

Objective

By the end of this 10-week unit study on the solar system, the student will be able to:

- Identify and name the planets in our solar system
- Understand the order of the planets from the sun
- Describe the characteristics of each planet
- Create artwork and projects related to the solar system
- Conduct simple experiments to learn about space

Materials and Prep

- Books or online resources about the solar system
- Art supplies such as colored pencils, markers, and construction paper
- Basic science materials like a magnifying glass, flashlight, and balloons
- Access to a computer or tablet for research and interactive activities

Activities

- Create a model of the solar system using different-sized balls or balloons to represent the planets
- Design a poster or infographic showcasing the key facts about each planet
- Write a short story or poem about a fictional journey to one of the planets
- Conduct experiments to learn about gravity, light, and the effects of space on the human body
- Create a collage or artwork inspired by the colors and textures of the planets

Talking Points

- **"Did you know that our solar system is made up of the sun and everything that orbits around it? The sun is a star and it provides us with light and heat. Can you think of some things that orbit around the sun?"**
- **"There are eight planets in our solar system. Can you name them? Remember, the order from the sun is: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune."**
- **"Each planet is unique and has its own characteristics. For example, Venus is known as the hottest planet, while Neptune is the farthest from the sun. What are some interesting facts you know about any of the planets?"**
- **"Let's conduct a simple experiment to learn about gravity. Drop a ball and observe how it falls to the ground. Can you explain why it falls down instead of floating in the air?"**
- **"Light is also an important aspect of space. Did you know that it takes around 8 minutes for light from the sun to reach Earth? Let's use a flashlight to explore how light travels and reflects."**
- **"Space can have interesting effects on the human body. Astronauts experience weightlessness and their bones and muscles can weaken. Can you think of any ways we can simulate the effects of space on our bodies?"**