

**Chapter 1 The Science of Biology**

**Chapter Vocabulary Review**

**Short Answer** *On the lines provided, answer the following questions.*

1. What is science?

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\_\_\_\_\_

2. What is the relationship between observation and gathering data?

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\_\_\_\_\_

3. How do you make an inference?

\_\_\_\_\_

\_\_\_\_\_

4. What is the difference between a manipulated variable and a responding variable in a controlled experiment?

\_\_\_\_\_

\_\_\_\_\_

5. What is the difference between sexual reproduction and asexual reproduction?

\_\_\_\_\_

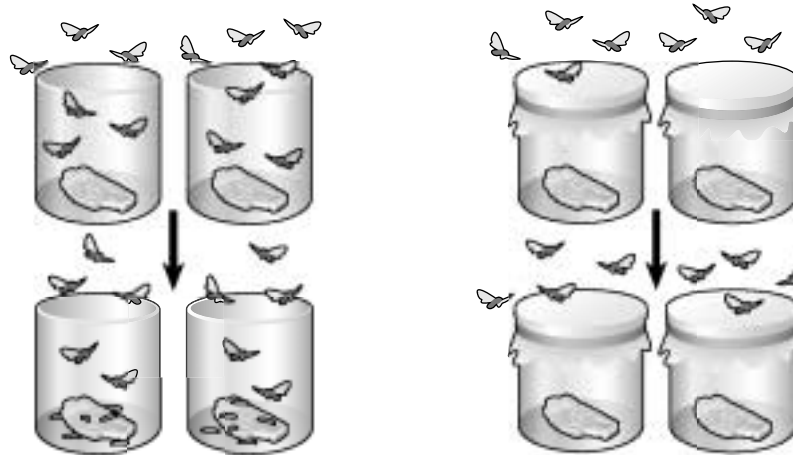
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**Matching** *On the lines provided, write the letter of the answer that best matches each description.*

- |                              |   |
|------------------------------|---|
| _____ 6. hypothesis          | a. process of keeping internal conditions fairly constant                                   |
| _____ 7. cell culture        | b. device that produces images of structures that are too small to see with the unaided eye |
| _____ 8. data                | c. proposed scientific explanation for a set of observations                                |
| _____ 9. evolve              | d. group of cells that develops from a single, original cell                                |
| _____ 10. metric system      | e. well-tested explanation that unifies a broad range of observations                       |
| _____ 11. homeostasis        | f. information gathered from observation  |
| _____ 12. cell fractionation | g. the science that seeks to understand the living world                                    |
| _____ 13. microscope         | h. to change over time  |
| _____ 14. biology            | i. decimal system based on certain standards and scaled on multiples of 10                  |
| _____ 15. theory             | j. technique that separates different cell parts  |

**Multiple Choice** *On the lines provided, write the letter of the answer that best completes the statement or answers the question.*

\_\_\_\_\_ 16. What theory was disproved by the experiment shown in the diagram?



- a. homeostasis
- b. evolution
- c. metabolism
- d. spontaneous generation

\_\_\_\_\_ 17. What is the name for a collection of living matter enclosed by a barrier that separates it from its surroundings?

- a. cell
- b. cell culture
- c. cell fractionation
- d. DNA

\_\_\_\_\_ 18. What is the name for a combination of chemical changes that builds up or breaks down material in an organism?

- a. homeostasis
- b. metabolism
- c. sexual reproduction
- d. cell culture

\_\_\_\_\_ 19. What type of microscope allows light to pass through the specimen and uses two lenses to form an image?

- a. transmission electron microscope
- b. electron microscope
- c. compound light microscope
- d. scanning electron microscope

\_\_\_\_\_ 20. The type of microscope that focuses beams of electrons on specimens is the

- a. compound microscope.
- b. electron microscope.
- c. scanning microscope.
- d. compound light microscope.