

# Englist.me



## Vocabulary Builder Reference from...

Chiara Decaroli: The high-stakes race to make quantum computers work | TED Talk

[https://www.ted.com/talks/chiara\\_decaroli\\_the\\_high\\_s\\_takes\\_race\\_to\\_make\\_quantum\\_computers\\_work](https://www.ted.com/talks/chiara_decaroli_the_high_s_takes_race_to_make_quantum_computers_work)

### All Words

#### IMPORTANT

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## Session 1: Word List

### cylinder

*n.* a solid or hollow geometric figure with two round ends and long straight sides, or an object shaped like this

(1) a six- **cylinder** engine, (2) a ventilation **cylinder**

The gas was trapped inside the **cylinders** under high pressure.

### revolutionize

*v.* to bring about a complete or radical change in something, often through the introduction of new methods or ideas

*synonym*: transform, innovate, modernize

(1) **revolutionize** the industry, (2) **revolutionize** the technology

The invention of the smartphone **revolutionized** the way we communicate with each other.

### useless

*adj.* not serving any useful purpose; having no practical result

*synonym*: ineffectual, unhelpful, worthless

(1) **useless** information, (2) **useless** in the kitchen

The old, rusty tools were now **useless** and had to be thrown away.

## **harness**

*v.* to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object

*synonym*: rein in, control, (noun) belt

(1) **harness** a horse to a carriage, (2) put a **harness** on my pet

People have been exploring ways to **harness** natural forces and resources since ancient times.

## **physics**

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

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

He studied the **physics** of radiation.

## **environment**

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

*synonym*: atmosphere, surroundings, climate

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

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

## **precise**

*adj.* sharply exact or accurate or delimited

*synonym*: accurate, exact, distinct

(1) **precise** analyses, (2) estimate **precise** costs

The content is **precise** and informative for me.

## **vibration**

*n.* a continuous quick and slight shaking movement

*synonym*: oscillation, fluctuation, reverberation

(1) protection against **vibration**, (2) sympathetic **vibration**

**Vibration** displaced part of the mechanism.

## **footstep**

*n.* a step, or the sound generated by a person walking when their foot hits the ground

*synonym*: footfall, step

(1) **footsteps** in the corridor, (2) approaching **footsteps**

The sound of oncoming **footsteps** grew louder, closer.

## elevator

*n.* a mechanical device used for vertical transportation, typically in multi-story buildings, consisting of a compartmentalized platform that moves between floors

*synonym* : lift, hoist

(1) **elevator** ride, (2) modern **elevator**

The hotel's **elevator** was out of order, so we had to take the stairs to our room on the fifth floor.

## vacuum

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

*synonym* : void, emptiness, gap

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

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

## chamber

*n.* a large room used for a formal, public, or particular purpose; one of the parts of a parliament

*synonym* : association, cabin, legislature

(1) a gas **chamber**, (2) the lower **chamber**

The surgeon made an incision in the **chambers** of the patient's heart.

## devoid

*adj.* completely lacking or free from something

*synonym* : empty, lacking, void

(1) **devoid** of life, (2) air **devoid** of pollution

The room was **devoid** of any furniture or decorations.

## compartment

*n.* a separate section or part of a larger enclosed space, such as a train carriage or a ship's cabin

*synonym* : section, part, subdivision

(1) **compartment** door, (2) a watertight **compartment**

The train's **compartment** was small but comfortable.

## laser

*n.* a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification

*synonym* : beam, bar, ray

(1) **laser** printer, (2) pulse **laser**

The company holds patents on core components of **laser** jet printers.

## beam

*n.* a long, sturdy piece of timber, metal, or other material used to support a structure or span a distance; a ray or stream of light emitted by a source

*synonym*: ray, ray of light, shaft of light

(1) **beam** of light, (2) a structural **beam** of a building

The sun's **beam** shone through the window and illuminated the room.

## 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.

## 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.

## 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.

## outstrip

*v.* to exceed or surpass a particular, measurable quality or attribute, such as speed, efficiency, or quality

*synonym*: outdo, surpass, exceed

(1) **outstrip** competitors, (2) **outstrip** population growth

The company's sales have **outstripped** expectations for the quarter.

## 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.

## classic

*adj.* judged or deserving to be regarded as one of the best or most important of its kind over a period of time; of a well-known type

*synonym* : definitive, traditional, typical

(1) a **classic** experiment, (2) Chinese **classic** literature

He displayed the **classic** symptoms of depression.

## process

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

*synonym* : procedure, method, system

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

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

## label

*n.* a small piece of paper, fabric, or other material attached to an object and giving information about it; (verb) to assign to a category

*synonym* : tag, mark, identifier

(1) a mailing **label**, (2) **label** a bag with my name

The **label** on the food package lists the ingredients and nutritional information.

## qubit

*n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits

*synonym* : quantum bit

(1) quantum **qubit**, (2) **qubit** storage

Technology development for controlling **qubits** is a major research goal in quantum computing.

## superposition

*n.* a principle in physics that describes the combination or overlaying of two or more waves or states of matter; (of geology) the process by which layers of rock or sediment are deposited on top of one another over time

*synonym* : overlay, overlap

(1) quantum **superposition**, (2) **superposition** theorem

The **superposition** of waves can result in either constructive or destructive interference.

## sphere

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

*synonym* : ball, globe, scope

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

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

## pole

*n.* one of two antipodal points where the Earth's axis of rotation intersects the Earth's surface; a long, slender, rounded rod, typically of wood or metal, used as a support or to hang something

*synonym* : rod, staff, shaft

(1) a fishing **pole**, (2) the plus **pole**

The North **Pole** is the northernmost point on Earth.

## 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.

## locate

v. to specify or determine the exact position of someone or something

*synonym* : discover, find, place

(1) **locate** a missing pet, (2) **locate** a tumor

The robot can accurately **locate** construction material.

## resolve

v. to find a suitable answer to the problems or difficulty

*synonym* : decide, determine, fix

(1) **resolve** a dispute, (2) **resolve** the computer error

This company **resolves** its battery problem completely.

## observe

v. to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion

*synonym* : watch, monitor, scrutinize

(1) **observe** a tradition, (2) **observe** wildlife

It is important to **observe** safety procedures in the workplace to prevent accidents.

## manipulate

v. to influence or control something or someone to your advantage, often in an unfair or dishonest way

*synonym* : control, exploit, abuse

(1) **manipulate** figures, (2) vulnerable to **manipulate**

Please tell me how to **manipulate** this computer.

## complicated

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

*synonym* : complex, convoluted, intricate

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

**complicated**

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

## corresponding

*adj.* similar to, connected with, or accompanying something, especially in position or purpose

*synonym* : matching, equivalent, analogous

(1) find a **corresponding** lack, (2) the **corresponding** word

in Spanish

The **corresponding** number on the dial was 3.

## theoretical

*adj.* relating to the concepts and principles upon which a particular topic is founded, rather than practice and experience

*synonym*: conceptual, conjectural, ideal

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

Absolute zero is the lowest **theoretical** temperature.

## handle

*v.* to deal with a situation, problem, or strong emotion

*synonym*: control, manage, deal with

(1) **handle** a precious object, (2) **handled** the incident

We all should learn how to **handle** stress.

## 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.

## correspond

*v.* to match or be similar to something else almost exactly; to exchange messages

*synonym*: match, equate, communicate

(1) **correspond** to a standard, (2) **correspond** with a foreign student

The numbers on the sign **correspond** to points on the map.

## 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.



## fragile

*adj.* delicate or easily broken or damaged

*synonym* : delicate, brittle, breakable

(1) politically **fragile** nation, (2) **fragile** ecosystem

The vase was made of **fragile** ceramic and easily broke when it was dropped.

## destroy

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

*synonym* : demolish, ruin, obliterate

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

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

## temperature

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

*synonym* : climate, warmth, degree

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

**temperature**

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

## fluctuation

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

*synonym* : change, instability, flux

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

Temperature **fluctuations** are often milder in oceanfront areas.

## stray

*v.* to move about aimlessly or without any destination; to move away from the right course or place where you should be

*synonym* : deviate, err, depart

(1) **stray** beyond the confines, (2) **stray** from a rule

Tourists often get lost and **stray** into a restricted area.

## electromagnetic

*adj.* of or relating to the magnetism produced by electric charge in motion

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

properties

His hypothesis concerns the role of an **electromagnetic** field in human health.

## collision

*n.* an instance of two or more objects or entities crashing into each other, usually resulting in damage, impact, or conflict

*synonym* : crash, impact, smash

(1) **collision** detection, (2) come into **collision** with my friend

The **collision** of tectonic plates can result in new mountain ranges, such as the Himalayas or the Alps.

## elaborate

*adj.* containing a lot of carefully prepared and organized or many complicated and detailed parts

*synonym* : detailed, intricate, complicated

(1) an **elaborate** hat, (2) **elaborate** Ponzi scheme

He proposed an **elaborate** program of public works.

## largely

*adv.* virtually entirely; to a large degree

*synonym* : mainly, chiefly, broadly

(1) **largely** accepted, (2) **largely** mitigate the issue

Nevada is **largely** a desert state.

## component

*n.* one of several parts that combines with others to form something bigger

*synonym* : element, part, factor

(1) key **component**, (2) spare **components** for cars

The researchers try to discover a common **component** in all types of successful organizations.

## involve

*v.* to include or affect someone or something as a necessary part of something else

*synonym* : implicate, include, engage

(1) **involve** a lot of paperwork, (2) **involve** a high degree of risk

The investigation **involves** several government agencies and is expected to take several months.

### fickle

*adj.* liable to change frequently or unexpectedly, often without reason; capricious or unsteady

*synonym*: capricious, unpredictable, inconsistent

(1) **fickle** opinion, (2) **fickle** mood

The weather can be quite **fickle** in this region, changing rapidly and unpredictably.

### trap

*n.* a piece of equipment or hole for catching animals or people; (verb) to catch animals or people and prevent them from escaping

*synonym*: catch, snare, pinfall

(1) set a **trap**, (2) **trap** an animal

The enemy fell right into the **trap**.

### ion

*n.* an atom or molecule that has a positive or negative electrical charge caused by its losing or gained one or more electrons

(1) **ion** channel, (2) rechargeable lithium- **ion** battery

The increased concentration of **ion** of hydrogen ions in an aqueous solution makes it more acidic.

### semiconductor

*n.* a material or substance that can conduct electricity under certain conditions but not others, often used in electronic devices

*synonym*: chip, wafer

(1) **semiconductor** industry, (2) **semiconductor** device

The company develops and sells **semiconductor** memory for use in computers and servers.

### electrical

*adj.* relating to electricity

(1) an **electrical** storm, (2) degree in **electrical** engineering

Actuators convert **electrical** pulses into motion.

**rotate**

v. to turn around a central point or axis; to move in a circular path around something

*synonym*: turn, revolve, spin

(1) **rotate** crops, (2) **rotate** about the origin

The Earth **rotates** on its axis once every 24 hours.

**simplify**

v. to make something more straightforward, more understandable, or easier to do

*synonym*: streamline, clarify, elucidate

(1) **simplify** my life, (2) **simplify** the process

Please **simplify** your explanation for the children.

**prime**

*adj.* main or most important; basic

*synonym*: excellent, exceptional, premium

(1) **prime** number, (2) deputy **prime** minister

After a thorough investigation, she has been named as the **prime** suspect.

**release**

v. to set free or allow to escape from confinement

*synonym*: free, let go, discharge

(1) **release** a prisoner, (2) **release** CO2 into the air

The animal rights group worked to **release** the dolphins back into the wild.

**photon**

*n.* a unit or quantum of electromagnetic energy, typically regarded as a particle that is the basic constituent of all light and other forms of electromagnetic radiation

*synonym*: particle, quantum, light

(1) **photon** emission, (2) **photon** energy

Infrared cameras detect **photons** in the infrared range of the electromagnetic spectrum.

**determinant**

*n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result

*synonym*: cause, factor, element

(1) environmental **determinant**, (2) a **determinant** of crop

yields

One **determinant** of success is having a positive attitude and a strong work ethic.

## emit

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

*synonym*: give off, radiate, expel

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

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

## rev

*n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute

*synonym*: revolution, RPM, speed

(1) low- **rev** engine, (2) **rev** up the crowd

He stepped on the gas pedal, and the engine released a loud **rev**.

## chip

*n.* a small fragment of something broken off from the whole; a long and thin piece of potato fried in oil or fat

*synonym*: flake, fragment, chunk

(1) a **chip** of wood, (2) I don't care a **chip**

We can use this campaign as a bargaining **chip** in the negotiations.

## circuit

*n.* (in electrical engineering) an electrical device that provides a path for electrical current to flow; a journey or route around a particular place or area

*synonym*: route, course, rotation

(1) **circuit** breaker, (2) federal **circuit** courts

An intelligent battery has a voltage monitoring **circuit**.

## translate

*v.* to convert or change words into another language

*synonym*: convert, transcribe, render

(1) **translate** a document into English, (2) **translate** the

emotion to a movement

**Translate** the text from Italian into English.

### 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.

### 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.

### disadvantage

*n.* a drawback or a negative aspect of something; (verb) to put someone or something in an unfavorable position

*synonym*: detriment, drawback, (verb) disfavor

(1) the **disadvantage** of a plan, (2) **disadvantage** small businesses

A lack of education can be a significant **disadvantage** in today's job market.

### increasingly

*adv.* more and more

*synonym*: more and more, progressively

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

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

## precision

*n.* 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**.

## 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.

## communicate

*v.* to share or exchange information with others by speaking, writing, moving your body, or using other signals

*synonym* : convey, share, transmit

(1) **communicate** his anxieties to the psychiatrist,  
(2) **communicate** well with my advisor

Dolphins use sound to **communicate** with each other.

## lifespan

*n.* the length of time for which a person, animal lives, or thing exists

*synonym* : duration, lifetime, continuance

(1) **lifespan** extension, (2) **lifespan** retrieval curve

Generally speaking, men have a shorter **lifespan** than women.

## constraint

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

*synonym* : limitation, restriction, bound

(1) **constraint** on business activity, (2) strict time **constraints**

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

## preserve

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

*synonym* : conserve, care for, maintain

(1) **preserve** my strength, (2) **preserve** a country's heritage  
They worked hard to **preserve** the nature of their native lands.

## spite

*n.* feelings of anger and resentment; (in spite of, also despite) a phrase that is used to indicate that something happened or exists even though there is a particular obstacle or difficulty

*synonym* : malice, ill will, vindictiveness

(1) bear **spite** against him, (2) die in **spite** of intensive care  
He did it out of **spite**, to annoy me.

## obstacle

*n.* a thing that blocks one's way or prevents or hinders progress

*synonym* : hindrance, barrier, block

(1) an **obstacle** to progress, (2) **obstacle** avoidance  
The **obstacle** course was challenging but fun.

## realm

*n.* a domain of activity, interest, or knowledge

*synonym* : domain, empire, kingdom

(1) public **realm**, (2) beyond the **realm** of possibility  
Her passions are in the **realm** of real-world political affairs.



## Session 2: Spelling

- |                             |  |
|-----------------------------|--|
| 1. bear sp__e against him   | <i>n.</i> feelings of anger and resentment; (in spite of, also despite) a phrase that is used to indicate that something happened or exists even though there is a particular obstacle or difficulty                               |
| 2. env_____nt affairs       | <i>n.</i> the natural world such as air, water, and land in which humans, animals, and plants live   |
| 3. cor_____nd to a standard | <i>v.</i> to match or be similar to something else almost exactly; to exchange messages  |
| 4. quantum sup_____ion      | <i>n.</i> a principle in physics that describes the combination or overlaying of two or more waves or states of matter; (of geology) the process by which layers of rock or sediment are deposited on top of one another over time |
| 5. fr_____e ecosystem       | <i>adj.</i> delicate or easily broken or damaged   |
| 6. the_____al physicist     | <i>adj.</i> relating to the concepts and principles upon which a particular topic is founded, rather than practice and experience  |
| 7. key co_____nt            | <i>n.</i> one of several parts that combines with others to form something bigger  |
| 8. pulse la__r              | <i>n.</i> a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification   |

ANSWERS: 1. spite, 2. environment, 3. correspond, 4. superposition, 5. fragile, 6. theoretical, 7. component, 8. laser

9. a mailing la\_\_l *n.* a small piece of paper, fabric, or other material attached to an object and giving information about it; (verb) to assign to a category
10. find a cor\_\_\_\_\_ing lack *adj.* similar to, connected with, or accompanying something, especially in position or purpose
11. lo\_\_\_e a missing pet *v.* to specify or determine the exact position of someone or something
12. protection against vi\_\_\_\_\_on *n.* a continuous quick and slight shaking movement
13. ad\_\_\_\_\_e a cooperative relationship *v.* to go or move forward; to develop in a positive way
14. re\_\_\_\_\_e the computer error *v.* to find a suitable answer to the problems or difficulty
15. federal ci\_\_\_\_\_t courts *n.* (in electrical engineering) an electrical device that provides a path for electrical current to flow; a journey or route around a particular place or area
16. baby with se\_\_\_\_\_ve 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
17. pr\_\_\_e number *adj.* main or most important; basic
18. flu\_\_\_\_\_on of water level *n.* a change, or the process of changing, that frequently happens, especially from one extreme to another; the quality of being unsteady and subject to changes
19. ha\_\_\_ed the incident *v.* to deal with a situation, problem, or strong emotion

ANSWERS: 9. label, 10. corresponding, 11. locate, 12. vibration, 13. advance, 14. resolve, 15. circuit, 16. sensitive, 17. prime, 18. fluctuation, 19. handle

20. quantum qu\_\_t *n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits
21. con\_\_\_\_\_nt on business activity *n.* a limit or restriction on something, such as an action, behavior, or thought
22. a structural b\_\_m of a building *n.* a long, sturdy piece of timber, metal, or other material used to support a structure or span a distance; a ray or stream of light emitted by a source
23. probabilistic qu\_\_\_\_\_m theory *n.* the smallest amount or unit of something, especially (electromagnetic) energy
24. si\_\_\_\_\_fy the process *v.* to make something more straightforward, more understandable, or easier to do
25. st\_\_y from a rule *v.* to move about aimlessly or without any destination; to move away from the right course or place where you should be
26. come into co\_\_\_\_\_on with my friend *n.* an instance of two or more objects or entities crashing into each other, usually resulting in damage, impact, or conflict
27. spare co\_\_\_\_\_nts for cars *n.* one of several parts that combines with others to form something bigger
28. laws of ph\_\_\_\_\_s *n.* the science of matter and energy and their interactions

ANSWERS: 20. qubit, 21. constraint, 22. beam, 23. quantum, 24. simplify, 25. stray, 26. collision, 27. component, 28. physics

29. sympathetic vi\_\_\_\_\_on *n.* a continuous quick and slight shaking movement
30. a det\_\_\_\_\_nt of crop yields *n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result
31. ad\_\_\_\_\_e the technology *v.* to go or move forward; to develop in a positive way
32. rev\_\_\_\_\_ize the industry *v.* to bring about a complete or radical change in something, often through the introduction of new methods or ideas
33. 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
34. chaotic env\_\_\_\_\_nt *n.* the natural world such as air, water, and land in which humans, animals, and plants live
35. ha\_\_\_\_\_s a horse to a carriage *v.* to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object
36. e\_\_t air pollution *v.* to give off or send out something such as light, heat, sound, gas, etc.

ANSWERS: 29. vibration, 30. determinant, 31. advance, 32. revolutionize, 33. microwave, 34. environment, 35. harness, 36. emit

37. in\_\_\_\_\_e a lot of paperwork *v.* to include or affect someone or something as a necessary part of something else
38. ele\_\_\_\_\_tic properties *adj.* of or relating to the magnetism produced by electric charge in motion
39. beyond the re\_\_m of possibility *n.* a domain of activity, interest, or knowledge
40. an ele\_\_\_\_\_al storm *adj.* relating to electricity
41. li\_\_\_\_\_an extension *n.* the length of time for which a person, animal lives, or thing exists
42. pr\_\_\_\_\_e analyses *adj.* sharply exact or accurate or delimited
43. approaching fo\_\_\_\_\_eps *n.* a step, or the sound generated by a person walking when their foot hits the ground
44. a fishing p\_\_e *n.* one of two antipodal points where the Earth's axis of rotation intersects the Earth's surface; a long, slender, rounded rod, typically of wood or metal, used as a support or to hang something
45. qu\_\_t storage *n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits
46. pa\_\_\_\_\_le energy *n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance

ANSWERS: 37. involve, 38. electromagnetic, 39. realm, 40. electrical, 41. lifespan, 42. precise, 43. footstep, 44. pole, 45. qubit, 46. particle

47. ro\_\_\_e about the origin      *v.* to turn around a central point or axis; to move in a circular path around something
48. st\_\_y beyond the confines      *v.* to move about aimlessly or without any destination; to move away from the right course or place where you should be
49. ph\_\_\_n energy      *n.* a unit or quantum of electromagnetic energy, typically regarded as a particle that is the basic constituent of all light and other forms of electromagnetic radiation
50. us\_\_\_\_s information      *adj.* not serving any useful purpose; having no practical result
51. us\_\_\_\_s in the kitchen      *adj.* not serving any useful purpose; having no practical result
52. put a ha\_\_\_\_s on my pet      *v.* to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object
53. low-r\_v engine      *n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute
54. el\_\_\_\_or ride      *n.* a mechanical device used for vertical transportation, typically in multi-story buildings, consisting of a compartmentalized platform that moves between floors

ANSWERS: 47. rotate, 48. stray, 49. photon, 50. useless, 51. useless, 52. harness, 53. rev, 54. elevator

55. sem\_\_\_\_\_tor device *n.* a material or substance that can conduct electricity under certain conditions but not others, often used in electronic devices
56. a pr\_\_\_\_\_on instrument *n.* the quality or condition of being exact and accurate
57. ro\_\_\_e crops *v.* to turn around a central point or axis; to move in a circular path around something
58. ha\_\_\_e a precious object *v.* to deal with a situation, problem, or strong emotion
59. the atmospheric tem\_\_\_\_\_re *n.* the degree of hotness or coldness of a thing or place
60. politically fr\_\_\_\_\_e nation *adj.* delicate or easily broken or damaged
61. the dis\_\_\_\_\_age of a plan *n.* a drawback or a negative aspect of something; (verb) to put someone or something in an unfavorable position
62. ele\_\_\_\_\_tic radiation *adj.* of or relating to the magnetism produced by electric charge in motion
63. Chinese cl\_\_\_\_\_c literature *adj.* judged or deserving to be regarded as one of the best or most important of its kind over a period of time; of a well-known type
64. die in sp\_\_\_e of intensive care *n.* feelings of anger and resentment; (in spite of, also despite) a phrase that is used to indicate that something happened or exists even though there is a particular obstacle or difficulty
65. de\_\_\_d of life *adj.* completely lacking or free from something

ANSWERS: 55. semiconductor, 56. precision, 57. rotate, 58. handle, 59. temperature, 60. fragile, 61. disadvantage, 62. electromagnetic, 63. classic, 64. spite, 65. devoid

66. lo\_\_\_e a tumor *v.* to specify or determine the exact position of someone or something
67. decision-making pr\_\_\_\_s *n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products
68. va\_\_\_m packing *n.* a space empty of matter; a device or tool used for cleaning or removing debris by creating suction
69. estimate pr\_\_\_\_e costs *adj.* sharply exact or accurate or delimited
70. rev\_\_\_\_\_ize the technology *v.* to bring about a complete or radical change in something, often through the introduction of new methods or ideas
71. a cl\_\_\_\_c experiment *adj.* judged or deserving to be regarded as one of the best or most important of its kind over a period of time; of a well-known type
72. the plus p\_\_e *n.* one of two antipodal points where the Earth's axis of rotation intersects the Earth's surface; a long, slender, rounded rod, typically of wood or metal, used as a support or to hang something
73. pr\_\_\_\_s improvement *n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products

ANSWERS: 66. locate, 67. process, 68. vacuum, 69. precise, 70. revolutionize, 71. classic, 72. pole, 73. process



74. pr\_\_\_\_ve a country's heritage      *v.* to keep or maintain a particular quality, feature, etc., especially to prevent it from decaying, being damaged, or being destroyed
75. become increasingly com\_\_\_\_\_ed      *adj.* involving a lot of different things or parts in a way that is difficult to understand or analyze
76. laws of qu\_\_\_\_m mechanics      *n.* the smallest amount or unit of something, especially (electromagnetic) energy
77. va\_\_\_\_m cleaner      *n.* a space empty of matter; a device or tool used for cleaning or removing debris by creating suction
78. a ventilation cy\_\_\_\_\_er      *n.* a solid or hollow geometric figure with two round ends and long straight sides, or an object shaped like this
79. at\_\_\_\_c nucleus      *adj.* of or relating to atom (= the smallest component of an element)
80. deputy pr\_\_e minister      *adj.* main or most important; basic
81. de\_\_\_\_yed evidence      *v.* to ruin or damage severely or completely; to eradicate or eliminate completely
82. ou\_\_\_\_ip population growth      *v.* to exceed or surpass a particular, measurable quality or attribute, such as speed, efficiency, or quality
83. set a t\_\_p      *n.* a piece of equipment or hole for catching animals or people; (verb) to catch animals or people and prevent them from escaping

ANSWERS: 74. preserve, 75. complicated, 76. quantum, 77. vacuum, 78. cylinder, 79. atomic, 80. prime, 81. destroy, 82. outstrip, 83. trap

84. tr\_\_\_\_\_te a document into English      *v.* to convert or change words into another language
85. sem\_\_\_\_\_tor industry      *n.* a material or substance that can conduct electricity under certain conditions but not others, often used in electronic devices
86. vulnerable to man\_\_\_\_\_te      *v.* to influence or control something or someone to your advantage, often in an unfair or dishonest way
87. el\_\_\_\_\_te Ponzi scheme      *adj.* containing a lot of carefully prepared and organized or many complicated and detailed parts
88. tr\_\_\_\_\_te the emotion to a movement      *v.* to convert or change words into another language
89. modern el\_\_\_\_\_or      *n.* a mechanical device used for vertical transportation, typically in multi-story buildings, consisting of a compartmentalized platform that moves between floors
90. inc\_\_\_\_\_ly cheerful character      *adv.* in a way that is very difficult to believe; exceedingly or extremely
91. i\_n channel      *n.* an atom or molecule that has a positive or negative electrical charge caused by its losing or gained one or more electrons
92. in\_\_\_\_\_e a high degree of risk      *v.* to include or affect someone or something as a necessary part of something else
93. fo\_\_\_\_\_eps in the corridor      *n.* a step, or the sound generated by a person walking when their foot hits the ground

ANSWERS: 84. translate, 85. semiconductor, 86. manipulate, 87. elaborate, 88. translate, 89. elevator, 90. incredibly, 91. ion, 92. involve, 93. footstep

94. se\_\_\_\_\_ve 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
95. dis\_\_\_\_\_age small businesses *n.* a drawback or a negative aspect of something; (verb) to put someone or something in an unfavorable position
96. get inc\_\_\_\_\_ly insecure *adv.* in a way that is very difficult to believe; exceedingly or extremely
97. rechargeable lithium-i\_n battery *n.* an atom or molecule that has a positive or negative electrical charge caused by its losing or gained one or more electrons
98. speak with pr\_\_\_\_\_on *n.* the quality or condition of being exact and accurate
99. the cor\_\_\_\_\_ing word in Spanish *adj.* similar to, connected with, or accompanying something, especially in position or purpose
100. a c\_\_p of wood *n.* a small fragment of something broken off from the whole; a long and thin piece of potato fried in oil or fat
101. la\_\_l a bag with my name *n.* a small piece of paper, fabric, or other material attached to an object and giving information about it; (verb) to assign to a category
102. strict time con\_\_\_\_\_nts *n.* a limit or restriction on something, such as an action, behavior, or thought
103. parallel com\_\_\_\_\_on *n.* the act or process of calculating something, especially an answer or amount, by using a machine or calculator

ANSWERS: 94. sensitive, 95. disadvantage, 96. incredibly, 97. ion, 98. precision, 99. corresponding, 100. chip, 101. label, 102. constraint, 103. computation

104. co\_\_\_\_\_on detection *n.* an instance of two or more objects or entities crashing into each other, usually resulting in damage, impact, or conflict
105. com\_\_\_\_\_nt door *n.* a separate section or part of a larger enclosed space, such as a train carriage or a ship's cabin
106. r\_v up the crowd *n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute
107. a gas ch\_\_\_\_\_r *n.* a large room used for a formal, public, or particular purpose; one of the parts of a parliament
108. 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
109. ob\_\_\_\_\_e a tradition *v.* to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion
110. com\_\_\_\_\_te his anxieties to the psychiatrist *v.* to share or exchange information with others by speaking, writing, moving your body, or using other signals

ANSWERS: 104. collision, 105. compartment, 106. rev, 107. chamber, 108. microwave, 109. observe, 110. communicate

111. at\_\_\_c bomb *adj.* of or relating to atom (= the smallest component of an element)
112. sup\_\_\_\_\_ion theorem *n.* a principle in physics that describes the combination or overlaying of two or more waves or states of matter; (of geology) the process by which layers of rock or sediment are deposited on top of one another over time
113. de\_\_\_\_\_y the ecosystem *v.* to ruin or damage severely or completely; to eradicate or eliminate completely
114. la\_\_\_\_\_y accepted *adv.* virtually entirely; to a large degree
115. air de\_\_\_d of pollution *adj.* completely lacking or free from something
116. the characters that re\_\_\_\_\_nt numbers *v.* to speak, act, or be present on behalf of another person or group; to form or constitute
117. com\_\_\_\_\_te well with my advisor *v.* to share or exchange information with others by speaking, writing, moving your body, or using other signals
118. re\_\_\_\_\_nt by a diagram *v.* to speak, act, or be present on behalf of another person or group; to form or constitute
119. 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
120. an ob\_\_\_\_\_le to progress *n.* a thing that blocks one's way or prevents or hinders progress

ANSWERS: 111. atomic, 112. superposition, 113. destroy, 114. largely, 115. devoid, 116. represent, 117. communicate, 118. represent, 119. advantage, 120. obstacle

121. business sp\_\_\_e *n.* a round object or geometric shape that is three-dimensional and symmetrical around a central point; a particular aspect or scope of life or activity
122. la\_\_\_\_y mitigate the issue *adv.* virtually entirely; to a large degree
123. ph\_\_\_n emission *n.* a unit or quantum of electromagnetic energy, typically regarded as a particle that is the basic constituent of all light and other forms of electromagnetic radiation
124. li\_\_\_\_an retrieval curve *n.* the length of time for which a person, animal lives, or thing exists
125. b\_\_m of light *n.* a long, sturdy piece of timber, metal, or other material used to support a structure or span a distance; a ray or stream of light emitted by a source
126. fi\_\_\_e mood *adj.* liable to change frequently or unexpectedly, often without reason; capricious or unsteady
127. man\_\_\_\_\_te figures *v.* to influence or control something or someone to your advantage, often in an unfair or dishonest way
128. inc\_\_\_\_\_gly become common *adv.* more and more
129. the lower ch\_\_\_\_r *n.* a large room used for a formal, public, or particular purpose; one of the parts of a parliament
130. nuclear ph\_\_\_\_s *n.* the science of matter and energy and their interactions

ANSWERS: 121. sphere, 122. largely, 123. photon, 124. lifespan, 125. beam, 126. fickle, 127. manipulate, 128. increasingly, 129. chamber, 130. physics

131. charged pa\_\_\_\_\_le *n.* a small piece of something; a word or piece of a term with grammatical function but little or no significance
132. ob\_\_\_\_\_e wildlife *v.* to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion
133. the\_\_\_\_\_al models *adj.* relating to the concepts and principles upon which a particular topic is founded, rather than practice and experience
134. a watertight com\_\_\_\_\_nt *n.* a separate section or part of a larger enclosed space, such as a train carriage or a ship's cabin
135. a six-cy\_\_\_\_\_er engine *n.* a solid or hollow geometric figure with two round ends and long straight sides, or an object shaped like this
136. t\_\_p an animal *n.* a piece of equipment or hole for catching animals or people; (verb) to catch animals or people and prevent them from escaping
137. ci\_\_\_\_\_t breaker *n.* (in electrical engineering) an electrical device that provides a path for electrical current to flow; a journey or route around a particular place or area
138. cor\_\_\_\_\_nd with a foreign student *v.* to match or be similar to something else almost exactly; to exchange messages
139. environmental det\_\_\_\_\_nt *n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result

ANSWERS: 131. particle, 132. observe, 133. theoretical, 134. compartment, 135. cylinder, 136. trap, 137. circuit, 138. correspond, 139. determinant

140. price flu\_\_\_\_\_ons *n.* a change, or the process of changing, that frequently happens, especially from one extreme to another; the quality of being unsteady and subject to changes
141. 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
142. la\_\_r printer *n.* a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification
143. extreme tem\_\_\_\_\_res *n.* the degree of hotness or coldness of a thing or place
144. face inc\_\_\_\_\_gly complicated challenges *adv.* more and more
145. re\_\_\_\_\_e a prisoner *v.* to set free or allow to escape from confinement
146. public re\_\_m *n.* a domain of activity, interest, or knowledge
147. an el\_\_\_\_\_te hat *adj.* containing a lot of carefully prepared and organized or many complicated and detailed parts
148. a com\_\_\_\_\_ed process *adj.* involving a lot of different things or parts in a way that is difficult to understand or analyze
149. e\_\_t a gamma ray *v.* to give off or send out something such as light, heat, sound, gas, etc.
150. sp\_\_\_e of influence *n.* a round object or geometric shape that is three-dimensional and symmetrical around a central point; a particular aspect or scope of life or activity

ANSWERS: 140. fluctuation, 141. advantage, 142. laser, 143. temperature, 144. increasingly, 145. release, 146. realm, 147. elaborate, 148. complicated, 149. emit, 150. sphere



151. si\_\_\_\_fy my life                    *v.*    to make something more straightforward, more understandable, or easier to do
152. re\_\_\_\_e CO2 into the air            *v.*    to set free or allow to escape from confinement
153. fi\_\_\_\_e opinion                    *adj.* liable to change frequently or unexpectedly, often without reason; capricious or unsteady
154. I don't care a c\_\_p                    *n.*    a small fragment of something broken off from the whole; a long and thin piece of potato fried in oil or fat
155. degree in ele\_\_\_\_al engineering    *adj.* relating to electricity
156. re\_\_\_\_e a dispute                    *v.*    to find a suitable answer to the problems or difficulty
157. pr\_\_\_\_ve my strength                *v.*    to keep or maintain a particular quality, feature, etc., especially to prevent it from decaying, being damaged, or being destroyed
158. ou\_\_\_\_ip competitors                *v.*    to exceed or surpass a particular, measurable quality or attribute, such as speed, efficiency, or quality
159. theory of com\_\_\_\_on                *n.*    the act or process of calculating something, especially an answer or amount, by using a machine or calculator
160. ob\_\_\_\_le avoidance                *n.*    a thing that blocks one's way or prevents or hinders progress

ANSWERS: 151. simplify, 152. release, 153. fickle, 154. chip, 155. electrical, 156. resolve, 157. preserve, 158. outstrip, 159. computation, 160. obstacle

## Session 3: Fill in the Blanks

1. 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
  
2. The numbers on the sign \_\_\_\_\_ to points on the map.  
*v.* to match or be similar to something else almost exactly; to exchange messages
  
3. The gas was trapped inside the \_\_\_\_\_ under high pressure.  
*n.* a solid or hollow geometric figure with two round ends and long straight sides, or an object shaped like this
  
4. They worked hard to \_\_\_\_\_ the nature of their native lands.  
*v.* to keep or maintain a particular quality, feature, etc., especially to prevent it from decaying, being damaged, or being destroyed
  
5. The company holds patents on core components of \_\_\_\_\_ jet printers.  
*n.* a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification
  
6. Scientific knowledge will \_\_\_\_\_ significantly with the power of AI.  
*v.* to go or move forward; to develop in a positive way
  
7. Every human is responsible for taking care of the Earth's \_\_\_\_\_.  
*n.* the natural world such as air, water, and land in which humans, animals, and plants live
  
8. Please tell me how to \_\_\_\_\_ this computer.  
*v.* to influence or control something or someone to your advantage, often in an unfair or dishonest way

ANSWERS: 1. particles, 2. correspond, 3. cylinders, 4. preserve, 5. laser, 6. advance, 7. environment, 8. manipulate

9. The animal rights group worked to \_\_\_\_\_ the dolphins back into the wild.  
*v.* to set free or allow to escape from confinement
10. Big techs are now eager to develop \_\_\_\_\_ computers.  
*n.* the smallest amount or unit of something, especially (electromagnetic) energy
11. An intelligent battery has a voltage monitoring \_\_\_\_\_.  
*n.* (in electrical engineering) an electrical device that provides a path for electrical current to flow; a journey or route around a particular place or area
12. Actuators convert \_\_\_\_\_ pulses into motion.  
*adj.* relating to electricity
13. The building was \_\_\_\_\_ in the fire and had to be rebuilt.  
*v.* to ruin or damage severely or completely; to eradicate or eliminate completely
14. The invention of the smartphone \_\_\_\_\_ the way we communicate with each other.  
*v.* to bring about a complete or radical change in something, often through the introduction of new methods or ideas
15. The hotel's \_\_\_\_\_ was out of order, so we had to take the stairs to our room on the fifth floor.  
*n.* a mechanical device used for vertical transportation, typically in multi-story buildings, consisting of a compartmentalized platform that moves between floors
16. The room was \_\_\_\_\_ of any furniture or decorations.  
*adj.* completely lacking or free from something

ANSWERS: 9. release, 10. quantum, 11. circuit, 12. electrical, 13. destroyed, 14. revolutionized, 15. elevator, 16. devoid

17. The \_\_\_\_\_ for applying for a visa can be lengthy and complicated.
- n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products
18. The budget \_\_\_\_\_ forced them to make difficult decisions.
- n.* a limit or restriction on something, such as an action, behavior, or thought
19. Tourists often get lost and \_\_\_\_\_ into a restricted area.
- v.* to move about aimlessly or without any destination; to move away from the right course or place where you should be
20. He displayed the \_\_\_\_\_ symptoms of depression.
- adj.* judged or deserving to be regarded as one of the best or most important of its kind over a period of time; of a well-known type
21. It is important to \_\_\_\_\_ safety procedures in the workplace to prevent accidents.
- v.* to watch or notice something carefully, often to gather information or insights; to take note of something or someone; to celebrate or commemorate a special event or occasion
22. Infrared cameras detect \_\_\_\_\_ in the infrared range of the electromagnetic spectrum.
- n.* a unit or quantum of electromagnetic energy, typically regarded as a particle that is the basic constituent of all light and other forms of electromagnetic radiation
23. Please use the \_\_\_\_\_ to clean up the mess on the floor.
- n.* a space empty of matter; a device or tool used for cleaning or removing debris by creating suction

ANSWERS: 17. process, 18. constraint, 19. stray, 20. classic, 21. observe, 22. photons, 23. vacuum

24. 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
25. He did it out of \_\_\_\_\_ to annoy me.
- n.* feelings of anger and resentment; (in spite of, also despite) a phrase that is used to indicate that something happened or exists even though there is a particular obstacle or difficulty
26. Generally speaking, men have a shorter \_\_\_\_\_ than women.
- n.* the length of time for which a person, animal lives, or thing exists
27. He proposed an \_\_\_\_\_ program of public works.
- adj.* containing a lot of carefully prepared and organized or many complicated and detailed parts
28. 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
29. Her passions are in the \_\_\_\_\_ of real-world political affairs.
- n.* a domain of activity, interest, or knowledge
30. Nevada is \_\_\_\_\_ a desert state.
- adv.* virtually entirely; to a large degree

ANSWERS: 24. microwave, 25. spite, 26. lifespan, 27. elaborate, 28. advantages, 29. realm, 30. largely

31. The \_\_\_\_\_ number on the dial was 3.

*adj.* similar to, connected with, or accompanying something, especially in position or purpose

32. We all should learn how to \_\_\_\_\_ stress.

*v.* to deal with a situation, problem, or strong emotion

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

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

34. The \_\_\_\_\_ of tectonic plates can result in new mountain ranges, such as the Himalayas or the Alps.

*n.* an instance of two or more objects or entities crashing into each other, usually resulting in damage, impact, or conflict

35. Carbon has an \_\_\_\_\_ mass of 12.

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

36. During the unloading, the container box \_\_\_\_\_ a clicking sound.

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

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

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

38. The train's \_\_\_\_\_ was small but comfortable.

*n.* a separate section or part of a larger enclosed space, such as a train carriage or a ship's cabin

ANSWERS: 31. corresponding, 32. handle, 33. sphere, 34. collision, 35. atomic, 36. emits, 37. temperatures, 38. compartment

39. The robot can accurately \_\_\_\_\_ construction material.

*v.* to specify or determine the exact position of someone or something

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

*adv.* more and more

41. Please \_\_\_\_\_ your explanation for the children.

*v.* to make something more straightforward, more understandable, or easier to do

42. The company's sales have \_\_\_\_\_ expectations for the quarter.

*v.* to exceed or surpass a particular, measurable quality or attribute, such as speed, efficiency, or quality

43. The weather can be quite \_\_\_\_\_ in this region, changing rapidly and unpredictably.

*adj.* liable to change frequently or unexpectedly, often without reason; capricious or unsteady

44. The \_\_\_\_\_ on the food package lists the ingredients and nutritional information.

*n.* a small piece of paper, fabric, or other material attached to an object and giving information about it; (verb) to assign to a category

45. He stepped on the gas pedal, and the engine released a loud \_\_\_\_\_.

*n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute

46. The \_\_\_\_\_ of waves can result in either constructive or destructive interference.

*n.* a principle in physics that describes the combination or overlaying of two or more waves or states of matter; (of geology) the process by which layers of rock or sediment are deposited on top of one another over time

ANSWERS: 39. locate, 40. increasingly, 41. simplify, 42. outstripped, 43. fickle, 44. label, 45. rev, 46. superposition

47. After a thorough investigation, she has been named as the \_\_\_\_\_ suspect.

*adj.* main or most important; basic

48. The investigation \_\_\_\_\_ several government agencies and is expected to take several months.

*v.* to include or affect someone or something as a necessary part of something else

49. \_\_\_\_\_ displaced part of the mechanism.

*n.* a continuous quick and slight shaking movement

50. This company \_\_\_\_\_ its battery problem completely.

*v.* to find a suitable answer to the problems or difficulty

51. This operation requires both patience and \_\_\_\_\_.

*n.* the quality or condition of being exact and accurate

52. The vase was made of \_\_\_\_\_ ceramic and easily broke when it was dropped.

*adj.* delicate or easily broken or damaged

53. Absolute zero is the lowest \_\_\_\_\_ temperature.

*adj.* relating to the concepts and principles upon which a particular topic is founded, rather than practice and experience

54. The content is \_\_\_\_\_ and informative for me.

*adj.* sharply exact or accurate or delimited

55. The \_\_\_\_\_ course was challenging but fun.

*n.* a thing that blocks one's way or prevents or hinders progress

ANSWERS: 47. prime, 48. involves, 49. Vibration, 50. resolves, 51. precision, 52. fragile, 53. theoretical, 54. precise, 55. obstacle



56. A lack of education can be a significant \_\_\_\_\_ in today's job market.  
*n.* a drawback or a negative aspect of something; (verb) to put someone or something in an unfavorable position
57. The company develops and sells \_\_\_\_\_ memory for use in computers and servers.  
*n.* a material or substance that can conduct electricity under certain conditions but not others, often used in electronic devices
58. The sound of oncoming \_\_\_\_\_ grew louder, closer.  
*n.* a step, or the sound generated by a person walking when their foot hits the ground
59. The surgeon made an incision in the \_\_\_\_\_ of the patient's heart.  
*n.* a large room used for a formal, public, or particular purpose; one of the parts of a parliament
60. 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
61. Temperature \_\_\_\_\_ are often milder in oceanfront areas.  
*n.* a change, or the process of changing, that frequently happens, especially from one extreme to another; the quality of being unsteady and subject to changes
62. The North \_\_\_\_\_ is the northernmost point on Earth.  
*n.* one of two antipodal points where the Earth's axis of rotation intersects the Earth's surface; a long, slender, rounded rod, typically of wood or metal, used as a support or to hang something

ANSWERS: 56. disadvantage, 57. semiconductor, 58. footsteps, 59. chambers, 60. sensitive, 61. fluctuations, 62. Pole

63. The enemy fell right into the \_\_\_\_\_.

- n.* a piece of equipment or hole for catching animals or people; (verb) to catch animals or people and prevent them from escaping

64. The researchers try to discover a common \_\_\_\_\_ in all types of successful organizations.

- n.* one of several parts that combines with others to form something bigger

65. \_\_\_\_\_ the text from Italian into English.

- v.* to convert or change words into another language

66. We elected him to \_\_\_\_\_ us at the international conference.

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

67. The increased concentrat\_\_\_\_ of hydrogen ions in an aqueous solution makes it more acidic.

- n.* an atom or molecule that has a positive or negative electrical charge caused by its losing or gained one or more electrons

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

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

69. One \_\_\_\_\_ of success is having a positive attitude and a strong work ethic.

- n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result

70. His hypothesis concerns the role of an \_\_\_\_\_ field in human health.

- adj.* of or relating to the magnetism produced by electric charge in motion

ANSWERS: 63. trap, 64. component, 65. Translate, 66. represent, 67. ion, 68. physics, 69. determinant, 70. electromagnetic

71. We can use this campaign as a bargaining \_\_\_\_\_ in the negotiations.
- n.* a small fragment of something broken off from the whole; a long and thin piece of potato fried in oil or fat
72. Dolphins use sound to \_\_\_\_\_ with each other.
- v.* to share or exchange information with others by speaking, writing, moving your body, or using other signals
73. The Earth \_\_\_\_\_ on its axis once every 24 hours.
- v.* to turn around a central point or axis; to move in a circular path around something
74. Technology development for controlling \_\_\_\_\_ is a major research goal in quantum computing.
- n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits
75. Several cities are experiencing \_\_\_\_\_ high unemployment rates.
- adv.* in a way that is very difficult to believe; exceedingly or extremely
76. The sun's \_\_\_\_\_ shone through the window and illuminated the room.
- n.* a long, sturdy piece of timber, metal, or other material used to support a structure or span a distance; a ray or stream of light emitted by a source
77. People have been exploring ways to \_\_\_\_\_ natural forces and resources since ancient times.
- v.* to control and exploit the power of something, especially natural resources that produce energy; (noun) a set of narrow pieces of leather and metal that are used to control or hold in place a person, animal, or object

ANSWERS: 71. chip, 72. communicate, 73. rotates, 74. qubits, 75. incredibly, 76. beam, 77. harness

78. The old, rusty tools were now \_\_\_\_\_ and had to be thrown away.

*adj.* not serving any useful purpose; having no practical result

79. He did \_\_\_\_\_ pen-and-ink drawings in just a few days.

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

80. 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

ANSWERS: 78. useless, 79. complicated, 80. computation