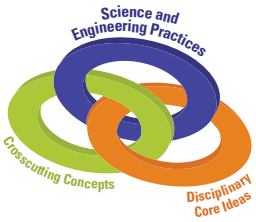
The Solar System and Beyond



Unit Overview

Phenomenon: Celestial objects in our solar system and beyond all follow distinct patterns of movement.

Storyline: Learn about gravity's role in the formation of the solar system, the growth of planets in the solar system, the existence of stars beyond our solar system, and the structure of the Milky Way and other galaxies. As a consultant, help a movie director shooting a film about space to make sure the end product accurately reflects the laws of physics and space.

Formation of the Solar System

Model gravity's role in the formation of the solar system and evaluate videos of solar system formation for pattern consistency.

Beyond the Solar System

Produce scale maps of the distances between celestial objects and design models of stars in the Milky Way galaxy.

Engineering Challenge: Engineering a Damping Device

Design and test a "space capsule" that will protect a camera from being smashed upon its return from space.

Performance Assessment: Writing a Gravity Adventure Scene

Write a script for a movie's climax using a gravitationally correct scenario. The script will present an exciting drama that results from gravity's force on celestial objects, and then you'll explain exactly how gravity is responsible for the event.

ANCHORING PHENOMENON

Anchoring Phenomenon: Celestial objects in our solar system and beyond all follow distinct patterns of movement.

1. Complete the first two columns of this chart.
   - List what you think you already know about this unit's phenomenon.
   - Then write at least three questions you have about this phenomenon.

   Return to this chart at the end of the unit. Add the key information you learned about this phenomenon. Give evidence!

Know	Want to Know	Learned