Animal Cells

What structures do animal cells contain?

Cells are surrounded by a **cell membrane** that holds the cell together and allows materials to pass into and out of the cell. Nutrients enter and wastes leave through the cell membrane. Within a cell, structures called **organelles** carry out all the activities necessary for life. Like the cell, most organelles are surrounded by a membrane that allows materials to enter and leave. Each organelle has a certain function.

- **The cytoplasm** is a gel-like material that contains the organelles.
- **The nucleus** contains DNA, which directs the cell's activities and determines an organism's characteristics.
- **The endoplasmic reticulum**, or ER, is a network of membranes that acts as a passageway for moving materials within the cell.
- **A mitochondrion** produces the energy needed for cell activities in the form of a molecule called **ATP**.
- **Ribosomes** have no membrane. They are where proteins are assembled.

Organelles in a typical animal cell

---

Show What You Know

1. ____ nucleus  
2. ____ mitochondrion  
3. ____ endoplasmic reticulum  
4. ____ ribosome  

- a. protein assembly  
- b. material transport  
- c. DNA storage  
- d. ATP production