

# Englist.me



## Vocabulary Builder Reference from...

*Michael Middlebrooks: The fantastically weird world of photosynthetic sea slugs | TED Talk*

[https://www.ted.com/talks/michael\\_middlebrooks\\_the\\_fantastically\\_weird\\_world\\_of\\_photosynthetic\\_sea\\_slugs](https://www.ted.com/talks/michael_middlebrooks_the_fantastically_weird_world_of_photosynthetic_sea_slugs)

### Advanced Words Only

#### IMPORTANT

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## Session 1: Word List

### slug

*n.* a common name for any terrestrial gastropod mollusk that appears to lack a shell with soft and black or brown color; a bullet, a shot of alcoholic drink

(1) lazy **slug**, (2) reduce **slug** damage

I spotted a giant **slug** in the rain garden.

### invertebrate

*n.* a class of animals that do not have a backbone; they include insects, worms, and mollusks

*synonym*: animal, mollusk, worm

(1) **invertebrate** species, (2) study of **invertebrates**

Many species of marine **invertebrates**, such as corals and sponges, are important components of ocean ecosystems.

### zoology

*n.* the scientific study of animals, including their classification, habits, behavior, physiology, and evolution

*synonym*: animal science, biology, zoography

(1) **zoology** book, (2) **zoology** professor

She's studying **zoology** at university and hopes to work at a zoo someday.

### clam

*n.* a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness

(1) giant **clam**, (2) shuck a **clam**

The **clam** digs through the sand to a significant depth.

## sponge

*n.* a soft material with many microscopic pores that can absorb a large amount of liquid and is used for washing and cleaning

(1) sea **sponge**, (2) metallic **sponge**

The tiny marine **sponge** has existed for more than 500 million years.

## photosynthesis

*n.* the process through which plants and other organisms transform light energy into chemical energy, which is then released through cellular respiration to power the organism's activities.

(1) oxygenic **photosynthesis**, (2) process of **photosynthesis**

In **photosynthesis**, plants use carbon dioxide to feed themselves.

## symbiosis

*n.* a close, prolonged association between two or more different species of organisms, typically to the advantage of all

*synonym*: cooperation, interdependence, mutualism

(1) industrial **symbiosis**, (2) **symbiosis** establishment

The **symbiosis** between the coral and the algae is an important example of mutualism.

## algae

*n.* A simple plant that grows in or near water and lacks typical leaves and roots

(1) **algae** biofuel, (2) blue **algae**

**Algae** has jammed the inlet to the water turbine.

## zooxanthella

*n.* a type of single-celled algae that lives in a mutualistic association with various marine animals, particularly coral

*synonym*: photobiont, dinoflagellate, symbiont

(1) **zooxanthella** symbiosis, (2) **zooxanthella** algae

The relationship between corals and **zooxanthellae** is essential for the survival of both organisms.

### flatworm

*n.* a type of simple, soft-bodied invertebrate animal with a flat, ribbon-like shape, including tapeworms and planarians

*synonym*: tapeworm, planarian, platyhelminthe

(1) **flatworm** regeneration, (2) parasitic **flatworm**

Some **flatworm** species are capable of asexual reproduction, allowing them to colonize new environments rapidly.

### anemone

*n.* a type of flowering plant that has bright, showy flowers and typically blooms in the spring; a marine creature that resembles flowers but has oral rings of tentacles

*synonym*: flower, blossom

(1) **anemone** flower, (2) European **anemone**

The beautiful **anemones** swayed gently in the ocean current.

### jellyfish

*n.* a marine creature with a soft, jelly-like body and tentacles for stinging

*synonym*: medusa, sea nettle, moon jelly

(1) spineless **jellyfish**, (2) **jellyfish** sting

The beach was filled with hundreds of **jellyfish**, so swimming was not recommended.

### mangrove

*n.* a tropical coastal tree or shrub that grows in saline soil and has prop roots that help to stabilize it

(1) **mangrove** forest, (2) **mangrove** swamp

The **mangrove** trees are known for their ability to survive in saltwater and sandy soil.

### tentacle

*n.* a flexible, mobile, and long arm-like organ used for feeling and holding things, catching food, or moving

(1) a squid's **tentacle**, (2) posterior **tentacle**

The police caught the fugitive criminal in the **tentacles** of an expanded investigation.

## micrograph

*n.* a photograph or image that has been taken through a microscope or magnifying lens, typically used for scientific or medical purposes

*synonym* : microphotograph

(1) **micrograph** image, (2) high-resolution **micrograph**

The **micrograph** of the cell shows detailed structures that the naked eye cannot see.

## 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.

## mollusk

*n.* a soft-bodied invertebrate with no internal skeleton, such as a snail, clam, or octopus

*synonym* : oyster, clam, snail

(1) **mollusk** shell, (2) edible **mollusk**

As a child, I loved collecting seashells and had many **mollusks**.

## snail

*n.* a slow-moving mollusk with a spiral shell that it uses to protect its body

*synonym* : escargot, slug, whelk

(1) **snail** mail, (2) **snail** pace

The gardener found a **snail** slowly making its way through the lettuce patch.

## octopus

*n.* a sea creature with a soft round body and eight long tentacles (= long parts like arms)

*synonym* : devilfish

(1) giant **octopus**, (2) venomous **octopus**

He experienced nausea after eating live **octopus**.

## arthropod

*n.* a type of invertebrate animal with a segmented body, jointed limbs, and an exoskeleton, including insects,

spiders, crustaceans, and centipedes

*synonym* : insect, crustacean, spider

(1) **arthropod** exoskeleton, (2) small **arthropod**

The classification of **arthropods** is constantly evolving as new species are discovered, and genetic studies provide new insights into their evolutionary relationships.

## colossal

*adj.* extremely large and impressive

*synonym* : gigantic, huge, enormous

(1) **colossal** statue, (2) a **colossal** success

The new building is truly **colossal**, towering over the surrounding buildings.

## symbiotic

*adj.* involving two varieties of animal or plant, each of which supplies the conditions for the other to exist

(1) **symbiotic** economy, (2) **symbiotic** bacteria

We have a mutually **symbiotic** connection with them.

## overharvested

*adj.* referring to a natural resource, particularly a plant or animal, that has been harvested or collected beyond its sustainable capacity

*synonym* : overexploited, overfished, depleted

(1) **overharvested** fish, (2) **overharvested** forest

Many fish populations have been severely **overharvested**, leading to a decline in their numbers.

## gastropod

*n.* a class of mollusk that typically have a coiled or spiral shell, including snails, slugs, and whelks

*synonym* : snail, slug, whelk

(1) terrestrial **gastropod**, (2) marine **gastropod**

Humans have used the shells of **gastropods** for thousands of years as tools, ornaments, and currency.

## seashell

*n.* a type of shell that once housed a mollusk, typically found on beaches or in shallow water

*synonym* : shell, conch, bivalve

(1) **seashell** ornament, (2) a fossil **seashell**

I love collecting **seashells** on the beach and displaying them in a jar at home.

## venomous

*adj.* extremely poisonous or injurious; containing or producing venom; marked by deep ill will

*synonym*: poisonous, toxic, lethal

(1) the **venomous** jellyfish's sting, (2) have **venomous** eyes

The **venomous** snake bit him, causing him to go into shock.

## 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.

## venom

*n.* a toxic substance produced by an animal, typically a snake or insect, and injected into prey or an enemy by biting or stinging

*synonym*: poison, toxin, hating

(1) the **venom** of a lizard, (2) injected **venom**

The snake's **venom** is highly toxic and can be fatal to humans.

## hare

*n.* a fast-running mammal with long ears and a short tail that closely resembles a rabbit but is larger and has longer hind legs

*synonym*: rabbit, bunny, lapin

(1) **hare** hunting, (2) brown **hare**

The farmer noticed a group of **hares** had been eating his vegetables, so he put up a fence to keep them out.

## pulmonate

*n.* a type of mollusk with a lung-like breathing organ found commonly in freshwater and terrestrial habitats

*synonym* : lunged snail, air-breathing snail

(1) **pulmonate** snail, (2) lunged **pulmonate**

Many **pulmonate** species are important in soil ecology, where they help to break down organic matter and recycle nutrients.

## displeasure

*n.* the state of being annoyed or unhappy with someone or something

*synonym* : dissatisfaction, unhappiness, discontent

(1) incur **displeasure**, (2) **displeasure** with a ruling

The boss's **displeasure** was evident when he slammed the door on his way out.

## nudibranch

*n.* a marine gastropod mollusk without a shell and with conspicuous or brightly colored gills found typically in warm seas

*synonym* : nudi, sea slug, naked slug

(1) **nudibranch** species, (2) colorful **nudibranch**

The diet of **nudibranchs** often consists of small invertebrates such as sea anemones, hydroids, and sponges.

## gill

*n.* a respiratory organ of fish and some other aquatic animals that extracts dissolved oxygen from water and excretes carbon dioxide

*synonym* : respiratory organ, lung

(1) **gill** slits, (2) **gill** apparatus

The fish's **gills** are necessary for extracting oxygen from the water.

## feathery

*adj.* having or resembling the soft and delicate feathers of a bird, typically in texture or appearance

*synonym* : fluffy, plumed, downy

(1) **feathery** fronds, (2) delicate **feathery**

The **feathery** leaves of the plant gently swayed in the breeze.

## tuft

*n.* a small cluster or clump of something, typically hair, grass, or feathers, that stands upright and apart from the

surrounding material

*synonym* : clump, bunch, cluster

(1) capillary **tuft**, (2) **tuft** of grass

The **tuft** of hair on the cat's head stood straight in alarm.

## **carnivore**

*n.* an animal that primarily eats meat as opposed to plant matter

*synonym* : predator, meat-eater, hunter

(1) **carnivore** diet, (2) hungry **carnivore**

A lion is a typical **carnivore**, as they mainly eat meat.

## **sting**

*v.* to cause a sharp, painful sensation or injury with a poison, venom, or other substance or by a physical action such as a bite or prick

*synonym* : bite, prick, poke

(1) **sting** me on the arm, (2) **sting** his face

Bees **sting** as a defense mechanism when they feel threatened.

## **sacoglossan**

*n.* a type of sea slug that feeds by piercing and sucking out the contents of sac-shaped algae and often has a green color resulting from photosynthetic pigments in their tissues

*synonym* : sap-sucking slug, ascoglossa

(1) **sacoglossan** feeding, (2) sea slug **sacoglossan**

Many **sacoglossan** species are brightly colored, which can warn predators that they are toxic or unpalatable.

## **camouflage**

*n.* an outward appearance that conceals the underlying essence of something; the way of concealing troops or military equipment so they cannot be seen against the surrounding environment

*synonym* : guise, mask, cloak

(1) **camouflage** clothing, (2) work as **camouflage**

They utilized branches of trees as **camouflage**.



## herbivore

*n.* an animal that eats only plants, such as a cow or a deer  
*synonym* : plant-eater, browser, graminivore

(1) **herbivore** diet, (2) **herbivore** animals

A giraffe is an **herbivore** that primarily eats leaves and twigs.

## poke

*v.* to push or prod with a sharp object or the finger  
*synonym* : prod, jab, push

(1) **poke** around the desk, (2) **poke** a fire

They **poked** fun at each other's jokes, laughing and teasing.

## slurp

*v.* to eat, drink, or consume with a loud or messy sucking noise; to make a loud or messy sucking noise while eating, drinking, or consuming

*synonym* : sip, gulp, drink noisily

(1) **slurp** tea, (2) **slurp** noodles

The child couldn't resist **slurping** her soup loudly at the dinner table.

## chloroplast

*n.* a type of membrane-bound organelle that conducts photosynthesis in plant and algal cells.

(1) **chloroplast** DNA, (2) **chloroplast** protein

**Chloroplast** membranes are incredibly vulnerable to damage by oxygen radicals produced as a byproduct of photochemistry.

## 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.

## kleptoplasty

*n.* the ability of some animals to "steal" chloroplasts from other organisms and incorporate them into their bodies, allowing them to photosynthesize like plants

*synonym* : chloroplast symbiosis, plastid capture

(1) **kleptoplasty** process, (2) **kleptoplasty** organism

The sea slug *Elysia chlorotica* is known for its **kleptoplasty**

ability to steal chloroplasts from algae and use them for photosynthesis.

## plasty

*n.* a surgical procedure that involves the shaping or molding of tissue or bone, particularly for reconstructive purposes

*synonym*: reconstruction, restoration, remodeling

(1) nasal **plasty**, (2) rhino- **plasty** operation

Patients with Crohn's disease who have developed narrowings in their small intestines may benefit from a stricture **plasty**.

## digestive

*adj.* relating to or capable of causing or promoting digestion of food

(1) **digestive** juices, (2) a **digestive** enzyme

A nutritious diet improves **digestive** functions.

## sac

*n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant

*synonym*: bag, pouch, knapsack

(1) **sac** contents, (2) abdominal **sac**

I placed my valuables in the **sac** before heading out on my hike.

## unravel

*v.* undo twisted, knitted, or woven threads by separating it

*synonym*: separate, unknot, ravel

(1) **unravel** a knit, (2) **unravel** a plot

Detectives are still attempting to **unravel** the mystery of his death.

## emerald

*adj.* having a deep, rich green color, like that of an emerald gemstone

*synonym*: green, verdant, jade

(1) an **emerald** gem, (2) **emerald** ring

The **emerald** green dress caught everyone's eye at the party.

## lettuce

*n.* a leafy vegetable that is often used as a base for salads or sandwiches; it has green leaves and a mild flavor

*synonym*: greens, salad, cress

(1) crisp **lettuce**, (2) wilted **lettuce**

I want a sandwich with extra **lettuce**, please.

## chlorophyll

*n.* any of a group of green pigments found in photosynthetic organisms

(1) **chlorophyll** pigment, (2) bacterial **chlorophyll**

**Chlorophyll** utilizes sunlight to create sugars.

## biochemical

*adj.* relating to the chemical processes and substances that occur within living organisms

*synonym*: molecular, biological

(1) **biochemical** reaction, (2) complex **biochemical**

**Biochemical** research is essential to understanding the complex chemical reactions in living organisms.

## Session 2: Spelling

1. terrestrial ga\_\_\_\_\_od *n.* a class of mollusk that typically have a coiled or spiral shell, including snails, slugs, and whelks
2. em\_\_\_\_\_d ring *adj.* having a deep, rich green color, like that of an emerald gemstone
3. injected ve\_\_m *n.* a toxic substance produced by an animal, typically a snake or insect, and injected into prey or an enemy by biting or stinging
4. capillary t\_\_t *n.* a small cluster or clump of something, typically hair, grass, or feathers, that stands upright and apart from the surrounding material
5. marine ga\_\_\_\_\_od *n.* a class of mollusk that typically have a coiled or spiral shell, including snails, slugs, and whelks
6. kle\_\_\_\_\_sty organism *n.* the ability of some animals to "steal" chloroplasts from other organisms and incorporate them into their bodies, allowing them to photosynthesize like plants
7. work as cam\_\_\_\_\_ge *n.* an outward appearance that conceals the underlying essence of something; the way of concealing troops or military equipment so they cannot be seen against the surrounding environment
8. process of pho\_\_\_\_\_sis *n.* the process through which plants and other organisms transform light energy into chemical energy, which is then released through cellular respiration to power the organism's activities.

ANSWERS: 1. gastropod, 2. emerald, 3. venom, 4. tuft, 5. gastropod, 6. kleptoplasty, 7. camouflage, 8. photosynthesis

9. crisp le\_\_\_\_e *n.* a leafy vegetable that is often used as a base for salads or sandwiches; it has green leaves and a mild flavor
10. s\_c contents *n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant
11. parasitic fl\_\_\_\_rm *n.* a type of simple, soft-bodied invertebrate animal with a flat, ribbon-like shape, including tapeworms and planarians
12. colorful nud\_\_\_\_ch *n.* a marine gastropod mollusk without a shell and with conspicuous or brightly colored gills found typically in warm seas
13. di\_\_\_\_ve juices *adj.* relating to or capable of causing or promoting digestion of food
14. sn\_\_l mail *n.* a slow-moving mollusk with a spiral shell that it uses to protect its body
15. industrial sy\_\_\_\_is *n.* a close, prolonged association between two or more different species of organisms, typically to the advantage of all
16. fl\_\_\_\_rm regeneration *n.* a type of simple, soft-bodied invertebrate animal with a flat, ribbon-like shape, including tapeworms and planarians
17. he\_\_\_\_re diet *n.* an animal that eats only plants, such as a cow or a deer

ANSWERS: 9. lettuce, 10. sac, 11. flatworm, 12. nudibranch, 13. digestive, 14. snail, 15. symbiosis, 16. flatworm, 17. herbivore

18. have ve\_\_\_\_\_us eyes      *adj.* extremely poisonous or injurious; containing or producing venom; marked by deep ill will
19. zoo\_\_\_\_\_lla algae      *n.* a type of single-celled algae that lives in a mutualistic association with various marine animals, particularly coral
20. nud\_\_\_\_\_ch species      *n.* a marine gastropod mollusk without a shell and with conspicuous or brightly colored gills found typically in warm seas
21. sea slug sac\_\_\_\_\_an      *n.* a type of sea slug that feeds by piercing and sucking out the contents of sac-shaped algae and often has a green color resulting from photosynthetic pigments in their tissues
22. co\_\_\_\_\_al statue      *adj.* extremely large and impressive
23. mo\_\_\_\_\_k shell      *n.* a soft-bodied invertebrate with no internal skeleton, such as a snail, clam, or octopus
24. sy\_\_\_\_\_is establishment      *n.* a close, prolonged association between two or more different species of organisms, typically to the advantage of all
25. st\_\_g me on the arm      *v.* to cause a sharp, painful sensation or injury with a poison, venom, or other substance or by a physical action such as a bite or prick
26. a co\_\_\_\_\_al success      *adj.* extremely large and impressive
27. wilted le\_\_\_\_\_e      *n.* a leafy vegetable that is often used as a base for salads or sandwiches; it has green leaves and a mild flavor

ANSWERS: 18. venomous, 19. zooxanthella, 20. nudibranch, 21. sacoglossan, 22. colossal, 23. mollusk, 24. symbiosis, 25. sting, 26. colossal, 27. lettuce

28. chl\_\_\_\_\_st protein *n.* a type of membrane-bound organelle that conducts photosynthesis in plant and algal cells.
29. ca\_\_\_\_\_re diet *n.* an animal that primarily eats meat as opposed to plant matter
30. chl\_\_\_\_\_ll pigment *n.* any of a group of green pigments found in photosynthetic organisms
31. spineless je\_\_\_\_\_sh *n.* a marine creature with a soft, jelly-like body and tentacles for stinging
32. or\_\_\_\_\_le protein *n.* a specialized subunit, usually within a cell, that has a specific function
33. fe\_\_\_\_\_ry fronds *adj.* having or resembling the soft and delicate feathers of a bird, typically in texture or appearance
34. sn\_\_l pace *n.* a slow-moving mollusk with a spiral shell that it uses to protect its body
35. sy\_\_\_\_\_ic economy *adj.* involving two varieties of animal or plant, each of which supplies the conditions for the other to exist
36. ma\_\_\_\_\_ve swamp *n.* a tropical coastal tree or shrub that grows in saline soil and has prop roots that help to stabilize it
37. reduce s\_\_g damage *n.* a common name for any terrestrial gastropod mollusk that appears to lack a shell with soft and black or brown color; a bullet, a shot of alcoholic drink
38. abdominal s\_c *n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant

ANSWERS: 28. chloroplast, 29. carnivore, 30. chlorophyll, 31. jellyfish, 32. organelle, 33. feathery, 34. snail, 35. symbiotic, 36. mangrove, 37. slug, 38. sac

39. g\_\_l slits *n.* a respiratory organ of fish and some other aquatic animals that extracts dissolved oxygen from water and excretes carbon dioxide
40. sy\_\_\_\_\_ic bacteria *adj.* involving two varieties of animal or plant, each of which supplies the conditions for the other to exist
41. an\_\_\_\_\_e flower *n.* a type of flowering plant that has bright, showy flowers and typically blooms in the spring; a marine creature that resembles flowers but has oral rings of tentacles
42. h\_\_e hunting *n.* a fast-running mammal with long ears and a short tail that closely resembles a rabbit but is larger and has longer hind legs
43. venomous oc\_\_\_\_\_s *n.* a sea creature with a soft round body and eight long tentacles (= long parts like arms)
44. giant oc\_\_\_\_\_s *n.* a sea creature with a soft round body and eight long tentacles (= long parts like arms)
45. edible mo\_\_\_\_\_k *n.* a soft-bodied invertebrate with no internal skeleton, such as a snail, clam, or octopus
46. blue al\_\_e *n.* A simple plant that grows in or near water and lacks typical leaves and roots
47. al\_\_e biofuel *n.* A simple plant that grows in or near water and lacks typical leaves and roots

ANSWERS: 39. gill, 40. symbiotic, 41. anemone, 42. hare, 43. octopus, 44. octopus, 45. mollusk, 46. algae, 47. algae



48. shuck a c\_\_m *n.* a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness
49. zo\_\_\_\_y book *n.* the scientific study of animals, including their classification, habits, behavior, physiology, and evolution
50. mic\_\_\_\_ic inquiry *adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
51. a fossil se\_\_\_\_ll *n.* a type of shell that once housed a mollusk, typically found on beaches or in shallow water
52. small ar\_\_\_\_od *n.* a type of invertebrate animal with a segmented body, jointed limbs, and an exoskeleton, including insects, spiders, crustaceans, and centipedes
53. p\_\_e a fire *v.* to push or prod with a sharp object or the finger
54. nasal pl\_\_\_\_y *n.* a surgical procedure that involves the shaping or molding of tissue or bone, particularly for reconstructive purposes
55. chl\_\_\_\_st DNA *n.* a type of membrane-bound organelle that conducts photosynthesis in plant and algal cells.
56. mic\_\_\_\_ic analysis *adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
57. pu\_\_\_\_te snail *n.* a type of mollusk with a lung-like breathing organ found commonly in freshwater and terrestrial habitats
58. ove\_\_\_\_ted forest *adj.* referring to a natural resource, particularly a plant or animal, that has been harvested or collected beyond its sustainable capacity

ANSWERS: 48. clam, 49. zoology, 50. microscopic, 51. seashell, 52. arthropod, 53. poke, 54. plasty, 55. chloroplast, 56. microscopic, 57. pulmonate, 58. overharvested

59. bio\_\_\_\_\_al assay *adj.* relating to the application of the natural sciences, especially biology, and physiology, to clinical medicine and healthcare
60. zo\_\_\_\_\_y professor *n.* the scientific study of animals, including their classification, habits, behavior, physiology, and evolution
61. a di\_\_\_\_\_ve enzyme *adj.* relating to or capable of causing or promoting digestion of food
62. ar\_\_\_\_\_od exoskeleton *n.* a type of invertebrate animal with a segmented body, jointed limbs, and an exoskeleton, including insects, spiders, crustaceans, and centipedes
63. complex bio\_\_\_\_\_al *adj.* relating to the chemical processes and substances that occur within living organisms
64. hungry ca\_\_\_\_\_re *n.* an animal that primarily eats meat as opposed to plant matter
65. he\_\_\_\_\_re animals *n.* an animal that eats only plants, such as a cow or a deer
66. bio\_\_\_\_\_al reaction *adj.* relating to the chemical processes and substances that occur within living organisms
67. oxygenic pho\_\_\_\_\_sis *n.* the process through which plants and other organisms transform light energy into chemical energy, which is then released through cellular respiration to power the organism's activities.
68. the ve\_\_\_\_\_us jellyfish's sting *adj.* extremely poisonous or injurious; containing or producing venom; marked by deep ill will

ANSWERS: 59. biomedical, 60. zoology, 61. digestive, 62. arthropod, 63. biochemical, 64. carnivore, 65. herbivore, 66. biochemical, 67. photosynthesis, 68. venomous

69. European an\_\_\_\_e *n.* a type of flowering plant that has bright, showy flowers and typically blooms in the spring; a marine creature that resembles flowers but has oral rings of tentacles
70. posterior te\_\_\_\_le *n.* a flexible, mobile, and long arm-like organ used for feeling and holding things, catching food, or moving
71. g\_\_l apparatus *n.* a respiratory organ of fish and some other aquatic animals that extracts dissolved oxygen from water and excretes carbon dioxide
72. lazy s\_\_g *n.* a common name for any terrestrial gastropod mollusk that appears to lack a shell with soft and black or brown color; a bullet, a shot of alcoholic drink
73. inv\_\_\_\_ate species *n.* a class of animals that do not have a backbone; they include insects, worms, and mollusks
74. zoo\_\_\_\_lla symbiosis *n.* a type of single-celled algae that lives in a mutualistic association with various marine animals, particularly coral
75. sl\_\_p tea *v.* to eat, drink, or consume with a loud or messy sucking noise; to make a loud or messy sucking noise while eating, drinking, or consuming
76. p\_\_e around the desk *v.* to push or prod with a sharp object or the finger
77. giant c\_\_m *n.* a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness

ANSWERS: 69. anemone, 70. tentacle, 71. gill, 72. slug, 73. invertebrate, 74. zooxanthella, 75. slurp, 76. poke, 77. clam

78. cutting-edge bio\_\_\_\_\_al *adj.* relating to the application of the natural sciences, especially biology, and physiology, to clinical medicine and healthcare
79. sac\_\_\_\_\_an feeding *n.* a type of sea slug that feeds by piercing and sucking out the contents of sac-shaped algae and often has a green color resulting from photosynthetic pigments in their tissues
80. high-resolution mic\_\_\_\_\_ph *n.* a photograph or image that has been taken through a microscope or magnifying lens, typically used for scientific or medical purposes
81. an em\_\_\_\_\_d gem *adj.* having a deep, rich green color, like that of an emerald gemstone
82. ove\_\_\_\_\_ted fish *adj.* referring to a natural resource, particularly a plant or animal, that has been harvested or collected beyond its sustainable capacity
83. cellular or\_\_\_\_\_les *n.* a specialized subunit, usually within a cell, that has a specific function
84. un\_\_\_\_\_l a knit *v.* undo twisted, knitted, or woven threads by separating it
85. lunged pu\_\_\_\_\_te *n.* a type of mollusk with a lung-like breathing organ found commonly in freshwater and terrestrial habitats
86. brown h\_\_e *n.* a fast-running mammal with long ears and a short tail that closely resembles a rabbit but is larger and has longer hind legs

ANSWERS: 78. biomedical, 79. sacoglossan, 80. micrograph, 81. emerald, 82. overharvested, 83. organelle, 84. unravel, 85. pulmonate, 86. hare

87. ma\_\_\_\_ve forest *n.* a tropical coastal tree or shrub that grows in saline soil and has prop roots that help to stabilize it
88. a squid's te\_\_\_\_le *n.* a flexible, mobile, and long arm-like organ used for feeling and holding things, catching food, or moving
89. un\_\_\_\_l a plot *v.* undo twisted, knitted, or woven threads by separating it
90. cam\_\_\_\_ge clothing *n.* an outward appearance that conceals the underlying essence of something; the way of concealing troops or military equipment so they cannot be seen against the surrounding environment
91. t\_\_t of grass *n.* a small cluster or clump of something, typically hair, grass, or feathers, that stands upright and apart from the surrounding material
92. study of inv\_\_\_\_ates *n.* a class of animals that do not have a backbone; they include insects, worms, and mollusks
93. dis\_\_\_\_re with a ruling *n.* the state of being annoyed or unhappy with someone or something
94. metallic sp\_\_\_\_e *n.* a soft material with many microscopic pores that can absorb a large amount of liquid and is used for washing and cleaning
95. the ve\_\_m of a lizard *n.* a toxic substance produced by an animal, typically a snake or insect, and injected into prey or an enemy by biting or stinging

ANSWERS: 87. mangrove, 88. tentacle, 89. unravel, 90. camouflage, 91. tuft, 92. invertebrate, 93. displeasure, 94. sponge, 95. venom

96. delicate fe\_\_\_\_ry      *adj.* having or resembling the soft and delicate feathers of a bird, typically in texture or appearance
97. st\_\_g his face      *v.* to cause a sharp, painful sensation or injury with a poison, venom, or other substance or by a physical action such as a bite or prick
98. sl\_\_p noodles      *v.* to eat, drink, or consume with a loud or messy sucking noise; to make a loud or messy sucking noise while eating, drinking, or consuming
99. sea sp\_\_\_\_e      *n.* a soft material with many microscopic pores that can absorb a large amount of liquid and is used for washing and cleaning
100. bacterial chl\_\_\_\_ll      *n.* any of a group of green pigments found in photosynthetic organisms
101. se\_\_\_\_ll ornament      *n.* a type of shell that once housed a mollusk, typically found on beaches or in shallow water
102. je\_\_\_\_sh sting      *n.* a marine creature with a soft, jelly-like body and tentacles for stinging
103. kle\_\_\_\_sty process      *n.* the ability of some animals to "steal" chloroplasts from other organisms and incorporate them into their bodies, allowing them to photosynthesize like plants
104. mic\_\_\_\_ph image      *n.* a photograph or image that has been taken through a microscope or magnifying lens, typically used for scientific or medical purposes

ANSWERS: 96. feathery, 97. sting, 98. slurp, 99. sponge, 100. chlorophyll, 101. seashell, 102. jellyfish, 103. kleptoplasty, 104. micrograph

105. rhino-pl\_\_\_y operation

*n.* a surgical procedure that involves the shaping or molding of tissue or bone, particularly for reconstructive purposes

106. incur dis\_\_\_\_\_re

*n.* the state of being annoyed or unhappy with someone or something

ANSWERS: 105. plasty, 106. displeasure

## Session 3: Fill in the Blanks

1. The fish's \_\_\_\_\_ are necessary for extracting oxygen from the water.
  - n.* a respiratory organ of fish and some other aquatic animals that extracts dissolved oxygen from water and excretes carbon dioxide
  
2. A lion is a typical \_\_\_\_\_ as they mainly eat meat.
  - n.* an animal that primarily eats meat as opposed to plant matter
  
3. The beach was filled with hundreds of \_\_\_\_\_ so swimming was not recommended.
  - n.* a marine creature with a soft, jelly-like body and tentacles for stinging
  
4. The diet of \_\_\_\_\_ often consists of small invertebrates such as sea anemones, hydroids, and sponges.
  - n.* a marine gastropod mollusk without a shell and with conspicuous or brightly colored gills found typically in warm seas
  
5. \_\_\_\_\_ membranes are incredibly vulnerable to damage by oxygen radicals produced as a byproduct of photochemistry.
  - n.* a type of membrane-bound organelle that conducts photosynthesis in plant and algal cells.
  
6. The \_\_\_\_\_ of hair on the cat's head stood straight in alarm.
  - n.* a small cluster or clump of something, typically hair, grass, or feathers, that stands upright and apart from the surrounding material
  
7. \_\_\_\_\_ utilizes sunlight to create sugars.
  - n.* any of a group of green pigments found in photosynthetic organisms

ANSWERS: 1. gills, 2. carnivore, 3. jellyfish, 4. nudibranchs, 5. Chloroplast, 6. tuft, 7. Chlorophyll



8. The \_\_\_\_\_ snake bit him, causing him to go into shock.

*adj.* extremely poisonous or injurious; containing or producing venom; marked by deep ill will

9. Many fish populations have been severely \_\_\_\_\_ leading to a decline in their numbers.

*adj.* referring to a natural resource, particularly a plant or animal, that has been harvested or collected beyond its sustainable capacity

10. Many species of marine \_\_\_\_\_ such as corals and sponges, are important components of ocean ecosystems.

*n.* a class of animals that do not have a backbone; they include insects, worms, and mollusks

11. Membranes bind these \_\_\_\_\_ together.

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

12. The snake's \_\_\_\_\_ is highly toxic and can be fatal to humans.

*n.* a toxic substance produced by an animal, typically a snake or insect, and injected into prey or an enemy by biting or stinging

13. A nutritious diet improves \_\_\_\_\_ functions.

*adj.* relating to or capable of causing or promoting digestion of food

14. They utilized branches of trees as \_\_\_\_\_.

*n.* an outward appearance that conceals the underlying essence of something; the way of concealing troops or military equipment so they cannot be seen against the surrounding environment

15. As a child, I loved collecting seashells and had many \_\_\_\_\_.

*n.* a soft-bodied invertebrate with no internal skeleton, such as a snail, clam, or octopus

ANSWERS: 8. venomous, 9. overharvested, 10. invertebrates, 11. organelles, 12. venom, 13. digestive, 14. camouflage, 15. mollusks

16. I want a sandwich with extra \_\_\_\_\_ please.

- n.* a leafy vegetable that is often used as a base for salads or sandwiches; it has green leaves and a mild flavor

17. They \_\_\_\_\_ fun at each other's jokes, laughing and teasing.

- v.* to push or prod with a sharp object or the finger

18. She's studying \_\_\_\_\_ at university and hopes to work at a zoo someday.

- n.* the scientific study of animals, including their classification, habits, behavior, physiology, and evolution

19. \_\_\_\_\_ 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

20. I love collecting \_\_\_\_\_ on the beach and displaying them in a jar at home.

- n.* a type of shell that once housed a mollusk, typically found on beaches or in shallow water

21. Some \_\_\_\_\_ species are capable of asexual reproduction, allowing them to colonize new environments rapidly.

- n.* a type of simple, soft-bodied invertebrate animal with a flat, ribbon-like shape, including tapeworms and planarians

22. The \_\_\_\_\_ leaves of the plant gently swayed in the breeze.

- adj.* having or resembling the soft and delicate feathers of a bird, typically in texture or appearance

23. Many \_\_\_\_\_ species are brightly colored, which can warn predators that they are toxic or unpalatable.

- n.* a type of sea slug that feeds by piercing and sucking out the contents of sac-shaped algae and often has a green color resulting from photosynthetic pigments in their tissues

ANSWERS: 16. lettuce, 17. poked, 18. zoology, 19. Biomedical, 20. seashells, 21.

flatworm, 22. feathery, 23. sacoglossan

24. In \_\_\_\_\_ plants use carbon dioxide to feed themselves.
- n.* the process through which plants and other organisms transform light energy into chemical energy, which is then released through cellular respiration to power the organism's activities.
25. \_\_\_\_\_ has jammed the inlet to the water turbine.
- n.* A simple plant that grows in or near water and lacks typical leaves and roots
26. The child couldn't resist \_\_\_\_\_ her soup loudly at the dinner table.
- v.* to eat, drink, or consume with a loud or messy sucking noise; to make a loud or messy sucking noise while eating, drinking, or consuming
27. The beautiful \_\_\_\_\_ swayed gently in the ocean current.
- n.* a type of flowering plant that has bright, showy flowers and typically blooms in the spring; a marine creature that resembles flowers but has oral rings of tentacles
28. The tiny marine \_\_\_\_\_ has existed for more than 500 million years.
- n.* a soft material with many microscopic pores that can absorb a large amount of liquid and is used for washing and cleaning
29. Many \_\_\_\_\_ species are important in soil ecology, where they help to break down organic matter and recycle nutrients.
- n.* a type of mollusk with a lung-like breathing organ found commonly in freshwater and terrestrial habitats
30. Humans have used the shells of \_\_\_\_\_ for thousands of years as tools, ornaments, and currency.
- n.* a class of mollusk that typically have a coiled or spiral shell, including snails, slugs, and whelks

ANSWERS: 24. photosynthesis, 25. Algae, 26. slurping, 27. anemones, 28. sponge, 29. pulmonate, 30. gastropods

31. I spotted a giant \_\_\_\_\_ in the rain garden.
- n.* a common name for any terrestrial gastropod mollusk that appears to lack a shell with soft and black or brown color; a bullet, a shot of alcoholic drink
32. The \_\_\_\_\_ between the coral and the algae is an important example of mutualism.
- n.* a close, prolonged association between two or more different species of organisms, typically to the advantage of all
33. The boss's \_\_\_\_\_ was evident when he slammed the door on his way out.
- n.* the state of being annoyed or unhappy with someone or something
34. The sea slug *Elysia chlorotica* is known for its \_\_\_\_\_ ability to steal chloroplasts from algae and use them for photosynthesis.
- n.* the ability of some animals to "steal" chloroplasts from other organisms and incorporate them into their bodies, allowing them to photosynthesize like plants
35. The new building is truly \_\_\_\_\_ towering over the surrounding buildings.
- adj.* extremely large and impressive
36. The gardener found a \_\_\_\_\_ slowly making its way through the lettuce patch.
- n.* a slow-moving mollusk with a spiral shell that it uses to protect its body
37. The relationship between corals and \_\_\_\_\_ is essential for the survival of both organisms.
- n.* a type of single-celled algae that lives in a mutualistic association with various marine animals, particularly coral
38. I placed my valuables in the \_\_\_\_\_ before heading out on my hike.
- n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant

ANSWERS: 31. slug, 32. symbiosis, 33. displeasure, 34. kleptoplasty, 35. colossal, 36. snail, 37. zooxanthellae, 38. sac

39. He experienced nausea after eating live \_\_\_\_\_.
- n.* a sea creature with a soft round body and eight long tentacles (= long parts like arms)
40. Bees \_\_\_\_\_ as a defense mechanism when they feel threatened.
- v.* to cause a sharp, painful sensation or injury with a poison, venom, or other substance or by a physical action such as a bite or prick
41. The \_\_\_\_\_ digs through the sand to a significant depth.
- n.* a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness
42. \_\_\_\_\_ research is essential to understanding the complex chemical reactions in living organisms.
- adj.* relating to the chemical processes and substances that occur within living organisms
43. The classification of \_\_\_\_\_ is constantly evolving as new species are discovered, and genetic studies provide new insights into their evolutionary relationships.
- n.* a type of invertebrate animal with a segmented body, jointed limbs, and an exoskeleton, including insects, spiders, crustaceans, and centipedes
44. Detectives are still attempting to \_\_\_\_\_ the mystery of his death.
- v.* undo twisted, knitted, or woven threads by separating it
45. The \_\_\_\_\_ of the cell shows detailed structures that the naked eye cannot see.
- n.* a photograph or image that has been taken through a microscope or magnifying lens, typically used for scientific or medical purposes

ANSWERS: 39. octopus, 40. sting, 41. clam, 42. Biochemical, 43. arthropods, 44. unravel, 45. micrograph

46. The police caught the fugitive criminal in the \_\_\_\_\_ of an expanded investigation.
- n.* a flexible, mobile, and long arm-like organ used for feeling and holding things, catching food, or moving
47. The \_\_\_\_\_ green dress caught everyone's eye at the party.
- adj.* having a deep, rich green color, like that of an emerald gemstone
48. The farmer noticed a group of \_\_\_\_\_ had been eating his vegetables, so he put up a fence to keep them out.
- n.* a fast-running mammal with long ears and a short tail that closely resembles a rabbit but is larger and has longer hind legs
49. Inspectors noticed \_\_\_\_\_ cracks in the submarine's hull.
- adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
50. Patients with Crohn's disease who have developed narrowings in their small intestines may benefit from a stricture \_\_\_\_\_.
- n.* a surgical procedure that involves the shaping or molding of tissue or bone, particularly for reconstructive purposes
51. We have a mutually \_\_\_\_\_ connection with them.
- adj.* involving two varieties of animal or plant, each of which supplies the conditions for the other to exist
52. A giraffe is an \_\_\_\_\_ that primarily eats leaves and twigs.
- n.* an animal that eats only plants, such as a cow or a deer
53. The \_\_\_\_\_ trees are known for their ability to survive in saltwater and sandy soil.
- n.* a tropical coastal tree or shrub that grows in saline soil and has prop roots that help to stabilize it

ANSWERS: 46. tentacles, 47. emerald, 48. hares, 49. microscopic, 50. plasty, 51. symbiotic, 52. herbivore, 53. mangrove

ANSWERS: