

2.1 What is Inside a Cell?

What Are Cells? (p. 39)

- A cell is the smallest part of your body that carries out life.
- Cells are the basic building blocks that make up all living things.
- You must use a microscope to view a cell.
- Humans are multicellular organisms because we have trillions of cells.

Functions of Cells (p. 39)

- Cells have similar needs as humans.
- Cells must take in food and get rid of waste.
- All cells need energy, which they get through cellular respiration.
- Cellular respiration = the taking in of oxygen and food, such as sugar, in order to get energy.

The Parts of Cells (p. 40)

- Most of the things your body does are done inside of a cell.

EX: You grow when your cells grow larger

and divide.

Some Parts of Animal Cells (p. 40; cell diagram p.41)

- Cells have the same needs as your body.
- The cell membrane is like the skin, holding the parts of the cell together. It also allows needed materials, such as, sugar, water, and oxygen to enter the cell, and materials like waste to exit the cell.
- The nucleus is like the brain. It tells other parts of the cell what to do.
- The nucleus contains chromosome and DNA.
Mitochondria produce power for the cell.
- Vacuoles are like your stomach.
They store and break down food.
- The cytoplasm is all of the material between the nucleus and the cell membrane.