

# Englist.me



## Vocabulary Builder Reference from...

*Daniel Kraft: Medicine's future? There's an app for that | TED Talk*

[https://www.ted.com/talks/daniel\\_kraft\\_medicine\\_s\\_future\\_there\\_s\\_an\\_app\\_for\\_that](https://www.ted.com/talks/daniel_kraft_medicine_s_future_there_s_an_app_for_that)

### Advanced Words Only

#### IMPORTANT

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## Session 1: Word List

### confer

*v.* to have a meeting or discussion to come to a decision or agreement or exchange ideas; to bestow something

*synonym*: consult, meet, discuss

(1) **confer** degree, (2) **confer** honor

The leaders of the two countries met to **confer** on the issue.

### mitochondria

*n.* (singular: mitochondrion) an organelle (= a specialized part of a cell) found in large numbers in most cells that produce energy for the cell by breaking down food

(1) a membrane of a **mitochondria**, (2) healthy

#### **mitochondria**

**Mitochondria** DNA is used to trace human lineage and migration footprints.

### haplotype

*n.* a specific combination of genetic variations or alleles that are inherited together on the same chromosome from a single parent, which is used to analyze genetic patterns and understand the inheritance of specific traits or diseases

*synonym*: allele, gene, genetic variant

(1) specific **haplotype**, (2) genetic **haplotype**

The **haplotype** analysis provided valuable insights into the evolutionary history of the species.

## bioinformatics

*n.* the interdisciplinary field that combines biology and computer science to analyze, interpret, and manage biological information and data, particularly in the realm of genetics, genomics, and other related areas

*synonym*: computational biology, genomics

(1) **bioinformatics** research, (2) **bioinformatics** tools

**Bioinformatics** algorithms are essential for identifying and analyzing patterns in biological data.

## lily

*n.* a flowering plant with large, showy, trumpet-shaped flowers, typically symbolizing purity, innocence, and beauty

(1) **lily** perfume, (2) water **lily**

The beautiful **lily** garden in the park was a sight to behold.

## innovate

*v.* to introduce new methods, ideas, or products

*synonym*: bring in, introduce, found

(1) **innovate** a new method, (2) **innovate** the quality of his life

Companies developing self-driving cars consistently **innovate** the emerging technologies.

## incentivize

*v.* to make someone want to do in a particular way by offering them a reward

*synonym*: encourage, motivate

(1) **incentivize** carpooling, (2) **incentivize** the right behavior

Governments **incentivize** their citizens to buy eco-friendly products through subsidies.

## improvisation

*n.* the act of making something up on the spot or creating or performing something without preparation

*synonym*: spontaneity, ad-lib, extemporization

(1) **improvisation** on stage, (2) jazz **improvisation**

He created a beautiful piece of music using only **improvisation**.

## smartphone

*n.* a mobile phone that functions as a computer and connects to the Internet

(1) **smartphone** app developer, (2) **smartphone** addict  
Internet traffic volumes have increased significantly with the advent of **smartphones**.

## medicinal

*adj.* of or relating to the treatment or cure of disease

*synonym*: curative, therapeutic, healing

(1) **medicinal** chemistry, (2) traditional **medicinal**

The **medicinal** properties of this herb have been known to help with various ailments.

## institutionalize

*v.* to establish or make something a part of an institution (= a place such as a university, hospital, etc.)

*synonym*: formalize, establish, regularize

(1) **institutionalize** a system, (2) **institutionalize** customary laws

The new policy aims to **institutionalize** the use of renewable energy sources.

## nanoscale

*adj.* on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale

(1) **nanoscale** device, (2) things at the **nanoscale**

This process improves the strength of the metal by controlling the **nanoscale** lattice structure of the metal.

## unmet

*adj.* describing a need, goal, or expectation that has not been satisfied or fulfilled

*synonym*: unsatisfied, unfulfilled, unmatched

(1) **unmet** demand, (2) **unmet** needs

The **unmet** expectations of the customers led to a decrease in sales.

## app

*n.* (abbreviation for application) software designed to run on smartphones and other mobile devices or inside a web browser on a PC

*synonym*: application, software

(1) killer **app**, (2) cannot log in to the **app**

The discovery of a critical bug caused the company to delay the **app's** release.

## surpass

*v.* to be or do better than someone or something; to excel or go beyond the limits or standards of something

*synonym*: excel, outdo, outperform

(1) **surpass** imagination, (2) **surpass** \$20 billion in sales

The athlete's record-breaking performance **surpassed** all expectations.

## curator

*n.* a person whose job is to manage the objects or artworks in a museum, art gallery, etc.

*synonym*: conservator, custodian, administrator

(1) **curator** of a library, (2) interim **curator**

The museum **curator** conserved the ancient manuscripts.

## reconstruct

*v.* to build or form something again that has been damaged or destroyed

*synonym*: rebuild, revamp, reorganize

(1) **reconstruct** an image, (2) **reconstruct** the original text

They've decided to **reconstruct** a ruined castle.

## reengineer

*v.* to redesign or restructure something such as a machine, system, organization, etc.

*synonym*: redesign, remodel, revamp

(1) **reengineer** work processes, (2) **reengineer** the organizational structure

As technology evolves, we need to **reengineer** our work styles.

## MRI

*n.* (abbreviation for magnetic resonance imaging) a medical imaging technique that uses a strong magnetic field and radio waves to produce detailed images of the inside of the body

(1) **MRI** brain image, (2) cardiac **MRI**

The **MRI** machine uses powerful magnets to produce detailed images of the inside of the body.

## psychoactive

*adj.* producing an effect on mental processes, such as mood, perception, or behavior; capable of affecting the mind or emotions

*synonym* : mind-altering, mind-bending, hallucinogenic

(1) **psychoactive** medication, (2) **psychoactive** effects

**Psychoactive** substances can seriously affect the brain and must be used cautiously.

## colonoscopy

*n.* a medical procedure in which a flexible tube with a camera on its end is inserted into the rectum to examine the colon for potential abnormalities or diseases

*synonym* : colon examination, bowel scope, colonography

(1) **colonoscopy** screening, (2) virtual **colonoscopy**

He had to undergo a **colonoscopy** as part of his routine medical check-up.

## radiology

*n.* the branch of medicine that uses medical imaging technologies such as X-rays, CT scans, MRIs, and ultrasound to diagnose and treat diseases and injuries

*synonym* : medical imaging, radiography, radioscopy

(1) interventional **radiology**, (2) diagnostic **radiology**

The patient underwent a **radiology** scan to diagnose their medical condition.

## augment

*v.* to increase the size, extent, quantity, etc. of something by adding something to it

*synonym* : boost, increase, expand

(1) **augment** the reality, (2) **augment** immunity

Economic factors and monetary policy **augmented** inflation.

## lesion

*n.* a damaged or abnormal area of tissue in the body, usually caused by injury or disease

*synonym* : injury, wound, damage

(1) muscle **lesion**, (2) brain **lesion**

The doctor examined the **lesion** on the patient's skin to determine if it was cancerous.

## biomedical

*adj.* relating to the application of the natural sciences, especially biology, and physiology, to clinical medicine and healthcare

*synonym* : medical, clinical, health-related

(1) **biomedical** assay, (2) cutting-edge **biomedical**

**Biomedical** engineering focuses on developing new medical technologies and innovations to improve patient health outcomes.

## stethoscope

*n.* a medical instrument consisting of a flexible tube with a chest piece at one end, used by healthcare professionals to listen to internal sounds, particularly heart and lung sounds

*synonym* : medical instrument, auscultation device

(1) medical **stethoscope**, (2) electronic **stethoscope**

The **stethoscope** examination helped the doctor detect the irregular heartbeat of the patient.

## supplant

*v.* to replace or take the place of something or someone, often by force or through strategic maneuvering; to make obsolete or obsolete by introducing a superior or more advanced alternative

*synonym* : replace, supersede, displace

(1) **supplant** traditional methods, (2) **supplant** current technology

The young startup aims to **supplant** the established players in the industry through innovation.

## crowdsourcing

*n.* the practice of obtaining needed services, ideas, or content by enlisting the services of a large number of people, either paid or unpaid, typically via the internet

(1) **crowdsourcing** apps, (2) **crowdsourcing** in climate policy

The company used this **crowdsourcing** platform to gather

ideas for its next product.

## jeopardy

*n.* the state of being in danger or at risk of harm or loss  
*synonym* : danger, risk, peril

(1) put his life in **jeopardy**, (2) tax in **jeopardy**

The project is in **jeopardy** of being canceled due to a lack of funding.

## laceration

*n.* a deep cut or tear in flesh or skin, often caused by a sharp object or a traumatic injury

*synonym* : tear, cut, gash

(1) **laceration** to skin, (2) multiple **lacerations**

The deep **laceration** on my arm required several stitches to close.

## hematology

*n.* the branch of medical science deals with the study of blood and its components, including blood diseases and disorders such as anemia, leukemia, and blood clotting disorders. It also encompasses the study of the blood-forming organs such as the bone marrow and lymphatic system

*synonym* : study of blood, blood science, hemopathology

(1) **hematology** finding, (2) **hematology** department

The medical lab specializes in **hematology** testing and analysis.

## tweet

*n.* a short, high sound made by a small bird; a message sent using Twitter, the social media application

*synonym* : peep, chirp, post (on Twitter)

(1) a chick's **tweet**, (2) his latest **tweets**

We could hear the **tweet** of baby birds.

## cuff

*n.* a band or strip of material, usually worn around the wrist or ankle, often used to secure or fasten something in place; a blow or hit delivered with an open hand, typically to the head or ear

*synonym* : bracelet, handcuff, shackle

(1) **cuff** bracelet, (2) soft **cuff**

The doctor used a blood pressure **cuff** to measure my vitals.

## gamut

*n.* the complete range or scope of something; the entire spectrum or extent of a particular quality, emotion, or situation

*synonym*: range, spectrum, array

(1) musical **gamut**, (2) **gamut** of jobs

The actress's performance ran the **gamut** of emotions, from anger to joy to sorrow.

## kludge

*n.* a piece of hardware, software, or system that is poorly designed or constructed and often involves a makeshift or temporary solution to a problem

*synonym*: hack, workaround, makeshift solution

(1) **kludge** solution, (2) **kludge** code

The old printer was connected to the computer with a **kludge** of cables and adapters.

## quantify

*v.* to express or measure something in numerical terms

*synonym*: measure, express, determine

(1) **quantify** the results, (2) **quantify** blood flow

He tried to **quantify** the amount of product that was needed to complete the job.

## robotic

*adj.* of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots

*synonym*: automated, mechanical, laborsaving

(1) **robotic** arm, (2) **robotic** guide operation

The surgeon removed the tumor using **robotic** video assistance.

## scar

*n.* a mark that remains on the skin after a wound has healed

*synonym*: blemish, imperfection, blotch

(1) burn **scar**, (2) carry a **scar**



Even after the wound has healed, a **scar** remains.

## endoscope

*n.* a medical instrument that consists of a long, flexible tube with a light and a camera on end, used to examine the interior of a body cavity or organ visually

(1) medical **endoscope**, (2) flexible **endoscope**

The doctor used a diagnostic **endoscope** to examine the patient's stomach during the medical procedure.

## gallbladder

*n.* a small, pear-shaped organ located near the liver that stores and releases bile into the small intestine to aid in digestion

*synonym*: cholecyst

(1) **gallbladder** surgery, (2) **gallbladder** disease

Eating a fatty meal can trigger **gallbladder** pain in some people.

## mediate

*v.* to try to bring about an agreement or understanding between people who are in conflict

*synonym*: arbitrate, reconcile, intervene

(1) **mediate** allergic reaction, (2) **mediate** a negotiation

The teacher had to **mediate** a disagreement between two students over a stolen pencil.

## paraplegia

*n.* a form of paralysis that affects all or part of the lower body, typically caused by injury to the spinal cord or nervous system

*synonym*: spinal cord injury, paralysis

(1) **paraplegia** treatment, (2) traumatic **paraplegia**

After his accident, he was left with **paraplegia** and had to use a wheelchair.

## quadriplegia

*n.* paralysis of all four limbs and the torso, usually resulting from injury to the spinal cord in the neck region

(1) **quadriplegia** patients, (2) **quadriplegia** care

After the accident, he had **quadriplegia** and could not move his arms or legs.

## bionic

*adj.* relating to or using technology or devices that enhance or replace biological functions, typically in a way that mimics or improves upon the original

(1) **bionic** exoskeleton, (2) **bionic** technology

The soldier was fitted with a **bionic** arm after losing him in combat.

## dexterity

*n.* skill and speed in performing physical tasks, especially with the hands; mental skill or adroitness in dealing with situations or problems

*synonym* : skillfulness, agility, expertise

(1) **dexterity** with the pen, (2) manual **dexterity**

The surgeon's **dexterity** was impressive during the delicate surgery.

## exoskeleton

*n.* a hard, external protective covering or framework that supports and gives shape to the body of an invertebrate animal, such as an insect or crab

*synonym* : chitin, exocuticle, carapace

(1) **exoskeleton** suit, (2) robotic **exoskeleton**

The **exoskeleton** of the crab protects it from predators and environmental changes.

## prosthetic

*adj.* of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant

(1) have **prosthetic** arms, (2) **prosthetic** limbs

New **prosthetic** joints are less prone to metal poisoning.

## pacemaker

*n.* a small electronic device that is implanted in the chest to regulate the heartbeat of people with certain heart conditions; a person or thing that sets the pace or rhythm for others

*synonym* : heartbeat regulator, pacer, pacesetter

(1) implanted **pacemaker**, (2) **pacemaker** battery

Some people with **pacemakers** may need to avoid certain activities or sources of electromagnetic interference.

## cardiologist

*n.* a medical doctor who specializes in the study and treatment of the heart and the circulatory system

*synonym*: heart doctor, heart specialist, cardiac specialist

(1) **cardiologist** appointment, (2) skilled **cardiologist**

My grandfather is seeing a **cardiologist** to monitor his heart condition.

## telemetry

*n.* the process of collecting and transmitting data from remote or inaccessible sources using wireless or other communication means, usually for monitoring or control purposes

*synonym*: data transmission, remote measurement

(1) **telemetry** technology, (2) **telemetry** system

The satellite sends **telemetry** data back to Earth to help scientists study the atmosphere.

## retina

*n.* the innermost light-sensitive membrane covering the back wall of the eyeball

(1) **retinal** cells, (2) **retina** scanner

Damage to the **retina** may play a role in the development of glaucoma.

## eyeball

*n.* the round part of the eye of a vertebrate that is usually inside the head and, therefore, cannot be seen

(1) **eyeball** motion, (2) redness of the **eyeball**

Increased **eyeball** pressure leads to the development of glaucoma.

## Bluetooth

*n.* a short-range wireless communication technology that allows electronic devices to connect and exchange data wirelessly over short distances, commonly used for connecting devices such as smartphones, headphones, and speakers

(1) **Bluetooth** connection, (2) **Bluetooth-enabled** device

I need a **Bluetooth** headset for my conference calls.

## microscopic

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

*synonym*: infinitesimal, tiny, atomic

(1) **microscopic** inquiry, (2) **microscopic** analysis

Inspectors noticed **microscopic** cracks in the submarine's hull.

## quake

*v.* to shake or vibrate violently and for a short time

*synonym*: shake, trembler, tremor

(1) **quake** in his boots, (2) **quake** with cold

The earth began to **quake**, and he knew he had to leave the building immediately.

## underserved

*adj.* inadequately or insufficiently provided with help, products, or services

(1) **underserved** market, (2) traditionally **underserved**

This area is medically **underserved**.

## clot

*n.* a thick mass or lump of coagulated liquid, especially blood; a group of people or things that form an obstructive, unsympathetic, or resistant force

*synonym*: clump, coagulation, thrombus

(1) blood **clot**, (2) **clot** prevention

The **clot** in the blood vessel required immediate medical attention.

## blockbuster

*n.* a movie, book, or other product that is extremely successful and popular, especially one that makes much money

*synonym*: hit, success, smash

(1) **blockbuster** movie, (2) international **blockbuster**

The new action movie is expected to be a **blockbuster** hit.

## macula

*n.* a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision

*synonym*: center of the retina, spot, eyespot

(1) **macula** lutea, (2) damage to the **macula**

There are several treatment options available for patients with **macula-related** disorders.

## degenerate

v. (of a person, animal, or plant) to become worse in health or physical condition

*synonym*: deteriorate, decline, decay

(1) **degenerate** into a disagreement, (2) **degenerate** into recession

The once-thriving city has **degenerated** into a crime-ridden slum.

## decode

v. to convert something, such as a message or piece of information, from a specific form into one that you can understand

*synonym*: decipher, translate, interpret

(1) **decode** a message, (2) ability to **decode** the differences

The software could **decode** the encrypted data and reveal the hidden information.

## pharmacogenomics

n. the study of how genes affect an individual's response to drugs and other treatments, particularly in the context of personalized medicine

(1) **pharmacogenomics** technology,

(2) **pharmacogenomics** testing

The **pharmacogenomics** industry is growing rapidly due to its immense potential.

## modulate

v. to change the key, style, loudness, etc., of something in music to create a particular effect; to fix or adjust the time, amount, degree, or rate of something

*synonym*: regulate, inflect, adjust

(1) **modulate** the function, (2) **modulate** from one key to another

These chemicals **modulate** the effect of metabolism.

## proteome

*n.* the entire complement of proteins that can be expressed by a genome, cell, tissue, or organism, including all of its functional forms and modifications

(1) bacterial **proteome**, (2) **proteome** database

Scientists are studying the human **proteome** to understand better how proteins work in the body.

## biomarker

*n.* a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacologic responses to a therapeutic intervention

*synonym*: indicator, measure, signature

(1) diabetes **biomarker**, (2) **biomarker** discovery

The **biomarker** test showed that the patient was responding well to the treatment.

## oncology

*n.* the branch of medicine that deals with the study and treatment of tumors, especially malignancies

*synonym*: cancer treatment, study of tumors

(1) **oncology** center, (2) modern **oncology** treatment

The pharmaceutical company unveiled its latest breakthrough drug for the **oncology** market.

## relapse

*n.* the fact of becoming ill or starting to misbehave again after making an improvement

*synonym*: degeneration, deterioration, retrogression

(1) biochemical **relapse**, (2) **relapse** prevention

He had a **relapse** because he was working through the night.

## whack

*v.* to hit someone or something hard or noisily

*synonym*: hit, strike, bash

(1) **whack** him with a stick, (2) **whack** up the volume

He **whacked** the ball out of the park with his home run.

## embryonic

*adj.* of or relating to an embryo (= an animal organism in the early stages of growth); in an early stage of development

*synonym* : embryonal

(1) **embryonic** stem cells, (2) **embryonic** development

The project is still in its **embryonic** stage.

## puncture

*n.* a small hole or wound made by piercing, such as with a needle, nail, or pointed object

*synonym* : piercing, prick, hole

(1) bicycle **puncture**, (2) needle **puncture**

The tire had a **puncture** and needed to be replaced.

## anesthesia

*n.* a state of controlled, temporary loss of bodily sensation or awareness that is induced for medical purposes

(1) **anesthesia** for surgery, (2) local **anesthesia**

He is in general **anesthesia** under the surgeon.

## reprogram

*v.* to modify or recreate a program

*synonym* : recreate, modify, revamp

(1) **reprogram** a device, (2) **reprogram** a database

He **reprogrammed** the computer's operating system to remove the safeguard.

## pluripotent

*adj.* describing cells that have the potential to differentiate into any specialized cell in the body, often used in the context of stem cell research and applications

*synonym* : versatile, all-purpose, adaptable

(1) **pluripotent** embryonic cells, (2) **pluripotent** gene expression

**Pluripotent** stem cells can differentiate into any cell in the body.

## myocyte

*n.* a type of muscle cell found in muscle tissue, responsible for contraction and movement

*synonym* : muscle cell, cardiac cell, heart cell

(1) cardiac **myocyte**, (2) skeletal **myocyte**

The cardiologist analyzed the **myocyte** cells in the patient's heart tissue.

## decentralize

v. to move the power, control, or authority of an organization, government, or system from a single place to several smaller ones

*synonym*: deconcentrate, disperse, distribute

(1) **decentralize** authority, (2) **decentralize** organizational structure

We need to **decentralize** our data to recover quickly from a disaster.

## empower

v. to give someone the power or authority to do something

*synonym*: authorize, endow, entitle

(1) **empower** my life, (2) **empower** the secretary to do the same

The company **empowered** employees to buy low-price items without approval to achieve efficient purchasing.



## Session 2: Spelling

1. un\_\_t needs *adj.* describing a need, goal, or expectation that has not been satisfied or fulfilled
2. biochemical re\_\_\_\_e *n.* the fact of becoming ill or starting to misbehave again after making an improvement
3. blo\_\_\_\_\_er movie *n.* a movie, book, or other product that is extremely successful and popular, especially one that makes much money
4. specific ha\_\_\_\_pe *n.* a specific combination of genetic variations or alleles that are inherited together on the same chromosome from a single parent, which is used to analyze genetic patterns and understand the inheritance of specific traits or diseases
5. c\_\_f bracelet *n.* a band or strip of material, usually worn around the wrist or ankle, often used to secure or fasten something in place; a blow or hit delivered with an open hand, typically to the head or ear
6. on\_\_\_\_gy center *n.* the branch of medicine that deals with the study and treatment of tumors, especially malignancies
7. me\_\_\_\_e allergic reaction *v.* to try to bring about an agreement or understanding between people who are in conflict
8. exo\_\_\_\_\_on suit *n.* a hard, external protective covering or framework that supports and gives shape to the body of an invertebrate animal, such as an insect or crab

ANSWERS: 1. unmet, 2. relapse, 3. blockbuster, 4. haplotype, 5. cuff, 6. oncology, 7. mediate, 8. exoskeleton

- |  |           |   |
|--|-----------|---|
| 9. qua_____gia care                      | <i>n.</i> | paralysis of all four limbs and the torso, usually resulting from injury to the spinal cord in the neck region  |
| 10. sma_____ne app developer             | <i>n.</i> | a mobile phone that functions as a computer and connects to the Internet  |
| 11. re_____e prevention                  | <i>n.</i> | the fact of becoming ill or starting to misbehave again after making an improvement   |
| 12. dec_____ize organizational structure | <i>v.</i> | to move the power, control, or authority of an organization, government, or system from a single place to several smaller ones  |
| 13. te_____ry technology                 | <i>n.</i> | the process of collecting and transmitting data from remote or inaccessible sources using wireless or other communication means, usually for monitoring or control purposes |
| 14. te_____ry system                     | <i>n.</i> | the process of collecting and transmitting data from remote or inaccessible sources using wireless or other communication means, usually for monitoring or control purposes |
| 15. flexible en_____pe                   | <i>n.</i> | a medical instrument that consists of a long, flexible tube with a light and a camera on end, used to examine the interior of a body cavity or organ visually               |
| 16. par_____ia treatment                 | <i>n.</i> | a form of paralysis that affects all or part of the lower body, typically caused by injury to the spinal cord or nervous system   |

ANSWERS: 9. quadriplegia, 10. smartphone, 11. relapse, 12. decentralize, 13. telemetry, 14. telemetry, 15. endoscope, 16. paraplegia

17. em\_\_\_\_\_r the secretary to do the same  
*v.* to give someone the power or authority to do something
18. de\_\_\_\_\_ty with the pen  
*n.* skill and speed in performing physical tasks, especially with the hands; mental skill or adroitness in dealing with situations or problems
19. bi\_\_\_c technology  
*adj.* relating to or using technology or devices that enhance or replace biological functions, typically in a way that mimics or improves upon the original
20. implanted pa\_\_\_\_\_er  
*n.* a small electronic device that is implanted in the chest to regulate the heartbeat of people with certain heart conditions; a person or thing that sets the pace or rhythm for others
21. ins\_\_\_\_\_ize a system  
*v.* to establish or make something a part of an institution (= a place such as a university, hospital, etc.)
22. redness of the ey\_\_\_\_\_l  
*n.* the round part of the eye of a vertebrate that is usually inside the head and, therefore, cannot be seen
23. diagnostic ra\_\_\_\_\_gy  
*n.* the branch of medicine that uses medical imaging technologies such as X-rays, CT scans, MRIs, and ultrasound to diagnose and treat diseases and injuries
24. mic\_\_\_\_\_ic inquiry  
*adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy

ANSWERS: 17. empower, 18. dexterity, 19. bionic, 20. pacemaker, 21. institutionalize, 22. eyeball, 23. radiology, 24. microscopic

25. cro\_\_\_\_\_ing in climate policy      *n.* the practice of obtaining needed services, ideas, or content by enlisting the services of a large number of people, either paid or unpaid, typically via the internet
26. killer a\_p      *n.* (abbreviation for application) software designed to run on smartphones and other mobile devices or inside a web browser on a PC
27. in\_\_\_\_\_te a new method      *v.* to introduce new methods, ideas, or products
28. rec\_\_\_\_\_ct an image      *v.* to build or form something again that has been damaged or destroyed
29. have pro\_\_\_\_\_ic arms      *adj.* of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant
30. su\_\_\_\_\_s imagination      *v.* to be or do better than someone or something; to excel or go beyond the limits or standards of something
31. wh\_\_k up the volume      *v.* to hit someone or something hard or noisily
32. au\_\_\_\_\_t immunity      *v.* to increase the size, extent, quantity, etc. of something by adding something to it
33. pha\_\_\_\_\_ics technology      *n.* the study of how genes affect an individual's response to drugs and other treatments, particularly in the context of personalized medicine
34. imp\_\_\_\_\_ion on stage      *n.* the act of making something up on the spot or creating or performing something without preparation

ANSWERS: 25. crowdsourcing, 26. app, 27. innovate, 28. reconstruct, 29. prosthetic, 30. surpass, 31. whack, 32. augment, 33. pharmacogenomics, 34. improvisation

35. needle pu\_\_\_\_re *n.* a small hole or wound made by piercing, such as with a needle, nail, or pointed object
36. in\_\_\_\_te the quality of his life *v.* to introduce new methods, ideas, or products
37. ga\_\_t of jobs *n.* the complete range or scope of something; the entire spectrum or extent of a particular quality, emotion, or situation
38. re\_\_\_al cells *n.* the innermost light-sensitive membrane covering the back wall of the eyeball
39. qu\_\_\_\_fy blood flow *v.* to express or measure something in numerical terms
40. musical ga\_\_t *n.* the complete range or scope of something; the entire spectrum or extent of a particular quality, emotion, or situation
41. traditional me\_\_\_\_al *adj.* of or relating to the treatment or cure of disease
42. Bl\_\_\_\_\_th-enabled device *n.* a short-range wireless communication technology that allows electronic devices to connect and exchange data wirelessly over short distances, commonly used for connecting devices such as smartphones, headphones, and speakers
43. dec\_\_\_\_\_ize authority *v.* to move the power, control, or authority of an organization, government, or system from a single place to several smaller ones

ANSWERS: 35. puncture, 36. innovate, 37. gamut, 38. retina, 39. quantify, 40. gamut, 41. medicinal, 42. Bluetooth, 43. decentralize

44. bicycle pu\_\_\_\_re *n.* a small hole or wound made by piercing, such as with a needle, nail, or pointed object
45. damage to the ma\_\_\_\_a *n.* a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision
46. me\_\_\_\_e a negotiation *v.* to try to bring about an agreement or understanding between people who are in conflict
47. bio\_\_\_\_ics tools *n.* the interdisciplinary field that combines biology and computer science to analyze, interpret, and manage biological information and data, particularly in the realm of genetics, genomics, and other related areas
48. carry a s\_\_r *n.* a mark that remains on the skin after a wound has healed
49. healthy mit\_\_\_\_ria *n.* (singular: mitochondrion) an organelle (= a specialized part of a cell) found in large numbers in most cells that produce energy for the cell by breaking down food
50. interventional ra\_\_\_\_gy *n.* the branch of medicine that uses medical imaging technologies such as X-rays, CT scans, MRIs, and ultrasound to diagnose and treat diseases and injuries
51. me\_\_\_\_al chemistry *adj.* of or relating to the treatment or cure of disease

ANSWERS: 44. puncture, 45. macula, 46. mediate, 47. bioinformatics, 48. scar, 49. mitochondria, 50. radiology, 51. medicinal

52. his latest tw\_\_ts *n.* a short, high sound made by a small bird; a message sent using Twitter, the social media application
53. multiple lac\_\_\_\_\_ons *n.* a deep cut or tear in flesh or skin, often caused by a sharp object or a traumatic injury
54. electronic ste\_\_\_\_\_pe *n.* a medical instrument consisting of a flexible tube with a chest piece at one end, used by healthcare professionals to listen to internal sounds, particularly heart and lung sounds
55. medical en\_\_\_\_\_pe *n.* a medical instrument that consists of a long, flexible tube with a light and a camera on end, used to examine the interior of a body cavity or organ visually
56. cannot log in to the a\_p *n.* (abbreviation for application) software designed to run on smartphones and other mobile devices or inside a web browser on a PC
57. cu\_\_\_\_\_r of a library *n.* a person whose job is to manage the objects or artworks in a museum, art gallery, etc.
58. qua\_\_\_\_\_gia patients *n.* paralysis of all four limbs and the torso, usually resulting from injury to the spinal cord in the neck region
59. co\_\_\_\_r degree *v.* to have a meeting or discussion to come to a decision or agreement or exchange ideas; to bestow something
60. bio\_\_\_\_\_ics research *n.* the interdisciplinary field that combines biology and computer science to analyze, interpret, and manage biological information and data, particularly in the realm of genetics, genomics, and other related areas

ANSWERS: 52. tweet, 53. laceration, 54. stethoscope, 55. endoscope, 56. app, 57. curator, 58. quadriplegia, 59. confer, 60. bioinformatics

61. qu\_\_e in his boots      *v.* to shake or vibrate violently and for a short time
62. virtual col\_\_\_\_\_py      *n.* a medical procedure in which a flexible tube with a camera on its end is inserted into the rectum to examine the colon for potential abnormalities or diseases
63. re\_\_\_a scanner      *n.* the innermost light-sensitive membrane covering the back wall of the eyeball
64. kl\_\_\_e code      *n.* a piece of hardware, software, or system that is poorly designed or constructed and often involves a makeshift or temporary solution to a problem
65. inc\_\_\_\_\_ze the right behavior      *v.* to make someone want to do in a particular way by offering them a reward
66. ro\_\_\_\_\_c guide operation      *adj.* of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots
67. em\_\_\_\_\_r my life      *v.* to give someone the power or authority to do something
68. hem\_\_\_\_\_gy department      *n.* the branch of medical science deals with the study of blood and its components, including blood diseases and disorders such as anemia, leukemia, and blood clotting disorders. It also encompasses the study of the blood-forming organs such as the bone marrow and lymphatic system

ANSWERS: 61. quake, 62. colonoscopy, 63. retina, 64. kludge, 65. incentivize, 66. robotic, 67. empower, 68. hematology



69. bi\_\_\_\_\_er discovery *n.* a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacologic responses to a therapeutic intervention
70. mo\_\_\_\_\_te from one key to another *v.* to change the key, style, loudness, etc., of something in music to create a particular effect; to fix or adjust the time, amount, degree, or rate of something
71. genetic ha\_\_\_\_\_pe *n.* a specific combination of genetic variations or alleles that are inherited together on the same chromosome from a single parent, which is used to analyze genetic patterns and understand the inheritance of specific traits or diseases
72. things at the na\_\_\_\_\_le *adj.* on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale
73. a chick's tw\_\_t *n.* a short, high sound made by a small bird; a message sent using Twitter, the social media application
74. ins\_\_\_\_\_ize customary laws *v.* to establish or make something a part of an institution (= a place such as a university, hospital, etc.)
75. rec\_\_\_\_\_ct the original text *v.* to build or form something again that has been damaged or destroyed
76. jazz imp\_\_\_\_\_ion *n.* the act of making something up on the spot or creating or performing something without preparation

ANSWERS: 69. biomarker, 70. modulate, 71. haplotype, 72. nanoscale, 73. tweet, 74. institutionalize, 75. reconstruct, 76. improvisation

77. gal\_\_\_\_\_er disease *n.* a small, pear-shaped organ located near the liver that stores and releases bile into the small intestine to aid in digestion
78. cardiac my\_\_\_\_\_e *n.* a type of muscle cell found in muscle tissue, responsible for contraction and movement
79. a membrane of a mit\_\_\_\_\_ria *n.* (singular: mitochondrion) an organelle (= a specialized part of a cell) found in large numbers in most cells that produce energy for the cell by breaking down food
80. bio\_\_\_\_\_al assay *adj.* relating to the application of the natural sciences, especially biology, and physiology, to clinical medicine and healthcare
81. und\_\_\_\_\_ed market *adj.* inadequately or insufficiently provided with help, products, or services
82. burn s\_\_r *n.* a mark that remains on the skin after a wound has healed
83. pr\_\_\_\_\_me database *n.* the entire complement of proteins that can be expressed by a genome, cell, tissue, or organism, including all of its functional forms and modifications
84. ree\_\_\_\_\_er the organizational structure *v.* to redesign or restructure something such as a machine, system, organization, etc.
85. ree\_\_\_\_\_er work processes *v.* to redesign or restructure something such as a machine, system, organization, etc.

ANSWERS: 77. gallbladder, 78. myocyte, 79. mitochondria, 80. biomedical, 81. underserved, 82. scar, 83. proteome, 84. reengineer, 85. reengineer

86. em\_\_\_\_\_ic development      *adj.* of or relating to an embryo (= an animal organism in the early stages of growth); in an early stage of development
87. international blo\_\_\_\_\_er      *n.* a movie, book, or other product that is extremely successful and popular, especially one that makes much money
88. psy\_\_\_\_\_ive medication      *adj.* producing an effect on mental processes, such as mood, perception, or behavior; capable of affecting the mind or emotions
89. de\_\_\_e a message      *v.* to convert something, such as a message or piece of information, from a specific form into one that you can understand
90. cardiac M\_l      *n.* (abbreviation for magnetic resonance imaging) a medical imaging technique that uses a strong magnetic field and radio waves to produce detailed images of the inside of the body
91. su\_\_\_\_\_s \$20 billion in sales      *v.* to be or do better than someone or something; to excel or go beyond the limits or standards of something
92. pa\_\_\_\_\_er battery      *n.* a small electronic device that is implanted in the chest to regulate the heartbeat of people with certain heart conditions; a person or thing that sets the pace or rhythm for others
93. pha\_\_\_\_\_ics testing      *n.* the study of how genes affect an individual's response to drugs and other treatments, particularly in the context of personalized medicine

ANSWERS: 86. embryonic, 87. blockbuster, 88. psychoactive, 89. decode, 90. MRI, 91. surpass, 92. pacemaker, 93. pharmacogenomics

94. psy\_\_\_\_\_ive effects      *adj.* producing an effect on mental processes, such as mood, perception, or behavior; capable of affecting the mind or emotions
95. ro\_\_\_\_\_c arm      *adj.* of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots
96. blood c\_\_t      *n.* a thick mass or lump of coagulated liquid, especially blood; a group of people or things that form an obstructive, unsympathetic, or resistant force
97. plu\_\_\_\_\_nt embryonic cells      *adj.* describing cells that have the potential to differentiate into any specialized cell in the body, often used in the context of stem cell research and applications
98. skeletal my\_\_\_\_\_e      *n.* a type of muscle cell found in muscle tissue, responsible for contraction and movement
99. ability to de\_\_\_e the differences      *v.* to convert something, such as a message or piece of information, from a specific form into one that you can understand
100. gal\_\_\_\_\_er surgery      *n.* a small, pear-shaped organ located near the liver that stores and releases bile into the small intestine to aid in digestion
101. re\_\_\_\_\_am a device      *v.* to modify or recreate a program

ANSWERS: 94. psychoactive, 95. robotic, 96. clot, 97. pluripotent, 98. myocyte, 99. decode, 100. gallbladder, 101. reprogram

102. brain le\_\_\_n *n.* a damaged or abnormal area of tissue in the body, usually caused by injury or disease
103. kl\_\_\_e solution *n.* a piece of hardware, software, or system that is poorly designed or constructed and often involves a makeshift or temporary solution to a problem
104. car\_\_\_\_\_ist appointment *n.* a medical doctor who specializes in the study and treatment of the heart and the circulatory system
105. qu\_\_\_e with cold *v.* to shake or vibrate violently and for a short time
106. put his life in je\_\_\_\_dy *n.* the state of being in danger or at risk of harm or loss
107. qu\_\_\_\_\_fy the results *v.* to express or measure something in numerical terms
108. Bl\_\_\_\_\_th connection *n.* a short-range wireless communication technology that allows electronic devices to connect and exchange data wirelessly over short distances, commonly used for connecting devices such as smartphones, headphones, and speakers
109. medical ste\_\_\_\_\_pe *n.* a medical instrument consisting of a flexible tube with a chest piece at one end, used by healthcare professionals to listen to internal sounds, particularly heart and lung sounds
110. soft c\_\_\_f *n.* a band or strip of material, usually worn around the wrist or ankle, often used to secure or fasten something in place; a blow or hit delivered with an open hand, typically to the head or ear

ANSWERS: 102. lesion, 103. kludge, 104. cardiologist, 105. quake, 106. jeopardy, 107. quantify, 108. Bluetooth, 109. stethoscope, 110. cuff

111. tax in je\_\_\_\_\_dy      *n.* the state of being in danger or at risk of harm or loss
112. M\_I brain image      *n.* (abbreviation for magnetic resonance imaging) a medical imaging technique that uses a strong magnetic field and radio waves to produce detailed images of the inside of the body
113. na\_\_\_\_\_le device      *adj.* on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale
114. sma\_\_\_\_\_ne addict      *n.* a mobile phone that functions as a computer and connects to the Internet
115. water l\_\_y      *n.* a flowering plant with large, showy, trumpet-shaped flowers, typically symbolizing purity, innocence, and beauty
116. su\_\_\_\_\_nt traditional methods      *v.* to replace or take the place of something or someone, often by force or through strategic maneuvering; to make obsolete or obsolete by introducing a superior or more advanced alternative
117. re\_\_\_\_\_am a database      *v.* to modify or recreate a program
118. co\_\_\_r honor      *v.* to have a meeting or discussion to come to a decision or agreement or exchange ideas; to bestow something
119. diabetes bi\_\_\_\_\_er      *n.* a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacologic responses to a therapeutic intervention

ANSWERS: 111. jeopardy, 112. MRI, 113. nanoscale, 114. smartphone, 115. lily, 116. supplant, 117. reprogram, 118. confer, 119. biomarker

120. interim cu\_\_\_\_r *n.* a person whose job is to manage the objects or artworks in a museum, art gallery, etc.
121. ma\_\_\_a lutea *n.* a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision
122. muscle le\_\_\_n *n.* a damaged or abnormal area of tissue in the body, usually caused by injury or disease
123. traditionally und\_\_\_\_ed *adj.* inadequately or insufficiently provided with help, products, or services
124. inc\_\_\_\_ze carpooling *v.* to make someone want to do in a particular way by offering them a reward
125. deg\_\_\_\_te into recession *v.* (of a person, animal, or plant) to become worse in health or physical condition
126. pro\_\_\_\_ic limbs *adj.* of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant
127. plu\_\_\_\_nt gene expression *adj.* describing cells that have the potential to differentiate into any specialized cell in the body, often used in the context of stem cell research and applications
128. hem\_\_\_\_gy finding *n.* the branch of medical science deals with the study of blood and its components, including blood diseases and disorders such as anemia, leukemia, and blood clotting disorders. It also encompasses the study of the blood-forming organs such as the bone marrow and lymphatic system

ANSWERS: 120. curator, 121. macula, 122. lesion, 123. underserved, 124. incentivize, 125. degenerate, 126. prosthetic, 127. pluripotent, 128. hematology

129. ey\_\_\_\_\_l motion *n.* the round part of the eye of a vertebrate that is usually inside the head and, therefore, cannot be seen
130. lac\_\_\_\_\_on to skin *n.* a deep cut or tear in flesh or skin, often caused by a sharp object or a traumatic injury
131. skilled car\_\_\_\_\_ist *n.* a medical doctor who specializes in the study and treatment of the heart and the circulatory system
132. em\_\_\_\_\_ic stem cells *adj.* of or relating to an embryo (= an animal organism in the early stages of growth); in an early stage of development
133. ane\_\_\_\_\_ia for surgery *n.* a state of controlled, temporary loss of bodily sensation or awareness that is induced for medical purposes
134. c\_\_t prevention *n.* a thick mass or lump of coagulated liquid, especially blood; a group of people or things that form an obstructive, unsympathetic, or resistant force
135. bacterial pr\_\_\_\_\_me *n.* the entire complement of proteins that can be expressed by a genome, cell, tissue, or organism, including all of its functional forms and modifications
136. au\_\_\_\_\_t the reality *v.* to increase the size, extent, quantity, etc. of something by adding something to it
137. deg\_\_\_\_\_te into a disagreement *v.* (of a person, animal, or plant) to become worse in health or physical condition

ANSWERS: 129. eyeball, 130. laceration, 131. cardiologist, 132. embryonic, 133. anesthesia, 134. clot, 135. proteome, 136. augment, 137. degenerate



138. col\_\_\_\_\_py screening *n.* a medical procedure in which a flexible tube with a camera on its end is inserted into the rectum to examine the colon for potential abnormalities or diseases
139. su\_\_\_\_\_nt current technology *v.* to replace or take the place of something or someone, often by force or through strategic maneuvering; to make obsolete or obsolete by introducing a superior or more advanced alternative
140. l\_\_y perfume *n.* a flowering plant with large, showy, trumpet-shaped flowers, typically symbolizing purity, innocence, and beauty
141. robotic exo\_\_\_\_\_on *n.* a hard, external protective covering or framework that supports and gives shape to the body of an invertebrate animal, such as an insect or crab
142. cutting-edge bio\_\_\_\_\_al *adj.* relating to the application of the natural sciences, especially biology, and physiology, to clinical medicine and healthcare
143. cro\_\_\_\_\_ing apps *n.* the practice of obtaining needed services, ideas, or content by enlisting the services of a large number of people, either paid or unpaid, typically via the internet
144. local ane\_\_\_\_\_ia *n.* a state of controlled, temporary loss of bodily sensation or awareness that is induced for medical purposes

ANSWERS: 138. colonoscopy, 139. supplant, 140. lily, 141. exoskeleton, 142. biomedical, 143. crowdsourcing, 144. anesthesia

145. mo\_\_\_\_te the function *v.* to change the key, style, loudness, etc., of something in music to create a particular effect; to fix or adjust the time, amount, degree, or rate of something
146. mic\_\_\_\_ic analysis *adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
147. bi\_\_\_\_c exoskeleton *adj.* relating to or using technology or devices that enhance or replace biological functions, typically in a way that mimics or improves upon the original
148. traumatic par\_\_\_\_ia *n.* a form of paralysis that affects all or part of the lower body, typically caused by injury to the spinal cord or nervous system
149. wh\_\_k him with a stick *v.* to hit someone or something hard or noisily
150. un\_\_t demand *adj.* describing a need, goal, or expectation that has not been satisfied or fulfilled
151. manual de\_\_\_\_ty *n.* skill and speed in performing physical tasks, especially with the hands; mental skill or adroitness in dealing with situations or problems
152. modern on\_\_\_\_gy treatment *n.* the branch of medicine that deals with the study and treatment of tumors, especially malignancies

ANSWERS: 145. modulate, 146. microscopic, 147. bionic, 148. paraplegia, 149. whack, 150. unmet, 151. dexterity, 152. oncology

## Session 3: Fill in the Blanks

1. The discovery of a critical bug caused the company to delay the \_\_\_\_\_ release.  
*n.* (abbreviation for application) software designed to run on smartphones and other mobile devices or inside a web browser on a PC
2. The once-thriving city has \_\_\_\_\_ into a crime-ridden slum.  
*v.* (of a person, animal, or plant) to become worse in health or physical condition
3. The deep \_\_\_\_\_ on my arm required several stitches to close.  
*n.* a deep cut or tear in flesh or skin, often caused by a sharp object or a traumatic injury
4. The \_\_\_\_\_ of the crab protects it from predators and environmental changes.  
*n.* a hard, external protective covering or framework that supports and gives shape to the body of an invertebrate animal, such as an insect or crab
5. The soldier was fitted with a \_\_\_\_\_ arm after losing him in combat.  
*adj.* relating to or using technology or devices that enhance or replace biological functions, typically in a way that mimics or improves upon the original
6. The project is in \_\_\_\_\_ of being canceled due to a lack of funding.  
*n.* the state of being in danger or at risk of harm or loss
7. The cardiologist analyzed the \_\_\_\_\_ cells in the patient's heart tissue.  
*n.* a type of muscle cell found in muscle tissue, responsible for contraction and movement

ANSWERS: 1. app's, 2. degenerated, 3. laceration, 4. exoskeleton, 5. bionic, 6. jeopardy, 7. myocyte

8. \_\_\_\_\_ algorithms are essential for identifying and analyzing patterns in biological data.
- n.* the interdisciplinary field that combines biology and computer science to analyze, interpret, and manage biological information and data, particularly in the realm of genetics, genomics, and other related areas
9. \_\_\_\_\_ stem cells can differentiate into any cell in the body.
- adj.* describing cells that have the potential to differentiate into any specialized cell in the body, often used in the context of stem cell research and applications
10. The medical lab specializes in \_\_\_\_\_ testing and analysis.
- n.* the branch of medical science deals with the study of blood and its components, including blood diseases and disorders such as anemia, leukemia, and blood clotting disorders. It also encompasses the study of the blood-forming organs such as the bone marrow and lymphatic system
11. After the accident, he had \_\_\_\_\_ and could not move his arms or legs.
- n.* paralysis of all four limbs and the torso, usually resulting from injury to the spinal cord in the neck region
12. The old printer was connected to the computer with a \_\_\_\_\_ of cables and adapters.
- n.* a piece of hardware, software, or system that is poorly designed or constructed and often involves a makeshift or temporary solution to a problem
13. The \_\_\_\_\_ examination helped the doctor detect the irregular heartbeat of the patient.
- n.* a medical instrument consisting of a flexible tube with a chest piece at one end, used by healthcare professionals to listen to internal sounds, particularly heart and lung sounds

ANSWERS: 8. Bioinformatics, 9. Pluripotent, 10. hematology, 11. quadriplegia, 12. kludge, 13. stethoscope

14. He had to undergo a \_\_\_\_\_ as part of his routine medical check-up.
- n.* a medical procedure in which a flexible tube with a camera on its end is inserted into the rectum to examine the colon for potential abnormalities or diseases
15. These chemicals \_\_\_\_\_ the effect of metabolism.
- v.* to change the key, style, loudness, etc., of something in music to create a particular effect; to fix or adjust the time, amount, degree, or rate of something
16. The doctor used a blood pressure \_\_\_\_\_ to measure my vitals.
- n.* a band or strip of material, usually worn around the wrist or ankle, often used to secure or fasten something in place; a blow or hit delivered with an open hand, typically to the head or ear
17. The \_\_\_\_\_ in the blood vessel required immediate medical attention.
- n.* a thick mass or lump of coagulated liquid, especially blood; a group of people or things that form an obstructive, unsympathetic, or resistant force
18. Even after the wound has healed, a \_\_\_\_\_ remains.
- n.* a mark that remains on the skin after a wound has healed
19. The \_\_\_\_\_ properties of this herb have been known to help with various ailments.
- adj.* of or relating to the treatment or cure of disease
20. Scientists are studying the human \_\_\_\_\_ to understand better how proteins work in the body.
- n.* the entire complement of proteins that can be expressed by a genome, cell, tissue, or organism, including all of its functional forms and modifications

ANSWERS: 14. colonoscopy, 15. modulate, 16. cuff, 17. clot, 18. scar, 19. medicinal, 20. proteome

21. The doctor used a diagnostic \_\_\_\_\_ to examine the patient's stomach during the medical procedure.
- n.* a medical instrument that consists of a long, flexible tube with a light and a camera on end, used to examine the interior of a body cavity or organ visually
22. We need to \_\_\_\_\_ our data to recover quickly from a disaster.
- v.* to move the power, control, or authority of an organization, government, or system from a single place to several smaller ones
23. The young startup aims to \_\_\_\_\_ the established players in the industry through innovation.
- v.* to replace or take the place of something or someone, often by force or through strategic maneuvering; to make obsolete or obsolete by introducing a superior or more advanced alternative
24. I need a \_\_\_\_\_ headset for my conference calls.
- n.* a short-range wireless communication technology that allows electronic devices to connect and exchange data wirelessly over short distances, commonly used for connecting devices such as smartphones, headphones, and speakers
25. The actress's performance ran the \_\_\_\_\_ of emotions, from anger to joy to sorrow.
- n.* the complete range or scope of something; the entire spectrum or extent of a particular quality, emotion, or situation
26. The software could \_\_\_\_\_ the encrypted data and reveal the hidden information.
- v.* to convert something, such as a message or piece of information, from a specific form into one that you can understand

ANSWERS: 21. endoscope, 22. decentralize, 23. supplant, 24. Bluetooth, 25. gamut, 26. decode

27. The earth began to \_\_\_\_\_ and he knew he had to leave the building immediately.
- v.* to shake or vibrate violently and for a short time
28. He is in general \_\_\_\_\_ under the surgeon.
- n.* a state of controlled, temporary loss of bodily sensation or awareness that is induced for medical purposes
29. The beautiful \_\_\_\_\_ garden in the park was a sight to behold.
- n.* a flowering plant with large, showy, trumpet-shaped flowers, typically symbolizing purity, innocence, and beauty
30. My grandfather is seeing a \_\_\_\_\_ to monitor his heart condition.
- n.* a medical doctor who specializes in the study and treatment of the heart and the circulatory system
31. The pharmaceutical company unveiled its latest breakthrough drug for the \_\_\_\_\_ market.
- n.* the branch of medicine that deals with the study and treatment of tumors, especially malignancies
32. There are several treatment options available for patients with \_\_\_\_\_ disorders.
- n.* a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision
33. The new action movie is expected to be a \_\_\_\_\_ hit.
- n.* a movie, book, or other product that is extremely successful and popular, especially one that makes much money

ANSWERS: 27. quake, 28. anesthesia, 29. lily, 30. cardiologist, 31. oncology, 32. macula-related, 33. blockbuster

34. \_\_\_\_\_ DNA is used to trace human lineage and migration footprints.  
*n.* (singular: mitochondrion) an organelle (= a specialized part of a cell) found in large numbers in most cells that produce energy for the cell by breaking down food
35. The leaders of the two countries met to \_\_\_\_\_ on the issue.  
*v.* to have a meeting or discussion to come to a decision or agreement or exchange ideas; to bestow something
36. The \_\_\_\_\_ test showed that the patient was responding well to the treatment.  
*n.* a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacologic responses to a therapeutic intervention
37. The athlete's record-breaking performance \_\_\_\_\_ all expectations.  
*v.* to be or do better than someone or something; to excel or go beyond the limits or standards of something
38. Internet traffic volumes have increased significantly with the advent of \_\_\_\_\_.  
*n.* a mobile phone that functions as a computer and connects to the Internet
39. The teacher had to \_\_\_\_\_ a disagreement between two students over a stolen pencil.  
*v.* to try to bring about an agreement or understanding between people who are in conflict
40. Damage to the \_\_\_\_\_ may play a role in the development of glaucoma.  
*n.* the innermost light-sensitive membrane covering the back wall of the eyeball

ANSWERS: 34. Mitochondria, 35. confer, 36. biomarker, 37. surpassed, 38. smartphones, 39. mediate, 40. retina



41. The doctor examined the \_\_\_\_\_ on the patient's skin to determine if it was cancerous.
- n.* a damaged or abnormal area of tissue in the body, usually caused by injury or disease
42. This area is medically \_\_\_\_\_.
- adj.* inadequately or insufficiently provided with help, products, or services
43. The museum \_\_\_\_\_ conserved the ancient manuscripts.
- n.* a person whose job is to manage the objects or artworks in a museum, art gallery, etc.
44. The \_\_\_\_\_ analysis provided valuable insights into the evolutionary history of the species.
- n.* a specific combination of genetic variations or alleles that are inherited together on the same chromosome from a single parent, which is used to analyze genetic patterns and understand the inheritance of specific traits or diseases
45. Some people with \_\_\_\_\_ may need to avoid certain activities or sources of electromagnetic interference.
- n.* a small electronic device that is implanted in the chest to regulate the heartbeat of people with certain heart conditions; a person or thing that sets the pace or rhythm for others
46. The project is still in its \_\_\_\_\_ stage.
- adj.* of or relating to an embryo (= an animal organism in the early stages of growth); in an early stage of development
47. Eating a fatty meal can trigger \_\_\_\_\_ pain in some people.
- n.* a small, pear-shaped organ located near the liver that stores and releases bile into the small intestine to aid in digestion

ANSWERS: 41. lesion, 42. underserved, 43. curator, 44. haplotype, 45. pacemakers, 46. embryonic, 47. gallbladder

48. Inspectors noticed \_\_\_\_\_ cracks in the submarine's hull.  
*adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
49. They've decided to \_\_\_\_\_ a ruined castle.  
*v.* to build or form something again that has been damaged or destroyed
50. He had a \_\_\_\_\_ because he was working through the night.  
*n.* the fact of becoming ill or starting to misbehave again after making an improvement
51. The patient underwent a \_\_\_\_\_ scan to diagnose their medical condition.  
*n.* the branch of medicine that uses medical imaging technologies such as X-rays, CT scans, MRIs, and ultrasound to diagnose and treat diseases and injuries
52. He created a beautiful piece of music using only \_\_\_\_\_.  
*n.* the act of making something up on the spot or creating or performing something without preparation
53. The tire had a \_\_\_\_\_ and needed to be replaced.  
*n.* a small hole or wound made by piercing, such as with a needle, nail, or pointed object
54. Economic factors and monetary policy \_\_\_\_\_ inflation.  
*v.* to increase the size, extent, quantity, etc. of something by adding something to it
55. After his accident, he was left with \_\_\_\_\_ and had to use a wheelchair.  
*n.* a form of paralysis that affects all or part of the lower body, typically caused by injury to the spinal cord or nervous system

ANSWERS: 48. microscopic, 49. reconstruct, 50. relapse, 51. radiology, 52. improvisation, 53. puncture, 54. augmented, 55. paraplegia

56. \_\_\_\_\_ substances can seriously affect the brain and must be used cautiously.

*adj.* producing an effect on mental processes, such as mood, perception, or behavior; capable of affecting the mind or emotions

57. He \_\_\_\_\_ the computer's operating system to remove the safeguard.

*v.* to modify or recreate a program

58. New \_\_\_\_\_ joints are less prone to metal poisoning.

*adj.* of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant

59. The satellite sends \_\_\_\_\_ data back to Earth to help scientists study the atmosphere.

*n.* the process of collecting and transmitting data from remote or inaccessible sources using wireless or other communication means, usually for monitoring or control purposes

60. He \_\_\_\_\_ the ball out of the park with his home run.

*v.* to hit someone or something hard or noisily

61. The surgeon's \_\_\_\_\_ was impressive during the delicate surgery.

*n.* skill and speed in performing physical tasks, especially with the hands; mental skill or adroitness in dealing with situations or problems

62. As technology evolves, we need to \_\_\_\_\_ our work styles.

*v.* to redesign or restructure something such as a machine, system, organization, etc.

63. The new policy aims to \_\_\_\_\_ the use of renewable energy sources.

*v.* to establish or make something a part of an institution (= a place such as a university, hospital, etc.)

ANSWERS: 56. Psychoactive, 57. reprogrammed, 58. prosthetic, 59. telemetry, 60. whacked, 61. dexterity, 62. reengineer, 63. institutionalize

64. The \_\_\_\_\_ industry is growing rapidly due to its immense potential.
- n.* the study of how genes affect an individual's response to drugs and other treatments, particularly in the context of personalized medicine
65. Increased \_\_\_\_\_ pressure leads to the development of glaucoma.
- n.* the round part of the eye of a vertebrate that is usually inside the head and, therefore, cannot be seen
66. This process improves the strength of the metal by controlling the \_\_\_\_\_ lattice structure of the metal.
- adj.* on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale
67. The \_\_\_ machine uses powerful magnets to produce detailed images of the inside of the body.
- n.* (abbreviation for magnetic resonance imaging) a medical imaging technique that uses a strong magnetic field and radio waves to produce detailed images of the inside of the body
68. The company used this \_\_\_\_\_ platform to gather ideas for its next product.
- n.* the practice of obtaining needed services, ideas, or content by enlisting the services of a large number of people, either paid or unpaid, typically via the internet
69. The company \_\_\_\_\_ employees to buy low-price items without approval to achieve efficient purchasing.
- v.* to give someone the power or authority to do something
70. The surgeon removed the tumor using \_\_\_\_\_ video assistance.
- adj.* of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots

ANSWERS: 64. pharmacogenomics, 65. eyeball, 66. nanoscale, 67. MRI, 68. crowdsourcing, 69. empowered, 70. robotic

71. \_\_\_\_\_ engineering focuses on developing new medical technologies and innovations to improve patient health outcomes.

*adj.* relating to the application of the natural sciences, especially biology, and physiology, to clinical medicine and healthcare

72. Companies developing self-driving cars consistently \_\_\_\_\_ the emerging technologies.

*v.* to introduce new methods, ideas, or products

73. We could hear the \_\_\_\_\_ of baby birds.

*n.* a short, high sound made by a small bird; a message sent using Twitter, the social media application

74. Governments \_\_\_\_\_ their citizens to buy eco-friendly products through subsidies.

*v.* to make someone want to do in a particular way by offering them a reward

75. The \_\_\_\_\_ expectations of the customers led to a decrease in sales.

*adj.* describing a need, goal, or expectation that has not been satisfied or fulfilled

76. He tried to \_\_\_\_\_ the amount of product that was needed to complete the job.

*v.* to express or measure something in numerical terms

ANSWERS: 71. Biomedical, 72. innovate, 73. tweet, 74. incentivize, 75. unmet, 76. quantify