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Vocabulary Builder Reference from...

Devin Shuman: The genes you don't get from your parents (but can't live without) | TED Talk

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

All Words

IMPORTANT

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Session 1: Word List

gene

n. the fundamental unit of heredity and the sequence of nucleotides in DNA that codes for the creation of RNA or protein.

synonym : factor, cistron

(1) **gene** expression, (2) **gene** cloning

A defective **gene** is responsible for the disease.

separate

v. to force, take, or pull apart; mark as different

synonym : disunite, isolate, ramify

(1) **separate** video into chapter, (2) **separate** cream from milk

We need to **separate** the aspect of his personality from the part of his competence when making an investment decision.

chromosome

n. a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like

synonym : DNA

(1) a sex **chromosome**, (2) the end of **chromosome**

Human females normally have two X **chromosomes**.

inherit

v. to receive money, property, or a title from someone after they have died

synonym: obtain, gain, acquire

(1) **inherit** estate, (2) **inherit** ancestral property

After his death, his sons **inherited** his business.

fungus

n. a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive

synonym: mold, mildew, yeast

(1) **fungus** infection, (2) symbiotic **fungus**

Certain types of **fungus** can be toxic to humans, causing severe illness if ingested.

multicellular

adj. characterized by the presence of multiple or many cells, as opposed to unicellular (having only one cell)

synonym: multicelled, many-celled, complex

(1) **multicellular** tissues, (2) **multicellular** life

Multicellular organisms are composed of many specialized cells working together.

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.

belong

v. to be the property of someone or something; to be a member or part of a group; to be in the proper or appropriate place

synonym: fit, be appropriate, be suitable

(1) **belong** to different species, (2) **belong** to a group

All the books in this section **belong** to the library's rare collection and must be handled carefully.

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.

organelle

n. a specialized subunit, usually within a cell, that has a specific function

(1) cellular **organelles**, (2) **organelle** protein

Membranes bind these **organelles** together.

approximately

adv. close to a specific number or time but not exactly that number or time

synonym: about, around, roughly

(1) **approximately** 3 feet long, (2) **approximately** same

This trail takes **approximately** 2.5 hours.

engulf

v. to swallow up; to surround and cover completely

synonym: swallow, submerge, inundate

(1) **engulf** the politician, (2) **engulf** in water

The fire quickly **engulfed** the entire building.

ancestor

n. a person from whom one is descended; a forefather

synonym: forebear, forefather, progenitor

(1) **ancestor** language, (2) earliest human **ancestor**

My remote **ancestor** immigrated to the United States from Ireland in the 1800s.

predecessor

n. a person who held a position or office before the current holder

synonym: antecedent, forerunner, precursor

(1) the words of a **predecessor**, (2) **predecessor** model

The new CEO is the **predecessor** of the former CEO.

essential

adj. indispensable; fundamental

synonym : critical, crucial, basic

(1) **essential** amino acid, (2) **essential** commodities of life
Trial and error is an **essential** part of education.

convert

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

synonym : alter, remake, transform

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

oxygen

n. the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live

(1) the hydrogen binds the **oxygen**, (2) lack of **oxygen**
The passenger grabbed for the **oxygen** mask.

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.

humming

adj. producing a continuous, low, vibrating sound like that of the bee

synonym : buzzing, droning, vibrating

(1) **humming** sound, (2) **humming** bird
The **humming** of the bees filled the air as she walked through the garden.

transport

n. a system for moving people or products from one location to another using automobiles, roads, and so on

synonym : shipment, transit, conveyance

(1) **transport** facilities, (2) access to public **transport**
Enhanced rail **transportation** is crucial for our business.

destination

n. the place to which someone or something is going or being sent; the ultimate purpose or goal of a journey or action

synonym : location, endpoint, target

(1) travel **destination**, (2) romantic **destinations**

I am excited to reach my **destination** and explore the new city finally.

metabolite

n. a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions

synonym : intermediate

(1) **metabolite** concentration, (2) drug **metabolite**

The liver **metabolite** levels were higher than usual.

vary

v. to become different in terms of size, shape, etc.

synonym : alter, contrast, differ

(1) **vary** according to the age, (2) **vary** directly with the price

Maximum heart rates **vary** a lot for each individual.

mammal

n. any animal of which the female gives birth to live young, not eggs, and feeds her young on milk from her own body

(1) a primitive **mammal**, (2) a sort of **mammal**

Marine **mammal** populations are declining worldwide due to ocean pollution.

cucumber

n. a long and green fruit with thin skin and crisp, refreshing flesh, typically eaten as a vegetable

(1) a **cucumber** face mask, (2) several varieties of **cucumbers**

I like to slice **cucumber** and put it on my sandwiches.

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.

environment

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

synonym: atmosphere, surroundings, climate

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

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

entirely

adv. completely

synonym: completely, fully, totally

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

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

oxymonad

n. a type of single-celled organism that is found in aquatic environments and is characterized by its use of flagella to move around and capture prey

synonym: microbe, protist, flagellate

(1) **oxymonad** parasite, (2) the metabolic pathways of the **oxymonad**

The unique morphology of the **oxymonad** has puzzled scientists for decades.

monocercomonoides

n. a genus of parasitic single-celled organisms that are typically found in the intestines of various animals

synonym: parasite, single-cell organism, flagellate

(1) **monocercomonoides** infection,

(2) **monocercomonoides** worm

The life cycle of **monocercomonoides** involves multiple hosts, including snails and fish.

evolve

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

synonym: develop, mature, grow

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

Eyeless fish **evolved** in dark caves.

tandem

n. a device or arrangement that allows two or more things to be connected or work together in a coordinated manner; a bicycle built for two people to ride in a line, with one behind the other

synonym: bicycle built for two, double, tandem bike

(1) **tandem** approach, (2) **tandem** skydiving

The **tandem** bike ride was fun for the couple to enjoy together.

timeline

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

synonym: agenda, timetable, chronology

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

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

conceive

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

synonym: imagine, envision, concoct

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

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

sperm

n. the reproductive cell produced by a man or male animal

synonym: seed, semen, seminal fluid

(1) man with a low **sperm** count, (2) production of **sperm**

The male **sperm** fertilizes the female egg.

dissolve

v. to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss

synonym: disband, disappear, liquefy

(1) **dissolve** the sugar, (2) officially **dissolved** the marriage

The political party **dissolved** after much internal fighting.

conception

n. a general idea or belief of what something or someone is like or should be; an understanding of a situation or a

principle

synonym: notion, abstraction, cogitation

(1) a grand **conception**, (2) the **conception** of the good
I have no **conception** of what you intend.

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.

independence

n. freedom from another's or others' control or influence

synonym: freedom, liberty, autonomy

(1) financial **independence**, (2) **independence** ceremony

There is nothing more valuable than **independence** and freedom.

slightly

adv. in a small degree or extent; a little

synonym: barely, narrowly, scarcely

(1) increase **slightly**, (2) **slightly** alkaline soils

He moved his body **slightly** to the left.

fertilize

v. to cause an egg, female animal, or plant to develop by joining sperm from the male with them; to add a natural or chemical substance to land to make plants grow well

synonym: pollinate, inseminate, enrich

(1) **fertilize** the soil, (2) **fertilize** the female egg

The couple decided to use the non-husband sperm to **fertilize** a wife.

divide

v. to separate or cause to separate into parts or groups

synonym: separate, disconnect, split

(1) **divide** the cake into two pieces, (2) **divide** money equally

Can you **divide** 123321 by eleven?

divvy

v. to divide or distribute something, often something that is shared or pooled among a group of people

synonym: share, split, distribute

(1) **divvy** up duties, (2) **divvy** out rewards

The group decided to **divvy** up the tasks evenly for the project.

develop

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

synonym: evolve, progress, advance

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

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

embryo

n. an animal organism in the early stages of growth, either in its mother's womb or in an egg, or a plant that is developing in a seed

synonym: fetus, seed, origin

(1) destruction of human **embryos**, (2) **embryo** cloning

Our latest project is still at the **embryo** stage.

differentiate

v. to recognize or establish as being distinct; to distinguish between things that are compared; to calculate a derivative

synonym: discern, distinguish, separate

(1) **differentiate** between fact and fiction, (2) **differentiate** a function

The teacher asked the students to **differentiate** between the two similar species of birds.

tissue

n. an ensemble of similar cells of the animal or plant that together carry out a specific function

synonym: structure, texture, anatomy

(1) a facial **tissue**, (2) loss of muscle **tissue**

The researcher separated the nervous **tissue** for microscopic examinations.

variation

n. the act or state of changing; a difference or change in the way something is done, made or said

synonym: fluctuation, change, variation

(1) **variation** of temperature, (2) gene **variation**

There is a lot of **variation** in the colors of flowers in the garden.

scatter

v. to cause to separate and go in different directions

synonym: disperse, spread, bestrew

(1) **scatter** seeds, (2) **scatter** around the internet

The hunter's approach **scattered** the geese.

random

adj. made, done, or happening without method, conscious decision, or any regular pattern

synonym: incidental, arbitrary, unanticipated

(1) a **random** choice, (2) bombs fell at **random**

To find drunk drivers, police conduct **random** tests.

complexity

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

synonym: intricacy, sophistication, elaboration

(1) cognitive **complexity**, (2) **complexity** theory

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

process

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

synonym: procedure, method, system

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

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

- fuse** *n.* a small part in an electrical device or machinery that can interrupt the flow of electrical current when it is overloaded; (verb) to become plastic or fluid or liquefied from heat
synonym : (verb) melt, (verb) blend
(1) **fuse** blows, (2) **fuse** with one another
He has a short **fuse**.
- combine** *v.* to join or merge to form a single thing or group
synonym : coalesce, cohere, blend
(1) **combine** chemically with another substance,
(2) **combine** augmented reality
Hydrogen and oxygen **combine** to form water.
- sequester** *v.* to take temporary possession of someone's property until a debt is paid.
synonym : isolate, set apart, segregate
(1) **sequester** ten percent of the annual carbon emissions,
(2) **sequester** myself from the world
He approved their requests to **sequester** the jury.
- faulty** *adj.* having a defect or flaw that affects performance or operation
synonym : defective, flawed, imperfect
(1) **faulty** equipment, (2) make a **faulty** diagnosis
The **faulty** wiring caused a power outage.
- prop** *n.* a piece of wood, metal, etc., placed beneath or against something to support it or keep it in position; a system, institution, or person that gives help or support to someone or something
synonym : support, buttress, column
(1) emotional **prop**, (2) **prop** stick
We have finally lost our last **prop**.
- removal** *n.* the act of taking something away or off from a particular place

synonym: extraction, elimination, eradication

(1) dental tartar **removal**, (2) **removal** truck

The **removal** of the statue caused much controversy in the community.

dynamic

adj. having a lot of energy, ideas, and enthusiasm, and a strong personality; of or relating to dynamics (= the branch of physics and engineering concerned with the forces that cause motions of bodies)

synonym: energetic, active, vital

(1) a **dynamic** market, (2) **dynamic** person

The sprinter has a **dynamic** way of running.

degree

n. a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment

synonym: level, qualification, diploma

(1) bachelor's **degree**, (2) **degree** centigrade

She received her **degree** in psychology from the university.

transfer

v. to move, pass, or change from one person, place, or situation to another

synonym: move, relocate, shift

(1) **transfer** a file, (2) **transfer** power

She **transferred** the money from her savings account to her checking account.

instruction

n. detailed direction, order, etc., on how to do or use something

synonym: education, direction, guidance

(1) individual **instruction**, (2) follow his **instructions**

They needed further **instruction** to perform their duties efficiently.

involve

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

synonym: implicate, include, engage

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

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

regulate

v. to control something, especially by means of rules or laws

synonym: control, restrain, handle

(1) **regulate** blood sugar levels, (2) **regulate** our conduct

We must manage to **regulate** our expenditure.

defy

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

synonym: challenge, resist, disobey

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

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

unfold

v. to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown

synonym: open, spread out, expose

(1) **unfold** the story, (2) **unfold** the stroller

The mystery **unfolded** as the detectives gathered more clues.

simultaneously

adv. at the same time

synonym: concurrently, coincidentally, together

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

simultaneously

Two students answered the teacher's question

simultaneously.

inseparable

adj. incapable of being separated or disjoined; closely welded or joined together; mutually dependent or closely linked

synonym: attached, connected, united

(1) **inseparable** friends, (2) **inseparable** duo

The two friends were **inseparable** and did everything together.

Session 2: Spelling

- | | |
|---|---|
| 1. symbiotic fu___s | <i>n.</i> a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive |
| 2. in___e a lot of paperwork | <i>v.</i> to include or affect someone or something as a necessary part of something else |
| 3. tr___er a file | <i>v.</i> to move, pass, or change from one person, place, or situation to another |
| 4. increase sl___ly | <i>adv.</i> in a small degree or extent; a little |
| 5. se_____er ten percent of the annual carbon emissions | <i>v.</i> to take temporary possession of someone's property until a debt is paid. |
| 6. the words of a pre_____or | <i>n.</i> a person who held a position or office before the current holder |
| 7. co___ve a child | <i>v.</i> to have or develop an idea, a plan, etc. in mind; to become pregnant |
| 8. un___d the story | <i>v.</i> to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown |
| 9. en___ly satisfied with the meal | <i>adv.</i> completely |
| 10. bombs fell at ra___m | <i>adj.</i> made, done, or happening without method, conscious decision, or any regular pattern |

ANSWERS: 1. fungus, 2. involve, 3. transfer, 4. slightly, 5. sequester, 6. predecessor, 7. conceive, 8. unfold, 9. entirely, 10. random

11. 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
12. fa___y equipment *adj.* having a defect or flaw that affects performance or operation
13. tr_____te the emotion to a movement *v.* to convert or change words into another language
14. env_____nt affairs *n.* the natural world such as air, water, and land in which humans, animals, and plants live
15. g__e expression *n.* the fundamental unit of heredity and the sequence of nucleotides in DNA that codes for the creation of RNA or protein.
16. the metabolic pathways of the ox_____ad *n.* a type of single-celled organism that is found in aquatic environments and is characterized by its use of flagella to move around and capture prey
17. de_____p a skill *v.* to grow or expand; to improve or refine through a process of progress and refinement, often to achieve greater sophistication or complexity; to elaborate or add detail to something that is in the process of being created
18. bachelor's de___e *n.* a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment

ANSWERS: 11. mitochondria, 12. faulty, 13. translate, 14. environment, 15. gene, 16. oxymonad, 17. develop, 18. degree

19. va_____on of temperature *n.* the act or state of changing; a difference or change in the way something is done, made or said
20. ev___e over the past decade *v.* to develop gradually, or to cause the development of something or someone gradually
21. small mo_____les *n.* a group of two or more atoms held together by attractive forces known as chemical bonds
22. a grand con_____on *n.* a general idea or belief of what something or someone is like or should be; an understanding of a situation or a principle
23. pr_____s improvement *n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products
24. he was en_____ly to blame *adv.* completely
25. tr_____te a document into English *v.* to convert or change words into another language
26. co_____t base 10 to base 16 *v.* to have a talk with someone; (adjective) reversed in order, relation, or action
27. pre_____or model *n.* a person who held a position or office before the current holder
28. es_____al commodities of life *adj.* indispensable; fundamental

ANSWERS: 19. variation, 20. evolve, 21. molecule, 22. conception, 23. process, 24. entirely, 25. translate, 26. convert, 27. predecessor, 28. essential

29. co_____t fat into energy *v.* to have a talk with someone; (adjective) reversed in order, relation, or action
30. co_____e augmented reality *v.* to join or merge to form a single thing or group
31. re_____te our conduct *v.* to control something, especially by means of rules or laws
32. mi_____es sterilizer *n.* a tiny living thing that can only be seen with a microscope and that may cause disease
33. ins_____le friends *adj.* incapable of being separated or disjoined; closely welded or joined together; mutually dependent or closely linked
34. in_____e a high degree of risk *v.* to include or affect someone or something as a necessary part of something else
35. di__y up duties *v.* to divide or distribute something, often something that is shared or pooled among a group of people
36. di__y out rewards *v.* to divide or distribute something, often something that is shared or pooled among a group of people
37. ta___m approach *n.* a device or arrangement that allows two or more things to be connected or work together in a coordinated manner; a bicycle built for two people to ride in a line, with one behind the other
38. follow his ins_____ons *n.* detailed direction, order, etc., on how to do or use something

ANSWERS: 29. convert, 30. combine, 31. regulate, 32. microbe, 33. inseparable, 34. involve, 35. divvy, 36. divvy, 37. tandem, 38. instruction

39. p__p stick *n.* a piece of wood, metal, etc., placed beneath or against something to support it or keep it in position; a system, institution, or person that gives help or support to someone or something
40. ins_____le duo *adj.* incapable of being separated or disjoined; closely welded or joined together; mutually dependent or closely linked
41. in_____t ancestral property *v.* to receive money, property, or a title from someone after they have died
42. ge___e analyses *n.* the complete set or sequence of genes of a human, animal, plant, or other living things
43. fe_____ze the soil *v.* to cause an egg, female animal, or plant to develop by joining sperm from the male with them; to add a natural or chemical substance to land to make plants grow well
44. individual ins_____on *n.* detailed direction, order, etc., on how to do or use something
45. production of sp__m *n.* the reproductive cell produced by a man or male animal
46. a cu_____er face mask *n.* a long and green fruit with thin skin and crisp, refreshing flesh, typically eaten as a vegetable
47. sim_____sly affected *adv.* at the same time
48. f__e with one another *n.* a small part in an electrical device or machinery that can interrupt the flow of electrical current when it is overloaded; (verb) to become plastic or fluid or liquefied from heat

ANSWERS: 39. prop, 40. inseparable, 41. inherit, 42. genome, 43. fertilize, 44. instruction, 45. sperm, 46. cucumber, 47. simultaneously, 48. fuse

49. un___d the stroller *v.* to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown
50. mon_____des infection *n.* a genus of parasitic single-celled organisms that are typically found in the intestines of various animals
51. a facial ti___e *n.* an ensemble of similar cells of the animal or plant that together carry out a specific function
52. earliest human an____or *n.* a person from whom one is descended; a forefather
53. hu____g bird *adj.* producing a continuous, low, vibrating sound like that of the bee
54. or_____le protein *n.* a specialized subunit, usually within a cell, that has a specific function
55. emotional p__p *n.* a piece of wood, metal, etc., placed beneath or against something to support it or keep it in position; a system, institution, or person that gives help or support to someone or something
56. be___g to a group *v.* to be the property of someone or something; to be a member or part of a group; to be in the proper or appropriate place
57. ti_____ne of science history *n.* a series of events arranged in chronological order and displayed along a line, usually drawn left to right or top to bottom

ANSWERS: 49. unfold, 50. monocercomonoides, 51. tissue, 52. ancestor, 53. humming, 54. organelle, 55. prop, 56. belong, 57. timeline

58. com_____ty theory *n.* the state or quality of being complicated or intricate and difficult to understand
59. di___e the cake into two pieces *v.* to separate or cause to separate into parts or groups
60. mul_____lar life *adj.* characterized by the presence of multiple or many cells, as opposed to unicellular (having only one cell)
61. lay out a ti_____ne *n.* a series of events arranged in chronological order and displayed along a line, usually drawn left to right or top to bottom
62. be___g to different species *v.* to be the property of someone or something; to be a member or part of a group; to be in the proper or appropriate place
63. app_____ely same *adv.* close to a specific number or time but not exactly that number or time
64. re_____te blood sugar levels *v.* to control something, especially by means of rules or laws
65. ta___m skydiving *n.* a device or arrangement that allows two or more things to be connected or work together in a coordinated manner; a bicycle built for two people to ride in a line, with one behind the other
66. decision-making pr_____s *n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products

ANSWERS: 58. complexity, 59. divide, 60. multicellular, 61. timeline, 62. belong, 63. approximately, 64. regulate, 65. tandem, 66. process

67. dif_____ate between fact and fiction *v.* to recognize or establish as being distinct; to distinguish between things that are compared; to calculate a derivative
68. em___o cloning *n.* an animal organism in the early stages of growth, either in its mother's womb or in an egg, or a plant that is developing in a seed
69. en___f the politician *v.* to swallow up; to surround and cover completely
70. gene va_____on *n.* the act or state of changing; a difference or change in the way something is done, made or said
71. a sort of ma___l *n.* any animal of which the female gives birth to live young, not eggs, and feeds her young on milk from her own body
72. se_____te video into chapter *v.* to force, take, or pull apart; mark as different
73. officially di_____ved the marriage *v.* to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss
74. f___e blows *n.* a small part in an electrical device or machinery that can interrupt the flow of electrical current when it is overloaded; (verb) to become plastic or fluid or liquefied from heat
75. a ra___m choice *adj.* made, done, or happening without method, conscious decision, or any regular pattern

ANSWERS: 67. differentiate, 68. embryo, 69. engulf, 70. variation, 71. mammal, 72. separate, 73. dissolve, 74. fuse, 75. random

76. the hydrogen binds the ox___n *n.* the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live
77. loss of muscle ti___e *n.* an ensemble of similar cells of the animal or plant that together carry out a specific function
78. sc____r seeds *v.* to cause to separate and go in different directions
79. dy____c person *adj.* having a lot of energy, ideas, and enthusiasm, and a strong personality; of or relating to dynamics (= the branch of physics and engineering concerned with the forces that cause motions of bodies)
80. 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
81. lack of ox___n *n.* the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live
82. d__y gravity *v.* to challenge or dare someone to do something; to resist or disobey a rule, decision, etc.
83. en___f in water *v.* to swallow up; to surround and cover completely
84. cellular or____les *n.* a specialized subunit, usually within a cell, that has a specific function

ANSWERS: 76. oxygen, 77. tissue, 78. scatter, 79. dynamic, 80. mitochondria, 81. oxygen, 82. defy, 83. engulf, 84. organelle

85. re_____l truck *n.* the act of taking something away or off from a particular place
86. pathogenic mi_____e *n.* a tiny living thing that can only be seen with a microscope and that may cause disease
87. a dy_____c market *adj.* having a lot of energy, ideas, and enthusiasm, and a strong personality; of or relating to dynamics (= the branch of physics and engineering concerned with the forces that cause motions of bodies)
88. tr_____er power *v.* to move, pass, or change from one person, place, or situation to another
89. destruction of human em____os *n.* an animal organism in the early stages of growth, either in its mother's womb or in an egg, or a plant that is developing in a seed
90. app_____ely 3 feet long *adv.* close to a specific number or time but not exactly that number or time
91. the end of chr_____me *n.* a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like
92. g__e cloning *n.* the fundamental unit of heredity and the sequence of nucleotides in DNA that codes for the creation of RNA or protein.
93. drug met_____te *n.* a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions

ANSWERS: 85. removal, 86. microbe, 87. dynamic, 88. transfer, 89. embryo, 90. approximately, 91. chromosome, 92. gene, 93. metabolite

94. a sex chr_____me *n.* a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like
95. di___e money equally *v.* to separate or cause to separate into parts or groups
96. chaotic env_____nt *n.* the natural world such as air, water, and land in which humans, animals, and plants live
97. co_____e chemically with another substance *v.* to join or merge to form a single thing or group
98. es_____al amino acid *adj.* indispensable; fundamental
99. di_____ve the sugar *v.* to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss
100. ox_____ad parasite *n.* a type of single-celled organism that is found in aquatic environments and is characterized by its use of flagella to move around and capture prey
101. fu___s infection *n.* a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive
102. met_____te concentration *n.* a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions
103. man with a low sp___m count *n.* the reproductive cell produced by a man or male animal

ANSWERS: 94. chromosome, 95. divide, 96. environment, 97. combine, 98. essential, 99. dissolve, 100. oxymonad, 101. fungus, 102. metabolite, 103. sperm

114. access to public tr_____rt *n.* a system for moving people or products from one location to another using automobiles, roads, and so on
115. hu_____g sound *adj.* producing a continuous, low, vibrating sound like that of the bee
116. dental tartar re_____l *n.* the act of taking something away or off from a particular place
117. v__y directly with the price *v.* to become different in terms of size, shape, etc.
118. several varieties of cu_____ers *n.* a long and green fruit with thin skin and crisp, refreshing flesh, typically eaten as a vegetable
119. the con_____on of the good *n.* a general idea or belief of what something or someone is like or should be; an understanding of a situation or a principle
120. co_____ve of an idea *v.* to have or develop an idea, a plan, etc. in mind; to become pregnant
121. an_____or language *n.* a person from whom one is descended; a forefather
122. financial ind_____nce *n.* freedom from another's or others' control or influence
123. travel des_____on *n.* the place to which someone or something is going or being sent; the ultimate purpose or goal of a journey or action
124. sl_____ly alkaline soils *adv.* in a small degree or extent; a little
125. take several inputs sim_____sly *adv.* at the same time

ANSWERS: 114. transport, 115. humming, 116. removal, 117. vary, 118. cucumber, 119. conception, 120. conceive, 121. ancestor, 122. independence, 123. destination, 124. slightly, 125. simultaneously

126. fe_____ze the female egg *v.* to cause an egg, female animal, or plant to develop by joining sperm from the male with them; to add a natural or chemical substance to land to make plants grow well
127. make a fa___y diagnosis *adj.* having a defect or flaw that affects performance or operation
128. tr_____rt facilities *n.* a system for moving people or products from one location to another using automobiles, roads, and so on
129. dif_____ate a function *v.* to recognize or establish as being distinct; to distinguish between things that are compared; to calculate a derivative
130. v__y according to the age *v.* to become different in terms of size, shape, etc.
131. d__y authority *v.* to challenge or dare someone to do something; to resist or disobey a rule, decision, etc.
132. ind_____nce ceremony *n.* freedom from another's or others' control or influence
133. se_____te cream from milk *v.* to force, take, or pull apart; mark as different
134. de___e centigrade *n.* a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment
135. mon_____des worm *n.* a genus of parasitic single-celled organisms that are typically found in the intestines of various animals

ANSWERS: 126. fertilize, 127. faulty, 128. transport, 129. differentiate, 130. vary, 131. defy, 132. independence, 133. separate, 134. degree, 135. monocercomonoides

136. a primitive ma___l

n. any animal of which the female gives birth to live young, not eggs, and feeds her young on milk from her own body

ANSWERS: 136. mammal

Session 3: Fill in the Blanks

1. The unique morphology of the _____ has puzzled scientists for decades.
n. a type of single-celled organism that is found in aquatic environments and is characterized by its use of flagella to move around and capture prey
2. This trail takes _____ 2.5 hours.
adv. close to a specific number or time but not exactly that number or time
3. Later, his claim was found to be _____ false.
adv. completely
4. The fire quickly _____ the entire building.
v. to swallow up; to surround and cover completely
5. The mystery _____ as the detectives gathered more clues.
v. to open up or spread out something that is folded or rolled up; to reveal or disclose something that was previously hidden or unknown
6. The _____ bike ride was fun for the couple to enjoy together.
n. a device or arrangement that allows two or more things to be connected or work together in a coordinated manner; a bicycle built for two people to ride in a line, with one behind the other
7. They needed further _____ to perform their duties efficiently.
n. detailed direction, order, etc., on how to do or use something
8. The researcher separated the nervous _____ for microscopic examinations.
n. an ensemble of similar cells of the animal or plant that together carry out a specific function

ANSWERS: 1. oxymonad, 2. approximately, 3. entirely, 4. engulfed, 5. unfolded, 6. tandem, 7. instruction, 8. tissue

9. Certain types of _____ can be toxic to humans, causing severe illness if ingested.
- n.* a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive
10. A defective _____ is responsible for the disease.
- n.* the fundamental unit of heredity and the sequence of nucleotides in DNA that codes for the creation of RNA or protein.
11. Membranes bind these _____ together.
- n.* a specialized subunit, usually within a cell, that has a specific function
12. The _____ for applying for a visa can be lengthy and complicated.
- n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products
13. _____ organisms are composed of many specialized cells working together.
- adj.* characterized by the presence of multiple or many cells, as opposed to unicellular (having only one cell)
14. After his death, his sons _____ his business.
- v.* to receive money, property, or a title from someone after they have died
15. We have finally lost our last _____.
- n.* a piece of wood, metal, etc., placed beneath or against something to support it or keep it in position; a system, institution, or person that gives help or support to someone or something

ANSWERS: 9. fungus, 10. gene, 11. organelles, 12. process, 13. Multicellular, 14. inherited, 15. prop

16. All the books in this section _____ to the library's rare collection and must be handled carefully.
- v.* to be the property of someone or something; to be a member or part of a group; to be in the proper or appropriate place
17. To find drunk drivers, police conduct _____ tests.
- adj.* made, done, or happening without method, conscious decision, or any regular pattern
18. Our latest project is still at the _____ stage.
- n.* an animal organism in the early stages of growth, either in its mother's womb or in an egg, or a plant that is developing in a seed
19. Enhanced rail _____ is crucial for our business.
- n.* a system for moving people or products from one location to another using automobiles, roads, and so on
20. Hydrogen and oxygen _____ to form water.
- v.* to join or merge to form a single thing or group
21. The group decided to _____ up the tasks evenly for the project.
- v.* to divide or distribute something, often something that is shared or pooled among a group of people
22. The liver _____ levels were higher than usual.
- n.* a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions
23. Eyeless fish _____ in dark caves.
- v.* to develop gradually, or to cause the development of something or someone gradually

ANSWERS: 16. belong, 17. random, 18. embryo, 19. transportation, 20. combine, 21. divvy, 22. metabolite, 23. evolved

24. Marine _____ populations are declining worldwide due to ocean pollution.
n. any animal of which the female gives birth to live young, not eggs, and feeds her young on milk from her own body
25. 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
26. The new CEO is the _____ of the former CEO.
n. a person who held a position or office before the current holder
27. We must _____ a new system to streamline our workflow and increase efficiency.
v. to grow or expand; to improve or refine through a process of progress and refinement, often to achieve greater sophistication or complexity; to elaborate or add detail to something that is in the process of being created
28. Trial and error is an _____ part of education.
adj. indispensable; fundamental
29. The _____ of the statue caused much controversy in the community.
n. the act of taking something away or off from a particular place
30. _____ the text from Italian into English.
v. to convert or change words into another language
31. I like to slice _____ and put it on my sandwiches.
n. a long and green fruit with thin skin and crisp, refreshing flesh, typically eaten as a vegetable

ANSWERS: 24. mammal, 25. molecule, 26. predecessor, 27. develop, 28. essential, 29. removal, 30. Translate, 31. cucumber

32. The passenger grabbed for the _____ mask.
n. the chemical element with the symbol O that is present in air and water and is necessary for people, animals, and plants to live
33. Human females normally have two X _____.
n. a long and string-like DNA molecule containing the part or all of the genetic material of an organism that controls what an animal or plant is like
34. 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
35. The project's _____ made it difficult for the team to complete it on time.
n. the state or quality of being complicated or intricate and difficult to understand
36. I can't _____ he'd want to harm us.
v. to have or develop an idea, a plan, etc. in mind; to become pregnant
37. The political party _____ after much internal fighting.
v. to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss
38. I am excited to reach my _____ and explore the new city finally.
n. the place to which someone or something is going or being sent; the ultimate purpose or goal of a journey or action
39. The _____ of the bees filled the air as she walked through the garden.
adj. producing a continuous, low, vibrating sound like that of the bee

ANSWERS: 32. oxygen, 33. chromosomes, 34. genome, 35. complexity, 36. conceive, 37. dissolved, 38. destination, 39. humming

40. Maximum heart rates _____ a lot for each individual.

v. to become different in terms of size, shape, etc.

41. The couple decided to use the non-husband sperm to _____ a wife.

v. to cause an egg, female animal, or plant to develop by joining sperm from the male with them; to add a natural or chemical substance to land to make plants grow well

42. He moved his body _____ to the left.

adv. in a small degree or extent; a little

43. The life cycle of _____ involves multiple hosts, including snails and fish.

n. a genus of parasitic single-celled organisms that are typically found in the intestines of various animals

44. The teacher asked the students to _____ between the two similar species of birds.

v. to recognize or establish as being distinct; to distinguish between things that are compared; to calculate a derivative

45. The two friends were _____ and did everything together.

adj. incapable of being separated or disjoined; closely welded or joined together; mutually dependent or closely linked

46. Can you _____ 123321 by eleven?

v. to separate or cause to separate into parts or groups

47. He approved their requests to _____ the jury.

v. to take temporary possession of someone's property until a debt is paid.

ANSWERS: 40. vary, 41. fertilize, 42. slightly, 43. monocercomonoides, 44. differentiate, 45. inseparable, 46. divide, 47. sequester

48. She _____ the money from her savings account to her checking account.
v. to move, pass, or change from one person, place, or situation to another
49. _____ 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
50. There is a lot of _____ in the colors of flowers in the garden.
n. the act or state of changing; a difference or change in the way something is done, made or said
51. Every human is responsible for taking care of the Earth's _____.
n. the natural world such as air, water, and land in which humans, animals, and plants live
52. We must manage to _____ our expenditure.
v. to control something, especially by means of rules or laws
53. _____ 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
54. The _____ wiring caused a power outage.
adj. having a defect or flaw that affects performance or operation
55. I want to _____ my sadness into strength.
v. to have a talk with someone; (adjective) reversed in order, relation, or action

ANSWERS: 48. transferred, 49. Microbes, 50. variation, 51. environment, 52. regulate, 53. Mitochondria, 54. faulty, 55. convert

56. Two students answered the teacher's question _____.

adv. at the same time

57. The sprinter has a _____ way of running.

adj. having a lot of energy, ideas, and enthusiasm, and a strong personality; of or relating to dynamics (= the branch of physics and engineering concerned with the forces that cause motions of bodies)

58. She received her _____ in psychology from the university.

n. a unit of measurement for angles, temperature, or level of proficiency or achievement; a rank or level of academic or professional attainment

59. He has a short _____.

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

60. There is nothing more valuable than _____ and freedom.

n. freedom from another's or others' control or influence

61. My remote _____ immigrated to the United States from Ireland in the 1800s.

n. a person from whom one is descended; a forefather

62. The hunter's approach _____ the geese.

v. to cause to separate and go in different directions

63. We need to _____ the aspect of his personality from the part of his competence when making an investment decision.

v. to force, take, or pull apart; mark as different

ANSWERS: 56. simultaneously, 57. dynamic, 58. degree, 59. fuse, 60. independence, 61. ancestor, 62. scattered, 63. separate

64. The investigation _____ several government agencies and is expected to take several months.
- v.* to include or affect someone or something as a necessary part of something else
65. I have no _____ of what you intend.
- n.* a general idea or belief of what something or someone is like or should be; an understanding of a situation or a principle
66. The male _____ fertilizes the female egg.
- n.* the reproductive cell produced by a man or male animal
67. He imposed a _____ on the project.
- n.* a series of events arranged in chronological order and displayed along a line, usually drawn left to right or top to bottom
68. She tried to _____ her parents by moving to the city against their wishes.
- v.* to challenge or dare someone to do something; to resist or disobey a rule, decision, etc.

ANSWERS: 64. involves, 65. conception, 66. sperm, 67. timeline, 68. defy