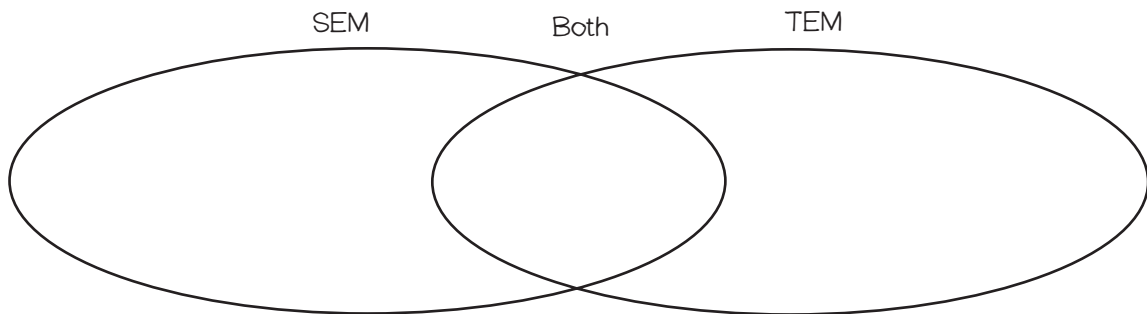


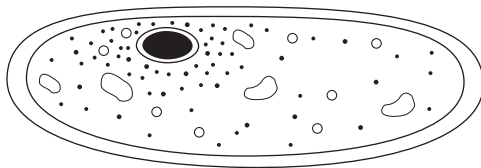
SECTION | MICROSCOPES ALLOW US TO SEE INSIDE THE CELL.

1.2 Reinforcing Key Concepts**BIG IDEA** All living things are made up of cells.**KEY CONCEPT** Microscopes allow us to see inside the cell.

- 1. The microscope is an important tool.** The scanning electron microscope (SEM) and the transmission electron microscope (TEM) have made it possible to observe extremely small objects. Fill in the Venn diagram to describe the similarities and the differences between the SEM and the TEM.



- 2. Cells are diverse.** Almost all multicellular organisms are eukaryotic. Most unicellular organisms are prokaryotic. Below is a drawing of a cell. Is this cell eukaryotic or prokaryotic? How can you tell?



- 3. Plants and animals have eukaryotic cells.** An organelle is any part of a cell that is enclosed by a membrane. The membrane keeps the activities of the organelle separate from the activities of all of the other organelles in the cytoplasm. Label three organelles in the animal-cell diagram below.

