

7th Grade Science Online Resources/Virtual Field Trips

Legends of Learning: Gaming website that reviews scientific concepts.

<https://app.legendsoflearning.com/login/students/choose>

Teacher Codes: CROWE

BACCU

Discovery Education: Virtual Field Trips

Tundra

<https://www.discoveryeducation.com/learn/tundra-connections/>

How Science Powers Us

<https://www.howsciencepowersus.com/education-resources/virtual-field-trip>

Virtual Cell: Guided tour through the cell and cell processes.

<http://www.vcell.science/project/flythrough>: cell structure and organelles

<http://www.vcell.science/project/mitosis>: Mitosis

<http://www.vcell.science/project/meiosis>: Meiosis

<http://www.vcell.science/project/transcription>: Transcription

<http://www.vcell.science/project/translation>: Translation

<http://www.vcell.science/project/energyconsumption>: Energy Use

Virtual Field Trips to Various Biome Locations

<https://www.virtualfieldtrips.org/video-library/videos-by-curriculum-area/science-videos/>

National Geographic

Genetics

[https://www.nationalgeographic.org/education/resource-](https://www.nationalgeographic.org/education/resource-library/?q=&page=1&per_page=25&content_type_category=Video&grades=7&subjects=Genetics)

[library/?q=&page=1&per_page=25&content_type_category=Video&grades=7&subjects=Genetics](https://www.nationalgeographic.org/education/resource-library/?q=&page=1&per_page=25&content_type_category=Video&grades=7&subjects=Genetics)

Ecology and Conservation

[https://www.nationalgeographic.org/education/resource-](https://www.nationalgeographic.org/education/resource-library/?q=&page=1&per_page=25&content_type_category=Video&grades=7&subjects=Ecology)

[library/?q=&page=1&per_page=25&content_type_category=Video&grades=7&subjects=Ecology](https://www.nationalgeographic.org/education/resource-library/?q=&page=1&per_page=25&content_type_category=Video&grades=7&subjects=Ecology)

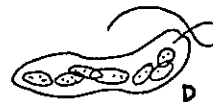
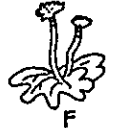
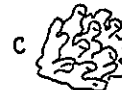
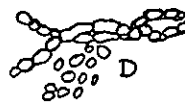
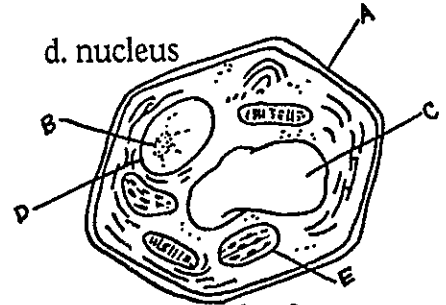
Smithsonian Natural History Museum Virtual Tour

<https://naturalhistory.si.edu/visit/virtual-tour>

LIFE SCIENCE SKILLS TEST

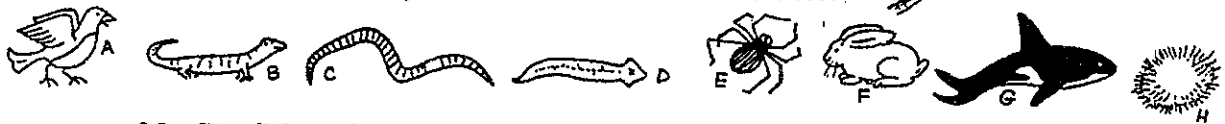
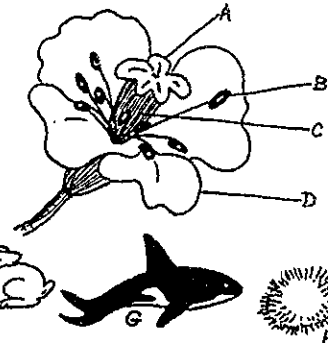
Write the correct answer to each question in its corresponding blank.

- Which is **not** a characteristic of all living organisms?
a. ability to move b. needs water c. gives off waste d. is made of cells
- What part of the cell controls movement of materials in and out of the cell?
- In what cell structure are proteins made?
a. mitochondria b. Golgi bodies c. ribosomes d. nucleus
- What structure in a plant cell contains chlorophyll?
- What kind of a cell is pictured here: plant or animal?
- Which part of the pictured cell regulates the movement of materials in and out of the nucleus?
- Which part of the pictured cell stores water and dissolved materials?
- What process is happening when a cell's cytoplasm shrinks due to water loss?
a. metabolism b. active transport c. mitosis d. plasmolysis
- During what process do plants release energy from stored food?
a. feedback b. photosynthesis c. respiration d. diffusion
- What process is the tendency of an organism to adjust itself to maintain a balanced state?
- What is the basic unit of structure and function in all organisms?
- A(n) _____ is a trait whereby an organism changes to survive changes in its environment.
- What is the smallest division of a kingdom for classification of living things?
- Water passes through a cell membrane by
a. photosynthesis b. respiration c. adaptation d. osmosis
- The part of a compound microscope that moves the body tube up and down for focusing is the _____.
- The part of a compound microscope that holds a slide in place is the _____.
- What kingdom is represented by E (pictured at the right)?
- Which organism pictured belongs to the protist kingdom?
- Which organism pictured belongs to the animal kingdom?
- What short, hairlike structures help some protists move?
- Which of these have properties of both living and nonliving things?
a. bacteria b. viruses c. fungi d. protists
- Which of the simple organisms pictured below are **neither** fungi **nor** protists?

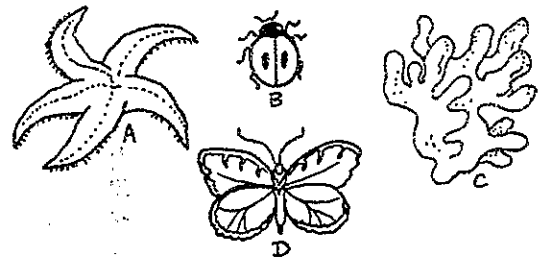


Name _____

23. What is added to the atmosphere during respiration?
24. A plant that has tubelike structures to carry water and nutrients is a(n) ____ plant.
25. A plant that grows, reproduces, and dies within one season is a(n) ____ plant.
26. During the process of _____, water is lost through the stomata in plant leaves.
27. A(n) _____ is a young plant growing within a seed.
28. Fir, pine, spruce, and redwood trees are
 - a. angiosperms
 - b. gymnosperms
 - c. nonvascular plants
 - d. deciduous
29. Plants get the nitrogen they need from _____.
30. The part of the flower that produces pollen is the _____.
31. The _____ is the female reproductive organ of a flowering plant.
32. Most of the oxygen in the atmosphere comes from
 - a. evaporation
 - b. diffusion
 - c. transpiration
 - d. photosynthesis
33. The ____ is the part of the plant that traps light energy for use in photosynthesis.
34. In the flower pictured at right, A is the _____.
35. Which letter labels the flower part that will develop into a fruit?
36. Which letter labels the male reproductive organ?
37. Animals with backbones belong to what phylum?
38. Which animals pictured below are invertebrates?

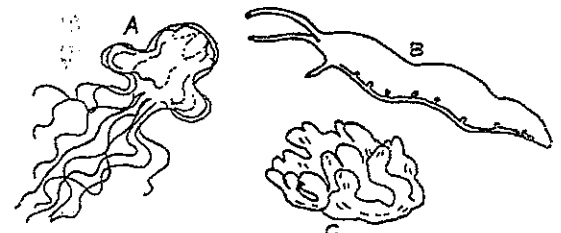


39. Starfish and sand dollars belong to the _____ phylum.
40. Jellyfish and coral belong to the same phylum as
 - a. snails
 - b. sponges
 - c. sea anemones
 - d. fish
41. An animal belonging to the phylum arthropoda is a
 - a. tapeworm
 - b. lobster
 - c. squid
 - d. slug
42. An animal that is **not** a mollusk is a
 - a. clam
 - b. octopus
 - c. slug
 - d. sea cucumber



43. Which organism(s) pictured at right has(ve) **no** symmetry?
44. Which organism(s) pictured at right has(ve) **radial** symmetry?
45. Which organism(s) pictured above has(ve) **bilateral** symmetry?

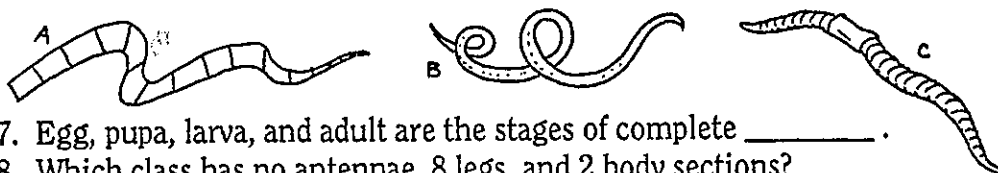
46. _____ animals keep a constant body temperature.
47. _____ are structures that help fish get oxygen from water.
48. The number of body segments that insects have is _____.
49. _____ is the process where insects shed their exoskeletons as they grow.
50. The bodies of mammals are covered with _____.
51. Animals in the _____ phylum have jointed legs.



52. _____ is the class of arthropods which have 8 legs.
53. Which animal (at right) is a coelenterate?
54. Which animal (at right) is a sponge?

Name _____

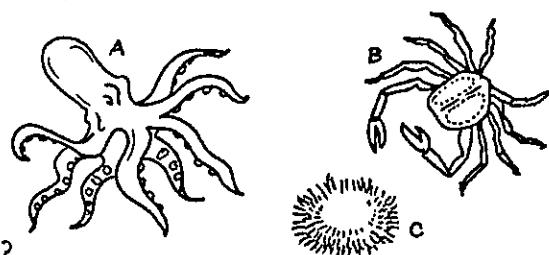
55. In the examples shown below, to what phylum does B belong?
 a. segmented worm b. roundworm c. flatworm d. echinoderm
56. In the examples below, which animal has bilateral symmetry?



57. Egg, pupa, larva, and adult are the stages of complete _____.
58. Which class has no antennae, 8 legs, and 2 body sections?

- a. fish c. arachnids
 b. crustaceans d. insects

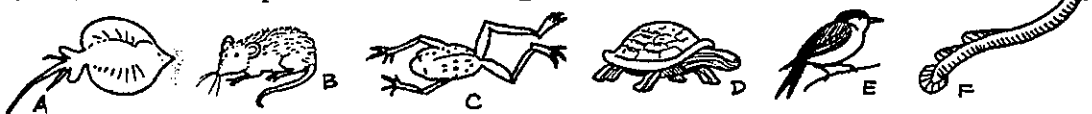
59. Which animal (at right) is an arthropod?
 60. Which animal (at right) is a mollusk?
 61. Which animal (at right) has radial symmetry?



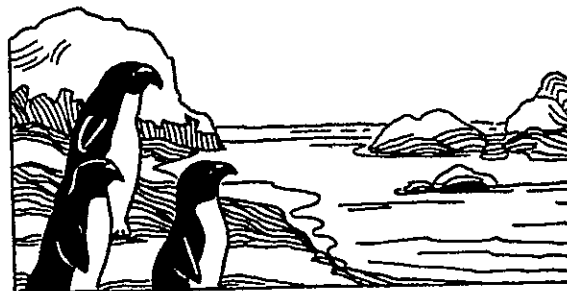
62. Which is **not** a characteristic of mammals?
 a. hair covering b. 3-chambered heart c. produce milk d. produce sweat
63. Which is **not** a characteristic of birds?
 a. 4-chambered heart b. hollow bones c. cold-blooded d. lungs
64. Which is **not** a characteristic of reptiles?
 a. exoskeleton b. backbone c. scale covering d. cold-blooded
65. Which organism undergoes complete metamorphosis?
 a. fish b. frog c. grasshopper d. moth
66. What class of arthropods has 2 pair of antennae, gills, and a flexible exoskeleton?
67. Which animal pictured below is a millipede?
68. Which animal pictured below is a crustacean?
69. E (pictured below) belongs to what class of arthropod?



70. In the row of animals below, to what class does A belong?
71. Which animals below are **not** warm-blooded?
72. Which animal pictured below has gills and lungs?

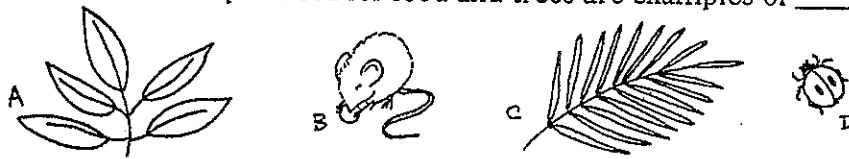
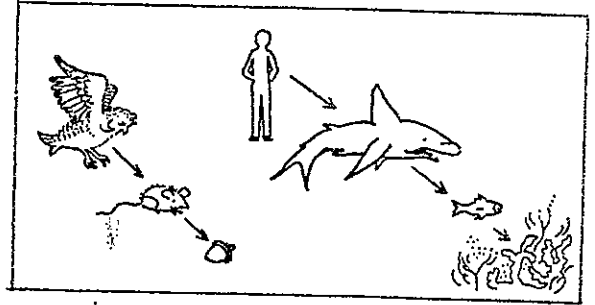


73. A _____ is a place in the ecosystem where populations of organisms live and grow.
74. Organisms that remove and eat dead organisms are called _____.
75. A _____ is all the organisms of one species in a community.
76. Which of these represents an ecosystem?
 a. a dead tree c. a coral reef
 b. a drop of pond water d. all of these
77. The picture on the right represents which biome?
 a. taiga c. desert
 b. tundra d. temperate forest



Name _____

78. A _____ is the role an organism plays in a community.
79. The first link in a food chain is always
a. grass b. a producer c. a primary consumer d. a secondary consumer
80. The part of the biosphere that surrounds an organism is its _____.
81. What kind of resources are coal, petroleum, and natural gas?
82. If a species is _____, its organisms are found in very small numbers.
83. A complex network of food relationships is called a _____.
84. A biome that supports large herds of animals is _____.
85. Which would **not** be found in a temperate deciduous forest?
a. coral b. maple trees c. deer d. insects
86. Which would **not** be found in a taiga biome?
a. pine trees c. fir trees
b. permafrost d. moose and bears
87. Which organisms in these food chains (at right) are primary consumers?
88. Which organisms in these food chains are producers?
89. Which organisms in these food chains are secondary consumers?
90. An orchid lives on a tree without causing the tree harm. This is _____.
a. predatorism b. parasitism c. commensalism d. pollination
91. A fungus causes the decay of a dead log. The fungus is a _____.
a. decomposer b. scavenger c. competitor d. predator
92. Some fish and sea anemone live together in a relationship that benefits both. This is called _____.
a. parasitism b. mutualism c. commensalism d. competition
93. Sulfur dioxide combines with water vapor in the air to produce a pollutant called _____.
94. Animals and crops raised for food and trees are examples of _____ resources.



95. Which organisms pictured above are consumers?
96. Ash, dust, smog, acid rain, noise, and auto exhaust are all examples of _____.
97. _____ is the renewing of a forest by planting new trees or seeds.
98. _____ substances are organic wastes that are **not** harmful to the environment when decomposed.
99. Are wood and coal both fossil fuels?
100. _____ pollution raises the temperature of water in waterways.

SCORE: Total Points _____ out of a possible 100 points

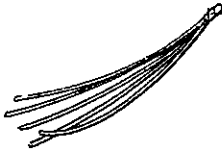
Name _____

A Key to Trees

Name _____

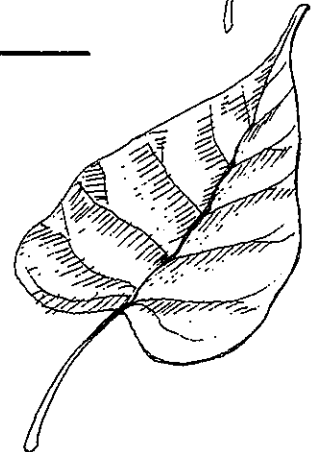
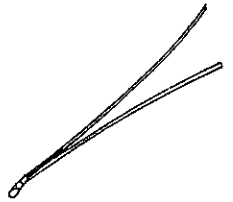
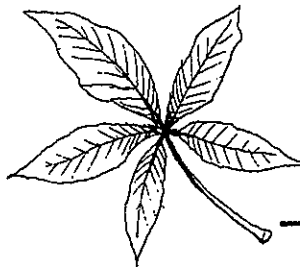
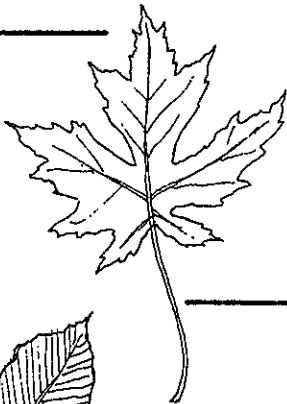
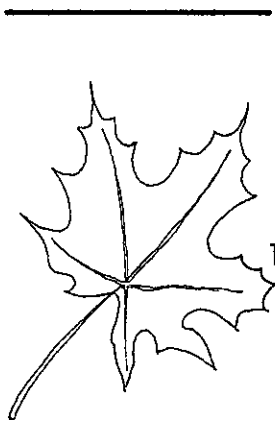
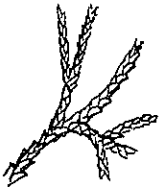
A scientist may use a key to identify a tree by its leaves.

Use the following key to identify the leaves pictured on this page.
The first one is done for you.



white pine

1. a. The tree has needles go to 2
b. The tree has leaves go to 5
2. a. The needles are in bundles go to 3
b. The needles are scale-like white cedar
3. a. There are 5 needles white pine
b. There are 2 needles go to 4
4. a. The needles are thick and spread
away from each other jack pine
b. The needles are long and thin red pine
5. a. The leaves are simple go to 8
b. The leaves are compound go to 6
6. a. The leaflets radiate from one point go to 7
b. The leaflets do not radiate from one point.. white ash
7. a. There are 5 leaflets buckeye
b. There are 7 leaflets horse chestnut
8. a. The leaf has notches go to 9
b. The leaf does not have notches go to 10
9. a. The notches are pointed silver maple
b. The notches are rounded sugar maple
10. a. The leaf is tapered at both ends dogwood
b. The leaf is heart-shaped catalpa



RELATIONSHIPS IN THE ECOSYSTEM

It may look as if this bear is simply eating this fish. But it is far from simple. These two animals are in a relationship! Not a very comfortable one for the fish, of course, but an important one in the ecosystem nonetheless!

Use one of the terms at the bottom of the page to label each example described.

1. Vultures gather around a dead deer. _____
2. Camels, cacti, sagebrush, lizards, snakes, and insects all live together in a section of desert. _____
3. A tick feeds on your dog. _____
4. Beetles and termites want to break down the dead material in the same spot on the same dead tree. _____
5. Mice feed on acorns; owls feed on mice. _____
6. A pond frog catches a nice fly on his sticky tongue. _____
7. The dandelions seem to be taking over your lawn. _____
8. Mule deer live in the forest behind my house. _____
9. A bacteria causes your throat to be sore. _____
10. An orchid attaches itself to a tree branch without doing the tree any harm. _____
11. A poisonous sea anemone gives protection to a fish, but feeds on the predators that come after it. _____
12. A mountain lion stalks a young deer. _____
13. A fungus grows on a rotting log. _____
14. Ants crawl all over a dead worm. _____
15. Some bacteria live and get their nourishment inside your intestines, and help to keep them healthy. _____
16. Weeds choke out the young corn plants in your garden. _____
17. A spider traps a fat fly in her web. _____

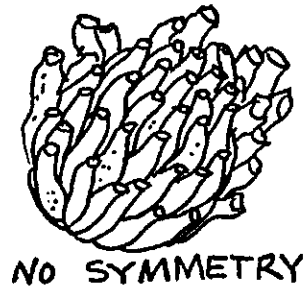
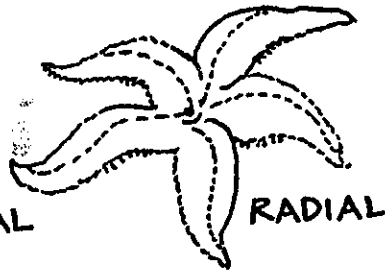
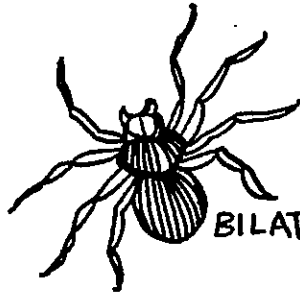


commensalism
 scavengers
 community
 competition
 food chain
 mutualism
 population
 predator-prey
 dominant species
 decomposer
 parasitism
 scavenger

Name _____

A SIDE VIEW

Bertram Bi Olly Gist wants to classify these animals according to their **symmetry**. Help him out. Label each animal with **B** for **bilateral**, **R** for **radial**, or **N** for **no symmetry**.



Symmetry is a similarity or likeness of two parts.

An organism with **bilateral symmetry** has two sides or parts that are alike.

An organism with **radial symmetry** has an arrangement of similar parts around a central axis like spokes of a wheel.



1. FROG: _____



2. CRAB: _____



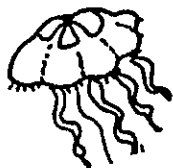
3. ANT: _____



4. MAN: _____



5. ANEMONE: _____



6. JELLYFISH: _____



7. HONEYBEE: _____



8. SPONGE: _____



9. SEA CUCUMBER: _____



10. DOG: _____



11. CAT: _____



12. STARFISH: _____



13. ROUND WORM: _____



14. HYDRA: _____



15. OCTOPUS: _____



16. SEA URCHIN: _____



BUTTERFLY: _____



18. CRAYFISH: _____



19. SPIDER: _____



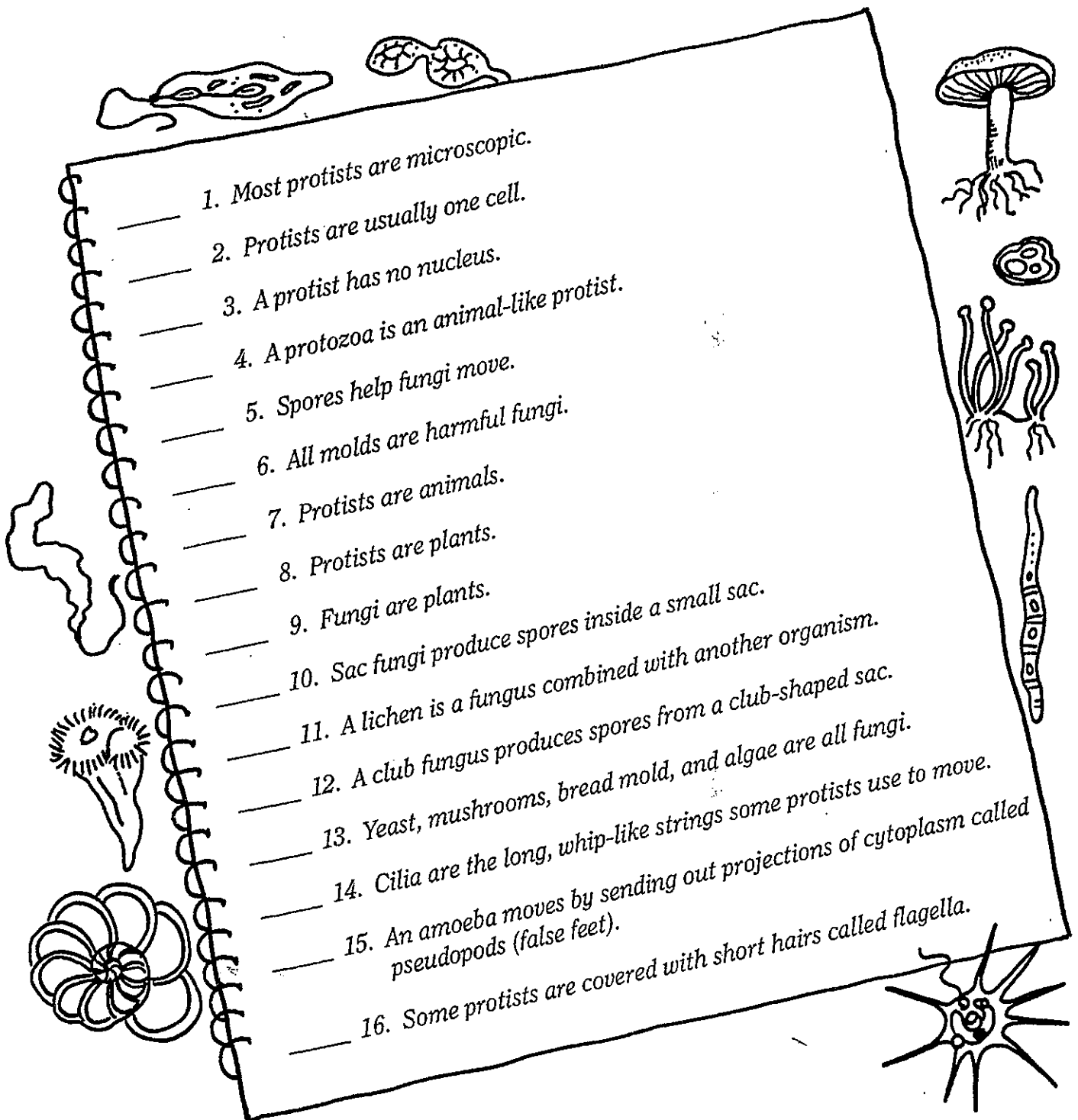
20. OYSTER: _____

By the way, does Bertram's body have symmetry? _____

Name _____

STRANGE CHOICE OF FRIENDS

Fungi and protists don't get a lot of respect from most people. They are not exactly plants or animals. But Lorena thinks they're rather interesting characters. So she's listing impressive facts about protists and fungi. But is she right? Use your knowledge about protists and fungi to decide if each thing she's written is true (T) or false (F).

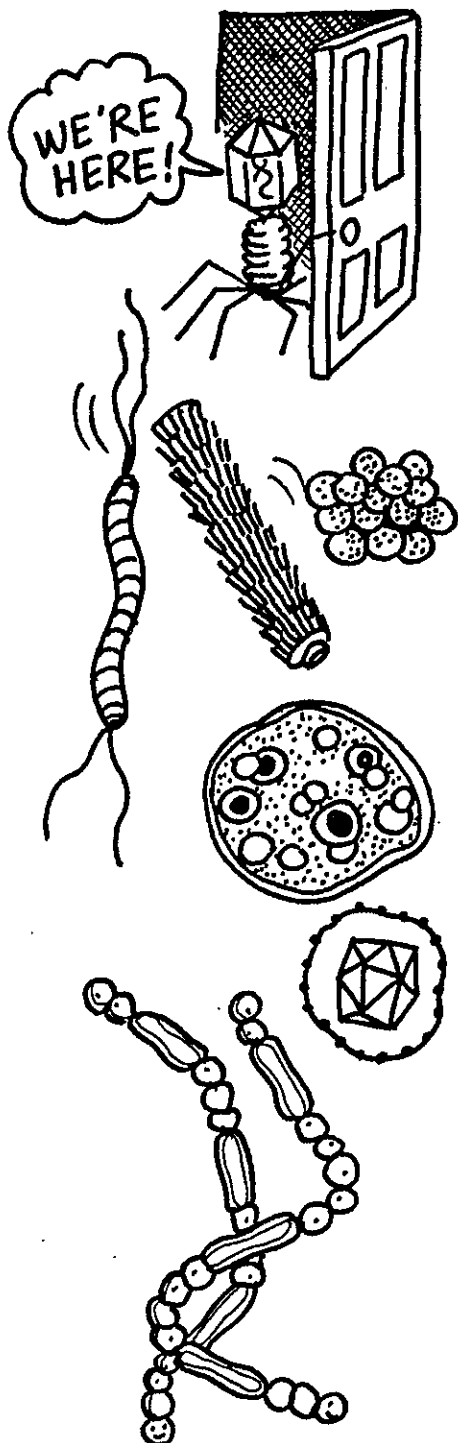


- ___ 1. Most protists are microscopic.
- ___ 2. Protists are usually one cell.
- ___ 3. A protist has no nucleus.
- ___ 4. A protozoa is an animal-like protist.
- ___ 5. Spores help fungi move.
- ___ 6. All molds are harmful fungi.
- ___ 7. Protists are animals.
- ___ 8. Protists are plants.
- ___ 9. Fungi are plants.
- ___ 10. Sac fungi produce spores inside a small sac.
- ___ 11. A lichen is a fungus combined with another organism.
- ___ 12. A club fungus produces spores from a club-shaped sac.
- ___ 13. Yeast, mushrooms, bread mold, and algae are all fungi.
- ___ 14. Cilia are the long, whip-like strings some protists use to move.
- ___ 15. An amoeba moves by sending out projections of cytoplasm called pseudopods (false feet).
- ___ 16. Some protists are covered with short hairs called flagella.

Name _____

A VISIT FROM A VIRUS

You've probably been visited by a virus or some bacteria, so you are qualified to answer these questions. Write your answers on the lines preceeding the questions.



- _____ 1. If a virus visits you, have you had an encounter with an organism?
- _____ 2. If a virus visits you, would it be helpful to have a drug on hand?
- _____ 3. What does a virus have to be inside in order to survive?
- _____ 4. What do you need in order to see a virus?
- _____ 5. Can a virus change the normal activity of a cell?
- _____ 6. Name 2 ways a virus can spread among humans.
- _____ 7. Can a virus be destroyed?
- _____ 8. Is a virus living, nonliving, or both?
- _____ 9. What protein in the body defends against viruses?
- _____ 10. Name a disease-causing virus for which there is a vaccination.
- _____ 11. If you took a virus apart, would you find cells?
- _____ 12. Can a virus hang out a long time in a body without showing up?
- _____ 13. What kingdom do bacteria belong to?
- _____ 14. What is a bacterial organism that eats dead organisms?
- _____ 15. Is spoiled food a sign of a visit from bacteria?
- _____ 16. Are all bacteria harmful?
- _____ 17. Is there bacteria in unspoiled cheese?
- _____ 18. Could you find a nucleus inside a bacteria cell?
- _____ 19. What is done to milk to kill harmful bacteria?
- _____ 20. What bacteria is spiral-shaped?
- _____ 21. What bacteria is spherical in shape?
- _____ 22. What bacteria is rod-shaped?
- _____ 23. What is the relationship called in which bacteria doesn't harm its host?
- _____ 24. What is the relationship called in which bacteria harms its host?

Name _____

CHAPTER

INTRODUCTION TO MULTICELLULAR ORGANISMS

10

Diagnostic Test

Choose the letter of the best answer.

- _____ 1. The six kingdoms reflect the diversity of living things on Earth. Diversity refers to
- common characteristics
 - many differences
 - large number
 - organization
- _____ 2. Algae and some bacteria use sunlight as an energy source. These organisms are
- parasites
 - decomposers
 - plants
 - producers
- _____ 3. Which of these can respond to their environment?
- only protists
 - only multicellular organisms
 - only organisms with nuclei
 - only living things
- _____ 4. Some protists use sunlight, water, and carbon dioxide to obtain energy through
- photosynthesis
 - binary fission
 - decomposing
 - injection
- _____ 5. Any living thing must copy its genetic material in order to
- consume energy
 - move around
 - reproduce
 - remain organized
- _____ 6. A single-celled organism reproduces by
- binary fission
 - decomposition
 - parasitism
 - host cell invasion

- _____ 7. One cell performs all the functions of life in
- a. all protists
 - b. all single-celled organisms
 - c. all bacteria and viruses
 - d. all producers
- _____ 8. Which of these have cells containing nuclei?
- a. all viruses
 - b. all protists
 - c. all producers
 - d. all bacteria
- _____ 9. Which of the following are animal-like protists that get energy from other organisms?
- a. phytoplankton
 - b. decomposers
 - c. algae
 - d. protozoa
- _____ 10. How does a cell membrane organize living cells?
- a. captures other organisms
 - b. keeps water from entering the cell
 - c. separates the inside and outside of a cell
 - d. stops organisms from becoming multicellular
- _____ 11. Slime mold is a decomposer. This means that it
- a. breaks down soil or other organisms for energy
 - b. captures sunlight and converts it to chemical energy
 - c. reproduces by splitting into two parts
 - d. captures other organisms with flagella
- _____ 12. All living things
- a. are multicellular
 - b. have nuclei in their cells
 - c. grow in size
 - d. must consume other organisms
- _____ 13. In order to reproduce, a virus needs
- a. a host cell
 - b. sunlight
 - c. extra protein
 - d. a vaccine

Name _____

Comparing Mitosis and Meiosis

Determine whether each characteristic applies to mitosis, meiosis, or both by putting a check in the appropriate column(s).

Characteristics	Mitosis	Meiosis
1. no pairing of homologs occurs		
2. two divisions		
3. four daughter cells produced		
4. associated with growth and asexual reproduction		
5. associated with sexual reproduction		
6. one division		
7. two daughter cells produced		
8. Involves duplication of chromosomes		
9. chromosome number is maintained		
10. chromosome number is halved		
11. crossing over between homologous chromosomes may occur		
12. daughter cells are identical to parent cell		
13. daughter cells are not identical to parent cell		
14. produces gametes		
15. synopsis occurs in prophase		

Name _____

Punnett Squares—One Trait

In a certain species of animal, black fur (B) is dominant over brown fur (b). Using the following Punnett square, predict the genotypes and phenotypes of the offspring whose parents are both Bb, or have heterozygous black fur.

	B	b
B		
b		

Genotypes: _____ % homozygous black fur (BB)

_____ % heterozygous black fur (Bb)

_____ % homozygous brown fur (bb)

Phenotypes: _____ % black fur

_____ % brown fur

Now, do the same when one parent is homozygous black and the other is homozygous brown.

Genotypes: _____ % homozygous black fur (BB)

_____ % heterozygous black fur (Bb)

_____ % homozygous brown fur (bb)

Phenotypes: _____ % black fur

_____ % brown fur

Repeat the process again when one parent is heterozygous black and the other is homozygous brown.

Genotypes: _____ % homozygous black fur (BB)

_____ % heterozygous black fur (Bb)

_____ % homozygous brown fur (bb)

Phenotypes: _____ % black fur

_____ % brown fur

Cell Organelle Quiz

Directions: Read each statement carefully. Choose (A) if the statement is True. Choose (B) if the statement is False.

- _____ 1. In both types of cells, the golgi body/apparatus packages proteins for transport in/out of the cell.
- _____ 2. In both types of cells, the nuclear envelope receives materials and distributes them to the cell.
- _____ 3. Ribosomes synthesize proteins.
- _____ 4. Chromosomes contain hereditary information.
- _____ 5. DNA assembles ribosomes.
- _____ 6. The cell membrane allows any/all material to pass into the cell.

Directions: Complete the following questions below. Answer each question on the scantron sheet provided.

- _____ 7. Select a statement that best completes the phrase below.

~In a plant cell...

- A. there is one large vacuole that stores water and helps hold up the plant.
- B. the vacuoles enter and leave through the cell membrane.
- C. there are lots of small vacuoles.

- _____ 8. What is a function of the nucleus of an animal cell?

- A. It is the place where energy is produced.
- B. It stores the genetic information, the DNA (chromosomes).
- C. It defends the cell from infections.

- _____ 9. Select the statement that best describes the function of the cell wall.

- A. It gives shape and support to plant cells physical structure.
- B. It produces food from sunlight.
- C. Its jelly-like fluid surrounds the nucleus and most of the cell's internal parts.

- _____ 10. Which organelle functions as the "powerhouse" of the cell by producing the energy necessary for all cell functions to occur?

- A. cytoplasm
- B. ribosomes
- C. Mitochondrion

- _____ 11. Which **ONE** of the following correctly matches the organelle with its function?

- A. cell wall: produces energy for the cell
- B. nucleus: control center of the cell
- C. cell membrane: gives rigid structure to the plant cell

- _____ 12. The fluid substance that holds the organelles of the cell is called the _____.

- A. cytoplasm
- B. cell wall
- C. nucleus

Matching: Match each organelle to its function.

- ____ 13. stores and packages chemicals such as proteins; forms vesicles
- ____ 14. Used for storage; usually contains water, food, and waste
- ____ 15. control center of the cell; houses DNA strands; double-membraned
- ____ 16. stores chlorophyll; sites of photosynthesis
- ____ 17. provides ATP for cellular energy; site of oxidative metabolism

- | | |
|----|--------------|
| A. | nucleus |
| B. | golgi bodies |
| C. | chloroplast |
| D. | mitochondria |
| E. | vacuoles |

- ____ 18. internal transport system without ribosomes attached; stores lipids and steroids
- ____ 19. jelly-like substance of broken down materials; mainly water, between the nucleus and cell membrane
- ____ 20. only found in animal cells; used during mitosis & cell division; found in pairs; comprised of nine microtubules
- ____ 21. membrane surrounding nucleus and cell organelles
- ____ 22. internal transport system with the presence of ribosomes;

- | | |
|----|------------------------------|
| A. | centrioles |
| B. | cytoplasm |
| C. | Rough endoplasmic reticulum |
| D. | cell membrane |
| E. | smooth endoplasmic reticulum |

- ____ 23. located within the nucleus; houses RNA; assembles ribosomes
- ____ 24. digestion enzymes can be found; process known as autolysis can be performed to get rid of the cell; old or worn out organelles are recycled
- ____ 25. stiff outer covering of a plant cell; provides structure, support & protection for a plant
- ____ 26. site of protein synthesis; found on the Rough Endoplasmic Reticulum or freely floating in the cytoplasm

- | | |
|----|-----------|
| A. | cell wall |
| B. | ribosome |
| C. | nucleolus |
| D. | lysosome |

Name _____

Parts of the Cell

Match each description with the appropriate term.

- | | |
|---|---------------------------|
| _____ 1. holds nucleus together | a. Golgi bodies |
| _____ 2. surface for chemical activity | b. nucleus |
| _____ 3. units of heredity | c. chromosomes |
| _____ 4. digestion center | d. vacuole |
| _____ 5. where proteins are made | e. ribosomes |
| _____ 6. structures involved in mitosis in animal cells | f. endoplasmic reticulum |
| _____ 7. microscopic cylinders that support and give the cell shape | g. nuclear membrane |
| _____ 8. shapes and supports a plant cell | h. centrioles |
| _____ 9. stores and releases chemicals | i. cytoplasm |
| _____ 10. food for plant cells is made here | j. chlorophyll |
| _____ 11. spherical body within nucleus | k. chloroplasts |
| _____ 12. controls entry into and out of cell | l. cell (plasma) membrane |
| _____ 13. traps light and is used to produce food for plants | m. cell wall |
| _____ 14. chromosomes are found here | n. mitochondria |
| _____ 15. jellylike substance within cell | o. lysosome |
| _____ 16. contains code that guides all cell activity | p. genes |
| _____ 17. minute hole in the nuclear membrane | q. nuclear pore |
| _____ 18. "powerhouse" of cell | r. nucleolus |
| _____ 19. contains water and dissolved minerals | s. plastid |
| _____ 20. stores food or contains pigment | t. microtubule |