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Vocabulary Builder Reference from...

Jason W. Chin: A virus-resistant organism -- and what it could mean for the future | TED Talk

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

All Words

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Session 1: Word List

virus

n. a tiny infectious organic material that causes disease in people, animals, and plants

synonym: bacterium, germ, ailment

(1) spread of the **virus**, (2) a strain of **virus**

An infected person in the hospital will likely pass the **virus** to others.

resistant

adj. not affected by something, especially changes or new ideas; of or relating to immunity to disease or infection

synonym: unsusceptible, immune, invulnerable

(1) penicillin- **resistant** bacteria, (2) **resistant** to persuasion

Insects in urban areas are becoming **resistant** to insecticides.

protein

n. a molecule made up of a long chain of amino acids, which is essential for the structure and function of the body's tissues

(1) stress **protein**, (2) **protein** synthesis

The body needs a certain amount of **protein** to build and repair tissues.

compose

v. to write music, poetry, or formal writing; to constitute or make up a whole, or a specified part of it

synonym: compile, constitute, build

(1) **compose** an essay, (2) **compose** my thoughts

The structure is **composed** of three main components.

triplet

n. a group of three things or people, especially three babies born at the same time from the same pregnancy

synonym: trio, threesome, three-piece set

(1) **triplet** siblings, (2) **triplet** acetylene

The **triplet** babies were born premature and needed extra care.

codon

n. a sequence of three nitrogenous bases in a DNA or RNA molecule that specifies a particular amino acid or a start or stop signal in protein synthesis

synonym: genetic sequence, DNA triplet

(1) **codon** base, (2) **codon** sequence

Scientists have found that **codon** usage can vary among different species and even between different tissues within the same organism.

encode

v. to convert information into a code or format suitable for storage or transmission

synonym: transcribe, convert

(1) **encode** data, (2) **encode** information

The software can **encode** and decode encrypted messages.

amino

n. compounds and functional groups that contain a basic nitrogen atom with a lone pair (NH₂) that combine to make protein

(1) **amino** compound, (2) **amino** acid

This company was granted a patent for its **amino** resin manufacturing process.

acid

n. sour; water-soluble chemicals with a sour flavor; any of a variety of generally liquid compounds capable of

reacting with and occasionally dissolving other materials

synonym : SOUR

(1) an **acid** reaction, (2) good source of essential amino **acids**

During pregnancy, the stomach generates less **acid** than usual.

genetic

adj. of or relating to genes (= parts of the DNA in cells) or the science of genes

synonym : hereditary, genetical, inborn

(1) have **genetic** testing, (2) a **genetic** disorder

Understanding protein folding is a vital step in deciphering the **genetic** code.

rulebook

n. a set of rules or regulations, especially one governing a particular activity or organization

synonym : manual, guidebook, regulations

(1) follow a **rulebook**, (2) **rulebook** violation

The company's **rulebook** clearly outlines the expectations for employees.

define

v. to state or explain precisely the nature, scope, or meaning of something

synonym : characterize, depict, express

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

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

serine

n. a hydrophilic amino acid that acts as a neurotransmitter and is found in many proteins

synonym : amino acid

(1) **serine** protease, (2) receptor **serine**

The high **serine** levels in the blood were an indicator of liver disease.

synonymous

adj. having the same or a similar meaning as another word or phrase

synonym: equivalent, interchangeable, similar

(1) **synonymous** terms, (2) non- **synonymous** mutation

The phrase "big shot" and "important person" are **synonymous**.

universal

adj. existing or affecting everywhere or everyone

synonym: common, broad, worldwide

(1) **universal** life, (2) principles of **universal** design

The picture earned near- **universal** acclaim from critics.

essentially

adv. relating to the essential features or concepts of anything

synonym: fundamentally, basically, virtually

(1) **essentially** correct, (2) become **essentially** same

Essentially, a society is an organism.

trait

n. a particular feature of your nature

synonym: attribute, feature, quality

(1) chemical **trait**, (2) personality **traits**

Multiple genes may influence behavioral **traits** concurrently.

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.

coli

n. a bacterium of the genus *Escherichia* that is commonly found in the human gut and is used as a model organism in molecular biology and biochemistry

(1) E. **coli** bacteria strain, (2) **coli** cells

The study of *Escherichia coli* has led to important advancements in areas such as antibiotic resistance, gut

microbiome, and synthetic biology.

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.

rewrite

v. to write something such as a book or speech again in a different way, usually to improve it or add new information

synonym : revise, edit, rework

(1) **rewrite** a composition, (2) **rewrite** a world record

I need to **rewrite** most of the essay with feedback from my teacher.

microbe

n. a tiny living thing that can only be seen with a microscope and that may cause disease

synonym : germ, microorganism, bacterium

(1) pathogenic **microbe**, (2) **microbes** sterilizer

Microbes thrive on the surface of the human skin.

replace

v. to take the place of something

synonym : substitute, supersede, displace

(1) **replace** one word with another, (2) **replace** a phone

Eventually, the new design will **replace** all older models.

compress

v. to press or squeeze together to make something take up less space

synonym : condense, constrict, squeeze

(1) **compress** the chest, (2) **compress** gas

She **compressed** the files into a single ZIP archive to save space on her computer.

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.

synonym

n. a word or expression that has the same or nearly the same meaning as another word or expression in the same language

synonym: equivalent, substitute, parallel

(1) **synonym** retrieval, (2) rough **synonym**

She was searching for a **synonym** for 'happiness' in the thesaurus.

synthetic

adj. made by combining chemical substances as opposed to being naturally occurring

synonym: artificial, manufactured, fabricated

(1) **synthetic** fiber, (2) **synthetic** fertilizer

Synthetic diamonds play an essential role as machine tool blades.

chemistry

n. the branch of the natural sciences dealing with the composition of substances and their properties and reactions

(1) professor of **chemistry**, (2) the **chemistry** of soil

He is familiar with **chemistry** and biology.

tube

n. a cylindrical container of metal, plastic, glass, etc., usually sealed and used as a means of preserving food or chemicals; a hollow cylindrical shape

synonym: pipe, hose, duct

(1) a capillary **tube**, (2) a glass **tube**

The **tube** train was packed with commuters during rush hour.

prohibitively

adv. in a manner that discourages or prevents something from happening or being done, especially by making it too expensive

synonym: excessively

(1) **prohibitively** long time, (2) **prohibitively** difficult
The cost of the project was **prohibitively** high for the company to consider.

assemble

v. to collect in one place as a single group

synonym: gather, congregate, collect

(1) **assemble** your colleagues, (2) **assemble** a jigsaw puzzle

The president began to **assemble** an army.

stretch

v. to make or be capable of making anything longer or broader without hurting or breaking

synonym: lengthen, prolong, extend

(1) **stretch** along the coast, (2) **stretch** a story

Some herds have been observed to **stretch** hundreds of kilometers.

streamline

v. to simplify or make more efficient by eliminating unnecessary parts or steps

synonym: simplify, optimize, make more efficient

(1) **streamline** administrative activities, (2) **streamline** workflow

The government plans to **streamline** the tax collection process to make it more efficient.

machinery

n. a group of large machines or the components of a machine that make it work; social institution functions or structure for doing something

synonym: apparatus, appliance, equipment

(1) heavy **machinery**, (2) inactive **machinery**

The **machinery** of audit formally issued a business improvement order.

normally

adv. usually; under normal conditions

synonym: commonly, generally, naturally

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

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

specifically

adv. only associated with or meant for one thing

synonym: especially, particularly, notably

(1) designed **specifically** for men, (2) for **specifically** American customers

This ad campaign is aimed **specifically** at young women.

component

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

synonym: element, part, factor

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

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

translate

v. to convert or change words into another language

synonym: convert, transcribe, render

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

Translate the text from Italian into English.

mRNA

n. (an abbreviation for messenger RNA) a single-stranded molecule of RNA that corresponds to the genetic sequence of a gene, and is read by a ribosome in the process of synthesizing a protein

(1) **mRNA** translation, (2) nuclear **mRNA**

The **mRNA** vaccine can expedite many approval processes because it does not contain a virus.

infect

v. to affect a person, an animal, or a plant with a disease-causing organism

synonym: pollute, contaminate, affect

(1) **infect** other animal species, (2) **infect** a computer with a virus

Children often **infect** parents with this head cold.

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.

incompatible *adj.* so different as to not be able to exist or work with another thing or person

synonym : inharmonious, conflicting, inconsistent

(1) **incompatible** personalities, (2) **incompatible** colors
It is a religion **incompatible** with the western country.

broad *adj.* very wide; general

synonym : wide, expansive, comprehensive

(1) attract **broad** attention, (2) a **broad** mind
He accumulated wealth across a **broad** spectrum of assets.

extend v. to broaden in scope, range, or area

synonym : prolong, lengthen, advance

(1) **extend** the warranty, (2) **extend** a line
Her visit will **extend** from Monday to Friday.

crop n. a plant that is cultivated in large amounts, particularly for food

synonym : output, produce, product

(1) **crop** field, (2) **crop** herbicide
Sow early for an early **crop**.

agriculture n. the practice or science of cultivating the land or raising stock

synonym : farming, husbandry, agribusiness

(1) organic **agriculture**, (2) intensive **agriculture**
Agriculture is the foundation of our economy.

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.

recall

v. to remember something

synonym: remember, retrieve, recollect

(1) **recall** the incident, (2) **recall** his name

She vividly **recalls** getting laid off several years ago.

corresponding

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

synonym: matching, equivalent, analogous

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

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

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.

ribosome

n. a cellular structure made of RNA and protein that helps in the production of proteins

(1) coli **ribosome**, (2) **ribosome** binding

Ribosome dysfunction can lead to diseases such as muscular dystrophy.

synthetase

adj. an enzyme that catalyzes the formation of a chemical bond between two molecules

synonym: enzyme

(1) **synthetase** inhibition, (2) amine **synthetase**

Synthetase enzymes are responsible for synthesizing various biological molecules.

enzyme

n. a substance produced by a living organism that acts as a catalyst to bring about a specific biochemical reaction

synonym: catalyst, activator, accelerator

(1) **enzyme** reaction, (2) lack of digestive **enzymes**

A deficiency in the **enzyme** can lead to a medical condition.

unique

adj. being the only one of its kind; unlike anything else

synonym: one-of-a-kind, unparalleled, incomparable

(1) a **unique** teacher, (2) **unique** design

The painting is **unique**, and there is no other like it.

string

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

synonym: line, wire, rope

(1) retie the **string** and make it strong, (2) tense piano **strings**

She wore a **string** of pearls around her neck.

amazing

adj. extremely surprising, especially in a way that you like or admire

synonym: exceptional, extraordinary, wonderful

(1) **amazing** advances, (2) the most **amazing** feeling

The golfer recorded an **amazing** distance.

vast

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

synonym: expansive, extended, boundless

(1) **vast** majority, (2) **vast** desert

A **vast** audience viewed the broadcast.

molecule

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

synonym: particle, element, atom

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

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

polymer

n. a substance composed of macromolecules (= large groups of atoms) made from many smaller and simpler

molecules

(1) **polymer** fiber, (2) biological **polymer**

We are developing plant-derived **polymers** to reduce environmental impact.

linear

adj. of, relating to, or consisting of lines or length; able to be expressed as a straight line, especially on a graph

synonym: straight, direct, right

(1) **linear** trend, (2) a **linear** equation

People tend to make **linear** predictions.

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.

unlock

v. to open something, such as a door, window, etc., usually using a key

synonym: open, solve, unravel

(1) **unlock** a door with a key, (2) **unlock** value

The customs officer required the traveler to **unlock** his suitcase.

efficiently

adv. in a way that produces maximum output with minimum effort or expense

synonym: expeditiously, skillfully, ably

(1) **efficiently** combined, (2) develop software more **efficiently**

We can resolve support requests quickly and **efficiently** by utilization of AI.

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.

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.

delete

v. to remove something, especially that has been written; to wipe out digitally or magnetically recorded information

synonym : erase, wipe out, remove

(1) **delete** a file, (2) **delete** this modification

Highlight the sentences that you want to **delete**.

genetically

adv. in a way that relates to or is produced by genes (= the units in the cells of a living thing received by an animal or plant from its parents) or heredity

synonym : hereditary, inherited, family-related

(1) **genetically** inherited traits, (2) **genetically** manipulated plant

The **genetically** modified crops were resistant to pests and required less water.

assign

v. to give a specific job or piece of work to a someone

synonym : entrust, delegate, designate

(1) **assign** projects, (2) **assign** top priority

Please **assign** a different color to each other kind of item.

diverse

adj. including numerous categories of individuals or entities; various

synonym : manifold, various, myriad

(1) **diverse** backgrounds, (2) a person of **diverse** talents

New York is a city with a **diverse** ethnic population.

identity

n. the fact of being who or what somebody or something is; the features, emotions, or ideas that distinguish persons from one another

synonym : character, personality, individuality

(1) mistaken **identity**, (2) **identity** as an individual

The terrorist's **identity** remains unknown.

cellular

adj. of or connected with the cells of animals or plants; of or connected with a mobile telephone system that uses several short-range radio stations instead of wires

synonym : organic, biological, nuclear

(1) **cellular** and molecular biology, (2) a **cellular** phone handset

This factory employs a **cellular** manufacturing system.

predict

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

synonym : forecast, anticipate, foresee

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

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

peptide

n. a molecule made up of two or more amino acids linked in a chain, found in the structure of proteins

synonym : protein fragment, chain of amino acids

(1) **peptide** chain, (2) synthesis of **peptide**

The new drug was developed using a **peptide-based** formula that targets specific cells in the body.

macrocycle

n. a large molecule with a cyclic structure, typically one that contains several repeating units

(1) triazole **macrocycle** systems, (2) rectangular **macrocycle**

The **macrocycle's** stability can be tuned by modifying its size, shape, and chemical composition.

antibiotic

n. a substance or drug that kills or slows down the growth of bacteria

synonym : antimicrobial, chemotherapeutic, germicide

(1) **antibiotic** resistance, (2) **antibiotic** allergy

He has been prescribed an **antibiotic** to treat his infection.

immunosuppressive *adj.* reducing or suppressing the immune system's ability to fight against diseases

(1) **immunosuppressive** property,

(2) **immunosuppressive** therapy

The drugs used to treat the patient were

immunosuppressive.

tumor *n.* a mass of diseased tissue that forms when cells in the body divide and grow in an uncontrolled way

synonym: neoplasm, mass, lump

(1) **tumor** growth, (2) **tumor** at remote sites

The patient was diagnosed with a **tumor** in her lung.

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**.

biodegrade *v.* to decay naturally by microorganisms, such as bacteria and fungi

(1) **biodegrade** by the microorganism, (2) bioplastic designed to **biodegrade**

The company's plastic products are easily **biodegraded** thanks to a unique manufacturing process.

opportune *adj.* suitable or happening at a time that is suitable or convenient for a particular purpose

synonym: suitable, timely, practical

(1) **opportune** occasion, (2) an **opportune** remark

The phone rang at the most **opportune** time.

biology *n.* the scientific study of life and the natural processes of living things

(1) evolutionary **biology**, (2) cell and molecular **biology**
In junior high school, we had to dissect a frog in **biology** class.

constituent

n. one of the parts of the whole; a person represented by an elected official

synonym: member, element, part

(1) **constituent** assembly, (2) the solid **constituent** of blood cells

Each **constituent** member of the council has the right to vote on important decisions.

recycle

v. to sort and collect things to process them and produce valuable materials that can be used again

synonym: reclaim, reuse, reprocess

(1) **recycle** the cardboard boxes, (2) **recycle** milk packaging into new paper

We largely **recycle** the circuit board of cell phones because they contain a lot of valuable metals.

envision

v. to imagine or expect what a situation will be like in the future

synonym: anticipate, foresee, picture

(1) **envision** the future, (2) **envision** the project's success

We cannot **envision** her as President.

circular

adj. shaped like a circle; having a round form

synonym: round, loopy, oblique

(1) **circular** economy, (2) non- **circular** orbit

The **circular** shape of the planet makes it difficult to determine which direction is north.

bioeconomy

n. the part of the economy concerned with the production of goods and services using biological resources and processes

(1) the nation's **bioeconomy**, (2) a cornerstone of the

bioeconomy

The development of the **bioeconomy** is critical for the transition to a low-carbon, circular economy.

manufacture

v. to make goods in large numbers, usually in a factory using machines

synonym: create, fabricate, assemble

(1) **manufacture** an enzyme, (2) **manufacture** a product

The majority of synthetic vitamins are **manufactured** from oil.

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.

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.

bioreactor

n. a device or system used to cultivate living cells, tissues, or organisms for industrial or research purposes

synonym: fermenter

(1) **bioreactor** engineering, (2) anaerobic **bioreactor**

The scientists optimized the conditions in the **bioreactor** to increase the yield of the desired product.

ferment

v. to experience a chemical change or action that results in the production of alcohol or effervescence of gases;
(noun) a state of agitated activity or change, especially in the context of social or political movements

synonym: ripen, simmer, (noun) agitation

(1) **ferment** sugar into ethanol, (2) political **ferment**

The dough was left to **ferment** overnight to give the bread its distinctive flavor.

inspiration

n. something that motivates or encourages someone to create or achieve something, or a feeling of excitement or creativity

synonym: motivation, drive, encouragement

(1) source of **inspiration**, (2) get **inspiration** from nature

He found **inspiration** in the works of his favorite authors.

reimagine

v. to imagine or conceive of something in a new or different way

synonym: re-conceptualize, re-envision, re-create

(1) **reimagine** the future, (2) **reimagine** the possibilities

The company is trying to **reimagine** its business model to stay competitive.

sustainable

adj. able to continue or be continued for a long time

synonym: continuable, enduring, tolerable

(1) **sustainable** alternative fuel, (2) principles of **sustainable** development

The government should do more to support environmentally **sustainable** agriculture.

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.

Session 2: Spelling

1. syn_____se inhibition *adj.* an enzyme that catalyzes the formation of a chemical bond between two molecules
2. 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
3. man_____re a product *v.* to make goods in large numbers, usually in a factory using machines
4. syn_____us terms *adj.* having the same or a similar meaning as another word or phrase
5. heavy ma_____ry *n.* a group of large machines or the components of a machine that make it work; social institution functions or structure for doing something
6. co_____e my thoughts *v.* to write music, poetry, or formal writing; to constitute or make up a whole, or a specified part of it
7. co_____ss gas *v.* to press or squeeze together to make something take up less space
8. re_____ne the future *v.* to imagine or conceive of something in a new or different way
9. ind_____us student *adj.* hardworking, diligent, and persistent in effort
10. po_____r fiber *n.* a substance composed of macromolecules (= large groups of atoms) made from many smaller and simpler molecules

ANSWERS: 1. synthetase, 2. compound, 3. manufacture, 4. synonymous, 5. machinery, 6. compose, 7. compress, 8. reimagine, 9. industrious, 10. polymer

- | | |
|---|---|
| 11. synthesis of pe_____e | <i>n.</i> a molecule made up of two or more amino acids linked in a chain, found in the structure of proteins |
| 12. as___n top priority | <i>v.</i> to give a specific job or piece of work to a someone |
| 13. con_____nt assembly | <i>n.</i> one of the parts of the whole; a person represented by an elected official |
| 14. attract br__d attention | <i>adj.</i> very wide; general |
| 15. non-ci_____ar orbit | <i>adj.</i> shaped like a circle; having a round form |
| 16. retie the st___g and make it strong | <i>n.</i> long, thin material used for tying things together, composed of several twisted threads |
| 17. organic agr_____re | <i>n.</i> the practice or science of cultivating the land or raising stock |
| 18. v__t desert | <i>adj.</i> enormous in size, number, amount, or quantity |
| 19. gen_____ly inherited traits | <i>adv.</i> in a way that relates to or is produced by genes (= the units in the cells of a living thing received by an animal or plant from its parents) or heredity |
| 20. am__o acid | <i>n.</i> compounds and functional groups that contain a basic nitrogen atom with a lone pair (NH ₂) that combine to make protein |
| 21. a person of di_____e talents | <i>adj.</i> including numerous categories of individuals or entities; various |
| 22. re_____e a world record | <i>v.</i> to write something such as a book or speech again in a different way, usually to improve it or add new information |

ANSWERS: 11. peptide, 12. assign, 13. constituent, 14. broad, 15. circular, 16. string, 17. agriculture, 18. vast, 19. genetically, 20. amino, 21. diverse, 22. rewrite

23. a glass t__e *n.* a cylindrical container of metal, plastic, glass, etc., usually sealed and used as a means of preserving food or chemicals; a hollow cylindrical shape
24. imm_____ive property *adj.* reducing or suppressing the immune system's ability to fight against diseases
25. 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.
26. en___e data *v.* to convert information into a code or format suitable for storage or transmission
27. ex___d a line *v.* to broaden in scope, range, or area
28. un___e design *adj.* being the only one of its kind; unlike anything else
29. ant_____ic allergy *n.* a substance or drug that kills or slows down the growth of bacteria
30. man_____re an enzyme *v.* to make goods in large numbers, usually in a factory using machines
31. m__A translation *n.* (an abbreviation for messenger RNA) a single-stranded molecule of RNA that corresponds to the genetic sequence of a gene, and is read by a ribosome in the process of synthesizing a protein
32. anaerobic bio_____or *n.* a device or system used to cultivate living cells, tissues, or organisms for industrial or research purposes
33. de___e a word *v.* to state or explain precisely the nature, scope, or meaning of something

ANSWERS: 23. tube, 24. immunosuppressive, 25. rely, 26. encode, 27. extend, 28. unique, 29. antibiotic, 30. manufacture, 31. mRNA, 32. bioreactor, 33. define

34. co__n sequence *n.* a sequence of three nitrogenous bases in a DNA or RNA molecule that specifies a particular amino acid or a start or stop signal in protein synthesis
35. ant_____ic resistance *n.* a substance or drug that kills or slows down the growth of bacteria
36. re___l the incident *v.* to remember something
37. sy_____ic fertilizer *adj.* made by combining chemical substances as opposed to being naturally occurring
38. inc_____ble personalities *adj.* so different as to not be able to exist or work with another thing or person
39. the DNA se_____ce *n.* a series of related events, actions, numbers, etc., which have a particular order
40. re_____e one word with another *v.* to take the place of something
41. en_____on the project's success *v.* to imagine or expect what a situation will be like in the future
42. intensive agr_____re *n.* the practice or science of cultivating the land or raising stock
43. pr_____t when she will arrive *v.* to state beforehand that something will happen in the future, mainly based on knowledge or experience
44. pro_____ely difficult *adv.* in a manner that discourages or prevents something from happening or being done, especially by making it too expensive
45. score an ad_____ge *n.* a condition or circumstance that puts one in a favorable or superior position; a beneficial feature or asset that someone or something has

ANSWERS: 34. codon, 35. antibiotic, 36. recall, 37. synthetic, 38. incompatible, 39. sequence, 40. replace, 41. envision, 42. agriculture, 43. predict, 44. prohibitively, 45. advantage

46. manually op_____e a machine *v.* to work in a particular way; to supervise something
47. amine syn_____se *adj.* an enzyme that catalyzes the formation of a chemical bond between two molecules
48. tu__r growth *n.* a mass of diseased tissue that forms when cells in the body divide and grow in an uncontrolled way
49. sus_____le alternative fuel *adj.* able to continue or be continued for a long time
50. a strain of vi__s *n.* a tiny infectious organic material that causes disease in people, animals, and plants
51. un___k a door with a key *v.* to open something, such as a door, window, etc., usually using a key
52. ru_____ok violation *n.* a set of rules or regulations, especially one governing a particular activity or organization
53. tr_____te a document into English *v.* to convert or change words into another language
54. re_____e a composition *v.* to write something such as a book or speech again in a different way, usually to improve it or add new information
55. sequencing of the human ge___e *n.* the complete set or sequence of genes of a human, animal, plant, or other living things
56. re_____ne the possibilities *v.* to imagine or conceive of something in a new or different way
57. co_____ss the chest *v.* to press or squeeze together to make something take up less space

ANSWERS: 46. operate, 47. synthetase, 48. tumor, 49. sustainable, 50. virus, 51. unlock, 52. rulebook, 53. translate, 54. rewrite, 55. genome, 56. reimagine, 57. compress

58. c__i cells *n.* a bacterium of the genus *Escherichia* that is commonly found in the human gut and is used as a model organism in molecular biology and biochemistry
59. ce____ar and molecular biology *adj.* of or connected with the cells of animals or plants; of or connected with a mobile telephone system that uses several short-range radio stations instead of wires
60. tr____t siblings *n.* a group of three things or people, especially three babies born at the same time from the same pregnancy
61. ci____ar economy *adj.* shaped like a circle; having a round form
62. ex____t a valuable opportunity *v.* to make full use of and gain an advantage from resources, opportunities, etc.
63. political fe____t *v.* to experience a chemical change or action that results in the production of alcohol or effervescence of gases; (noun) a state of agitated activity or change, especially in the context of social or political movements
64. de___e this modification *v.* to remove something, especially that has been written; to wipe out digitally or magnetically recorded information
65. not no____ly drink much *adv.* usually; under normal conditions
66. E. c__i bacteria strain *n.* a bacterium of the genus *Escherichia* that is commonly found in the human gut and is used as a model organism in molecular biology and biochemistry

ANSWERS: 58. coli, 59. cellular, 60. triplet, 61. circular, 62. exploit, 63. ferment, 64. delete, 65. normally, 66. coli

67. li___r trend *adj.* of, relating to, or consisting of lines or length; able to be expressed as a straight line, especially on a graph
68. re_____e a phone *v.* to take the place of something
69. mo_____le behavior *n.* a group of two or more atoms held together by attractive forces known as chemical bonds
70. tense piano st___gs *n.* long, thin material used for tying things together, composed of several twisted threads
71. inc_____ble colors *adj.* so different as to not be able to exist or work with another thing or person
72. a li___r equation *adj.* of, relating to, or consisting of lines or length; able to be expressed as a straight line, especially on a graph
73. chemical tr__t *n.* a particular feature of your nature
74. 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
75. stress pr_____n *n.* a molecule made up of a long chain of amino acids, which is essential for the structure and function of the body's tissues
76. op_____ne occasion *adj.* suitable or happening at a time that is suitable or convenient for a particular purpose
77. designed spe_____lly for men *adv.* only associated with or meant for one thing

ANSWERS: 67. linear, 68. replace, 69. molecule, 70. string, 71. incompatible, 72. linear, 73. trait, 74. synthesis, 75. protein, 76. opportune, 77. specifically

78. ad____e the technology *v.* to go or move forward; to develop in a positive way
79. ind____us worker *adj.* hardworking, diligent, and persistent in effort
80. de____e a file *v.* to remove something, especially that has been written; to wipe out digitally or magnetically recorded information
81. lack of digestive en____es *n.* a substance produced by a living organism that acts as a catalyst to bring about a specific biochemical reaction
82. evolutionary bi____y *n.* the scientific study of life and the natural processes of living things
83. un____k value *v.* to open something, such as a door, window, etc., usually using a key
84. get ins____on from nature *n.* something that motivates or encourages someone to create or achieve something, or a feeling of excitement or creativity
85. as____le your colleagues *v.* to collect in one place as a single group
86. c__p field *n.* a plant that is cultivated in large amounts, particularly for food
87. ad____e a cooperative relationship *v.* to go or move forward; to develop in a positive way
88. the most am____g feeling *adj.* extremely surprising, especially in a way that you like or admire
89. re____l his name *v.* to remember something
90. ge____e analyses *n.* the complete set or sequence of genes of a human, animal, plant, or other living things

ANSWERS: 78. advance, 79. industrious, 80. delete, 81. enzyme, 82. biology, 83. unlock, 84. inspiration, 85. assemble, 86. crop, 87. advance, 88. amazing, 89. recall, 90. genome

91. pe____e chain *n.* a molecule made up of two or more amino acids linked in a chain, found in the structure of proteins
92. an a__d reaction *n.* sour; water-soluble chemicals with a sour flavor; any of a variety of generally liquid compounds capable of reacting with and occasionally dissolving other materials
93. the nation's bio____my *n.* the part of the economy concerned with the production of goods and services using biological resources and processes
94. en____er shortage *n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software
95. st____h a story *v.* to make or be capable of making anything longer or broader without hurting or breaking
96. principles of un____al design *adj.* existing or affecting everywhere or everyone
97. st____h along the coast *v.* to make or be capable of making anything longer or broader without hurting or breaking
98. pro____ely long time *adv.* in a manner that discourages or prevents something from happening or being done, especially by making it too expensive
99. id____ty as an individual *n.* the fact of being who or what somebody or something is; the features, emotions, or ideas that distinguish persons from one another

ANSWERS: 91. peptide, 92. acid, 93. bioeconomy, 94. engineer, 95. stretch, 96. universal, 97. stretch, 98. prohibitively, 99. identity

100. triazole mac_____le systems *n.* a large molecule with a cyclic structure, typically one that contains several repeating units
101. un_____al life *adj.* existing or affecting everywhere or everyone
102. ex____d the warranty *v.* to broaden in scope, range, or area
103. co_____e an essay *v.* to write music, poetry, or formal writing; to constitute or make up a whole, or a specified part of it
104. in____t other animal species *v.* to affect a person, an animal, or a plant with a disease-causing organism
105. as_____le a jigsaw puzzle *v.* to collect in one place as a single group
106. 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
107. rough sy_____m *n.* a word or expression that has the same or nearly the same meaning as another word or expression in the same language
108. bio_____or engineering *n.* a device or system used to cultivate living cells, tissues, or organisms for industrial or research purposes
109. pr_____n synthesis *n.* a molecule made up of a long chain of amino acids, which is essential for the structure and function of the body's tissues
110. professor of ch_____ry *n.* the branch of the natural sciences dealing with the composition of substances and their properties and reactions

ANSWERS: 100. macrocycle, 101. universal, 102. extend, 103. compose, 104. infect, 105. assemble, 106. compound, 107. synonym, 108. bioreactor, 109. protein, 110. chemistry

111. a un___e teacher *adj.* being the only one of its kind; unlike anything else
112. fe_____t sugar into ethanol *v.* to experience a chemical change or action that results in the production of alcohol or effervescence of gases; (noun) a state of agitated activity or change, especially in the context of social or political movements
113. complete no_____ly *adv.* usually; under normal conditions
114. cell and molecular bi_____y *n.* the scientific study of life and the natural processes of living things
115. the ul_____te goal in life *adj.* furthest or highest in degree or order
116. en___e information *v.* to convert information into a code or format suitable for storage or transmission
117. pr_____t the future *v.* to state beforehand that something will happen in the future, mainly based on knowledge or experience
118. mistaken id_____ty *n.* the fact of being who or what somebody or something is; the features, emotions, or ideas that distinguish persons from one another
119. re_____e milk packaging into new paper *v.* to sort and collect things to process them and produce valuable materials that can be used again
120. a br__d mind *adj.* very wide; general
121. find a cor_____ing lack *adj.* similar to, connected with, or accompanying something, especially in position or purpose

ANSWERS: 111. unique, 112. ferment, 113. normally, 114. biology, 115. ultimate, 116. encode, 117. predict, 118. identity, 119. recycle, 120. broad, 121. corresponding

122. en___e reaction *n.* a substance produced by a living organism that acts as a catalyst to bring about a specific biochemical reaction
123. bio_____de by the microorganism *v.* to decay naturally by microorganisms, such as bacteria and fungi
124. a ce_____ar phone handset *adj.* of or connected with the cells of animals or plants; of or connected with a mobile telephone system that uses several short-range radio stations instead of wires
125. imm_____ive therapy *adj.* reducing or suppressing the immune system's ability to fight against diseases
126. am_____g advances *adj.* extremely surprising, especially in a way that you like or admire
127. personality tr__ts *n.* a particular feature of your nature
128. toxic ch_____als *adj.* relating to or connected with chemistry;
129. spread of the vi__s *n.* a tiny infectious organic material that causes disease in people, animals, and plants
130. pathogenic mi_____e *n.* a tiny living thing that can only be seen with a microscope and that may cause disease
131. 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
132. key co_____nt *n.* one of several parts that combines with others to form something bigger

ANSWERS: 122. enzyme, 123. biodegrade, 124. cellular, 125. immunosuppressive, 126. amazing, 127. trait, 128. chemical, 129. virus, 130. microbe, 131. synthesis, 132. component

133. penicillin-re_____nt bacteria *adj.* not affected by something, especially changes or new ideas; of or relating to immunity to disease or infection
134. source of ins_____on *n.* something that motivates or encourages someone to create or achieve something, or a feeling of excitement or creativity
135. develop software more eff_____ly *adv.* in a way that produces maximum output with minimum effort or expense
136. tu__r at remote sites *n.* a mass of diseased tissue that forms when cells in the body divide and grow in an uncontrolled way
137. di_____e backgrounds *adj.* including numerous categories of individuals or entities; various
138. tr_____t acetylene *n.* a group of three things or people, especially three babies born at the same time from the same pregnancy
139. nuclear m__A *n.* (an abbreviation for messenger RNA) a single-stranded molecule of RNA that corresponds to the genetic sequence of a gene, and is read by a ribosome in the process of synthesizing a protein
140. an op_____ne remark *adj.* suitable or happening at a time that is suitable or convenient for a particular purpose
141. gen_____ly manipulated plant *adv.* in a way that relates to or is produced by genes (= the units in the cells of a living thing received by an animal or plant from its parents) or heredity

ANSWERS: 133. resistant, 134. inspiration, 135. efficiently, 136. tumor, 137. diverse, 138. triplet, 139. mRNA, 140. opportune, 141. genetically

142. the cor_____ing word in Spanish *adj.* similar to, connected with, or accompanying something, especially in position or purpose
143. the ul_____te luxury *adj.* furthest or highest in degree or order
144. c__p herbicide *n.* a plant that is cultivated in large amounts, particularly for food
145. as___n projects *v.* to give a specific job or piece of work to a someone
146. sy_____m retrieval *n.* a word or expression that has the same or nearly the same meaning as another word or expression in the same language
147. se___e protease *n.* a hydrophilic amino acid that acts as a neurotransmitter and is found in many proteins
148. co__n base *n.* a sequence of three nitrogenous bases in a DNA or RNA molecule that specifies a particular amino acid or a start or stop signal in protein synthesis
149. am__o compound *n.* compounds and functional groups that contain a basic nitrogen atom with a lone pair (NH₂) that combine to make protein
150. mi_____es sterilizer *n.* a tiny living thing that can only be seen with a microscope and that may cause disease
151. a ge_____c disorder *adj.* of or relating to genes (= parts of the DNA in cells) or the science of genes
152. re_____e the cardboard boxes *v.* to sort and collect things to process them and produce valuable materials that can be used again

ANSWERS: 142. corresponding, 143. ultimate, 144. crop, 145. assign, 146. synonym, 147. serine, 148. codon, 149. amino, 150. microbe, 151. genetic, 152. recycle

153. spare co_____nts for cars *n.* one of several parts that combines with others to form something bigger
154. de___e my position *v.* to state or explain precisely the nature, scope, or meaning of something
155. bioplastic designed to bio_____de *v.* to decay naturally by microorganisms, such as bacteria and fungi
156. coli ri_____me *n.* a cellular structure made of RNA and protein that helps in the production of proteins
157. ex_____t a security hole *v.* to make full use of and gain an advantage from resources, opportunities, etc.
158. 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
159. a civil en_____er *n.* a person whose job is designing, building, or maintaining something such as machines, structures, or software
160. follow a ru_____ok *n.* a set of rules or regulations, especially one governing a particular activity or organization
161. a cornerstone of the bio_____my *n.* the part of the economy concerned with the production of goods and services using biological resources and processes
162. sy_____ic fiber *adj.* made by combining chemical substances as opposed to being naturally occurring

ANSWERS: 153. component, 154. define, 155. biodegrade, 156. ribosome, 157. exploit, 158. advantage, 159. engineer, 160. rulebook, 161. bioeconomy, 162. synthetic

163. the solid con_____nt of blood cells
n. one of the parts of the whole; a person represented by an elected official
164. tr_____te the emotion to a movement
v. to convert or change words into another language
165. ess_____ly correct
adv. relating to the essential features or concepts of anything
166. str_____ne administrative activities
v. to simplify or make more efficient by eliminating unnecessary parts or steps
167. the ch_____ry of soil
n. the branch of the natural sciences dealing with the composition of substances and their properties and reactions
168. the se_____ce of the seasons
n. a series of related events, actions, numbers, etc., which have a particular order
169. in____t a computer with a virus
v. to affect a person, an animal, or a plant with a disease-causing organism
170. biological po_____r
n. a substance composed of macromolecules (= large groups of atoms) made from many smaller and simpler molecules
171. v__t majority
adj. enormous in size, number, amount, or quantity
172. good source of essential amino a__ds
n. sour; water-soluble chemicals with a sour flavor; any of a variety of generally liquid compounds capable of reacting with and occasionally dissolving other materials

ANSWERS: 163. constituent, 164. translate, 165. essentially, 166. streamline, 167. chemistry, 168. sequence, 169. infect, 170. polymer, 171. vast, 172. acid

173. rectangular mac_____le *n.* a large molecule with a cyclic structure, typically one that contains several repeating units
174. op_____e 24 hours a day *v.* to work in a particular way; to supervise something
175. 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.
176. a ch_____al compound *adj.* relating to or connected with chemistry;
177. principles of sus_____le development *adj.* able to continue or be continued for a long time
178. str_____ne workflow *v.* to simplify or make more efficient by eliminating unnecessary parts or steps
179. for spe_____lly American customers *adv.* only associated with or meant for one thing
180. become ess_____ly same *adv.* relating to the essential features or concepts of anything
181. eff_____ly combined *adv.* in a way that produces maximum output with minimum effort or expense
182. ri_____me binding *n.* a cellular structure made of RNA and protein that helps in the production of proteins
183. receptor se_____e *n.* a hydrophilic amino acid that acts as a neurotransmitter and is found in many proteins
184. small mo_____les *n.* a group of two or more atoms held together by attractive forces known as chemical bonds

ANSWERS: 173. macrocycle, 174. operate, 175. rely, 176. chemical, 177. sustainable, 178. streamline, 179. specifically, 180. essentially, 181. efficiently, 182. ribosome, 183. serine, 184. molecule

185. a capillary t__e *n.* a cylindrical container of metal, plastic, glass, etc., usually sealed and used as a means of preserving food or chemicals; a hollow cylindrical shape
186. re_____nt to persuasion *adj.* not affected by something, especially changes or new ideas; of or relating to immunity to disease or infection
187. inactive ma_____ry *n.* a group of large machines or the components of a machine that make it work; social institution functions or structure for doing something
188. non-syn_____us mutation *adj.* having the same or a similar meaning as another word or phrase
189. have ge_____c testing *adj.* of or relating to genes (= parts of the DNA in cells) or the science of genes
190. en_____on the future *v.* to imagine or expect what a situation will be like in the future

ANSWERS: 185. tube, 186. resistant, 187. machinery, 188. synonymous, 189. genetic, 190. envision

Session 3: Fill in the Blanks

1. He accumulated wealth across a _____ spectrum of assets.
adj. very wide; general
2. The body needs a certain amount of _____ to build and repair tissues.
n. a molecule made up of a long chain of amino acids, which is essential for the structure and function of the body's tissues
3. _____ enzymes are responsible for synthesizing various biological molecules.
adj. an enzyme that catalyzes the formation of a chemical bond between two molecules
4. 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.
5. The golfer recorded an _____ distance.
adj. extremely surprising, especially in a way that you like or admire
6. It's notoriously challenging to _____ birth rates.
v. to state beforehand that something will happen in the future, mainly based on knowledge or experience
7. She was searching for a _____ for 'happiness' in the thesaurus.
n. a word or expression that has the same or nearly the same meaning as another word or expression in the same language

ANSWERS: 1. broad, 2. protein, 3. Synthetase, 4. rely, 5. amazing, 6. predict, 7. synonym

8. The terrorist's _____ remains unknown.
n. the fact of being who or what somebody or something is; the features, emotions, or ideas that distinguish persons from one another
9. In junior high school, we had to dissect a frog in _____ class.
n. the scientific study of life and the natural processes of living things
10. The majority of synthetic vitamins are _____ from oil.
v. to make goods in large numbers, usually in a factory using machines
11. Some herds have been observed to _____ hundreds of kilometers.
v. to make or be capable of making anything longer or broader without hurting or breaking
12. She vividly _____ getting laid off several years ago.
v. to remember something
13. The company is trying to _____ its business model to stay competitive.
v. to imagine or conceive of something in a new or different way
14. Children often _____ parents with this head cold.
v. to affect a person, an animal, or a plant with a disease-causing organism
15. We do move forward with those tasks in _____ next week.
n. a series of related events, actions, numbers, etc., which have a particular order
16. The president began to _____ an army.
v. to collect in one place as a single group

ANSWERS: 8. identity, 9. biology, 10. manufactured, 11. stretch, 12. recalls, 13. reimagine, 14. infect, 15. sequence, 16. assemble

17. The painting is _____ and there is no other like it.

adj. being the only one of its kind; unlike anything else

18. The phone rang at the most _____ time.

adj. suitable or happening at a time that is suitable or convenient for a particular purpose

19. 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

20. The _____ babies were born premature and needed extra care.

n. a group of three things or people, especially three babies born at the same time from the same pregnancy

21. The study of Escherichia _____ has led to important advancements in areas such as antibiotic resistance, gut microbiome, and synthetic biology.

n. a bacterium of the genus Escherichia that is commonly found in the human gut and is used as a model organism in molecular biology and biochemistry

22. The shape of the DNA _____ is a double helix.

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

23. The structure is _____ of three main components.

v. to write music, poetry, or formal writing; to constitute or make up a whole, or a specified part of it

24. A deficiency in the _____ can lead to a medical condition.

n. a substance produced by a living organism that acts as a catalyst to bring about a specific biochemical reaction

ANSWERS: 17. unique, 18. opportune, 19. compound, 20. triplet, 21. coli, 22. molecule, 23. composed, 24. enzyme

25. He is familiar with _____ and biology.

n. the branch of the natural sciences dealing with the composition of substances and their properties and reactions

26. The _____ shape of the planet makes it difficult to determine which direction is north.

adj. shaped like a circle; having a round form

27. We _____ our mining resources to strengthen our national power.

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

28. The drugs used to treat the patient were _____.

adj. reducing or suppressing the immune system's ability to fight against diseases

29. Please _____ a different color to each other kind of item.

v. to give a specific job or piece of work to a someone

30. _____ thrive on the surface of the human skin.

n. a tiny living thing that can only be seen with a microscope and that may cause disease

31. This ad campaign is aimed _____ at young women.

adv. only associated with or meant for one thing

32. I don't _____ take a vacation in the middle of summer.

adv. usually; under normal conditions

33. During pregnancy, the stomach generates less _____ than usual.

n. sour; water-soluble chemicals with a sour flavor; any of a variety of generally liquid compounds capable of reacting with and occasionally dissolving other materials

ANSWERS: 25. chemistry, 26. circular, 27. exploit, 28. immunosuppressive, 29. assign, 30. Microbes, 31. specifically, 32. normally, 33. acid

34. She _____ the files into a single ZIP archive to save space on her computer.

v. to press or squeeze together to make something take up less space

35. _____ a society is an organism.

adv. relating to the essential features or concepts of anything

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

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

37. 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

38. He was known to be very _____ and would often work late into the night.

adj. hardworking, diligent, and persistent in effort

39. 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

40. We cannot _____ her as President.

v. to imagine or expect what a situation will be like in the future

41. The development of the _____ is critical for the transition to a low-carbon, circular economy.

n. the part of the economy concerned with the production of goods and services using biological resources and processes

ANSWERS: 34. compressed, 35. Essentially, 36. string, 37. genome, 38. industrious, 39. synthesis, 40. envision, 41. bioeconomy

42. Eventually, the new design will _____ all older models.
v. to take the place of something
43. Scientists have found that _____ usage can vary among different species and even between different tissues within the same organism.
n. a sequence of three nitrogenous bases in a DNA or RNA molecule that specifies a particular amino acid or a start or stop signal in protein synthesis
44. This factory employs a _____ manufacturing system.
adj. of or connected with the cells of animals or plants; of or connected with a mobile telephone system that uses several short-range radio stations instead of wires
45. The phrase "big shot" and "important person" are _____.
adj. having the same or a similar meaning as another word or phrase
46. The software can _____ and decode encrypted messages.
v. to convert information into a code or format suitable for storage or transmission
47. The _____ vaccine can expedite many approval processes because it does not contain a virus.
n. (an abbreviation for messenger RNA) a single-stranded molecule of RNA that corresponds to the genetic sequence of a gene, and is read by a ribosome in the process of synthesizing a protein
48. The scientists optimized the conditions in the _____ to increase the yield of the desired product.
n. a device or system used to cultivate living cells, tissues, or organisms for industrial or research purposes

ANSWERS: 42. replace, 43. codon, 44. cellular, 45. synonymous, 46. encode, 47. mRNA, 48. bioreactor

49. Each _____ member of the council has the right to vote on important decisions.

n. one of the parts of the whole; a person represented by an elected official

50. I need to _____ most of the essay with feedback from my teacher.

v. to write something such as a book or speech again in a different way, usually to improve it or add new information

51. 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

52. _____ dysfunction can lead to diseases such as muscular dystrophy.

n. a cellular structure made of RNA and protein that helps in the production of proteins

53. Understanding protein folding is a vital step in deciphering the _____ code.

adj. of or relating to genes (= parts of the DNA in cells) or the science of genes

54. Scientific knowledge will _____ significantly with the power of AI.

v. to go or move forward; to develop in a positive way

55. Management must take _____ responsibility for the accident.

adj. furthest or highest in degree or order

56. People tend to make _____ predictions.

adj. of, relating to, or consisting of lines or length; able to be expressed as a straight line, especially on a graph

ANSWERS: 49. constituent, 50. rewrite, 51. advantages, 52. Ribosome, 53. genetic, 54. advance, 55. ultimate, 56. linear

57. Multiple genes may influence behavioral _____ concurrently.
n. a particular feature of your nature
58. We can resolve support requests quickly and _____ by utilization of AI.
adv. in a way that produces maximum output with minimum effort or expense
59. The high _____ levels in the blood were an indicator of liver disease.
n. a hydrophilic amino acid that acts as a neurotransmitter and is found in many proteins
60. A _____ audience viewed the broadcast.
adj. enormous in size, number, amount, or quantity
61. The _____ will repair my telephone tomorrow morning.
n. a person whose job is designing, building, or maintaining something such as machines, structures, or software
62. He found _____ in the works of his favorite authors.
n. something that motivates or encourages someone to create or achieve something, or a feeling of excitement or creativity
63. An infected person in the hospital will likely pass the _____ to others.
n. a tiny infectious organic material that causes disease in people, animals, and plants
64. The picture earned near-_____ acclaim from critics.
adj. existing or affecting everywhere or everyone
65. The government should do more to support environmentally _____ agriculture.
adj. able to continue or be continued for a long time

ANSWERS: 57. traits, 58. efficiently, 59. serine, 60. vast, 61. engineer, 62. inspiration, 63. virus, 64. universal, 65. sustainable

66. The patient was diagnosed with a _____ in her lung.

- n.* a mass of diseased tissue that forms when cells in the body divide and grow in an uncontrolled way

67. He has been prescribed an _____ to treat his infection.

- n.* a substance or drug that kills or slows down the growth of bacteria

68. _____ diamonds play an essential role as machine tool blades.

- adj.* made by combining chemical substances as opposed to being naturally occurring

69. The researchers try to discover a common _____ in all types of successful organizations.

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

70. _____ is the foundation of our economy.

- n.* the practice or science of cultivating the land or raising stock

71. It is a religion _____ with the western country.

- adj.* so different as to not be able to exist or work with another thing or person

72. Highlight the sentences that you want to _____.

- v.* to remove something, especially that has been written; to wipe out digitally or magnetically recorded information

73. We largely _____ the circuit board of cell phones because they contain a lot of valuable metals.

- v.* to sort and collect things to process them and produce valuable materials that can be used again

ANSWERS: 66. tumor, 67. antibiotic, 68. Synthetic, 69. component, 70. Agriculture, 71. incompatible, 72. delete, 73. recycle

74. The cost of the project was _____ high for the company to consider.
adv. in a manner that discourages or prevents something from happening or being done, especially by making it too expensive
75. Her visit will _____ from Monday to Friday.
v. to broaden in scope, range, or area
76. Sow early for an early _____.
n. a plant that is cultivated in large amounts, particularly for food
77. The company's _____ clearly outlines the expectations for employees.
n. a set of rules or regulations, especially one governing a particular activity or organization
78. The _____ of audit formally issued a business improvement order.
n. a group of large machines or the components of a machine that make it work; social institution functions or structure for doing something
79. _____ the text from Italian into English.
v. to convert or change words into another language
80. The _____ stability can be tuned by modifying its size, shape, and chemical composition.
n. a large molecule with a cyclic structure, typically one that contains several repeating units
81. The government plans to _____ the tax collection process to make it more efficient.
v. to simplify or make more efficient by eliminating unnecessary parts or steps

ANSWERS: 74. prohibitively, 75. extend, 76. crop, 77. rulebook, 78. machinery, 79. Translate, 80. macrocycle's, 81. streamline

82. We are developing plant-derived _____ to reduce environmental impact.
n. a substance composed of macromolecules (= large groups of atoms) made from many smaller and simpler molecules
83. New York is a city with a _____ ethnic population.
adj. including numerous categories of individuals or entities; various
84. The new drug was developed using a _____ formula that targets specific cells in the body.
n. a molecule made up of two or more amino acids linked in a chain, found in the structure of proteins
85. The company's plastic products are easily _____ thanks to a unique manufacturing process.
v. to decay naturally by microorganisms, such as bacteria and fungi
86. The _____ modified crops were resistant to pests and required less water.
adv. in a way that relates to or is produced by genes (= the units in the cells of a living thing received by an animal or plant from its parents) or heredity
87. To advance this discussion, we must _____ "success" rigorously.
v. to state or explain precisely the nature, scope, or meaning of something
88. This machine is too difficult to _____ for me.
v. to work in a particular way; to supervise something
89. The dough was left to _____ overnight to give the bread its distinctive flavor.
v. to experience a chemical change or action that results in the production of alcohol or effervescence of gases; (noun) a state of agitated activity or change, especially in the context of social or political movements

ANSWERS: 82. polymers, 83. diverse, 84. peptide-based, 85. biodegraded, 86. genetically, 87. define, 88. operate, 89. ferment

90. Insects in urban areas are becoming _____ to insecticides.

adj. not affected by something, especially changes or new ideas; of or relating to immunity to disease or infection

91. The firm has grown into a large _____ manufacturing.

adj. relating to or connected with chemistry;

92. This company was granted a patent for its _____ resin manufacturing process.

n. compounds and functional groups that contain a basic nitrogen atom with a lone pair (NH₂) that combine to make protein

93. The customs officer required the traveler to _____ his suitcase.

v. to open something, such as a door, window, etc., usually using a key

94. The _____ number on the dial was 3.

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

95. The _____ train was packed with commuters during rush hour.

n. a cylindrical container of metal, plastic, glass, etc., usually sealed and used as a means of preserving food or chemicals; a hollow cylindrical shape

ANSWERS: 90. resistant, 91. chemical, 92. amino, 93. unlock, 94. corresponding, 95. tube