



Science

Grade 7

1st Nine Weeks

This academic overview can be used to monitor and support your child's at-home learning progress.

Unit 1: Introduction & Cell Structures/Functions

Student Learning Targets

- I can correctly identify and name the organelles in a plant and animal cell.
- I can describe the structure and function of each cell organelle in a plant and animal cell.
- I can differentiate between the organelles found in the plant cell and those found in the animal cell.
- I can create a 3D model of a plant and animal cell.

Questions to Check for Unit Understanding

- In what ways are the structure and function of cell organelles in animal and plant cells similar and different?
- What are the different organelles within a cell and what is their function?
- What are the different levels of organization in plant and animal cells?
- What cell organelles share similar functions to human body systems?
- What is a theory?
- What are the components of the cell theory?

Key Academic Vocabulary

- Cell: the basic structural and functional unit of living organisms
- Cell Membrane: the lipid barrier that encloses the cytoplasm and controls what enters and exits the cell
- Cytoplasm: a jellylike material that holds the nucleus, organelles, and other components within the outer membrane of the cell
- Nucleus: a membrane-bound organelle in eukaryotic cells that contains the DNA; the control center
- Organelle: a structure inside a cell that performs a specialized function

Unit 2: Plant Systems & Homeostasis

Student Learning Targets

- I can identify the forces that affect motion in plants.
- I can describe the levels of organization in plants.
- I can describe how plants respond to external stimuli found in the environment.
- I can describe responses in plants from internal stimuli that allow them to maintain balance.

Questions to Check for Unit Understanding

- What is homeostasis?
- How does responding to internal and external stimuli help maintain homeostasis in living organisms such as plants?
- How do plants and animals respond to external stimuli?
- How do plants and animals respond to internal stimuli?

Key Academic Vocabulary

- Homeostasis: the tendency of an organism or cell to maintain a balanced state to maintain health and function
- Response: a change in a system resulting from a stimulus
- Stimulus: an action or condition that provokes a response