

**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?

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

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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

\_\_\_\_\_ 7. cell culture

\_\_\_\_\_ 8. data

\_\_\_\_\_ 9. evolve

\_\_\_\_\_ 10. metric system

\_\_\_\_\_ 11. homeostasis

\_\_\_\_\_ 12. cell fractionation

\_\_\_\_\_ 13. microscope

\_\_\_\_\_ 14. biology

\_\_\_\_\_ 15. theory

a. process of keeping internal conditions relatively stable

b. device that produces images of structures that are too small to see with the unaided eye

c. possible explanation to a scientific question

d. group of cells that develops from a single, original cell

e. well-tested explanation that unifies a broad range of observations

f. information gathered from observation

g. the science that seeks to understand the living world

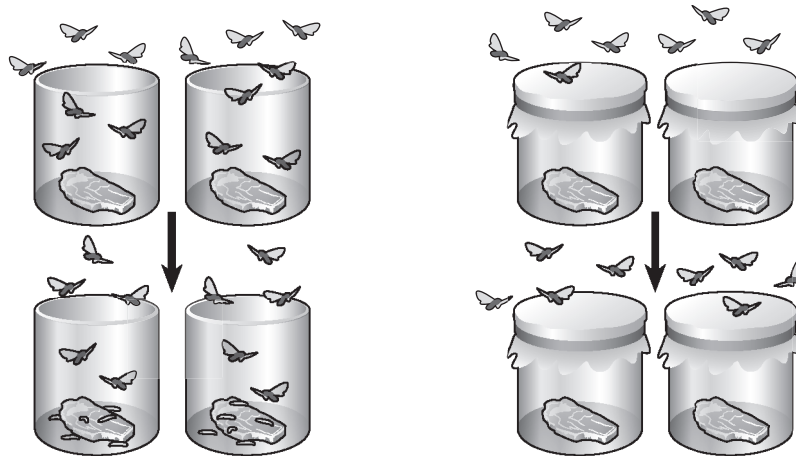
h. to change over time

i. decimal system based on certain standards and scaled on multiples of 10

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.