

Cellular Boundaries All cells are surrounded by a cell membrane. Many cells also have a cell wall. Both cell membranes and cell walls separate cells from the environment and provide support.

- ▶ Cell walls support, shape, and protect the cell. Most prokaryotes and many eukaryotes have them. Animals do not have cell walls. Cell walls lie outside the cell membrane. Most cell walls allow materials to pass through them.
- ▶ A cell membrane consists of a lipid bilayer, a strong but flexible barrier between the cell and its surroundings. The cell membrane regulates what enters and leaves the cell and also protects and supports the cell. Most biological membranes are selectively permeable, allowing some substances, but not others, to pass across them.

### Cellular Boundaries

For Questions 23-25, complete each statement by writing the correct word or words.

- Most cell walls are porous to water and other materials but strong enough to support and protect cells.
- Nearly all of the plant tissue called wood is made up of cell walls.
- Besides supporting and protecting a cell, the cell membrane regulates what enters and leaves the cell.
- Complete the diagram of a section of a cell membrane. Then, on the line below the diagram, write the name of the model that describes the cell membrane's structure.

