase

(1) **pursue** a goal, (2) **pursue** freedoms She intends to **pursue** a political career.

# **Session 2: Spelling**

1.	have a bs toward socialism	n.	a strong feeling in favor of or against one group of people, an idea, or thing, often not based on fair judgment
2.	learn new cots	n.	an idea or principle associated with something abstract
3.	conve information	adj.	serving to settle an issue or put an end to doubt or uncertainty; irrefutable and leaves no room for doubt
4.	dit a well-ordered condition	ν.	to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
5.	beam of elons	n.	a tiny particle with the negative electrical charge
6.	phihy of education	n.	the study of general and fundamental questions, such as those about existence, reason, knowledge, values, mind
7.	fie resources	adj.	having a limit or restriction of size, time, etc.
8.	a scientific diry	n.	the act or process of finding information a place, or an object, or learning about something that was previously not known
9.	pre for inside information	n.	a tool used for testing or examining, especially for medical or scientific purposes, or an exploratory mission to a planet or other celestial body; (verb) to investigate, examine, or search into something

ANSWERS: 1. bias, 2. concept, 3. conclusive, 4. disrupt, 5. electron, 6. philosophy, 7. finite, 8. discovery, 9. probe

10.	site a future scenario	ν.	to make a pretense of someone's behavior or looks; to reproduce something that exists in real life using computers, models, etc., usually for study or training purposes
11.	feel a slt concern	adj.	very small in degree or amount
12.	pale energy	n.	a small piece of something; a word or piece of a term with grammatical function but little or no significance
13.	dit sleep	ν.	to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
14.	inte matter	adj.	not having life or spirit; not animate
15.	invte a data leak	ν.	to conduct a systematic or formal inquiry to identify and evaluate the facts of a crime, problem, statement, etc. to establish the truth
16.	incle amount	adj.	unbelievable; enormous
17.	plt 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
18.	hypze what could have happened	<i>v</i> .	to form or present a theory or explanation without sufficient evidence; to speculate
19.	matcs competition	n.	the science dealing with the logic of quantities, shapes, spaces, and arrangement

ANSWERS: 10. simulate, 11. slight, 12. particle, 13. disrupt, 14. inanimate, 15. investigate, 16. incredible, 17. planet, 18. hypothesize, 19. mathematics

20.	dr_t away on a raft	<i>v</i> .	to move smoothly and slowly in water or air, especially as a result of outside forces, with no control over the direction
21.	prote weeds	<i>v</i> .	to grow or increase rapidly in number; to reproduce or spread rapidly, especially in an uncontrolled manner
22.	incly cheerful character	adv.	in a way that is very difficult to believe; exceedingly or extremely
23.	negative inty	n.	the state or quality of having no end or limit; (mathematics) a number greater than any natural number
24.	get incly insecure	adv.	in a way that is very difficult to believe; exceedingly or extremely
25.	roller ske	n.	a type of footwear that has a blade attached to its sole for skating on ice or other hard surfaces; an activity or sport that involves gliding on skates on ice or other hard surfaces
26.	sty increase	adj.	firmly fixed, supported, or balanced; not shaking or moving
27.	the arry rule of a dictator	adj.	based on chance, or individual whim rather than any reason
28.	micic inquiry	adj.	tiny; exceedingly precise and detail-oriented; of or used in microscopy
29.	prote cells	<i>v</i> .	to grow or increase rapidly in number; to reproduce or spread rapidly, especially in an uncontrolled manner
30.	inte appetite	adj.	unlimited or very great; impossible to measure

ANSWERS: 20. drift, 21. proliferate, 22. incredibly, 23. infinity, 24. incredibly, 25. skate, 26. steady, 27. arbitrary, 28. microscopic, 29. proliferate, 30. infinite

31.	exptal 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
32.	sily situated	adv.	in almost the same way
33.	rae an aura	<i>v</i> .	to spread out or emit something, such as light or heat, in all directions
34.	launch an iny	n.	the act or process of asking a question or asking for information; an official process of investigating a matter of public interest
35.	cognitive comty	<i>n</i> .	the state or quality of being complicated or intricate and difficult to understand
36.	continuously shng landscape	adj.	constantly changing or moving
37.	conus improvement	adj.	occurring or existing without a pause or interruption
38.	ade a cooperative relationship	<i>v</i> .	to go or move forward; to develop in a positive way
39.	ase a lousy attitude to his boss	ν.	to think or accept something to be true without having proof of it; to take or begin to have power; to begin to exhibit a specific quality or appearance
40.	prle of treatment	n.	a fundamental law or truth that explains or controls how something happens or works
41.	baby with seve skin	adj.	able to notice slight changes, signals, or influences; able to feel or perceive other's feelings; susceptible to the things people say or do

ANSWERS: 31. experimental, 32. similarly, 33. radiate, 34. inquiry, 35. complexity, 36. shifting, 37. continuous, 38. advance, 39. assume, 40. principle, 41. sensitive

of

42.	neutral hydrogen ams	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
43.	non-fin bestseller	n.	the type of book or story, especially novels, that describes imaginary events and people; anything made up or imagined that is not true
44.	inte in supply	adj.	unlimited or very great; impossible to measure
45.	poe repair	n.	a hole or depression in a road surface, usually caused by wear, weathering, or erosion; can be dangerous to drivers and cause damage to vehicles
46.	iny about the product	n.	the act or process of asking a question or asking for information; an official process of investigating a matter of public interest
47.	at incle speed	adj.	unbelievable; enormous
48.	conve statement	adj.	serving to settle an issue or put an end to doubt or uncertainty; irrefutable and leaves no room for doubt
49.	major paradigm sht	n.	a slight transition in position, direction, or trend
50.	accte evidence	ν.	to collect or acquire a large number of things over a long period of time
51.	arry size and shape	adj.	based on chance, or individual whim rather than any reason
52.	unanticipated glh	n.	a minor problem or malfunction, especially in a computer program, system, or machine

ANSWERS: 42. atom, 43. fiction, 44. infinite, 45. pothole, 46. inquiry, 47. incredible, 48. conclusive, 49. shift, 50. accumulate, 51. arbitrary, 52. glitch

53.	effect of cosmic r_ys	n.	a narrow line of light, heat, or another form of energy
54.	stuff of science fin	n.	the type of book or story, especially novels, that describes imaginary events and people; anything made up or imagined that is not true
55.	experimentally obsle	adj.	that can be noticed or seen
56.	inte nature	adj.	not having life or spirit; not animate
57.	invte the matter	v.	to conduct a systematic or formal inquiry to identify and evaluate the facts of a crime, problem, statement, etc. to establish the truth
58.	theory of the unse	n.	everything that exists, especially all physical matter, including planets, stars, galaxies, and all other forms of matter and energy
59.	second coc velocity	adj.	relating to the universe or cosmos; vast or limitless
60.	eve	v.	to develop gradually, or to cause the development of something or someone gradually
61.	posty for growth	n.	a chance that something may happen or be true
62.	apply unrelated	adv.	based on what you have heard or read
63.	ase an important role	ν.	to think or accept something to be true without having proof of it; to take or begin to have power; to begin to exhibit a specific quality or appearance

ANSWERS: 53. ray, 54. fiction, 55. observable, 56. inanimate, 57. investigate, 58. universe, 59. cosmic, 60. evolve, 61. possibility, 62. apparently, 63. assume

64.	strict time connts	n.	a limit or restriction on something, such as an action, behavior, or thought
65.	speak with pron	n.	the quality or condition of being exact and accurate
66.	apply simple	adv.	based on what you have heard or read
67.	a pron instrument	n.	the quality or condition of being exact and accurate
68.	a n_k on the fender of a car	n.	a small cut, notch, or indentation in a surface or an edge
69.	opaque to X-r_ys	n.	a narrow line of light, heat, or another form of energy
70.	slt increase	adj.	very small in degree or amount
71.	b_s against a big company	n.	a strong feeling in favor of or against one group of people, an idea, or thing, often not based on fair judgment
72.	accte cash value	ν.	to collect or acquire a large number of things over a long period of time
73.	eve over the past decade	<i>v</i> .	to develop gradually, or to cause the development of something or someone gradually
74.	adt the rearview mirror	ν.	to make a minor modification to something to make it more suited for a new set of conditions or to make it function better.
75.	atc bomb	adj.	of or relating to atom (= the smallest component of an element)
76.	shng balance	adj.	constantly changing or moving

ANSWERS: 64. constraint, 65. precision, 66. apparently, 67. precision, 68. nick, 69. ray, 70. slight, 71. bias, 72. accumulate, 73. evolve, 74. adjust, 75. atomic, 76. shifting

77.	hypze as to outcomes	v.	to form or present a theory or explanation without sufficient evidence; to speculate
78.	ske park	n.	a type of footwear that has a blade attached to its sole for skating on ice or other hard surfaces; an activity or sport that involves gliding on skates on ice or other hard surfaces
79.	mole behavior	n.	a group of two or more atoms held together by attractive forces known as chemical bonds
80.	coe an average score	<i>v</i> .	to make a mathematical calculation
81.	notable ince	n.	a particular example or single occurrence of something
82.	flow of elons	n.	a tiny particle with the negative electrical charge
83.	vie by X-ray	adj.	capable of being seen; or open to easy view
84.	nk on my hand	n.	a small cut, notch, or indentation in a surface or an edge
85.	atc nucleus	adj.	of or relating to atom (= the smallest component of an element)
86.	gon a public enterprise	<i>v</i> .	to legally control and direct a country, city, group of people, etc. and be responsible for introducing new laws, organizing and maintaining public services
87.	detle by the human ear	adj.	capable of being discovered or identified

ANSWERS: 77. hypothesize, 78. skate, 79. molecule, 80. compute, 81. instance, 82. electron, 83. visible, 84. nick, 85. atomic, 86. govern, 87. detectable

88.	detailed expon	n.	the information or arguments that someone provides to make something understandable or clear
89.	aln fungi	n.	a person who comes from a different country, race, or group; a form of life assumed to exist outside the Earth or its atmosphere
90.	fie decimal	adj.	having a limit or restriction of size, time, etc.
91.	rae in all directions	<i>v</i> .	to spread out or emit something, such as light or heat, in all directions
92.	resident alns	n.	a person who comes from a different country, race, or group; a form of life assumed to exist outside the Earth or its atmosphere
93.	cot car	n.	an idea or principle associated with something abstract
94.	milum bottle of wine	n.	a span of 1000 years, or the 1000th anniversary (plural: millennia)
95.	the great diry 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
96.	probabilistic qum theory	n.	the smallest amount or unit of something, especially (electromagnetic) energy
97.	computer glh	n.	a minor problem or malfunction, especially in a computer program, system, or machine

ANSWERS: 88. explanation, 89. alien, 90. finite, 91. radiate, 92. alien, 93. concept, 94. millennium, 95. discovery, 96. quantum, 97. glitch

98. the expon for the failure	n.	the information or arguments that someone provides to make something understandable or clear
99. PIk length	n.	a unit of measurement used in physics to quantify the smallest possible amounts of energy, typically associated with subatomic particles and other quantum phenomena
100. posty of a major earthquake	n.	a chance that something may happen or be true
101. comty theory	n.	the state or quality of being complicated or intricate and difficult to understand
102. the inty of the universe	n.	the state or quality of having no end or limit; (mathematics) a number greater than any natural number
103. vt majority	adj.	enormous in size, number, amount, or quantity
104. prle in business	n.	a fundamental law or truth that explains or controls how something happens or works
105. drt down the stream	<i>v</i> .	to move smoothly and slowly in water or air, especially as a result of outside forces, with no control over the direction
106. have sily great abilities	adv.	in almost the same way
107. test my hypis	n.	a proposed idea or explanation that is based on a few known facts but has not yet been proven to be true or accurate
108. pue freedoms	<i>v</i> .	to do something or attempt to attain something over time; to follow or seek someone or something, especially in

ANSWERS: 98. explanation, 99. Planck, 100. possibility, 101. complexity, 102. infinity, 103. vast, 104. principle, 105. drift, 106. similarly, 107. hypothesis, 108. pursue

trying to catch them

109. a nation's right to gon	ν.	to legally control and direct a country, city, group of people, etc. and be responsible for introducing new laws, organizing and maintaining public services
110. a good grounding in matcs	n.	the science dealing with the logic of quantities, shapes, spaces, and arrangement
111. degree of accy	n.	the state or degree of being exact or correct; the ability to perform something with proficiency and without mistake
112. det a bad event	ν.	to find or recognize something, especially something difficult to see, hear, etc.
113. ade the technology	ν.	to go or move forward; to develop in a positive way
114. coe the value	v.	to make a mathematical calculation
115. a lunar pre	n.	a tool used for testing or examining, especially for medical or scientific purposes, or an exploratory mission to a planet or other celestial body; (verb) to investigate, examine, or search into something
116. lime benefits	n.	the duration of someone's life or something's existence;
117. oxygen am	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: 109. govern, 110. mathematics, 111. accuracy, 112. detect, 113. advance, 114. compute, 115. probe, 116. lifetime, 117. atom

118. inc	ble jargon	adj.	impossible to understand or explain; not able to be grasped or comprehended
119. lime	ban from the sport	n.	the duration of someone's life or something's existence;
120. western p	hihy	n.	the study of general and fundamental questions, such as those about existence, reason, knowledge, values, mind
121. new and (	comng evidence	adj.	arousing strong and irresistible interest, attention, or admiration
122. save the	plt	n.	any of the nine large celestial bodies that circle in the solar system; any celestial body that revolves around a star
123. a blazing	arnt	n.	a set of statements or reasons used to support or refute a proposition or theory; a verbal or physical fight or dispute
124. make a c	alon	n.	the act or process of using numbers to judge an amount of something
125. charged p	oale	n.	a small piece of something; a word or piece of a term with grammatical function but little or no significance
126. take a st <sub>.</sub>	y job	adj.	firmly fixed, supported, or balanced; not shaking or moving
127. adt a	schedule		to make a minor modification to something to make it more suited for a new set of conditions or to make it function better.

ANSWERS: 118. incomprehensible, 119. lifetime, 120. philosophy, 121. compelling, 122. planet, 123. argument, 124. calculation, 125. particle, 126. steady, 127. adjust

128. parallel comon	n.	the act or process of calculating something, especially an answer or amount, by using a machine or calculator
129. rent by a diagram	ν.	to speak, act, or be present on behalf of another person or group; to form or constitute
130. laws of qum mechanics	n.	the smallest amount or unit of something, especially (electromagnetic) energy
131. connt on business activity	n.	a limit or restriction on something, such as an action, behavior, or thought
132. seve documents	adj.	able to notice slight changes, signals, or influences; able to feel or perceive other's feelings; susceptible to the things people say or do
133. vie stars	adj.	capable of being seen; or open to easy view
134. Doppler sht	n.	a slight transition in position, direction, or trend
135. a cont temperature	adj.	happening repeatedly or all the time
136. coc background radiation	adj.	relating to the universe or cosmos; vast or limitless
137. a bold hypis	n.	a proposed idea or explanation that is based on a few known facts but has not yet been proven to be true or accurate
138. obsle change	adj.	that can be noticed or seen
139. theory of comon	n.	the act or process of calculating something, especially an answer or amount, by using a machine or calculator

ANSWERS: 128. computation, 129. represent, 130. quantum, 131. constraint, 132. sensitive, 133. visible, 134. shift, 135. constant, 136. cosmic, 137. hypothesis, 138. observable, 139. computation

140. micic analysis	adj.	tiny; exceedingly precise and detail-oriented; of or used in microscopy
141. exptal design	adj.	relating to or based on new ideas, forms, methods, etc. that have not beer tried before, usually to find out what effect they have
142. a cont wind	adj.	happening repeatedly or all the time
143. for ince	n.	a particular example or single occurrence of something
144. a barely detle change	adj.	capable of being discovered or identified
145. expansion of the unse	n.	everything that exists, especially all physical matter, including planets, stars galaxies, and all other forms of matter and energy
146. the accy of his compass	n.	the state or degree of being exact or correct; the ability to perform something with proficiency and without mistake
147. calon of loss and gain	n.	the act or process of using numbers to judge an amount of something
148. deep poe	n.	a hole or depression in a road surface, usually caused by wear, weathering, or erosion; can be dangerous to drivers and cause damage to vehicles
149. small moles	n.	a group of two or more atoms held together by attractive forces known as chemical bonds
150. a conus row of warehouses	adj.	occurring or existing without a pause or interruption

ANSWERS: 140. microscopic, 141. experimental, 142. constant, 143. instance, 144. detectable, 145. universe, 146. accuracy, 147. calculation, 148. pothole, 149. molecule, 150. continuous

151.	det smuggling across borders	ν.	to find or recognize something, especially something difficult to see, hear, etc.
152.	incble math problem	adj.	impossible to understand or explain; no able to be grasped or comprehended
153.	past milum	n.	a span of 1000 years, or the 1000th anniversary (plural: millennia)
154.	the arnt against capital punishment	n.	a set of statements or reasons used to support or refute a proposition or theory; a verbal or physical fight or dispute
155.	pue a goal	<i>v</i> .	to do something or attempt to attain something over time; to follow or seek someone or something, especially in trying to catch them
156.	site climate change	v.	to make a pretense of someone's behavior or looks; to reproduce something that exists in real life using computers, models, etc., usually for study or training purposes
157.	PIk mass	n.	a unit of measurement used in physics to quantify the smallest possible amounts of energy, typically associated with subatomic particles and other quantum phenomena
158.	tell a comng story	adj.	arousing strong and irresistible interest, attention, or admiration
159.	the characters that rent numbers	<i>v</i> .	to speak, act, or be present on behalf of another person or group; to form or constitute

ANSWERS: 151. detect, 152. incomprehensible, 153. millennium, 154. argument, 155. pursue, 156. simulate, 157. Planck, 158. compelling, 159. represent

160. v\_\_t desert

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

ANSWERS: 160. vast

# **Session 3: Fill in the Blanks**

1.	That investor saw an of possibilities in this company.
n.	the state or quality of having no end or limit; (mathematics) a number greater than any natural number
2.	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
3.	The teacher is very to children's feelings.
adj	able to notice slight changes, signals, or influences; able to feel or perceive other's feelings; susceptible to the things people say or do
4.	He has a flair for
n.	the science dealing with the logic of quantities, shapes, spaces, and arrangement
5.	I around for years in Europe before going to university.
ν.	to move smoothly and slowly in water or air, especially as a result of outside forces, with no control over the direction
6.	You have to your content to the age of the audience.
<i>v</i> .	to make a minor modification to something to make it more suited for a new set of conditions or to make it function better.
7.	Any theorem relies on both fact and assumption.
adj	that can be noticed or seen
AN	SWERS: 1. infinity, 2. planet, 3. sensitive, 4. mathematics, 5. drifted, 6. adjust, 7.
	servable

8. My home is easily from the shore.
adj. capable of being seen; or open to easy view
9. One such rapidly growing is quantum cryptography.
n. an idea or principle associated with something abstract
10. Human beings have a lifespan, so we yearn for the idea of immortality.
adj. having a limit or restriction of size, time, etc.
11. Efficiency isn't an essential here; fairness is.
<ul> <li>a fundamental law or truth that explains or controls how something happens of works</li> </ul>
12. I tried to the efficiency of the investment.
v. to make a mathematical calculation
13. The research provided evidence that the new treatment was effective.
adj. serving to settle an issue or put an end to doubt or uncertainty; irrefutable and leaves no room for doubt
14. She had lived through two world wars in her
n. the duration of someone's life or something's existence;
15. We argue that wages for temporary workers should rise.
adv. in almost the same way
16. The error in the was attributable to rounding.
n. the act or process of using numbers to judge an amount of something
ANSWERS: 8. visible, 9. concept, 10. finite, 11. principle, 12. compute, 13. conclusive, 14. lifetime, 15. similarly, 16. calculation

17.	The computer system had a minor that caused a delay.
n.	a minor problem or malfunction, especially in a computer program, system, or machine
18.	Inspectors noticed cracks in the submarine's hull.
adj	tiny; exceedingly precise and detail-oriented; of or used in microscopy
19.	The outermost shell determines the chemical properties of an atom.
n.	a tiny particle with the negative electrical charge
20.	The researcher demonstrated the superiority of quantum in several mathematical tasks.
n.	the act or process of calculating something, especially an answer or amount, by using a machine or calculator
21.	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
22.	The of getting the disease will drastically increase.
n.	a chance that something may happen or be true
23.	This operation requires both patience and
n.	the quality or condition of being exact and accurate
24.	The following example that the capacity of each battery is the same.
v.	to think or accept something to be true without having proof of it; to take or begin to have power; to begin to exhibit a specific quality or appearance
	SWERS: 17. glitch, 18. microscopic, 19. electron, 20. computation, 21. particles, possibility, 23. precision, 24. assumes

25. Could you help me some furniture?
n. a slight transition in position, direction, or trend
26 species have drastically altered the ecosystem in this area.
<ul> <li>a person who comes from a different country, race, or group; a form of life assumed to exist outside the Earth or its atmosphere</li> </ul>
27. A audience viewed the broadcast.
adj. enormous in size, number, amount, or quantity
28. Our tech support responds to the first exceptionally promptly.
n. the act or process of asking a question or asking for information; an official process of investigating a matter of public interest
29. Eyeless fish in dark caves.
v. to develop gradually, or to cause the development of something or someone gradually
30. Several cities are experiencing high unemployment rates.
adv. in a way that is very difficult to believe; exceedingly or extremely
31. The budget forced them to make difficult decisions.
n. a limit or restriction on something, such as an action, behavior, or thought
32. The interviewer arrived in a of time.
n. a small cut, notch, or indentation in a surface or an edge
33. Ethics is a branch of
n. the study of general and fundamental questions, such as those about existence, reason, knowledge, values, mind
ANSWERS: 25. shift, 26. Alien, 27. vast, 28. inquiry, 29. evolved, 30. incredibly, 31 constraint, 32. nick, 33. philosophy

34.	The object is at ultraviolet wavelengths.
adj.	capable of being discovered or identified
35.	Our world is in the third
n.	a span of 1000 years, or the 1000th anniversary (plural: millennia)
36.	The object was not capable of movement or feeling.
adj.	not having life or spirit; not animate
	The number of COVID cases continued to in many countries worldwide.
ν.	to grow or increase rapidly in number; to reproduce or spread rapidly, especially in an uncontrolled manner
38.	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
39.	Big techs are now eager to develop computers.
n.	the smallest amount or unit of something, especially (electromagnetic) energy
40.	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
41.	The police believed this explanation was plausible.
adv.	based on what you have heard or read
42.	We elected him to us at the international conference.
ν.	to speak, act, or be present on behalf of another person or group; to form or constitute
	SWERS: 34. detectable, 35. millennium, 36. inanimate, 37. proliferate, 38. overy, 39. quantum, 40. universe, 41. apparently, 42. represent

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43.	The project's made it difficult for the team to complete it on time.
n.	the state or quality of being complicated or intricate and difficult to understand
44.	dropping wears away the stone.
adj	happening repeatedly or all the time
45.	The car hit a and caused a flat tire.
n.	a hole or depression in a road surface, usually caused by wear, weathering, or erosion; can be dangerous to drivers and cause damage to vehicles
46.	I'm so sorry to you when you're pretty busy.
ν.	to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
47.	Her response revealed idiocy.
adj	unbelievable; enormous
48.	His presentation deeply moved everyone.
adj.	arousing strong and irresistible interest, attention, or admiration
49.	Trends in the fashion industry are so that it is challenging to keep up with them.
adj	constantly changing or moving
50.	The regulations medical malpractice claims are rigorous.
v.	to legally control and direct a country, city, group of people, etc. and be responsible for introducing new laws, organizing and maintaining public services
	SWERS: 43. complexity, 44. Constant, 45. pothole, 46. disrupt, 47. incredible, 48 npelling, 49. shifting, 50. governing

51.	The between the two sides over the proposed policy was heated.
n.	a set of statements or reasons used to support or refute a proposition or theory; a verbal or physical fight or dispute
52.	Truth is stranger than
n.	the type of book or story, especially novels, that describes imaginary events and people; anything made up or imagined that is not true
53.	She researched gender in politics.
n.	a strong feeling in favor of or against one group of people, an idea, or thing, often not based on fair judgment
54.	The mathematical formula was to most of the students.
adj	. impossible to understand or explain; not able to be grasped or comprehended
55.	This evidence supports the big-bang
n.	
56.	The following is currently being used to explain the phenomenon in question.
n.	the information or arguments that someone provides to make something understandable or clear
57.	These articles cite five of climate change.
n.	a particular example or single occurrence of something
58.	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
	SWERS: 51. argument, 52. fiction, 53. bias, 54. incomprehensible, 55. hypothesis, explanation, 57. instances, 58. atom

59.	Carbon has an mass of 12.
adj.	of or relating to atom (= the smallest component of an element)
60.	She intends to a political career.
<i>v</i> .	to do something or attempt to attain something over time; to follow or seek someone or something, especially in trying to catch them
61.	NASA sent a to study the atmosphere of Jupiter.
n.	a tool used for testing or examining, especially for medical or scientific purposes, or an exploratory mission to a planet or other celestial body; (verb) to investigate, examine, or search into something
62.	The security camera has four intruders.
<i>v</i> .	to find or recognize something, especially something difficult to see, hear, etc.
63.	The heavy snow has been since last morning.
adj.	occurring or existing without a pause or interruption
64.	He had painted the wood to stone.
ν.	to make a pretense of someone's behavior or looks; to reproduce something that exists in real life using computers, models, etc., usually for study or training purposes
65.	She has been practicing an ice routine for months
n.	a type of footwear that has a blade attached to its sole for skating on ice or other hard surfaces; an activity or sport that involves gliding on skates on ice or other hard surfaces
66.	The patient's vital signs are indicating a stable condition.
adj.	firmly fixed, supported, or balanced; not shaking or moving
	SWERS: 59. atomic, 60. pursue, 61. probe, 62. detected, 63. continuous, 64. ulate, 65. skate, 66. steady,

67.	constant is a fundamental constant of nature used in quantum mechanics.
n.	a unit of measurement used in physics to quantify the smallest possible amounts of energy, typically associated with subatomic particles and other quantum phenomena
68.	He has his wealth through real estate investments.
ν.	to collect or acquire a large number of things over a long period of time
69.	The committee several apparent inconsistencies.
v.	to conduct a systematic or formal inquiry to identify and evaluate the facts of a crime, problem, statement, etc. to establish the truth
70.	Scientific knowledge will significantly with the power of AI.
ν.	to go or move forward; to develop in a positive way
	The battle had an impact on the nation.
adj	unlimited or very great; impossible to measure
72.	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
73.	rays are high-energy particles that originate from outside the solar system.
adj	relating to the universe or cosmos; vast or limitless
74.	The shape of the DNA is a double helix.
n.	a group of two or more atoms held together by attractive forces known as chemical bonds
	SWERS: 67. Planck's, 68. accumulated, 69. investigated, 70. advance, 71. infinite experimental, 73. Cosmic, 74. molecule

75. (	Gamma penetrate body tissues and cause cell damage.
n.	a narrow line of light, heat, or another form of energy
	Scientists that the new fish species evolved to survive in deep-sea environments.
v.	to form or present a theory or explanation without sufficient evidence; to speculate
77	To assure I recommend investing in high-quality test kits.
n.	the state or degree of being exact or correct; the ability to perform something with proficiency and without mistake
78. I	He collected data to avoid decisions.
adj.	based on chance, or individual whim rather than any reason
79. I	Roads from the famous building in the center of the city.
<i>v</i> .	to spread out or emit something, such as light or heat, in all directions
80. \	We made modifications to reflect the views of both sides.
adj.	very small in degree or amount
ANS sligh	SWERS: 75. rays, 76. hypothesize, 77. accuracy, 78. arbitrary, 79. radiate, 80.