

Name: _____

Date: _____

1. Which is required for germination of a seed?

- A. organic fertilizer
 - B. enough water to soak the seeds
 - C. other seeds of the same species
 - D. a grow light shining on the planting area
-

2. Which reproductive plant structure traps the pollen needed for fertilization?

- A. anther
 - B. ovule
 - C. petal
 - D. stigma
-

3. Which is the **best** biological definition of a flower?

- A. vascular plant
 - B. ornamental structure
 - C. vegetative plant organ
 - D. sex organ of a plant
-

4. Which is the female reproductive organ in plants?

- A. anther
 - B. filament
 - C. pistil
 - D. stamen
-

5. Which part of a flower is considered to be the female reproductive organ?

- A. anther
 - B. corolla
 - C. pistil
 - D. sepal
-

6. Which is considered to be the male part of a flower?

- A. calyx
 - B. pistil
 - C. sepal
 - D. stamen
-

Organisms (ScienceGHS GT3)

7. Where in a flower does fertilization occur?

- A. pistil
 - B. sepal
 - C. stamen
 - D. stigma
-

8.

The overall organization of the human body follows which general pattern?

- A. tissues, cells, organs, organ systems
 - B. organ systems, organs, cells, tissues
 - C. cells, tissues, organs, organ systems
 - D. cells, organs, organ systems, tissues
-

9.

Symbiosis involving a fungi and algae is seen in which of the following?

- A. moss
 - B. lichen
 - C. mildew
 - D. bread mold
-

10.

Bread molds, a type of fungi, reproduce sexually by conjugation and asexually by

- A. spores.
 - B. budding.
 - C. cloning.
 - D. meiosis.
-

11.

Binary fission is a type of asexual reproduction, and is **most** common in

- A. fungi.
- B. amoebae.
- C. vascular plants.
- D. gymnosperms.

12. Pollination characteristically occurs in which of the following?

- A. angiosperms and gymnosperms
 - B. angiosperms and slime molds
 - C. bryophytes and angiosperms
 - D. yeasts and bryophytes
-

13.

A similarity between millipedes and lobsters is that both

- A. have a notochord.
 - B. belong to the phylum Arthropoda.
 - C. reproduce both sexually and asexually.
 - D. have specialized claws for protection.
-

14.

To which phylum do earthworms and leeches belong?

- A. Annelida
 - B. Arthropoda
 - C. Protozoans
 - D. Echinodermata
-

15.

The oxygen given off by plants is a result of

- A. photosynthesis.
 - B. nitrogen reduction.
 - C. aerobic respiration.
 - D. anaerobic respiration.
-

16. Which is an example of sexual reproduction?

- A. budding
 - B. conjugation
 - C. fission
 - D. mitosis
-

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17. By what process is food moved through the digestive system?

- A. filtration
 - B. peristalsis
 - C. vascular constriction
 - D. intramural pressure
-

18. Which of these statements is true of all arthropods?

- A. They live primarily in warm environments.
 - B. They have an outer skeleton.
 - C. They have two body segments.
 - D. They reproduce both sexually and asexually.
-

19. Oyster farmers used to remove starfish from their oyster beds, chop up the starfish, and throw the pieces back in the water. Why was this a poor practice?

- A. It polluted the water.
 - B. The starfish carried parasites which infested the oysters.
 - C. The pieces could regenerate.
 - D. It upset the oxygen balance in the water.
-

20. Which of the following functions is associated with the stomach?

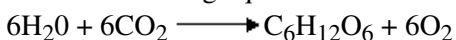
- A. bile production
 - B. acid production
 - C. insulin production
 - D. hormone production
-

21.

On which of its structures will a flower's pollen be formed?

- A. anther
 - B. ovary
 - C. pistil
 - D. petal
-

22. The following equation describes which process?



- A. reduction
 - B. oxidation
 - C. photosynthesis
 - D. cell respiration
-

23.

Which of the following are products of cellular respiration?

- A. ADP and oxygen
 - B. glucose and oxygen
 - C. ATP and carbon dioxide
 - D. oxygen and carbon dioxide
-

24. Which of the following phyla of worms are the simplest from an evolutionary standpoint?

- A. true worms
 - B. roundworms
 - C. ribbon worms
 - D. flatworms
-

25. Echinoderms, such as starfish, get their name from their

- A. way of moving.
 - B. tube feet.
 - C. water-vascular system.
 - D. spiny skin.
-

26.

Which characteristic is shared by **most** members of Insecta?

- A. hard scales which protect and camouflage
 - B. metamorphosis from larvae to adult
 - C. a two-part shell that encloses a soft body
 - D. an endoskeleton that supports internal organs
-

27. Which is an example of cloning?

- A. taking leaf cuttings from a houseplant and growing new plants from them
 - B. transferring pollen from one flower to another
 - C. conjugation of two paramecia
 - D. none of these
-

28. What is the economic impact of earthworms?

- A. Positive, because they improve the soil for agriculture.
 - B. Positive, because they are a major food source for domestic animals.
 - C. Negative, because they devour crops.
 - D. Negative, because they cause disease.
-

29. In what way are all invertebrates alike?

- A. They lack blood cells.
 - B. They lack internal backbones.
 - C. They have an exoskeleton.
 - D. They can reproduce asexually.
-

30. Insects molt so that they can

- A. eat.
 - B. reproduce.
 - C. breathe.
 - D. grow.
-

31. Earthworms are often found on the surface of the ground after a rain. Which of these statements **best** explains this fact?

- A. They are looking for food.
 - B. They are laying their eggs on the damp grass.
 - C. They can't get enough oxygen in wet soil.
 - D. They are sunning themselves to raise their body temperatures.
-

32. The mature ovary of a flower becomes the

- A. fruit.
 - B. ovules.
 - C. pollen.
 - D. sperm.
-

33. The three parts of a flowering plant's pistil are the

- A. ovary, style, and stigma.
 - B. anther, stamen, and stalk.
 - C. calyx, corolla, and pollen.
 - D. sepals, petals, and corolla.
-

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34. The parts of a flower that cover and protect the flower bud are the

- A. petals.
 - B. sepals.
 - C. stalks.
 - D. stamens.
-

35. The first stage of plant germination involves emergence of the

- A. leaf.
 - B. root.
 - C. seed.
 - D. stem.
-

36. From which part of a flower do insects pick up pollen during feeding?

- A. anther
 - B. sepal
 - C. stamen
 - D. stigma
-

37. Food for a developing seed is stored in the

- A. cotyledons.
 - B. hypocotyl.
 - C. leaves.
 - D. roots.
-

38. A condition that must occur in many types of seeds before germination can begin is

- A. aeration.
 - B. dormancy.
 - C. hibernation.
 - D. pollination.
-

39. Which is the female part of a flower?

- A. nectar
 - B. petal
 - C. pistil
 - D. pollen
-

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40. When a bee transports pollen from the anther of one flower to the stigma of another, what has occurred?

- A. cross-pollination
 - B. gametization
 - C. germination
 - D. mitosis
-

41.

Which of the following describes homeostasis?

- A. A cat chases a ball of string.
 - B. A dog barks at a television set.
 - C. A child inherits brown hair color.
 - D. A boy's heart rate increases when running.
-

42.

Which of the following are prokaryotic organisms?

- A. bacteria
 - B. oak trees
 - C. mushrooms
 - D. brown algae
-

43.

Which of the following is a seed-producing plant?

- A. mushroom
 - B. maple tree
 - C. lichen on rocks
 - D. moss with sporophyte stalk
-

44. Which explains the relationships among an embryo, a seed, and a fruit?

- A. An embryo is a part of a seed, and the seed is found inside the fruit.
 - B. The embryo is found in the ovum, and a fruit is a swollen ovum.
 - C. The fruit comes from a seed, while the ovum comes from the fruit.
 - D. The ovum surrounds the seed, while the fruit is a part of the ovum.
-

45. Zoology is the study of

- A. animals.
 - B. bacteria.
 - C. plants.
 - D. viruses.
-

46. Some decomposers get their energy by breaking down glucose in the absence of oxygen. This type of cellular respiration is a form of

- A. electrolysis.
 - B. fermentation.
 - C. photosynthesis.
 - D. inorganic decomposition.
-

47. Cross-pollination occurs if

- A. two flowers on the same plant are involved.
 - B. flowers on two separate plants are involved.
 - C. pollen is carried through the air across a large area.
 - D. two flowers from different species of plants are involved.
-

48. Which is an example of asexual reproduction?

- A. Fruit develops around a seed.
 - B. The offspring of plants have a variety of traits.
 - C. A neighbor's tulip bulbs can be split and shared with others.
 - D. Pollen is transported from pistils to stamens in flowers.
-

49. Which is NOT an example of asexual reproduction?

- A. gamete formation
 - B. binary fission
 - C. spore formation
 - D. vegetative propagation
-

50. For which group of organisms is binary fission the **most** common type of asexual reproduction?

- A. simple plants like mosses and ferns
 - B. advanced flowering plants
 - C. invertebrates such as worms
 - D. unicellular organisms like amoebae
-

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51. A fungus has a wall composed of a polysaccharide similar to cellulose, which is also found in the exoskeleton of insects. This material is

- A. chitin.
 - B. hemicellulose.
 - C. leucine.
 - D. protein-lipid layers.
-

52.

In photosynthesis, light energy is converted to

- A. nuclear energy.
 - B. chemical energy.
 - C. convection energy.
 - D. electromagnetic energy.
-

53.

Sunlight, together with which of the following, would **best** illustrate that electromagnetic waves carry energy and can interact with matter?

- A. fungi
 - B. mRNA
 - C. chloroplasts
 - D. mitochondria
-

54. Which of the following uses light energy to convert CO_2 and H_2O to organic compounds?

- A. fungi
 - B. arthropod
 - C. yeast
 - D. algae
-

55. Which is NOT true of internal fertilization?

- A. Fewer eggs are produced.
 - B. The eggs have greater protection.
 - C. Adults return to water for reproduction.
 - D. The young are more fully developed at birth.
-

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56. Pollination is the transfer of pollen to the stigma. Some pollen is transferred for miles to the stigma of other flowers. Which is NOT a carrier of pollen?

- A. birds
 - B. rain
 - C. insects
 - D. wind
-

57. Most flowers have both male and female parts. However, incomplete flowers do not have both parts and are either male or female. Which part clearly distinguishes a male flower?

- A. stamen
 - B. stigma
 - C. ovary
 - D. sepal
-

58. Which is NOT necessary for germination of a plant seed?

- A. water
 - B. proper temperature
 - C. oxygen
 - D. sunlight
-

59. Many flowers have both male and female reproductive parts. However, some flowers have only male or female parts. Which are the male parts?

- A. stamen, pistil, anther
 - B. stamen, anther, pollen grain
 - C. pistil, stigma, style
 - D. stamen, style, pollen grain
-

60. Which describes pollination?

- A. pollen landing on the stigma
 - B. pollen forming a pollen tube
 - C. pollen fertilizing an egg cell
 - D. pollen forming the seed
-

61. Animals that produce large numbers of eggs at one time usually fertilize them

- A. externally.
 - B. inadequately.
 - C. internally.
 - D. repeatedly.
-

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62. Molds often spread by contaminating food that is left exposed to air. Which type of reproductive process is **most likely** to spread organisms by air?

- A. budding
- B. binary fission
- C. spore formation
- D. vegetative propagation

Answer Key

1. B) enough water to soak the seeds
2. D) stigma
3. D) sex organ of a plant
4. C) pistil
5. C) pistil
6. D) stamen
7. A) pistil
8. C) cells, tissues, organs, organ systems
9. B) lichen
10. A) spores.
11. B) amoebae.
12. A) angiosperms and gymnosperms
13. B) belong to the phylum Arthropoda.
14. A) Annelida
15. A) photosynthesis.
16. B) conjugation
17. B) peristalsis
18. B) They have an outer skeleton.
19. C) The pieces could regenerate.
20. B) acid production
21. A) anther
22. C) photosynthesis

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- 23. C) ATP and carbon dioxide
- 24. D) flatworms
- 25. D) spiny skin.
- 26. B) metamorphosis from larvae to adult
- 27. A) taking leaf cuttings from a houseplant and growing new plants from them
- 28. A) Positive, because they improve the soil for agriculture.
- 29. B) They lack internal backbones.
- 30. D) grow.
- 31. C) They can't get enough oxygen in wet soil.
- 32. A) fruit.
- 33. A) ovary, style, and stigma.
- 34. B) sepals.
- 35. B) root.
- 36. A) anther
- 37. A) cotyledons.
- 38. B) dormancy.
- 39. C) pistil
- 40. A) cross-pollination
- 41. D) A boy's heart rate increases when running.
- 42. A) bacteria
- 43. B) maple tree
- 44. A) An embryo is a part of a seed, and the seed is found inside the fruit.
- 45. A) animals.

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- 46. B) fermentation.
- 47. B) flowers on two separate plants are involved.
- 48. C) A neighbor's tulip bulbs can be split and shared with others.
- 49. A) gamete formation
- 50. D) unicellular organisms like amoebae
- 51. A) chitin.
- 52. B) chemical energy.
- 53. C) chloroplasts
- 54. D) algae
- 55. C) Adults return to water for reproduction.
- 56. B) rain
- 57. A) stamen
- 58. D) sunlight
- 59. B) stamen, anther, pollen grain
- 60. A) pollen landing on the stigma
- 61. A) externally.
- 62. C) spore formation