

● Cells: The Units of Life

Complete the following sentences using the appropriate words from the textbook.

1. A light microscope that has two lenses is called a _____.
2. If the eyepiece lens of a microscope has a power of $10\times$ and the objective lens has a power of $43\times$, then the _____ is $430\times$.
3. Instead of a standard lens, the electron microscope uses a _____ to bend electrons.
4. The surfaces of whole objects can be examined with a _____ electron microscope.
5. If your class wanted to have a better look at an earthworm, a _____ light microscope could be used.
6. A _____ is used to see what is inside of a cell.
7. The _____ states that organisms are made of cells, cells are the basic units of structure and function in organisms, and cells come from preexisting cells.
8. A _____ microscope lets light pass through an object and then through two or more lenses.
9. The eyepiece lens usually has a power of _____.
10. SEM stands for _____.
11. The first person to use the term “cell” was looking through a microscope at a slice of _____.
12. Before the discovery that cells _____ to form new cells, people thought life occurred spontaneously.
13. A magnifying glass works like a _____ microscope because it has only one lens.
14. In a light microscope, the lenses _____ the image and _____ light toward your eye.

Match the description on the left with the person on the right by writing the correct letter in each blank.

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| _____ 15. observed that every cell comes from a cell that existed before | a. Rudolph Virchow |
| _____ 16. made the first compound microscope | b. Anton Van Leeuwenhoek |
| _____ 17. concluded that all animals are made up of cells | c. Zacharias Janssen |
| _____ 18. called box-like structures in cork “cells” | d. Theodor Schwann |
| _____ 19. made a simple microscope with a glass bead | e. Robert Hooke |