

# Englist.me



## Vocabulary Builder Reference from...

*Matt Langione: The promise of quantum computers | TED Talk*

[https://www.ted.com/talks/matt\\_langione\\_the\\_promise\\_of\\_quantum\\_computers](https://www.ted.com/talks/matt_langione_the_promise_of_quantum_computers)

### All Words

#### IMPORTANT

This material is a commentary and does not contain any copyrighted material of the reference source. We strongly recommend accessing/buying the reference source at the same time.

## Session 1: Word List

### climate

*n.* the weather in a particular location averaged over some long period

*synonym*: atmosphere, weather, environment

(1) a cold **climate**, (2) effects of **climate** change

**Climate** and weather have an impact on every part of our lifestyles.

### inequality

*n.* the unfairness of a society in which some people have more opportunity, money, etc. than others; (mathematics) relation between two values when they are different

*synonym*: imbalance, prejudice, unfairness

(1) **inequality** in salary, (2) algebraic **inequality**

There are several causes of economic **inequality** within societies.

### supercomputer

*n.* a computer with a high level of computing power and speed, typically used for scientific or engineering computations that require immense amounts of data processing

*synonym*: high-performance computer, mainframe, giant computer

(1) **supercomputer** performance, (2) **supercomputer** technology

China has developed one of the world's fastest **supercomputers** for its space program.

## reliance

*n.* the state of depending on or needing something or someone

*synonym*: dependence, support, confidence

(1) **reliance** on social media, (2) self- **reliance** and solidarity

He acted in **reliance** on her naked promises.

## urgent

*adj.* requiring immediate attention or action; pressing

*synonym*: pressing, critical, immediate

(1) an **urgent** telegram, (2) **urgent** situation

It is **urgent** that we leave for the airport now to catch our flight.

## crack

*v.* to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking

*synonym*: snap, burst, break

(1) **crack** an eggshell, (2) a **crack** in a board

He that would eat the kernel must **crack** the nut.

## sequence

*n.* a series of related events, actions, numbers, etc., which have a particular order

*synonym*: arrangement, succession, series

(1) the **sequence** of the seasons, (2) the DNA **sequence**

We do move forward with those tasks in **sequence** next week.

## genome

*n.* the complete set or sequence of genes of a human, animal, plant, or other living things

(1) sequencing of the human **genome**, (2) **genome** analyses

The human **genome** contains approximately three billion chemical base pairs.

## 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.

## 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.

## critic

*n.* someone who expresses opinions about the quality of books, music, etc.

*synonym*: pundit, analyst, attacker

(1) art **critic**, (2) severe **critic**

Advocates for legal reform hear less harsh words from their **critics**.

## 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.

## magic

*n.* beliefs and actions employed to influence supernatural beings and forces; any art or performance that invokes supernatural powers

*synonym*: fascination, illusion, wizardry

(1) a **magic** spell, (2) she is **magic**

He performed **magic** tricks with sophisticated moves.

## progression

*n.* the act or process of changing to the next stage or phase or moving forward

*synonym*: advancement, development, evolution

(1) **progression** of civilization, (2) **progression** of disease

The company has made great strides in its **progression** toward sustainability.

## compute

*v.* to make a mathematical calculation

*synonym*: calculate

(1) **compute** an average score, (2) **compute** the value

I tried to **compute** the efficiency of the investment.

## standstill

*n.* a complete halt in movement or activity, especially due to an obstruction or lack of resources

*synonym*: halt, deadlock, impasse

(1) transportation **standstill**, (2) economic **standstill**

The traffic accident caused a **standstill** on the highway for several hours.

## accomplished

*adj.* having completed a task or achieved a goal successfully; skilled or proficient at something

*synonym*: achieved, finished, completed

(1) **accomplished** at a very early age, (2) **accomplished** goal

She felt **accomplished** after finishing her book.

## startling

*adj.* extremely surprising, astonishing, and sometimes worrying

*synonym*: alarming, astonishing, shocking

(1) **startling** earthquake shocks, (2) **startling** discovery

He describes the story with **startling** reality.

## instant

*adj.* happening immediately, with no delay

*synonym*: immediate, urgent, moment

(1) get **instant** access, (2) an **instant** reply

His pleasant face turned cold in an **instant**.

## 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.

## instance

*n.* a particular example or single occurrence of something

*synonym*: example, sample, illustration

(1) for **instance**, (2) notable **instance**

These articles cite five **instances** of climate change.

## conceive

*v.* to have or develop an idea, a plan, etc. in mind; to become pregnant

*synonym*: imagine, envision, concoct

(1) **conceive** of an idea, (2) **conceive** a child

I can't **conceive** he'd want to harm us.

## isolation

*n.* the condition of being alone or lonely; the act or state of separation between persons or groups

*synonym*: aloneness, seclusion, separateness

(1) **isolation** booth, (2) the country's **isolation**

That incident led to his **isolation**.

## paralysis

*n.* a condition in which you are unable to move or lose control of part or most of the body because of illness or injury

*synonym*: immobility, stiffness, palsy

(1) moral **paralysis**, (2) **paralysis** in the leg

Massive demonstrations lead to total **paralysis** of transportation.

## await

*v.* to wait or stay ready for something; to expect or anticipate something

*synonym*: expect, wait for, anticipate

(1) **await** your reply, (2) **await** a decision

We **await** the results of the election with bated breath.

## vaccine

*n.* a substance that is put into the body and protects them from disease by causing them to produce antibodies (= proteins that attack harmful bacteria, viruses, etc.)

*synonym* : vaccinum

(1) development of **vaccines**, (2) an oral **vaccine**

The mRNA **vaccine** was approved in less than a year because it did not contain the fragments of the target virus.

## coronavirus

*n.* a large family of viruses that can cause illness in humans and animals, which name comes from the crown-like spikes on the surface of the virus, which can be seen under a microscope, and COVID-19 is caused by a specific type of coronavirus known as SARS-CoV-2

*synonym* : covid

(1) **coronavirus** antibody test kit, (2) **coronavirus** bankruptcy

Considering the situation of **coronavirus**, organized stopped this year's beer festival.

## discovery

*n.* the act or process of finding information, a place, or an object, or learning about something that was previously not known

*synonym* : finding, uncovering, detection

(1) a scientific **discovery**, (2) the great **discovery** of the century

Her research team made an important **discovery**.

## beset

*v.* to annoy someone or something continually or chronically; to surround or attack from all sides

*synonym* : harass, plague, torment

(1) **beset** with difficulties, (2) **beset** the community

Raiders from the neighboring kingdom **beset** the small village.

## entirely

*adv.* completely

*synonym* : completely, fully, totally

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

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

## inadequate

*adj.* not sufficient or enough

*synonym* : insufficient, lacking, lacking enough

(1) an **inadequate** income, (2) **inadequate** funding

The small budget was **inadequate** to cover all the necessary expenses for the project.

## 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.

## finance

*n.* the management of money, credit, banking, and investments, especially by a government or commercial organization; the branch of economics that studies the management of money and other assets

*synonym* : banking, investment, fund

(1) **finance** act, (2) manage my **finances**

Our company decided to hire an advisor who specializes in **finance**.

## rely

*v.* to require a specific thing or the assistance and support of someone or something to continue, run properly, or succeed.

*synonym* : depend, count, lean

(1) **rely** on convenience stores, (2) **rely** entirely on him  
Babies heavily **rely** on others for food.

## minuscule

*adj.* extremely small; tiny

*synonym*: tiny, insignificant, microscopic

(1) **minuscule** amount, (2) **minuscule** letters

This ore emits **minuscule** quantities of radiation

## 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.

## affair

*n.* event, situation, or subject that is significant from a political or public perspective; a secretive or illicit sexual relationship

*synonym*: matter, incident, fling

(1) current **affairs**, (2) domestic **affairs**

Some critics say this exhibition will be a big **affair**.

## invite

*v.* to ask someone to come or join; to offer an opportunity or possibility for something to happen or take place

*synonym*: ask, request, summon

(1) **invite** guests, (2) **invite** criticism

We want to **invite** you to our annual charity event.

## encouraging

*adj.* giving hope, confidence, or support; inspiring

*synonym*: uplifting, inspiring, optimistic

(1) **encouraging** approval, (2) **encouraging** sign

The test results were **encouraging** and showed improvement.

## policy

*n.* a set of rules, guidelines, principles, or procedures that govern decision-making or action, often used in the context of business or government; a course of action or plan of action adopted or followed by an organization or individual to achieve a goal or objective



*synonym* : strategy, plan, guideline

(1) health **policy**, (2) foreign **policy**

The company's new **policy** on remote work has made it a more inclusive workplace.

## tradition

*n.* a belief, custom, or way of doing something that has been passed down from generation to generation within a group or society

*synonym* : custom, practice, ritual

(1) a **tradition** of a culture, (2) against **tradition**

It is a **tradition** in many families to have a big Thanksgiving dinner with all their relatives.

## emerge

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

*synonym* : arise, occur, appear

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

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

## 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.

## 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.

## exploit

*v.* to make full use of and gain an advantage from resources, opportunities, etc.

*synonym* : use, abuse, control

(1) **exploit** a security hole, (2) **exploit** a valuable opportunity

We **exploit** our mining resources to strengthen our national power.

## departure

*n.* the act of leaving, especially to start a journey

*synonym*: leaving, exit, flight

(1) **departure** from tradition, (2) **departure** from the company

The **departure** time for the flight is 6:00 am.

## 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.

## 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.

## operate

*v.* to work in a particular way; to supervise something

*synonym*: work, use, employ

(1) **operate** 24 hours a day, (2) manually **operate** a machine

This machine is too difficult to **operate** for me.

## deterministic

*adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations

*synonym*: predictable, predetermined, certain

(1) **deterministic** approach, (2) **deterministic** system

The **deterministic** algorithm always produces the same

result for a given input.

## serial

*adj.* consisting of or occurring in a series or sequence; relating to or involving a series or sequence of events, stories, or incidents

*synonym*: consecutive, sequential, successive

(1) **serial** killer, (2) **serial** number

The company is launching a new line of **serial** products aimed at young adults.

## probabilistic

*adj.* characterized by the influence of chance or probability; involving the use of statistical models or methods to estimate likelihoods or risks

*synonym*: probable, statistical, likely

(1) **probabilistic** model, (2) **probabilistic** approach

In a **probabilistic** system, the outcome is uncertain and can vary based on chance.

## simultaneously

*adv.* at the same time

*synonym*: concurrently, coincidentally, together

(1) **simultaneously** affected, (2) take several inputs

**simultaneously**

Two students answered the teacher's question

**simultaneously**.

## 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.

## entanglement

*n.* involvement in a complicated or difficult situation; a tangled mass

*synonym*: snarl, tangle, knot

(1) **entanglement** in conflict, (2) romantic **entanglement**  
The **entanglement** of the fishing net was making it difficult for the whales to swim.

## interference

*n.* the act or process of getting involved in and trying to influence a specific situation; the state of being affected and influenced with

*synonym*: obstruction, hindrance, impedance

(1) officious **interference**, (2) **interference** wave

Unfortunately, the radio **interference** made it difficult to hear the broadcast.

## explore

*v.* to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it

*synonym*: analyze, delve into, examine

(1) **explore** the world, (2) **explore** our options

The management must **explore** strategies to increase office security.

## possibility

*n.* a chance that something may happen or be true

*synonym*: chance, prospect, likelihood

(1) **possibility** for growth, (2) **possibility** of a major earthquake

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

## illustrate

*v.* to provide pictures, photographs, diagrams, etc. in a book or something for explanation

*synonym*: demonstrate, explain, exemplify

(1) **illustrate** a key point, (2) **illustrate** a story

The company's financial records **illustrate** how successful it has been.

## maze

*n.* a complex network of winding passages or pathways designed as a puzzle or challenge for people to navigate through

*synonym* : labyrinth, puzzle, network

(1) puzzle **maze**, (2) labyrinth **maze**

We got lost in the **maze** of streets while exploring the city.

## exhaust

*n.* the system in a vehicle that removes waste gases from the engine; (verb) to make someone completely tired

*synonym* : emission, fumes, (verb) deplete

(1) **exhaust** pipe, (2) **exhaust** a topic

The factory's **exhaust** fumes polluted the air and affected the health of the nearby residents.

## pathway

*n.* a track that constitutes or serves as a path; an approach or a way of doing something

*synonym* : route, footpath, trail

(1) **pathway** to understanding, (2) cellular signaling

### **pathways**

When the first molecule in the **pathway** receives a signal, it activates other molecules.

## roadblock

*n.* a physical barrier or obstacle that prevents progress or movement; a situation that impedes progress or creates difficulty in achieving a goal or objective

*synonym* : obstacle, barrier, blockade

(1) biological **roadblock**, (2) bypass **roadblock**

The accident caused a **roadblock** on the highway, causing traffic to come to a standstill.

## revert

*v.* to return to a previous state or condition; to reply

*synonym* : return, go back, restore

(1) **revert** to a heavy smoker, (2) **revert** to the original subject

After trying the new software, I **reverted** to the old version.

## 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.

## optimize

*v.* to make the best or most effective use of something

*synonym* : advance, amend, improve

(1) **optimize** a process, (2) **optimize** control for cooling  
The essence of economics is to **optimize** the allocation of limited resources.

## exponential

*adj.* becoming more and more rapid; of or involving mathematical exponents

(1) **exponential** growth, (2) **exponential** function  
Since the 1990s, the Internet has continued to experience **exponential** growth.

## fertilizer

*n.* a natural or chemical substance added to soil to make plants grow more successfully

*synonym* : manure

(1) a chemical **fertilizer**, (2) nonsynthetic **fertilizer**  
Nitrogen fixation by the Haber-Bosch method leads to the mass production of **fertilizers**.

## hallmark

*n.* a distinctive characteristic or attribute of a person or thing

*synonym* : symbol, authentication, indication

(1) the **hallmark** of a good scientist, (2) the **hallmark** of modern life  
A clear and simple expression is the **hallmark** of good writing.

## fuse

*n.* a small part in an electrical device or machinery that can interrupt the flow of electrical current when it is overloaded; (verb) to become plastic or fluid or liquefied from heat

*synonym* : (verb) melt, (verb) blend

(1) **fuse** blows, (2) **fuse** with one another  
He has a short **fuse**.

## nitrogen

*n.* a chemical element with the symbol N and atomic number 7, which is a highly reactive element that forms part of many compounds, including amino acids and proteins

(1) heavy **nitrogen**, (2) **nitrogen** absorption

**Nitrogen** gas is used to inflate car tires because it does not react with rubber.

## hydrogen

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

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

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

## ammonia

*n.* a compound of nitrogen and hydrogen that forms a gas with a strong smell, used as cleaning substances, fertilizers, and explosives

(1) **ammonia** water, (2) inhale **ammonia** fumes

The advent of **ammonia** fertilizers markedly increased agricultural productivity.

## ingredient

*n.* one of the things used to make something, especially one of the foods used to make a particular dish

*synonym*: element, component

(1) secret **ingredients**, (2) compound the **ingredients**

Greed is the primary **ingredient** in the making of criminals.

## severe

*adj.* extremely serious or bad in feeling, manner, or strict and harsh; extremely strong or vigorous

*synonym*: harsh, relentless, powerful

(1) **severe** heat, (2) a **severe** case of pneumonia

The senator received **severe** criticism from his opponent.

## 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**.

## expend

*v.* to use or spend time, money, energy, etc.

*synonym*: disburse, spend, pay

(1) **expend** a great deal of energy, (2) **expend** time and resources

Billionaires tend to **expend** private funds on a public undertaking.

## synthesis

*n.* the combination of components or elements to form a more complex whole; the creation of something new through combining parts or elements

*synonym*: combination, integration, compound

(1) **synthesis** of ammonia, (2) protein **synthesis** inhibitor

The chemical **synthesis** of the new drug was a breakthrough in medical research.

## develop

*v.* to grow or expand; to improve or refine through a process of progress and refinement, often to achieve greater sophistication or complexity; to elaborate or add detail to something that is in the process of being created

*synonym*: evolve, progress, advance

(1) **develop** a strategy, (2) **develop** a skill

We must **develop** a new system to streamline our workflow and increase efficiency.

## efficient

*adj.* performing at the highest level of productivity with the least wasted effort or resources; capable of achieving maximum output with minimum wasted effort, time, or materials

*synonym*: productive, effective, competent



(1) **efficient** operation, (2) energy- **efficient** appliances  
The new washing machine is much more **efficient** than the old one.

## molecular

*adj.* of or relating to molecules (= a group of two or more atoms held together by attractive forces known as chemical bonds)

*synonym* : microscopic, atomic

(1) **molecular** structure, (2) **molecular** biology

**Molecular** weight is the sum of all the atoms.

## interaction

*n.* the act of connecting with someone, mainly when working, playing, or spending time with them

*synonym* : dealings, exchange, relations

(1) the **interaction** between man and his environment,

(2) **interaction** among human beings

The **interaction** of the two groups is good for brainstorming.

## electrostatic

*adj.* relating to the static electric charge produced by friction or other means; describing the behavior of insulators and conductors in electrical systems

(1) **electrostatic** repulsion, (2) **electrostatic** discharge

The experiment showed a strong **electrostatic** charge between the two objects.

## catalyst

*n.* a person or thing that causes an important event to happen or changes the current situation rapidly; (chemistry) a substance that initiates or accelerates a chemical reaction without being changed itself

*synonym* : accelerator, stimulant, motivation

(1) a **catalyst** in the process of hydrolysis, (2) **catalyst** for reform

The global financial crisis acted as a **catalyst** to unite the country.

## nitrogenase

*n.* an enzyme found in certain bacteria that is responsible for the biological fixation of atmospheric nitrogen into

forms that can be used by plants and other organisms

*synonym*: nitrogen-fixing enzyme

(1) **nitrogenase** activity, (2) **nitrogenase** gene

The **nitrogenase** enzyme requires a lot of energy to function properly.

## infectious

*adj.* able to be passed quickly from one person, animal, or plant to another, especially through air or water

*synonym*: contagious, epidemic, transmittable

(1) an **infectious** fever, (2) person's smile is **infectious**

Leprosy is an indolent **infectious** disease.

## disease

*n.* a disorder or illness that affects the body or mind, often characterized by specific symptoms or abnormal functioning of organs or systems

*synonym*: illness, ailment, affliction

(1) **disease** prevention, (2) **disease** control

The doctor diagnosed him with a rare **disease** that had no known cure.

## identify

*v.* to recognize someone or something and say or prove who or what they are

*synonym*: determine, specify, recognize

(1) **identify** handwriting, (2) **identify** gene sequences

I will introduce you to how to **identify** the leading causes of the malfunction.

## candid

*adj.* honest, straightforward, and frank in someone's words or actions

*synonym*: honest, frank, straightforward

(1) **candid** conversation, (2) in my **candid** opinion

The **candid** photography captured the genuine emotions of the moment.

## inhibitor

*n.* a substance or agent that slows down or prevents a chemical reaction or biological process from occurring at

normal rates, often used in medicine or industrial applications to control or regulate various functions or reactions

*synonym*: hinderer, suppressor, blocker

(1) **inhibitor** protein, (2) chemical **inhibitor**

The virus uses an enzyme **inhibitor** to block the immune system's response.

## typical

*adj.* having the usual characteristics or traits of a specific group of things

*synonym*: characteristic, usual, distinctive

(1) **typical** leader, (2) fairly **typical** symptoms

This artwork is **typical** of her work.

## clinical

*adj.* of or relating to the examination and treatment of patients rather than theoretical or laboratory studies

*synonym*: dispassionate, analytic, scientific

(1) **clinical** surgery, (2) participate in **clinical** trials

She received special **clinical** training at the hospital.

## pharmaceutical

*adj.* relating to the production and selling of the medical drugs

*synonym*: drug, medication, prescription

(1) major **pharmaceutical** companies, (2) commercial **pharmaceutical** products

She gave money to help set up a **pharmaceutical** laboratory.

## approve

*v.* to think that someone or something is favorable, acceptable, or appropriate; to officially accept a plan, request, etc.

*synonym*: accept, authorize, agree

(1) **approve** a measures, (2) unanimously **approve** a resolution

My boss wouldn't **approve** of the plan.

## delay

*v.* to cause something to happen at a later time than originally intended or expected

*synonym* : block, adjourn, detain

(1) **delay** a flight three hours, (2) **delay** the new project  
We **delayed** the payment because of an incorrect invoice.

## pandemic

*n.* an outbreak of a disease that affects many people over a very wide area

*synonym* : outbreak

(1) flu **pandemic**, (2) global **pandemic**

They fear a **pandemic** of a new type of virus.

## massive

*adj.* enormous amount; very heavy and solid

*synonym* : enormous, giant, immense

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

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

## chemical

*adj.* relating to or connected with chemistry;

*synonym* : chemic, synthetic

(1) toxic **chemicals**, (2) a **chemical** compound

The firm has grown into a large **chemical** manufacturing.

## structure

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

*synonym* : construction, architecture, establishment

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

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

## compound

*n.* an item composed of two or more distinct elements combined; a chemical formed by the combination of two or more elements

*synonym* : combination, mixture, blend

(1) aquatic **compound**, (2) harmful **compound**

Common salt is a sodium and chlorine **compound**.

## trace

*v.* to find or discover someone or something that was lost  
*synonym*: seek, follow, depict

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

## relevance

*n.* the state or degree of being closely connected or appropriate to the matter at hand

*synonym*: pertinence, applicability, connection

(1) have no **relevance**, (2) **relevance** category

The **relevance** of this information to the current situation needs to be investigated.

## span

*n.* the entire length of something, such as time or space from beginning to end; the amount of space that something covers

*synonym*: interval, period, length

(1) the **span** of a bird's wings, (2) the average life **span**  
He slightly modified the **span** of training because it was just before a match.

## convert

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

*synonym*: alter, remake, transform

(1) **convert** fat into energy, (2) **convert** base 10 to base 16  
I want to **convert** my sadness into strength.

## database

*n.* a large amount of data stored in a computer system in such a way that it can be searched and updated easily

(1) **database** administrator, (2) employee **database**

Each country's officials can access the central **database**.

## trillion

*n.* the number 1,000,000,000,000; a million million

(1) **trillion** cubic feet, (2) many **trillions** of dollars

One light year is nearly 6 **trillion** miles.

## triumph

*n.* a great victory or achievement

*synonym*: victory, success, conquest

(1) **triumph** of democracy, (2) **triumph** of the spirit  
The team's **triumph** in the championship resulted from their hard work and dedication.

**lab** *n.* a workplace for the conduct of scientific research; a laboratory

*synonym*: workshop, laboratory, research chamber

(1) **lab** instrument, (2) medical **lab**

The Prime Minister will pay a courtesy visit to the Nobel laureate's **lab**.

**industrious** *adj.* hardworking, diligent, and persistent in effort

*synonym*: diligent, hardworking, assiduous

(1) **industrious** worker, (2) **industrious** student

He was known to be very **industrious** and would often work late into the night.

**discreet** *adj.* characterized by the ability to keep secrets or maintain confidentiality; showing prudence, tact, or reserve in behavior or speech; not likely to draw attention or cause offense

*synonym*: cautious, careful, circumspect

(1) **discreet** manner, (2) **discreet** conversation

He was **discreet** with the sensitive information he had been entrusted with.

**intractable** *adj.* difficult to manage or control; stubborn or obstinate

*synonym*: obstinate, stubborn, unyielding

(1) **intractable** pain, (2) **intractable** situation

The **intractable** problem defied a solution.

**unlikely** *adj.* not probable or likely to happen

*synonym*: doubtful, questionable, far-fetched

(1) **unlikely** event, (2) it is **unlikely** that he would win the game

The passage of the bill is **unlikely**.

## individual

*n.* a single person or thing, as distinct from a group  
*synonym* : person, being, self

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

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

## entrepreneur

*n.* an individual who creates or invests in one or more businesses, especially when this involves taking financial risks

*synonym* : founder, executive

(1) a successful **entrepreneur**, (2) billionaire **entrepreneur**

**Entrepreneurs** willingly accept business risks to achieve success.

## holdup

*n.* a delay or interruption, often caused by a problem or obstacle; a robbery or theft, often involving the use of weapons

*synonym* : delay, obstacle, interruption

(1) traffic **holdup**, (2) armed **holdup**

The construction project experienced a **holdup** due to a shortage of building materials.

## asset

*n.* something or someone that is useful or valuable quality, skill, etc.; valuable property

*synonym* : aid, resource, equity

(1) frozen **assets**, (2) liquid **assets** of the company

A sense of humor is an invaluable **asset** in this job.

## reserve

*v.* to keep something for future use or contingency; to obtain or arrange something, such as a meeting, seat, etc., in advance

*synonym* : keep, hold, preserve

(1) **reserve** the right, (2) **reserve** a concert ticket

You can easily **reserve** seats over the telephone.

## constrain

*v.* to restrict or limit someone or something's freedom or ability to do something

*synonym* : restrict, limit, confine

(1) **constrain** his freedom, (2) **constrain** information flow  
The political situation **constrained** the country's economic growth and foreign relations.

## unpredictable

*adj.* not capable of being foreseen or calculated; not regular or certain

*synonym* : uncertain, variable, random

(1) dangerously **unpredictable** person, (2) **unpredictable** outcome

The weather in this region is often **unpredictable**, with sudden rainstorms and strong winds.

## swan

*n.* a large waterbird with a long neck, bill, and webbed feet; known for their elegant and graceful appearance

*synonym* : cygnet, waterfowl, bird

(1) **swan** song, (2) black **swan**

The **swan's** feathers glistened in the sunlight.

## reduction

*n.* a decrease in size, amount, or degree

*synonym* : diminution, decrease, cutback

(1) **reduction** strategy, (2) a gradual **reduction**

The **reduction** in carbon emissions has been significant since the implementation of the new policy.

## invest

*v.* to put money, effort, time, etc. into something to make a profit or achieve a result

*synonym* : fund, sponsor, support

(1) **invest** in stocks, (2) **invest** capital

The government should view children as national assets and actively **invest** in them.

## ultimate

*adj.* furthest or highest in degree or order

*synonym* : highest, maximum, foremost

(1) the **ultimate** goal in life, (2) the **ultimate** luxury

Management must take **ultimate** responsibility for the



accident.

## stimulus

*n.* something that causes growth or arouses action

*synonym*: incitement, inspiration, motivation

(1) a response to a **stimulus**, (2) economic **stimulus**

This book provides children with ideas and a **stimulus** for outside recreation.

## transform

*v.* to change in outward structure or looks;

*synonym*: alter, convert, change

(1) **transform** an education system, (2) **transform** heat into power

My father's death **transformed** my life completely.

## caution

*n.* great care and attention that you take to avoid danger or mistakes; a warning against certain acts

*synonym*: carefulness, warning, notice

(1) extreme **caution**, (2) act with **caution**

He gave a stern **caution** to the naughty student.

## timeline

*n.* a series of events arranged in chronological order and displayed along a line, usually drawn left to right or top to bottom

*synonym*: agenda, timetable, chronology

(1) **timeline** of science history, (2) lay out a **timeline**

He imposed a **timeline** on the project.

## 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.

## hurdle

*n.* a barrier or obstacle that must be overcome

*synonym* : obstacle, barrier, challenge

(1) overcome **hurdles**, (2) **hurdle** race

The company faced several **hurdles** in the development of its new product.

## overcome

*v.* to succeed in controlling or dealing with something, such as a problem or difficulty; to defeat or overwhelm someone

*synonym* : beat, confound, overwhelm

(1) **overcome** opponents, (2) **overcome** all difficulties

He tried to **overcome** a bad reputation and win the election.

## engineer

*n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software

*synonym* : architect, creator, builder

(1) a civil **engineer**, (2) **engineer** shortage

The **engineer** will repair my telephone tomorrow morning.

## fundamental

*adj.* forming an essential base or core from which everything else develops or is affected

*synonym* : basic, essential, entire

(1) **fundamental** education, (2) **fundamental** rights

Human behavior has **fundamental** characteristics.

## mechanics

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

*synonym* : kinematics, dynamics

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

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

## conclude

*v.* to come to an end or close; to reach a judgment or opinion by reasoning

*synonym* : complete, finish, decide

(1) **conclude** a meeting, (2) **conclude** that he is healthy

We **concluded** a cease-fire.

## basis

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

*synonym* : foundation, base, ground

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

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

## afford

*v.* to have enough money or time to be able to buy or do something

(1) **afford** to buy a new car, (2) **afford** a high travel cost

He cannot **afford** a holiday.

## postpone

*v.* to delay or reschedule something to a later time or date

*synonym* : delay, defer, reschedule

(1) **postpone** meeting, (2) **postpone** event

Due to inclement weather, the game has been **postponed** until next week.

## 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.

## cumulative

*adj.* increasing or growing by one addition after another

*synonym* : accumulative, additive, compounding

(1) **cumulative** improvement, (2) **cumulative** damage

The **cumulative** effect of years of neglect had taken its toll on the old building.

## causation

*n.* the action or relationship between an event or action and its effect or consequence; the explanation for why something happens

*synonym* : cause, reason, origin

(1) **causation** analysis, (2) direct **causation**

The **causation** of the disease is still under investigation by medical researchers.

## precipitous

*adj.* extremely steep or rapid; hasty or impulsive, often with negative consequences; (of science) relating to or characterized by rapid, abrupt changes

*synonym* : steep, sudden, sheer

(1) **precipitous** behavior, (2) **precipitous** mountain

The sudden, **precipitous** drop in temperature caught everyone off guard.

## breakthrough

*n.* a sudden, dramatic, and important discovery or development that helps to improve a situation or provide an answer to a problem

*synonym* : advance, progress, innovation

(1) **breakthrough** in the negotiations, (2) **breakthrough** discovery

A technique called deep learning has led to **breakthroughs** in AI.

## overnight

*adj.* lasting for or occurring during one night; occurring or changing extremely quickly or suddenly; happening or being achieved in a short amount of time

*synonym* : all-night, sudden, immediate

(1) **overnight** parking, (2) **overnight** success

The **overnight** package delivery arrived at my door this morning.

## defy

*v.* to challenge or dare someone to do something; to resist or disobey a rule, decision, etc.

*synonym* : challenge, resist, disobey

(1) **defy** gravity, (2) **defy** authority

She tried to **defy** her parents by moving to the city against their wishes.

## 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.

## milestone

*n.* an important event or stage in the development or progress of something; a stone by the side of a road to show distances

*synonym* : landmark, turning point, touchstone

(1) key **milestone**, (2) **milestone** event

Reaching the **milestone** of 1000 subscribers on her SNS channel was a major achievement for her.

## schedule

*n.* a list of planned activities, tasks, or things that must be completed showing when they are intended to happen or be done

*synonym* : agenda, program, itinerary

(1) a heavy **schedule**, (2) arrange my **schedule**

So far, the meeting is going according to **schedule**.

## 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.

## preparation

*n.* the activity of getting ready for something or making something ready

*synonym* : practice, trial, rehearsal

(1) a **preparation** program, (2) the **preparation** of meals

He helped me with the **preparation** of this book.

## quote

v. to repeat or reproduce the words or statement of someone else, often acknowledging the source; to give an estimated cost or price for goods or services

*synonym* : cite, reference, mention

(1) **quote** a source, (2) **quote** a price

In his speech, he **quoted** a famous philosopher to emphasize his point.

## physicist

n. a scientist who specializes in the field of physics

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

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

## abacus

n. a counting device consisting of a frame with rods or wires on which beads or stones are moved to perform arithmetic calculations

*synonym* : bead frame, counting frame

(1) **abacus** calculations, (2) wooden **abacus** beads

The child was learning how to use an **abacus** in her math class.

## workflow

n. the sequence of industrial, administrative, or other processes through which a piece of work passes from initiation to completion; the system of procedures, people, and resources that contribute to an organization's productivity and efficiency

*synonym* : process, task management

(1) streamline **workflow**, (2) optimized **workflow**

Our team needs to re-evaluate our **workflow** to increase efficiency and productivity.

## integrate

v. to combine one thing with another so that they form a whole or work together; to accept equal participation for members of all races and ethnic groups

*synonym* : mix, merge, combine

(1) **integrate** into the existing system, (2) **integrate** both businesses

He found that it is difficult to **integrate** socially.

## onboard

*v.* to become or make part of a team, group, or system; to install, activate, or begin using a piece of equipment or software; (adjective) included or integrated into a particular system, machine, or device

*synonym*: embark, aboard, on-load

(1) **onboard** the new employees, (2) **onboard** computer

The passengers were instructed to **onboard** the aircraft as quickly as possible so that the flight could depart on time.

## talent

*n.* a natural ability to be good at something; someone who has a natural ability to be good at something

*synonym*: endowment, aptitude, capability

(1) a person of diverse **talents**, (2) raw **talent**

Numerous great professional sports **talents** have come from this city.

## mention

*v.* to speak or write about something or someone briefly

*synonym*: reference, allude, cite

(1) **mention** name, (2) **mention** in a report

I **mentioned** to him that I had seen his sister at the grocery store earlier that day.

## vision

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

*synonym*: sight, image, concept

(1) a prodigious **vision**, (2) telescopic **vision**

Driving is difficult for me because of my poor **vision**.

## imaginary

*adj.* existing only in someone's mind

*synonym*: fictional, ideal, fantastical

(1) **imaginary** number, (2) **imaginary** pregnancy

Little children tend to have **imaginary** friends.

## scope

*n.* the range of one's perceptions, thoughts, or actions, or a subject that

*synonym*: content, coverage, extent

(1) **scope** of a project, (2) have broad **scope**

The **scope** of human thought is diverse.

## tackle

*v.* to try to deal with a complex problem or situation

*synonym*: deal with, dive into, work on

(1) **tackle** the issue, (2) help **tackle** climate change

The government is determined to **tackle** sharp inflation.

## government

*n.* the group of people with authority to control a country or state

*synonym*: administration, regime, state

(1) **government** bureaucracy, (2) **government** funding

The federal **government** is planning to increase taxes for the next fiscal year.

## suit

*n.* a set of clothes that are made from the same material; a claim or complaint that a person or organization can file in court against another party; (verb) to be fit or acceptable for

*synonym*: clothes, lawsuit, (verb) fit

(1) **suit** and tie restaurant, (2) **suit** at law

Six **suits** are awaiting trial or verdict.

## accelerate

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

*synonym*: speed up, quicken, rev

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

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

## innovation

*n.* the creation of a new device or process resulting from study and experimentation

*synonym*: invention, initiation, creation

(1) **innovation** leader, (2) cutting-edge **innovation**



The vegetarian burger was an **innovation** that quickly spread to the United Kingdom.

## experiment

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

*synonym*: experimentation, investigation

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

His **experiments** showed highly positive results.

## underway

*adj.* having started and currently in progress

*synonym*: afoot, ongoing, in motion

(1) just getting **underway**, (2) campaign now **underway**

This project has been **underway** for several years.

## 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.

## Session 2: Spelling

1. me\_\_\_\_\_cs of the game  
*n.* the branch of physics that deals with the study of motion, forces, and energy; (mechanic) someone whose occupation is repairing and maintaining automobiles
2. se\_\_\_\_l number  
*adj.* consisting of or occurring in a series or sequence; relating to or involving a series or sequence of events, stories, or incidents
3. di\_\_\_\_\_e control  
*n.* a disorder or illness that affects the body or mind, often characterized by specific symptoms or abnormal functioning of organs or systems
4. the s\_\_n of a bird's wings  
*n.* the entire length of something, such as time or space from beginning to end; the amount of space that something covers
5. po\_\_\_\_\_ne event  
*v.* to delay or reschedule something to a later time or date
6. moral pa\_\_\_\_\_is  
*n.* a condition in which you are unable to move or lose control of part or most of the body because of illness or injury
7. economic sta\_\_\_\_\_ll  
*n.* a complete halt in movement or activity, especially due to an obstruction or lack of resources
8. global pa\_\_\_\_\_ic  
*n.* an outbreak of a disease that affects many people over a very wide area

ANSWERS: 1. mechanics, 2. serial, 3. disease, 4. span, 5. postpone, 6. paralysis, 7. standstill, 8. pandemic

9. ele\_\_\_\_\_tic discharge *adj.* relating to the static electric charge produced by friction or other means; describing the behavior of insulators and conductors in electrical systems
10. 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
11. ni\_\_\_\_\_en absorption *n.* a chemical element with the symbol N and atomic number 7, which is a highly reactive element that forms part of many compounds, including amino acids and proteins
12. po\_\_\_\_\_ne meeting *v.* to delay or reschedule something to a later time or date
13. ex\_\_\_\_\_d a great deal of energy *v.* to use or spend time, money, energy, etc.
14. s\_\_t at law *n.* a set of clothes that are made from the same material; a claim or complaint that a person or organization can file in court against another party; (verb) to be fit or acceptable for
15. d\_\_y authority *v.* to challenge or dare someone to do something; to resist or disobey a rule, decision, etc.
16. in\_\_\_\_\_or protein *n.* a substance or agent that slows down or prevents a chemical reaction or biological process from occurring at normal rates, often used in medicine or industrial applications to control or regulate various functions or reactions

ANSWERS: 9. electrostatic, 10. process, 11. nitrogen, 12. postpone, 13. expend, 14. suit, 15. defy, 16. inhibitor

17. bypass ro\_\_\_\_\_ck *n.* a physical barrier or obstacle that prevents progress or movement; a situation that impedes progress or creates difficulty in achieving a goal or objective
18. unanimously ap\_\_\_\_\_e a resolution *v.* to think that someone or something is favorable, acceptable, or appropriate; to officially accept a plan, request, etc.
19. pro\_\_\_\_\_on of civilization *n.* the act or process of changing to the next stage or phase or moving forward
20. probabilistic qu\_\_\_\_\_m theory *n.* the smallest amount or unit of something, especially (electromagnetic) energy
21. romantic ent\_\_\_\_\_ent *n.* involvement in a complicated or difficult situation; a tangled mass
22. pa\_\_\_\_\_y to understanding *n.* a track that constitutes or serves as a path; an approach or a way of doing something
23. in\_\_\_\_t in stocks *v.* to put money, effort, time, etc. into something to make a profit or achieve a result
24. at\_\_\_\_c bomb *adj.* of or relating to atom (= the smallest component of an element)
25. co\_\_\_\_\_t base 10 to base 16 *v.* to have a talk with someone; (adjective) reversed in order, relation, or action
26. int\_\_\_\_\_le situation *adj.* difficult to manage or control; stubborn or obstinate
27. chaotic env\_\_\_\_\_nt *n.* the natural world such as air, water, and land in which humans, animals, and plants live

ANSWERS: 17. roadblock, 18. approve, 19. progression, 20. quantum, 21. entanglement, 22. pathway, 23. invest, 24. atomic, 25. convert, 26. intractable, 27. environment

28. int\_\_\_\_\_nce wave *n.* the act or process of getting involved in and trying to influence a specific situation; the state of being affected and influenced with
29. an ina\_\_\_\_\_te income *adj.* not sufficient or enough
30. notable in\_\_\_\_\_ce *n.* a particular example or single occurrence of something
31. ov\_\_\_\_\_ht parking *adj.* lasting for or occurring during one night; occurring or changing extremely quickly or suddenly; happening or being achieved in a short amount of time
32. current af\_\_\_\_rs *n.* event, situation, or subject that is significant from a political or public perspective; a secretive or illicit sexual relationship
33. direct ca\_\_\_\_\_on *n.* the action or relationship between an event or action and its effect or consequence; the explanation for why something happens
34. theoretical ph\_\_\_\_\_st *n.* a scientist who specializes in the field of physics
35. mo\_\_\_\_\_ar biology *adj.* of or relating to molecules (= a group of two or more atoms held together by attractive forces known as chemical bonds)
36. 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

ANSWERS: 28. interference, 29. inadequate, 30. instance, 31. overnight, 32. affair, 33. causation, 34. physicist, 35. molecular, 36. qubit

37. se\_\_\_e heat *adj.* extremely serious or bad in feeling, manner, or strict and harsh; extremely strong or vigorous
38. a heavy sc\_\_\_\_\_le *n.* a list of planned activities, tasks, or things that must be completed showing when they are intended to happen or be done
39. a ca\_\_\_\_\_st in the process of hydrolysis *n.* a person or thing that causes an important event to happen or changes the current situation rapidly; (chemistry) a substance that initiates or accelerates a chemical reaction without being changed itself
40. s\_\_n song *n.* a large waterbird with a long neck, bill, and webbed feet; known for their elegant and graceful appearance
41. ma\_\_\_\_\_e stars *adj.* enormous amount; very heavy and solid
42. qu\_\_e a source *v.* to repeat or reproduce the words or statement of someone else, often acknowledging the source; to give an estimated cost or price for goods or services
43. in\_\_\_e criticism *v.* to ask someone to come or join; to offer an opportunity or possibility for something to happen or take place
44. telescopic vi\_\_\_n *n.* the ability to think about or see the future with imagination and intelligence; the faculty of being able to see
45. re\_\_\_\_\_e the right *v.* to keep something for future use or contingency; to obtain or arrange something, such as a meeting, seat, etc., in advance

ANSWERS: 37. severe, 38. schedule, 39. catalyst, 40. swan, 41. massive, 42. quote, 43. invite, 44. vision, 45. reserve

46. act with ca\_\_\_\_\_n *n.* great care and attention that you take to avoid danger or mistakes; a warning against certain acts
47. com\_\_\_\_\_ty theory *n.* the state or quality of being complicated or intricate and difficult to understand
48. lay out a ti\_\_\_\_\_ne *n.* a series of events arranged in chronological order and displayed along a line, usually drawn left to right or top to bottom
49. ill\_\_\_\_\_te a key point *v.* to provide pictures, photographs, diagrams, etc. in a book or something for explanation
50. f\_\_e with one another *n.* a small part in an electrical device or machinery that can interrupt the flow of electrical current when it is overloaded; (verb) to become plastic or fluid or liquefied from heat
51. a gradual re\_\_\_\_\_on *n.* a decrease in size, amount, or degree
52. is\_\_\_\_\_on booth *n.* the condition of being alone or lonely; the act or state of separation between persons or groups
53. puzzle m\_\_e *n.* a complex network of winding passages or pathways designed as a puzzle or challenge for people to navigate through
54. ca\_\_\_d conversation *adj.* honest, straightforward, and frank in someone's words or actions
55. a response to a st\_\_\_\_\_us *n.* something that causes growth or arouses action

ANSWERS: 46. caution, 47. complexity, 48. timeline, 49. illustrate, 50. fuse, 51. reduction, 52. isolation, 53. maze, 54. candid, 55. stimulus

56. billionaire ent\_\_\_\_\_eur *n.* an individual who creates or invests in one or more businesses, especially when this involves taking financial risks
57. r\_\_y on convenience stores *v.* to require a specific thing or the assistance and support of someone or something to continue, run properly, or succeed.
58. pos\_\_\_\_\_ty of a major earthquake *n.* a chance that something may happen or be true
59. foreign po\_\_\_\_y *n.* a set of rules, guidelines, principles, or procedures that govern decision-making or action, often used in the context of business or government; a course of action or plan of action adopted or followed by an organization or individual to achieve a goal or objective
60. exp\_\_\_\_\_nt design *n.* the scientific test conducted to observe what happens and gain new knowledge
61. labyrinth m\_\_e *n.* a complex network of winding passages or pathways designed as a puzzle or challenge for people to navigate through
62. en\_\_\_\_\_er shortage *n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software
63. fairly ty\_\_\_\_\_l symptoms *adj.* having the usual characteristics or traits of a specific group of things
64. have broad sc\_\_e *n.* the range of one's perceptions, thoughts, or actions, or a subject that

ANSWERS: 56. entrepreneur, 57. rely, 58. possibility, 59. policy, 60. experiment, 61. maze, 62. engineer, 63. typical, 64. scope



65. ov\_\_\_\_\_me opponents *v.* to succeed in controlling or dealing with something, such as a problem or difficulty; to defeat or overwhelm someone
66. det\_\_\_\_\_tic approach *adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations
67. sim\_\_\_\_\_sly affected *adv.* at the same time
68. cognitive com\_\_\_\_\_ty *n.* the state or quality of being complicated or intricate and difficult to understand
69. pa\_\_\_\_\_is in the leg *n.* a condition in which you are unable to move or lose control of part or most of the body because of illness or injury
70. face inc\_\_\_\_\_gly complicated challenges *adv.* more and more
71. inhale am\_\_\_\_\_a fumes *n.* a compound of nitrogen and hydrogen that forms a gas with a strong smell, used as cleaning substances, fertilizers, and explosives
72. energy-ef\_\_\_\_\_nt appliances *adj.* performing at the highest level of productivity with the least wasted effort or resources; capable of achieving maximum output with minimum wasted effort, time, or materials
73. ov\_\_\_\_\_me all difficulties *v.* to succeed in controlling or dealing with something, such as a problem or difficulty; to defeat or overwhelm someone

ANSWERS: 65. overcome, 66. deterministic, 67. simultaneously, 68. complexity, 69. paralysis, 70. increasingly, 71. ammonia, 72. efficient, 73. overcome

74. gov\_\_\_\_\_nt funding *n.* the group of people with authority to control a country or state
75. chemical in\_\_\_\_\_or *n.* a substance or agent that slows down or prevents a chemical reaction or biological process from occurring at normal rates, often used in medicine or industrial applications to control or regulate various functions or reactions
76. major pha\_\_\_\_\_cal companies *adj.* relating to the production and selling of the medical drugs
77. cellular signaling pa\_\_\_\_\_ys *n.* a track that constitutes or serves as a path; an approach or a way of doing something
78. 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
79. 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
80. a cold cl\_\_\_\_\_e *n.* the weather in a particular location averaged over some long period
81. tr\_\_e back to medieval times *v.* to find or discover someone or something that was lost

ANSWERS: 74. government, 75. inhibitor, 76. pharmaceutical, 77. pathway, 78. process, 79. superposition, 80. climate, 81. trace

82. sc\_\_e of a project *n.* the range of one's perceptions, thoughts, or actions, or a subject that
83. co\_\_\_\_de that he is healthy *v.* to come to an end or close; to reach a judgment or opinion by reasoning
84. wooden ab\_\_\_s beads *n.* a counting device consisting of a frame with rods or wires on which beads or stones are moved to perform arithmetic calculations
85. the st\_\_\_\_\_re of a machine *n.* the way of construction of something and the arrangement of its parts, or a complex thing constructed of many parts
86. en\_\_\_\_\_ly satisfied with the meal *adv.* completely
87. env\_\_\_\_\_nt affairs *n.* the natural world such as air, water, and land in which humans, animals, and plants live
88. a prodigious vi\_\_\_n *n.* the ability to think about or see the future with imagination and intelligence; the faculty of being able to see
89. heavy ni\_\_\_\_\_en *n.* a chemical element with the symbol N and atomic number 7, which is a highly reactive element that forms part of many compounds, including amino acids and proteins
90. pre\_\_\_\_\_us behavior *adj.* extremely steep or rapid; hasty or impulsive, often with negative consequences; (of science) relating to or characterized by rapid, abrupt changes

ANSWERS: 82. scope, 83. conclude, 84. abacus, 85. structure, 86. entirely, 87. environment, 88. vision, 89. nitrogen, 90. precipitous

91. am\_\_\_\_\_a water *n.* a compound of nitrogen and hydrogen that forms a gas with a strong smell, used as cleaning substances, fertilizers, and explosives
92. con\_\_\_\_\_nt on business activity *n.* a limit or restriction on something, such as an action, behavior, or thought
93. parallel com\_\_\_\_\_on *n.* the act or process of calculating something, especially an answer or amount, by using a machine or calculator
94. ex\_\_\_\_\_t a topic *n.* the system in a vehicle that removes waste gases from the engine; (verb) to make someone completely tired
95. sy\_\_\_\_\_is of ammonia *n.* the combination of components or elements to form a more complex whole; the creation of something new through combining parts or elements
96. tr\_\_\_\_\_h of the spirit *n.* a great victory or achievement
97. a civil en\_\_\_\_\_er *n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software
98. acc\_\_\_\_\_te the car *v.* to make something faster or earlier; to cause to develop or progress more quickly
99. ap\_\_\_\_\_e a measures *v.* to think that someone or something is favorable, acceptable, or appropriate; to officially accept a plan, request, etc.
100. many tr\_\_\_\_\_ons of dollars *n.* the number 1,000,000,000,000; a million million

ANSWERS: 91. ammonia, 92. constraint, 93. computation, 94. exhaust, 95. synthesis, 96. triumph, 97. engineer, 98. accelerate, 99. approve, 100. trillion

101. re\_\_\_t to a heavy smoker *v.* to return to a previous state or condition; to reply
102. person's smile is inf\_\_\_\_\_us *adj.* able to be passed quickly from one person, animal, or plant to another, especially through air or water
103. 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
104. cl\_\_\_\_\_al surgery *adj.* of or relating to the examination and treatment of patients rather than theoretical or laboratory studies
105. oxygen a\_\_m *n.* the smallest unit of ordinary matter that forms a chemical element, composed of a nucleus and one or more electrons bound to the nucleus
106. re\_\_\_\_\_ce on social media *n.* the state of depending on or needing something or someone
107. transportation sta\_\_\_\_\_ll *n.* a complete halt in movement or activity, especially due to an obstruction or lack of resources
108. health po\_\_\_y *n.* a set of rules, guidelines, principles, or procedures that govern decision-making or action, often used in the context of business or government; a course of action or plan of action adopted or followed by an organization or individual to achieve a goal or objective
109. co\_\_\_\_\_e the value *v.* to make a mathematical calculation

ANSWERS: 101. revert, 102. infectious, 103. pole, 104. clinical, 105. atom, 106. reliance, 107. standstill, 108. policy, 109. compute

110. liquid as\_\_ts of the company *n.* something or someone that is useful or valuable quality, skill, etc.; valuable property
111. ine\_\_\_\_\_ty in salary *n.* the unfairness of a society in which some people have more opportunity, money, etc. than others; (mathematics) relation between two values when they are different
112. campaign now un\_\_\_\_\_ay *adj.* having started and currently in progress
113. ur\_\_\_\_t situation *adj.* requiring immediate attention or action; pressing
114. ab\_\_\_\_s calculations *n.* a counting device consisting of a frame with rods or wires on which beads or stones are moved to perform arithmetic calculations
115. for in\_\_\_\_\_ce *n.* a particular example or single occurrence of something
116. af\_\_\_\_d a high travel cost *v.* to have enough money or time to be able to buy or do something
117. pos\_\_\_\_\_ty for growth *n.* a chance that something may happen or be true
118. she is ma\_\_c *n.* beliefs and actions employed to influence supernatural beings and forces; any art or performance that invokes supernatural powers
119. co\_\_\_\_\_in information flow *v.* to restrict or limit someone or something's freedom or ability to do something
120. l\_b instrument *n.* a workplace for the conduct of scientific research; a laboratory

ANSWERS: 110. asset, 111. inequality, 112. underway, 113. urgent, 114. abacus, 115. instance, 116. afford, 117. possibility, 118. magic, 119. constrain, 120. lab

121. gov\_\_\_\_\_nt bureaucracy *n.* the group of people with authority to control a country or state
122. aw\_\_t a decision *v.* to wait or stay ready for something; to expect or anticipate something
123. co\_\_\_\_\_de a meeting *v.* to come to an end or close; to reach a judgment or opinion by reasoning
124. ex\_\_\_\_\_e the world *v.* to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it
125. f\_\_e blows *n.* a small part in an electrical device or machinery that can interrupt the flow of electrical current when it is overloaded; (verb) to become plastic or fluid or liquefied from heat
126. ba\_\_s for calculation *n.* the most important facts, ideas, or events from which something is developed; the way how things are organized or arranged
127. 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
128. af\_\_\_\_d to buy a new car *v.* to have enough money or time to be able to buy or do something
129. arrange my sc\_\_\_\_\_le *n.* a list of planned activities, tasks, or things that must be completed showing when they are intended to happen or be done

ANSWERS: 121. government, 122. await, 123. conclude, 124. explore, 125. fuse, 126. basis, 127. pole, 128. afford, 129. schedule

130. pre\_\_\_\_\_us mountain *adj.* extremely steep or rapid; hasty or impulsive, often with negative consequences; (of science) relating to or characterized by rapid, abrupt changes
131. mi\_\_\_\_\_le amount *adj.* extremely small; tiny
132. biological ro\_\_\_\_\_ck *n.* a physical barrier or obstacle that prevents progress or movement; a situation that impedes progress or creates difficulty in achieving a goal or objective
133. get in\_\_\_\_\_t access *adj.* happening immediately, with no delay
134. d\_\_y gravity *v.* to challenge or dare someone to do something; to resist or disobey a rule, decision, etc.
135. in\_\_\_e guests *v.* to ask someone to come or join; to offer an opportunity or possibility for something to happen or take place
136. si\_\_\_\_\_te 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
137. di\_\_\_\_\_et manner *adj.* characterized by the ability to keep secrets or maintain confidentiality; showing prudence, tact, or reserve in behavior or speech; not likely to draw attention or cause offense
138. dangerously unp\_\_\_\_\_ble person *adj.* not capable of being foreseen or calculated; not regular or certain

ANSWERS: 130. precipitous, 131. minuscule, 132. roadblock, 133. instant, 134. defy, 135. invite, 136. simulate, 137. discreet, 138. unpredictable



139. black s\_\_n *n.* a large waterbird with a long neck, bill, and webbed feet; known for their elegant and graceful appearance
140. ent\_\_\_\_\_ent in conflict *n.* involvement in a complicated or difficult situation; a tangled mass
141. cum\_\_\_\_\_ve improvement *adj.* increasing or growing by one addition after another
142. pro\_\_\_\_\_on of disease *n.* the act or process of changing to the next stage or phase or moving forward
143. fun\_\_\_\_\_al rights *adj.* forming an essential base or core from which everything else develops or is affected
144. em\_\_\_e as a butterfly *v.* to move out of or away from something and become visible
145. a ch\_\_\_\_\_al compound *adj.* relating to or connected with chemistry;
146. sem\_\_\_\_\_tor device *n.* a material or substance that can conduct electricity under certain conditions but not others, often used in electronic devices
147. re\_\_\_\_\_e a concert ticket *v.* to keep something for future use or contingency; to obtain or arrange something, such as a meeting, seat, etc., in advance
148. the ul\_\_\_\_\_te luxury *adj.* furthest or highest in degree or order
149. em\_\_\_e from poverty *v.* to move out of or away from something and become visible
150. flu pa\_\_\_\_\_ic *n.* an outbreak of a disease that affects many people over a very wide area

ANSWERS: 139. swan, 140. entanglement, 141. cumulative, 142. progression, 143. fundamental, 144. emerge, 145. chemical, 146. semiconductor, 147. reserve, 148. ultimate, 149. emerge, 150. pandemic

151. ta\_\_\_e the issue *v.* to try to deal with a complex problem or situation
152. nit\_\_\_\_\_se gene *n.* an enzyme found in certain bacteria that is responsible for the biological fixation of atmospheric nitrogen into forms that can be used by plants and other organisms
153. domestic af\_\_\_rs *n.* event, situation, or subject that is significant from a political or public perspective; a secretive or illicit sexual relationship
154. the ha\_\_\_\_\_rk of modern life *n.* a distinctive characteristic or attribute of a person or thing
155. aw\_\_t your reply *v.* to wait or stay ready for something; to expect or anticipate something
156. re\_\_\_\_\_on strategy *n.* a decrease in size, amount, or degree
157. tr\_\_\_\_\_rm an education system *v.* to change in outward structure or looks;
158. st\_\_\_\_\_ng discovery *adj.* extremely surprising, astonishing, and sometimes worrying
159. frozen as\_\_ts *n.* something or someone that is useful or valuable quality, skill, etc.; valuable property
160. the great di\_\_\_\_\_ry of the century *n.* the act or process of finding information, a place, or an object, or learning about something that was previously not known
161. acc\_\_\_\_\_hed at a very early age *adj.* having completed a task or achieved a goal successfully; skilled or proficient at something

ANSWERS: 151. tackle, 152. nitrogenase, 153. affair, 154. hallmark, 155. await, 156. reduction, 157. transform, 158. startling, 159. asset, 160. discovery, 161. accomplished

162. protein sy\_\_\_\_\_is inhibitor *n.* the combination of components or elements to form a more complex whole; the creation of something new through combining parts or elements
163. in\_\_\_\_\_te both businesses *v.* to combine one thing with another so that they form a whole or work together; to accept equal participation for members of all races and ethnic groups
164. it is un\_\_\_\_\_ly that he would win the game *adj.* not probable or likely to happen
165. me\_\_\_\_\_n name *v.* to speak or write about something or someone briefly
166. an inf\_\_\_\_\_us fever *adj.* able to be passed quickly from one person, animal, or plant to another, especially through air or water
167. ina\_\_\_\_\_te funding *adj.* not sufficient or enough
168. economic st\_\_\_\_\_us *n.* something that causes growth or arouses action
169. on\_\_\_\_\_d the new employees *v.* to become or make part of a team, group, or system; to install, activate, or begin using a piece of equipment or software; (adjective) included or integrated into a particular system, machine, or device
170. employee da\_\_\_\_\_se *n.* a large amount of data stored in a computer system in such a way that it can be searched and updated easily
171. medical l\_b *n.* a workplace for the conduct of scientific research; a laboratory

ANSWERS: 162. synthesis, 163. integrate, 164. unlikely, 165. mention, 166. infectious, 167. inadequate, 168. stimulus, 169. onboard, 170. database, 171. lab

172. the country's is\_\_\_\_\_on *n.* the condition of being alone or lonely; the act or state of separation between persons or groups
173. exp\_\_\_\_\_al growth *adj.* becoming more and more rapid; of or involving mathematical exponents
174. ex\_\_\_\_d time and resources *v.* to use or spend time, money, energy, etc.
175. the int\_\_\_\_\_on between man and his environment *n.* the act of connecting with someone, mainly when working, playing, or spending time with them
176. a person of diverse ta\_\_\_\_ts *n.* a natural ability to be good at something; someone who has a natural ability to be good at something
177. be\_\_t with difficulties *v.* to annoy someone or something continually or chronically; to surround or attack from all sides
178. have no re\_\_\_\_\_ce *n.* the state or degree of being closely connected or appropriate to the matter at hand
179. pro\_\_\_\_\_tic approach *adj.* characterized by the influence of chance or probability; involving the use of statistical models or methods to estimate likelihoods or risks
180. optimized wo\_\_\_\_\_ow *n.* the sequence of industrial, administrative, or other processes through which a piece of work passes from initiation to completion; the system of procedures, people, and resources that contribute to an organization's productivity and efficiency

ANSWERS: 172. isolation, 173. exponential, 174. expend, 175. interaction, 176. talent, 177. beset, 178. relevance, 179. probabilistic, 180. workflow

181. development of va\_\_\_\_\_es      *n.* a substance that is put into the body and protects them from disease by causing them to produce antibodies (= proteins that attack harmful bacteria, viruses, etc.)
182. 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
183. de\_\_y a flight three hours      *v.* to cause something to happen at a later time than originally intended or expected
184. help ta\_\_\_e climate change      *v.* to try to deal with a complex problem or situation
185. de\_\_\_\_\_p a skill      *v.* to grow or expand; to improve or refine through a process of progress and refinement, often to achieve greater sophistication or complexity; to elaborate or add detail to something that is in the process of being created
186. co\_\_\_\_\_in his freedom      *v.* to restrict or limit someone or something's freedom or ability to do something
187. a private ind\_\_\_\_\_al      *n.* a single person or thing, as distinct from a group
188. a se\_\_\_e case of pneumonia      *adj.* extremely serious or bad in feeling, manner, or strict and harsh; extremely strong or vigorous
189. nonsynthetic fer\_\_\_\_\_er      *n.* a natural or chemical substance added to soil to make plants grow more successfully

ANSWERS: 181. vaccine, 182. advantage, 183. delay, 184. tackle, 185. develop, 186. constrain, 187. individual, 188. severe, 189. fertilizer

190. the ha\_\_\_\_rk of a good scientist      *n.* a distinctive characteristic or attribute of a person or thing
191. enc\_\_\_\_\_ng sign      *adj.* giving hope, confidence, or support; inspiring
192. be\_\_t the community      *v.* to annoy someone or something continually or chronically; to surround or attack from all sides
193. extreme ca\_\_\_\_n      *n.* great care and attention that you take to avoid danger or mistakes; a warning against certain acts
194. me\_\_\_\_\_cs equation      *n.* the branch of physics that deals with the study of motion, forces, and energy; (mechanic) someone whose occupation is repairing and maintaining automobiles
195. ma\_\_\_\_e amounts      *adj.* enormous amount; very heavy and solid
196. effects of cl\_\_\_\_\_e change      *n.* the weather in a particular location averaged over some long period
197. mi\_\_\_\_\_le letters      *adj.* extremely small; tiny
198. compound the ing\_\_\_\_\_nts      *n.* one of the things used to make something, especially one of the foods used to make a particular dish
199. unp\_\_\_\_\_ble outcome      *adj.* not capable of being foreseen or calculated; not regular or certain
200. a chemical fer\_\_\_\_\_er      *n.* a natural or chemical substance added to soil to make plants grow more successfully
201. a tr\_\_\_\_\_on of a culture      *n.* a belief, custom, or way of doing something that has been passed down from generation to generation within a group or society

ANSWERS: 190. hallmark, 191. encouraging, 192. beset, 193. caution, 194. mechanics, 195. massive, 196. climate, 197. minuscule, 198. ingredient, 199. unpredictable, 200. fertilizer, 201. tradition

202. bre\_\_\_\_\_ugh discovery *n.* a sudden, dramatic, and important discovery or development that helps to improve a situation or provide an answer to a problem
203. nit\_\_\_\_\_se activity *n.* an enzyme found in certain bacteria that is responsible for the biological fixation of atmospheric nitrogen into forms that can be used by plants and other organisms
204. laws of qu\_\_\_\_\_m mechanics *n.* the smallest amount or unit of something, especially (electromagnetic) energy
205. acc\_\_\_\_\_hed goal *adj.* having completed a task or achieved a goal successfully; skilled or proficient at something
206. ca\_\_\_\_\_on analysis *n.* the action or relationship between an event or action and its effect or consequence; the explanation for why something happens
207. strict time con\_\_\_\_\_nts *n.* a limit or restriction on something, such as an action, behavior, or thought
208. ind\_\_\_\_\_al freedom *n.* a single person or thing, as distinct from a group
209. the DNA se\_\_\_\_\_ce *n.* a series of related events, actions, numbers, etc., which have a particular order
210. severe cr\_\_\_\_c *n.* someone who expresses opinions about the quality of books, music, etc.
211. raw ta\_\_\_\_t *n.* a natural ability to be good at something; someone who has a natural ability to be good at something

ANSWERS: 202. breakthrough, 203. nitrogenase, 204. quantum, 205. accomplished, 206. causation, 207. constraint, 208. individual, 209. sequence, 210. critic, 211. talent

212. enc\_\_\_\_\_ng approval *adj.* giving hope, confidence, or support; inspiring
213. harmful co\_\_\_\_\_nd *n.* an item composed of two or more distinct elements combined; a chemical formed by the combination of two or more elements
214. the se\_\_\_\_\_ce of the seasons *n.* a series of related events, actions, numbers, etc., which have a particular order
215. algebraic ine\_\_\_\_\_ty *n.* the unfairness of a society in which some people have more opportunity, money, etc. than others; (mathematics) relation between two values when they are different
216. officious int\_\_\_\_\_nce *n.* the act or process of getting involved in and trying to influence a specific situation; the state of being affected and influenced with
217. me\_\_\_\_\_n in a report *v.* to speak or write about something or someone briefly
218. manage my fi\_\_\_\_\_es *n.* the management of money, credit, banking, and investments, especially by a government or commercial organization; the branch of economics that studies the management of money and other assets
219. sup\_\_\_\_\_ter technology *n.* a computer with a high level of computing power and speed, typically used for scientific or engineering computations that require immense amounts of data processing

ANSWERS: 212. encouraging, 213. compound, 214. sequence, 215. inequality, 216. interference, 217. mention, 218. finance, 219. supercomputer



220. da\_\_\_\_\_se administrator *n.* a large amount of data stored in a computer system in such a way that it can be searched and updated easily
221. neutral hydrogen a\_\_ms *n.* the smallest unit of ordinary matter that forms a chemical element, composed of a nucleus and one or more electrons bound to the nucleus
222. ex\_\_\_\_\_t a security hole *v.* to make full use of and gain an advantage from resources, opportunities, etc.
223. op\_\_\_\_\_ze control for cooling *v.* to make the best or most effective use of something
224. un\_\_\_\_\_ly event *adj.* not probable or likely to happen
225. armed ho\_\_\_p *n.* a delay or interruption, often caused by a problem or obstacle; a robbery or theft, often involving the use of weapons
226. key mi\_\_\_\_\_ne *n.* an important event or stage in the development or progress of something; a stone by the side of a road to show distances
227. im\_\_\_\_\_ry pregnancy *adj.* existing only in someone's mind
228. ex\_\_\_\_\_e our options *v.* to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it
229. ex\_\_\_\_\_t pipe *n.* the system in a vehicle that removes waste gases from the engine; (verb) to make someone completely tired

ANSWERS: 220. database, 221. atom, 222. exploit, 223. optimize, 224. unlikely, 225. holdup, 226. milestone, 227. imaginary, 228. explore, 229. exhaust

230. aquatic co\_\_\_\_\_nd *n.* an item composed of two or more distinct elements combined; a chemical formed by the combination of two or more elements
231. series of exp\_\_\_\_\_nts *n.* the scientific test conducted to observe what happens and gain new knowledge
232. co\_\_\_\_\_ve of an idea *v.* to have or develop an idea, a plan, etc. in mind; to become pregnant
233. he was en\_\_\_\_\_ly to blame *adv.* completely
234. take a st\_\_\_\_\_y job *adj.* firmly fixed, supported, or balanced; not shaking or moving
235. heavy hy\_\_\_\_\_en *n.* the chemical element that is the lightest gas is colorless, odorless, tasteless, and combines with oxygen to form water
236. the pre\_\_\_\_\_on of meals *n.* the activity of getting ready for something or making something ready
237. the ul\_\_\_\_\_te goal in life *adj.* furthest or highest in degree or order
238. hy\_\_\_\_\_en gas *n.* the chemical element that is the lightest gas is colorless, odorless, tasteless, and combines with oxygen to form water
239. in\_\_\_\_\_t capital *v.* to put money, effort, time, etc. into something to make a profit or achieve a result
240. ele\_\_\_\_\_tic repulsion *adj.* relating to the static electric charge produced by friction or other means; describing the behavior of insulators and conductors in electrical systems

ANSWERS: 230. compound, 231. experiment, 232. conceive, 233. entirely, 234. steady, 235. hydrogen, 236. preparation, 237. ultimate, 238. hydrogen, 239. invest, 240. electrostatic

241. participate in cl\_\_\_\_al trials *adj.* of or relating to the examination and treatment of patients rather than theoretical or laboratory studies
242. talented ph\_\_\_\_st *n.* a scientist who specializes in the field of physics
243. ind\_\_\_\_us worker *adj.* hardworking, diligent, and persistent in effort
244. inc\_\_\_\_gly become common *adv.* more and more
245. in\_\_\_\_te into the existing system *v.* to combine one thing with another so that they form a whole or work together; to accept equal participation for members of all races and ethnic groups
246. secret ing\_\_\_\_nts *n.* one of the things used to make something, especially one of the foods used to make a particular dish
247. ad\_\_\_\_e the technology *v.* to go or move forward; to develop in a positive way
248. the average life s\_\_n *n.* the entire length of something, such as time or space from beginning to end; the amount of space that something covers
249. tr\_\_\_\_h of democracy *n.* a great victory or achievement
250. ill\_\_\_\_te a story *v.* to provide pictures, photographs, diagrams, etc. in a book or something for explanation
251. fun\_\_\_\_al education *adj.* forming an essential base or core from which everything else develops or is affected

ANSWERS: 241. clinical, 242. physicist, 243. industrious, 244. increasingly, 245. integrate, 246. ingredient, 247. advance, 248. span, 249. triumph, 250. illustrate, 251. fundamental

252. exp\_\_\_\_\_al function *adj.* becoming more and more rapid; of or involving mathematical exponents
253. st\_\_\_\_\_re and function of the brain *n.* the way of construction of something and the arrangement of its parts, or a complex thing constructed of many parts
254. se\_\_\_l killer *adj.* consisting of or occurring in a series or sequence; relating to or involving a series or sequence of events, stories, or incidents
255. mo\_\_\_\_\_ar structure *adj.* of or relating to molecules (= a group of two or more atoms held together by attractive forces known as chemical bonds)
256. de\_\_\_\_\_p a strategy *v.* to grow or expand; to improve or refine through a process of progress and refinement, often to achieve greater sophistication or complexity; to elaborate or add detail to something that is in the process of being created
257. toxic ch\_\_\_\_\_als *adj.* relating to or connected with chemistry;
258. re\_\_\_\_\_ce category *n.* the state or degree of being closely connected or appropriate to the matter at hand
259. quantum sup\_\_\_\_\_ion *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: 252. exponential, 253. structure, 254. serial, 255. molecular, 256. develop, 257. chemical, 258. relevance, 259. superposition

260. de\_\_\_\_\_re from tradition *n.* the act of leaving, especially to start a journey
261. ad\_\_\_\_\_e a cooperative relationship *v.* to go or move forward; to develop in a positive way
262. acc\_\_\_\_\_te a chemical reaction *v.* to make something faster or earlier; to cause to develop or progress more quickly
263. ca\_\_\_\_\_st for reform *n.* a person or thing that causes an important event to happen or changes the current situation rapidly; (chemistry) a substance that initiates or accelerates a chemical reaction without being changed itself
264. cor\_\_\_\_\_us bankruptcy *n.* a large family of viruses that can cause illness in humans and animals, which name comes from the crown-like spikes on the surface of the virus, which can be seen under a microscope, and COVID-19 is caused by a specific type of coronavirus known as SARS-CoV-2
265. theory of com\_\_\_\_\_on *n.* the act or process of calculating something, especially an answer or amount, by using a machine or calculator
266. a cr\_\_k in a board *v.* to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking
267. manually op\_\_\_\_\_e a machine *v.* to work in a particular way; to supervise something

ANSWERS: 260. departure, 261. advance, 262. accelerate, 263. catalyst, 264. coronavirus, 265. computation, 266. crack, 267. operate

268. cor\_\_\_\_\_us antibody test kit      *n.* a large family of viruses that can cause illness in humans and animals, which name comes from the crown-like spikes on the surface of the virus, which can be seen under a microscope, and COVID-19 is caused by a specific type of coronavirus known as SARS-CoV-2
269. on\_\_\_\_\_d computer      *v.* to become or make part of a team, group, or system; to install, activate, or begin using a piece of equipment or software; (adjective) included or integrated into a particular system, machine, or device
270. ty\_\_\_\_\_l leader      *adj.* having the usual characteristics or traits of a specific group of things
271. sem\_\_\_\_\_tor industry      *n.* a material or substance that can conduct electricity under certain conditions but not others, often used in electronic devices
272. s\_\_t and tie restaurant      *n.* a set of clothes that are made from the same material; a claim or complaint that a person or organization can file in court against another party; (verb) to be fit or acceptable for
273. st\_\_\_\_\_ng earthquake shocks      *adj.* extremely surprising, astonishing, and sometimes worrying
274. de\_\_y the new project      *v.* to cause something to happen at a later time than originally intended or expected
275. an ur\_\_\_t telegram      *adj.* requiring immediate attention or action; pressing

ANSWERS: 268. coronavirus, 269. onboard, 270. typical, 271. semiconductor, 272. suit, 273. startling, 274. delay, 275. urgent

276. ge\_\_\_e analyses *n.* the complete set or sequence of genes of a human, animal, plant, or other living things
277. streamline wo\_\_\_\_\_ow *n.* the sequence of industrial, administrative, or other processes through which a piece of work passes from initiation to completion; the system of procedures, people, and resources that contribute to an organization's productivity and efficiency
278. 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
279. de\_\_\_\_\_re from the company *n.* the act of leaving, especially to start a journey
280. overcome hu\_\_\_es *n.* a barrier or obstacle that must be overcome
281. fi\_\_\_\_\_e act *n.* the management of money, credit, banking, and investments, especially by a government or commercial organization; the branch of economics that studies the management of money and other assets
282. 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
283. sup\_\_\_\_\_ter performance *n.* a computer with a high level of computing power and speed, typically used for scientific or engineering computations that require immense amounts of data processing

ANSWERS: 276. genome, 277. workflow, 278. classic, 279. departure, 280. hurdle, 281. finance, 282. classic, 283. supercomputer

284. int\_\_\_\_\_on among human beings     *n.* the act of connecting with someone, mainly when working, playing, or spending time with them
285. ov\_\_\_\_\_ht success     *adj.* lasting for or occurring during one night; occurring or changing extremely quickly or suddenly; happening or being achieved in a short amount of time
286. si\_\_\_\_\_te a future scenario     *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
287. on an equal ba\_\_s     *n.* the most important facts, ideas, or events from which something is developed; the way how things are organized or arranged
288. an oral va\_\_\_\_\_e     *n.* a substance that is put into the body and protects them from disease by causing them to produce antibodies (= proteins that attack harmful bacteria, viruses, etc.)
289. id\_\_\_\_\_fy handwriting     *v.* to recognize someone or something and say or prove who or what they are
290. ef\_\_\_\_\_nt operation     *adj.* performing at the highest level of productivity with the least wasted effort or resources; capable of achieving maximum output with minimum wasted effort, time, or materials
291. traffic ho\_\_\_p     *n.* a delay or interruption, often caused by a problem or obstacle; a robbery or theft, often involving the use of weapons

ANSWERS: 284. interaction, 285. overnight, 286. simulate, 287. basis, 288. vaccine, 289. identify, 290. efficient, 291. holdup



292. mi\_\_\_\_\_ne event *n.* an important event or stage in the development or progress of something; a stone by the side of a road to show distances
293. pro\_\_\_\_\_tic model *adj.* characterized by the influence of chance or probability; involving the use of statistical models or methods to estimate likelihoods or risks
294. a successful ent\_\_\_\_\_eur *n.* an individual who creates or invests in one or more businesses, especially when this involves taking financial risks
295. take several inputs sim\_\_\_\_\_sly *adv.* at the same time
296. inn\_\_\_\_\_on leader *n.* the creation of a new device or process resulting from study and experimentation
297. op\_\_\_\_\_e 24 hours a day *v.* to work in a particular way; to supervise something
298. di\_\_\_\_\_et conversation *adj.* characterized by the ability to keep secrets or maintain confidentiality; showing prudence, tact, or reserve in behavior or speech; not likely to draw attention or cause offense
299. a scientific di\_\_\_\_\_ry *n.* the act or process of finding information, a place, or an object, or learning about something that was previously not known
300. sequencing of the human ge\_\_\_\_\_e *n.* the complete set or sequence of genes of a human, animal, plant, or other living things

ANSWERS: 292. milestone, 293. probabilistic, 294. entrepreneur, 295. simultaneously, 296. innovation, 297. operate, 298. discreet, 299. discovery, 300. genome

301. hu___e race	<i>n.</i> a barrier or obstacle that must be overcome
302. a ma__c spell	<i>n.</i> beliefs and actions employed to influence supernatural beings and forces; any art or performance that invokes supernatural powers
303. in my ca___d opinion	<i>adj.</i> honest, straightforward, and frank in someone's words or actions
304. cum_____ve damage	<i>adj.</i> increasing or growing by one addition after another
305. score an ad_____ge	<i>n.</i> a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has
306. co_____t fat into energy	<i>v.</i> to have a talk with someone; (adjective) reversed in order, relation, or action
307. tr_____rm heat into power	<i>v.</i> to change in outward structure or looks;
308. ind_____us student	<i>adj.</i> hardworking, diligent, and persistent in effort
309. di_____e prevention	<i>n.</i> a disorder or illness that affects the body or mind, often characterized by specific symptoms or abnormal functioning of organs or systems
310. st___y increase	<i>adj.</i> firmly fixed, supported, or balanced; not shaking or moving
311. co_____ve a child	<i>v.</i> to have or develop an idea, a plan, etc. in mind; to become pregnant
312. tr_____on cubic feet	<i>n.</i> the number 1,000,000,000,000; a million million

ANSWERS: 301. hurdle, 302. magic, 303. candid, 304. cumulative, 305. advantage, 306. convert, 307. transform, 308. industrious, 309. disease, 310. steady, 311. conceive, 312. trillion

313. im\_\_\_\_\_ry number *adj.* existing only in someone's mind
314. against tr\_\_\_\_\_on *n.* a belief, custom, or way of doing something that has been passed down from generation to generation within a group or society
315. r\_\_y entirely on him *v.* to require a specific thing or the assistance and support of someone or something to continue, run properly, or succeed.
316. det\_\_\_\_\_tic system *adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations
317. at\_\_\_c nucleus *adj.* of or relating to atom (= the smallest component of an element)
318. tr\_\_e a telephone call *v.* to find or discover someone or something that was lost
319. an in\_\_\_\_\_t reply *adj.* happening immediately, with no delay
320. id\_\_\_\_\_fy gene sequences *v.* to recognize someone or something and say or prove who or what they are
321. re\_\_\_t to the original subject *v.* to return to a previous state or condition; to reply
322. just getting un\_\_\_\_\_ay *adj.* having started and currently in progress
323. qu\_\_e a price *v.* to repeat or reproduce the words or statement of someone else, often acknowledging the source; to give an estimated cost or price for goods or services

ANSWERS: 313. imaginary, 314. tradition, 315. rely, 316. deterministic, 317. atomic, 318. trace, 319. instant, 320. identify, 321. revert, 322. underway, 323. quote

324. co\_\_\_\_\_e an average score      *v.* to make a mathematical calculation
325. cr\_\_k an eggshell      *v.* to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking
326. a pre\_\_\_\_\_on program      *n.* the activity of getting ready for something or making something ready
327. bre\_\_\_\_\_ugh in the negotiations      *n.* a sudden, dramatic, and important discovery or development that helps to improve a situation or provide an answer to a problem
328. op\_\_\_\_\_ze a process      *v.* to make the best or most effective use of something
329. ti\_\_\_\_\_ne of science history      *n.* a series of events arranged in chronological order and displayed along a line, usually drawn left to right or top to bottom
330. int\_\_\_\_\_le pain      *adj.* difficult to manage or control; stubborn or obstinate
331. ex\_\_\_\_\_t a valuable opportunity      *v.* to make full use of and gain an advantage from resources, opportunities, etc.
332. 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

ANSWERS: 324. compute, 325. crack, 326. preparation, 327. breakthrough, 328. optimize, 329. timeline, 330. intractable, 331. exploit, 332. qubit

333. commercial pha\_\_\_\_\_cal products      *adj.* relating to the production and selling of the medical drugs
334. art cr\_\_\_c      *n.* someone who expresses opinions about the quality of books, music, etc.
335. cutting-edge inn\_\_\_\_\_on      *n.* the creation of a new device or process resulting from study and experimentation
336. self-re\_\_\_\_\_ce and solidarity      *n.* the state of depending on or needing something or someone

ANSWERS: 333. pharmaceutical, 334. critic, 335. innovation, 336. reliance

## Session 3: Fill in the Blanks

1. Common salt is a sodium and chlorine \_\_\_\_\_.  
*n.* an item composed of two or more distinct elements combined; a chemical formed by the combination of two or more elements
2. His pleasant face turned cold in an \_\_\_\_\_.  
*adj.* happening immediately, with no delay
3. This artwork is \_\_\_\_\_ of her work.  
*adj.* having the usual characteristics or traits of a specific group of things
4. The budget \_\_\_\_\_ forced them to make difficult decisions.  
*n.* a limit or restriction on something, such as an action, behavior, or thought
5. Advocates for legal reform hear less harsh words from their \_\_\_\_\_.  
*n.* someone who expresses opinions about the quality of books, music, etc.
6. The Prime Minister will pay a courtesy visit to the Nobel laureate's \_\_\_\_\_.  
*n.* a workplace for the conduct of scientific research; a laboratory
7. Some critics say this exhibition will be a big \_\_\_\_\_.  
*n.* event, situation, or subject that is significant from a political or public perspective; a secretive or illicit sexual relationship
8. The \_\_\_\_\_ feathers glistened in the sunlight.  
*n.* a large waterbird with a long neck, bill, and webbed feet; known for their elegant and graceful appearance

ANSWERS: 1. compound, 2. instant, 3. typical, 4. constraint, 5. critics, 6. lab, 7. affair, 8. swan's

9. 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
10. 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
11. Management must take \_\_\_\_\_ responsibility for the accident.
- adj.* furthest or highest in degree or order
12. 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
13. She felt \_\_\_\_\_ after finishing her book.
- adj.* having completed a task or achieved a goal successfully; skilled or proficient at something
14. Since the 1990s, the Internet has continued to experience \_\_\_\_\_ growth.
- adj.* becoming more and more rapid; of or involving mathematical exponents
15. The organizational \_\_\_\_\_ of start-ups is often flat and straightforward.
- n.* the way of construction of something and the arrangement of its parts, or a complex thing constructed of many parts
16. A technique called deep learning has led to \_\_\_\_\_ in AI.
- n.* a sudden, dramatic, and important discovery or development that helps to improve a situation or provide an answer to a problem

ANSWERS: 9. Pole, 10. discovery, 11. ultimate, 12. semiconductor, 13. accomplished, 14. exponential, 15. structure, 16. breakthroughs

17. The mRNA \_\_\_\_\_ was approved in less than a year because it did not contain the fragments of the target virus.
- n.* a substance that is put into the body and protects them from disease by causing them to produce antibodies (= proteins that attack harmful bacteria, viruses, etc.)
18. He cannot \_\_\_\_\_ a holiday.
- v.* to have enough money or time to be able to buy or do something
19. She tried to \_\_\_\_\_ her parents by moving to the city against their wishes.
- v.* to challenge or dare someone to do something; to resist or disobey a rule, decision, etc.
20. Human behavior has \_\_\_\_\_ characteristics.
- adj.* forming an essential base or core from which everything else develops or is affected
21. He acted in \_\_\_\_\_ on her naked promises.
- n.* the state of depending on or needing something or someone
22. \_\_\_\_\_ and weather have an impact on every part of our lifestyles.
- n.* the weather in a particular location averaged over some long period
23. 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
24. The human \_\_\_\_\_ contains approximately three billion chemical base pairs.
- n.* the complete set or sequence of genes of a human, animal, plant, or other living things

ANSWERS: 17. vaccine, 18. afford, 19. defy, 20. fundamental, 21. reliance, 22. Climate, 23. computation, 24. genome



25. One light year is nearly 6 \_\_\_\_\_ miles.  
*n.* the number 1,000,000,000,000; a million million
26. These articles cite five \_\_\_\_\_ of climate change.  
*n.* a particular example or single occurrence of something
27. The government is determined to \_\_\_\_\_ sharp inflation.  
*v.* to try to deal with a complex problem or situation
28. I can't \_\_\_\_\_ he'd want to harm us.  
*v.* to have or develop an idea, a plan, etc. in mind; to become pregnant
29. 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
30. It is \_\_\_\_\_ that we leave for the airport now to catch our flight.  
*adj.* requiring immediate attention or action; pressing
31. 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
32. Our company decided to hire an advisor who specializes in \_\_\_\_\_.  
*n.* the management of money, credit, banking, and investments, especially by a government or commercial organization; the branch of economics that studies the management of money and other assets
33. After trying the new software, I \_\_\_\_\_ to the old version.  
*v.* to return to a previous state or condition; to reply

ANSWERS: 25. trillion, 26. instances, 27. tackle, 28. conceive, 29. classic, 30. urgent, 31. atom, 32. finance, 33. reverted

34. The \_\_\_\_\_ photography captured the genuine emotions of the moment.

*adj.* honest, straightforward, and frank in someone's words or actions

35. Considering the situation of \_\_\_\_\_ organized stopped this year's beer festival.

*n.* a large family of viruses that can cause illness in humans and animals, which name comes from the crown-like spikes on the surface of the virus, which can be seen under a microscope, and COVID-19 is caused by a specific type of coronavirus known as SARS-CoV-2

36. 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

37. The \_\_\_\_\_ and the oxygen react and then form water.

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

38. We must \_\_\_\_\_ a new system to streamline our workflow and increase efficiency.

*v.* to grow or expand; to improve or refine through a process of progress and refinement, often to achieve greater sophistication or complexity; to elaborate or add detail to something that is in the process of being created

39. The new washing machine is much more \_\_\_\_\_ than the old one.

*adj.* performing at the highest level of productivity with the least wasted effort or resources; capable of achieving maximum output with minimum wasted effort, time, or materials

ANSWERS: 34. candid, 35. coronavirus, 36. qubits, 37. hydrogen, 38. develop, 39. efficient

40. He helped me with the \_\_\_\_\_ of this book.  
*n.* the activity of getting ready for something or making something ready
41. 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
42. The firm has grown into a large \_\_\_\_\_ manufacturing.  
*adj.* relating to or connected with chemistry;
43. I want to \_\_\_\_\_ my sadness into strength.  
*v.* to have a talk with someone; (adjective) reversed in order, relation, or action
44. Carbon has an \_\_\_\_\_ mass of 12.  
*adj.* of or relating to atom (= the smallest component of an element)
45. Leprosy is an indolent \_\_\_\_\_ disease.  
*adj.* able to be passed quickly from one person, animal, or plant to another, especially through air or water
46. We want to \_\_\_\_\_ you to our annual charity event.  
*v.* to ask someone to come or join; to offer an opportunity or possibility for something to happen or take place
47. Reaching the \_\_\_\_\_ of 1000 subscribers on her SNS channel was a major achievement for her.  
*n.* an important event or stage in the development or progress of something; a stone by the side of a road to show distances

ANSWERS: 40. preparation, 41. process, 42. chemical, 43. convert, 44. atomic, 45. infectious, 46. invite, 47. milestone

48. She received special \_\_\_\_\_ training at the hospital.

*adj.* of or relating to the examination and treatment of patients rather than theoretical or laboratory studies

49. The weather in this region is often \_\_\_\_\_ with sudden rainstorms and strong winds.

*adj.* not capable of being foreseen or calculated; not regular or certain

50. The doctor diagnosed him with a rare \_\_\_\_\_ that had no known cure.

*n.* a disorder or illness that affects the body or mind, often characterized by specific symptoms or abnormal functioning of organs or systems

51. The \_\_\_\_\_ of the fishing net was making it difficult for the whales to swim.

*n.* involvement in a complicated or difficult situation; a tangled mass

52. Due to inclement weather, the game has been \_\_\_\_\_ until next week.

*v.* to delay or reschedule something to a later time or date

53. The company has made great strides in its \_\_\_\_\_ toward sustainability.

*n.* the act or process of changing to the next stage or phase or moving forward

54. The factory's \_\_\_\_\_ fumes polluted the air and affected the health of the nearby residents.

*n.* the system in a vehicle that removes waste gases from the engine; (verb) to make someone completely tired

55. He performed \_\_\_\_\_ tricks with sophisticated moves.

*n.* beliefs and actions employed to influence supernatural beings and forces; any art or performance that invokes supernatural powers

ANSWERS: 48. clinical, 49. unpredictable, 50. disease, 51. entanglement, 52. postponed, 53. progression, 54. exhaust, 55. magic

56. Little children tend to have \_\_\_\_\_ friends.

*adj.* existing only in someone's mind

57. The child was learning how to use an \_\_\_\_\_ in her math class.

*n.* a counting device consisting of a frame with rods or wires on which beads or stones are moved to perform arithmetic calculations

58. Billionaires tend to \_\_\_\_\_ private funds on a public undertaking.

*v.* to use or spend time, money, energy, etc.

59. 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

60. Greed is the primary \_\_\_\_\_ in the making of criminals.

*n.* one of the things used to make something, especially one of the foods used to make a particular dish

61. Massive demonstrations lead to total \_\_\_\_\_ of transportation.

*n.* a condition in which you are unable to move or lose control of part or most of the body because of illness or injury

62. He was known to be very \_\_\_\_\_ and would often work late into the night.

*adj.* hardworking, diligent, and persistent in effort

63. China has developed one of the world's fastest \_\_\_\_\_ for its space program.

*n.* a computer with a high level of computing power and speed, typically used for scientific or engineering computations that require immense amounts of data processing

ANSWERS: 56. imaginary, 57. abacus, 58. expend, 59. advantages, 60. ingredient, 61. paralysis, 62. industrious, 63. supercomputers

64. I \_\_\_\_\_ to him that I had seen his sister at the grocery store earlier that day.  
*v.* to speak or write about something or someone briefly
65. Scientific knowledge will \_\_\_\_\_ significantly with the power of AI.  
*v.* to go or move forward; to develop in a positive way
66. He had painted the wood to \_\_\_\_\_ stone.  
*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
67. His \_\_\_\_\_ showed highly positive results.  
*n.* the scientific test conducted to observe what happens and gain new knowledge
68. \_\_\_\_\_ willingly accept business risks to achieve success.  
*n.* an individual who creates or invests in one or more businesses, especially when this involves taking financial risks
69. The virus uses an enzyme \_\_\_\_\_ to block the immune system's response.  
*n.* a substance or agent that slows down or prevents a chemical reaction or biological process from occurring at normal rates, often used in medicine or industrial applications to control or regulate various functions or reactions
70. A sense of humor is an invaluable \_\_\_\_\_ in this job.  
*n.* something or someone that is useful or valuable quality, skill, etc.; valuable property
71. My boss wouldn't \_\_\_\_\_ of the plan.  
*v.* to think that someone or something is favorable, acceptable, or appropriate; to officially accept a plan, request, etc.

ANSWERS: 64. mentioned, 65. advance, 66. simulate, 67. experiments, 68. Entrepreneurs, 69. inhibitor, 70. asset, 71. approve

72. There are several causes of economic \_\_\_\_\_ within societies.  
*n.* the unfairness of a society in which some people have more opportunity, money, etc. than others; (mathematics) relation between two values when they are different
73. Einstein was an outstanding and famous \_\_\_\_\_ of the 20th century.  
*n.* a scientist who specializes in the field of physics
74. This evidence will form the \_\_\_\_\_ for our discussion.  
*n.* the most important facts, ideas, or events from which something is developed; the way how things are organized or arranged
75. We do move forward with those tasks in \_\_\_\_\_ next week.  
*n.* a series of related events, actions, numbers, etc., which have a particular order
76. Our company found it \_\_\_\_\_ difficult to keep up with the competition.  
*adv.* more and more
77. My father's death \_\_\_\_\_ my life completely.  
*v.* to change in outward structure or looks;
78. The senator received \_\_\_\_\_ criticism from his opponent.  
*adj.* extremely serious or bad in feeling, manner, or strict and harsh; extremely strong or vigorous
79. The political situation \_\_\_\_\_ the country's economic growth and foreign relations.  
*v.* to restrict or limit someone or something's freedom or ability to do something

ANSWERS: 72. inequality, 73. physicist, 74. basis, 75. sequence, 76. increasingly, 77. transformed, 78. severe, 79. constrained

80. Numerous great professional sports \_\_\_\_\_ have come from this city.  
*n.* a natural ability to be good at something; someone who has a natural ability to be good at something
81. \_\_\_\_\_ weight is the sum of all the atoms.  
*adj.* of or relating to molecules (= a group of two or more atoms held together by attractive forces known as chemical bonds)
82. She gave money to help set up a \_\_\_\_\_ laboratory.  
*adj.* relating to the production and selling of the medical drugs
83. The \_\_\_\_\_ of the disease is still under investigation by medical researchers.  
*n.* the action or relationship between an event or action and its effect or consequence; the explanation for why something happens
84. Six \_\_\_\_\_ are awaiting trial or verdict.  
*n.* a set of clothes that are made from the same material; a claim or complaint that a person or organization can file in court against another party; (verb) to be fit or acceptable for
85. The chemical \_\_\_\_\_ of the new drug was a breakthrough in medical research.  
*n.* the combination of components or elements to form a more complex whole; the creation of something new through combining parts or elements
86. We \_\_\_\_\_ our mining resources to strengthen our national power.  
*v.* to make full use of and gain an advantage from resources, opportunities, etc.
87. This project has been \_\_\_\_\_ for several years.  
*adj.* having started and currently in progress

ANSWERS: 80. talents, 81. Molecular, 82. pharmaceutical, 83. causation, 84. suits, 85. synthesis, 86. exploit, 87. underway



88. Unfortunately, the radio \_\_\_\_\_ made it difficult to hear the broadcast.
- n.* the act or process of getting involved in and trying to influence a specific situation; the state of being affected and influenced with
89. He gave a stern \_\_\_\_\_ to the naughty student.
- n.* great care and attention that you take to avoid danger or mistakes; a warning against certain acts
90. The essence of economics is to \_\_\_\_\_ the allocation of limited resources.
- v.* to make the best or most effective use of something
91. During colonial eras, new migratory patterns \_\_\_\_\_.
- v.* to move out of or away from something and become visible
92. In his speech, he \_\_\_\_\_ a famous philosopher to emphasize his point.
- v.* to repeat or reproduce the words or statement of someone else, often acknowledging the source; to give an estimated cost or price for goods or services
93. The passengers were instructed to \_\_\_\_\_ the aircraft as quickly as possible so that the flight could depart on time.
- v.* to become or make part of a team, group, or system; to install, activate, or begin using a piece of equipment or software; (adjective) included or integrated into a particular system, machine, or device
94. He found that it is difficult to \_\_\_\_\_ socially.
- v.* to combine one thing with another so that they form a whole or work together; to accept equal participation for members of all races and ethnic groups
95. Raiders from the neighboring kingdom \_\_\_\_\_ the small village.
- v.* to annoy someone or something continually or chronically; to surround or attack from all sides

ANSWERS: 88. interference, 89. caution, 90. optimize, 91. emerged, 92. quoted, 93. onboard, 94. integrate, 95. beset

96. In a \_\_\_\_\_ system, the outcome is uncertain and can vary based on chance.  
*adj.* characterized by the influence of chance or probability; involving the use of statistical models or methods to estimate likelihoods or risks
97. The company faced several \_\_\_\_\_ in the development of its new product.  
*n.* a barrier or obstacle that must be overcome
98. The \_\_\_\_\_ of the two groups is good for brainstorming.  
*n.* the act of connecting with someone, mainly when working, playing, or spending time with them
99. You can easily \_\_\_\_\_ seats over the telephone.  
*v.* to keep something for future use or contingency; to obtain or arrange something, such as a meeting, seat, etc., in advance
100. The \_\_\_\_\_ in carbon emissions has been significant since the implementation of the new policy.  
*n.* a decrease in size, amount, or degree
101. He describes the story with \_\_\_\_\_ reality.  
*adj.* extremely surprising, astonishing, and sometimes worrying
102. \_\_\_\_\_ gas is used to inflate car tires because it does not react with rubber.  
*n.* a chemical element with the symbol N and atomic number 7, which is a highly reactive element that forms part of many compounds, including amino acids and proteins
103. We got lost in the \_\_\_\_\_ of streets while exploring the city.  
*n.* a complex network of winding passages or pathways designed as a puzzle or challenge for people to navigate through

ANSWERS: 96. probabilistic, 97. hurdles, 98. interaction, 99. reserve, 100. reduction, 101. startling, 102. Nitrogen, 103. maze

104. The government tried to \_\_\_\_\_ the commercialization of this development.  
*v.* to make something faster or earlier; to cause to develop or progress more quickly
105. So far, the meeting is going according to \_\_\_\_\_.  
*n.* a list of planned activities, tasks, or things that must be completed showing when they are intended to happen or be done
106. He that would eat the kernel must \_\_\_\_\_ the nut.  
*v.* to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking
107. He has a short \_\_\_\_\_.  
*n.* a small part in an electrical device or machinery that can interrupt the flow of electrical current when it is overloaded; (verb) to become plastic or fluid or liquefied from heat
108. The accident caused a \_\_\_\_\_ on the highway, causing traffic to come to a standstill.  
*n.* a physical barrier or obstacle that prevents progress or movement; a situation that impedes progress or creates difficulty in achieving a goal or objective
109. The federal \_\_\_\_\_ is planning to increase taxes for the next fiscal year.  
*n.* the group of people with authority to control a country or state
110. The traffic accident caused a \_\_\_\_\_ on the highway for several hours.  
*n.* a complete halt in movement or activity, especially due to an obstruction or lack of resources
111. The company is launching a new line of \_\_\_\_\_ products aimed at young adults.  
*adj.* consisting of or occurring in a series or sequence; relating to or involving a series or sequence of events, stories, or incidents

ANSWERS: 104. accelerate, 105. schedule, 106. crack, 107. fuse, 108. roadblock, 109. government, 110. standstill, 111. serial

112. The advent of \_\_\_\_\_ fertilizers markedly increased agricultural productivity.  
*n.* a compound of nitrogen and hydrogen that forms a gas with a strong smell, used as cleaning substances, fertilizers, and explosives
113. The \_\_\_\_\_ of this information to the current situation needs to be investigated.  
*n.* the state or degree of being closely connected or appropriate to the matter at hand
114. When the first molecule in the \_\_\_\_\_ receives a signal, it activates other molecules.  
*n.* a track that constitutes or serves as a path; an approach or a way of doing something
115. Two students answered the teacher's question \_\_\_\_\_.  
*adv.* at the same time
116. This book provides children with ideas and a \_\_\_\_\_ for outside recreation.  
*n.* something that causes growth or arouses action
117. The \_\_\_\_\_ of human thought is diverse.  
*n.* the range of one's perceptions, thoughts, or actions, or a subject that
118. The \_\_\_\_\_ package delivery arrived at my door this morning.  
*adj.* lasting for or occurring during one night; occurring or changing extremely quickly or suddenly; happening or being achieved in a short amount of time
119. The patient's vital signs are \_\_\_\_\_ indicating a stable condition.  
*adj.* firmly fixed, supported, or balanced; not shaking or moving

ANSWERS: 112. ammonia, 113. relevance, 114. pathway, 115. simultaneously, 116. stimulus, 117. scope, 118. overnight, 119. steady,

120. He slightly modified the \_\_\_\_\_ of training because it was just before a match.  
*n.* the entire length of something, such as time or space from beginning to end; the amount of space that something covers
121. The \_\_\_\_\_ time for the flight is 6:00 am.  
*n.* the act of leaving, especially to start a journey
122. Babies heavily \_\_\_\_\_ on others for food.  
*v.* to require a specific thing or the assistance and support of someone or something to continue, run properly, or succeed.
123. A clear and simple expression is the \_\_\_\_\_ of good writing.  
*n.* a distinctive characteristic or attribute of a person or thing
124. This ore emits \_\_\_\_\_ quantities of radiation  
*adj.* extremely small; tiny
125. We \_\_\_\_\_ the results of the election with bated breath.  
*v.* to wait or stay ready for something; to expect or anticipate something
126. That incident led to his \_\_\_\_\_.  
*n.* the condition of being alone or lonely; the act or state of separation between persons or groups
127. It is a \_\_\_\_\_ in many families to have a big Thanksgiving dinner with all their relatives.  
*n.* a belief, custom, or way of doing something that has been passed down from generation to generation within a group or society

ANSWERS: 120. span, 121. departure, 122. rely, 123. hallmark, 124. minuscule, 125. await, 126. isolation, 127. tradition

128. The test results were \_\_\_\_\_ and showed improvement.

*adj.* giving hope, confidence, or support; inspiring

129. Our team needs to re-evaluate our \_\_\_\_\_ to increase efficiency and productivity.

*n.* the sequence of industrial, administrative, or other processes through which a piece of work passes from initiation to completion; the system of procedures, people, and resources that contribute to an organization's productivity and efficiency

130. He was \_\_\_\_\_ with the sensitive information he had been entrusted with.

*adj.* characterized by the ability to keep secrets or maintain confidentiality; showing prudence, tact, or reserve in behavior or speech; not likely to draw attention or cause offense

131. He imposed a \_\_\_\_\_ on the project.

*n.* a series of events arranged in chronological order and displayed along a line, usually drawn left to right or top to bottom

132. I tried to \_\_\_\_\_ the efficiency of the investment.

*v.* to make a mathematical calculation

133. As an \_\_\_\_\_ he had the right to make his own decisions and live his life as he saw fit.

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

134. The \_\_\_\_\_ problem defied a solution.

*adj.* difficult to manage or control; stubborn or obstinate

135. Each country's officials can access the central \_\_\_\_\_.

*n.* a large amount of data stored in a computer system in such a way that it can be searched and updated easily

ANSWERS: 128. encouraging, 129. workflow, 130. discreet, 131. timeline, 132. compute, 133. individual, 134. intractable, 135. database

136. We \_\_\_\_\_ a cease-fire.

*v.* to come to an end or close; to reach a judgment or opinion by reasoning

137. The \_\_\_\_\_ will repair my telephone tomorrow morning.

*n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software

138. The construction project experienced a \_\_\_\_\_ due to a shortage of building materials.

*n.* a delay or interruption, often caused by a problem or obstacle; a robbery or theft, often involving the use of weapons

139. Nitrogen fixation by the Haber-Bosch method leads to the mass production of \_\_\_\_\_.

*n.* a natural or chemical substance added to soil to make plants grow more successfully

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

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

141. The vegetarian burger was an \_\_\_\_\_ that quickly spread to the United Kingdom.

*n.* the creation of a new device or process resulting from study and experimentation

142. The passage of the bill is \_\_\_\_\_.

*adj.* not probable or likely to happen

ANSWERS: 136. concluded, 137. engineer, 138. holdup, 139. fertilizers, 140. mechanics, 141. innovation, 142. unlikely

143. The sudden, \_\_\_\_\_ drop in temperature caught everyone off guard.  
*adj.* extremely steep or rapid; hasty or impulsive, often with negative consequences; (of science) relating to or characterized by rapid, abrupt changes
144. I will introduce you to how to \_\_\_\_\_ the leading causes of the malfunction.  
*v.* to recognize someone or something and say or prove who or what they are
145. The global financial crisis acted as a \_\_\_\_\_ to unite the country.  
*n.* a person or thing that causes an important event to happen or changes the current situation rapidly; (chemistry) a substance that initiates or accelerates a chemical reaction without being changed itself
146. The recent economic downturn has resulted in \_\_\_\_\_ layoffs.  
*adj.* enormous amount; very heavy and solid
147. 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
148. This machine is too difficult to \_\_\_\_\_ for me.  
*v.* to work in a particular way; to supervise something
149. The management must \_\_\_\_\_ strategies to increase office security.  
*v.* to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it
150. The company's financial records \_\_\_\_\_ how successful it has been.  
*v.* to provide pictures, photographs, diagrams, etc. in a book or something for explanation

ANSWERS: 143. precipitous, 144. identify, 145. catalyst, 146. massive, 147. superposition, 148. operate, 149. explore, 150. illustrate



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

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

152. 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

153. 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

154. The \_\_\_\_\_ of getting the disease will drastically increase.

- n.* a chance that something may happen or be true

155. Big techs are now eager to develop \_\_\_\_\_ computers.

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

156. The team's \_\_\_\_\_ in the championship resulted from their hard work and dedication.

- n.* a great victory or achievement

157. We \_\_\_\_\_ the payment because of an incorrect invoice.

- v.* to cause something to happen at a later time than originally intended or expected

158. The company's new \_\_\_\_\_ on remote work has made it a more inclusive workplace.

- n.* a set of rules, guidelines, principles, or procedures that govern decision-making or action, often used in the context of business or government; a course of action or plan of action adopted or followed by an organization or individual to achieve a goal or objective

ANSWERS: 151. vision, 152. complexity, 153. environment, 154. possibility, 155. quantum, 156. triumph, 157. delayed, 158. policy

159. Later, his claim was found to be \_\_\_\_\_ false.

*adv.* completely

160. The \_\_\_\_\_ algorithm always produces the same result for a given input.

*adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations

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

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

162. The \_\_\_\_\_ effect of years of neglect had taken its toll on the old building.

*adj.* increasing or growing by one addition after another

163. The experiment showed a strong \_\_\_\_\_ charge between the two objects.

*adj.* relating to the static electric charge produced by friction or other means; describing the behavior of insulators and conductors in electrical systems

164. The \_\_\_\_\_ enzyme requires a lot of energy to function properly.

*n.* an enzyme found in certain bacteria that is responsible for the biological fixation of atmospheric nitrogen into forms that can be used by plants and other organisms

165. The small budget was \_\_\_\_\_ to cover all the necessary expenses for the project.

*adj.* not sufficient or enough

166. He tried to \_\_\_\_\_ a bad reputation and win the election.

*v.* to succeed in controlling or dealing with something, such as a problem or difficulty; to defeat or overwhelm someone

ANSWERS: 159. entirely, 160. deterministic, 161. trace, 162. cumulative, 163. electrostatic, 164. nitrogenase, 165. inadequate, 166. overcome

167. The government should view children as national assets and actively \_\_\_\_\_ in them.

- v.* to put money, effort, time, etc. into something to make a profit or achieve a result

168. They fear a \_\_\_\_\_ of a new type of virus.

- n.* an outbreak of a disease that affects many people over a very wide area

ANSWERS: 167. invest, 168. pandemic