

Goal • Check your understanding of Chapter 10.

What to Do

Circle the letter of the best answer.

- Which of the following lists includes something that is non-living?
 - rabbit, grass, bacteria, whale
 - rabbit, insect, tree, whale
 - rabbit, stone, bacteria, whale
 - rabbit, yeast, tree, whale
- Which is the function of the fine adjustment knob of a compound light microscope?
 - brings an object into focus at high power
 - brings an object into focus at low or medium power
 - controls the amount of light reaching the specimen
 - supports the eyepiece
- What part of a compound light microscope holds the eyepiece and objective lenses at a proper distance from each other?
 - arm
 - base
 - iris diaphragm
 - stage
- What is the total magnification of a microscope that has a medium-power objective lens and an eyepiece lens with a magnification power of 10X?
 - 4X
 - 10X
 - 100X
 - 400X
- Which of the following describes resolving power?
 - the ability to distinguish between two dots or objects that are very close together
 - the number of objects you can count across the field of view
 - the number of times larger an image looks under a lens
 - the number of times smaller an image looks under a lens
- Which of the following is not found in animal cells?
 - cell membrane
 - chloroplast
 - cytoplasm
 - mitochondria

7. Which of the following statements describes a selectively permeable cell membrane?
- A. All substances can cross it.
 - B. No substances can cross it.
 - C. Some substances can cross it.
 - D. Some substances cross it more quickly than others.
8. Which of the following is part of cell theory?
- A. All cells are surrounded by cell walls.
 - B. All cells come from other living cells.
 - C. All cells have a nucleus.
 - D. All living things are made up of two or more cells.
9. Which of the following describes chromosomes?
- A. contain a cell's genetic material
 - B. help control the movement of food, wastes, and other substances into the cell and out of the cell
 - C. help distribute materials such as food and oxygen to different parts of the cell
 - D. store extra food

Short Answer Questions

10. Is an icicle a living thing? Explain why or why not.

11. (a) What do plant cells and animal cells have in common?

- (b) What are the differences between plant and animal cells?

12. (a) Describe cellular respiration.

- (b) Where does cellular respiration take place?
