

Skills Worksheet

Critical Thinking

Look-Alikes

In the space provided, write the letter of the term or phrase that best describes how each numbered item looks.

- | | |
|------------------------------------|-------------------------------|
| _____ 1. cell membrane | a. hot dog with a maze inside |
| _____ 2. mitochondrion | b. water balloon |
| _____ 3. proteins in cell membrane | c. sandwich |
| _____ 4. Golgi apparatus | d. stack of pancakes |
| _____ 5. central vacuole | e. icebergs |

Work-Alikes

In the space provided, write the letter of the term or phrase that best describes how each numbered item functions.

- | | |
|------------------------------|------------------------|
| _____ 6. cilia | a. welcoming committee |
| _____ 7. cell membrane | b. boat oars |
| _____ 8. ribosome | c. gate keepers |
| _____ 9. receptor proteins | d. protein factories |
| _____ 10. transport proteins | e. security guard |

Cause and Effect

In the space provided, write the letter of the term or phrase that best matches each cause or effect given below.

- | Cause | Effect |
|---|---|
| 11. _____ | cell theory |
| 12. prokaryote invaders | _____ |
| 13. _____ | phosphorus and two fatty acids make up molecule |
| 14. cell proteins have polar and nonpolar regions | _____ |
| 15. particle makes contact with a receptor | _____ |
| 16. _____ | rough ER |
-
- | |
|---|
| a. ribosomes present |
| b. cytoplasm is signaled |
| c. observations of Schleiden, Schwann, and Virchow |
| d. held in place in cell membrane |
| e. polar and nonpolar regions of cell membrane |
| f. mitochondria and chloroplasts have their own DNA |

Critical Thinking *continued*

Linkages

In the spaces provided, write the letters of the two terms or phrases that are linked together by the term or phrase in the middle. The choices can be placed in any order.

- | | |
|--|---|
| 17. _____ millimeter _____ | a. protein produced in ER |
| 18. _____ lightly stained parts
let electrons through _____ | b. micrometer |
| 19. _____ central vacuole _____ | c. water |
| 20. _____ Golgi apparatus _____ | d. plant cell rigidity |
| | e. specimen is stained with metal ions |
| | f. new vesicles are formed |
| | g. centimeter |
| | h. electrons strike fluorescent
screen, forming an image |

Analogies

An analogy is a relationship between two pairs of terms or phrases written as a : b :: c : d. The symbol : is read as "is to," and the symbol :: is read as "as." In the space provided, write the letter of the pair of terms or phrases that best completes the analogy shown.

- _____ 21. Hooke : cork cells ::
- a. Schleiden : animals
 - b. van Leeuwenhoek : single-celled organisms
 - c. Virchow : plants
 - d. Washington : dollar
- _____ 22. prokaryote : nucleus ::
- a. plant cell : chloroplasts
 - b. bacteria : ribosomes
 - c. cell : cell membrane
 - d. animal cell : cell wall
- _____ 23. marker : cell surface protein ::
- a. receptor : arm
 - b. protein : membrane
 - c. truck : motor vehicle
 - d. cell surface : protein