

# Living Organisms Study Guide

**Cells:** the basic building blocks of living organisms; cells can carry out all processes necessary for life

**Unicellular Organisms:** made of only one cell; can carry out all basic life processes (move, find food, grow, reproduce)

Examples: Bacteria, Paramecium, Amoeba, Euglena

**Multicellular Organisms:** a living thing made of more than one cell; cells have different jobs

Unicellular Organisms can take in materials directly from their environment, while Multicellular Organisms have to have complex systems for moving materials from cell to cell.

**Human Body Systems:** groups of body parts that work together to carry out all the body's functions

- **Skeletal System:** the basic framework of the body; made of bones: provides protection and makes up the structure of our body
- **Muscular System:** made of the muscles that are attached to bones; create movement
- **Digestive System:** breaks down food into nutrients so it can be used by the body; involves the mouth, esophagus, stomach, small intestine, and large intestine
- **Circulatory and Cardiovascular system:** carries oxygen, nutrients, and wastes (carbon dioxide) throughout the body; involves the heart, blood vessels, and blood
- **Respiratory System:** takes in oxygen from the air we breathe; involves the nose/mouth, trachea, lungs, and diaphragm: removes waste gas carbon dioxide
- **Nervous System:** controls all body systems by transmitting electrical messages from the brain to other parts of the body; involves the brain, spinal cord, and nerve cells

**Genetics:** the scientific study of how genes control the characteristics of plants and animals

**Trait:** a quality or characteristic of a living thing

**Behavior:** how a living thing responds to its surroundings

**Inherited Trait:** a characteristic a living thing gets from its parents

Examples: eye color, hair color, dimples, height

**Acquired (Learned) Trait:** a characteristic that a living thing develops after it is born

Examples: ability to talk, walk, getting scars, learning to read, language, music ability