



INVESTIGATION ASTRONOMY

Level: **Grades 6-8**

Length: **45 minutes**

PROGRAM DESCRIPTION

How heavy is 1lb on Jupiter? What does a solar eclipse look like from space? Explore the objects in our celestial neighborhood and the forces that affect them in this hands-on program. Through guided discussion and modeling astronomical events, students will gain a better understanding of Earth's place in space and how its movements create the patterns we experience throughout the year.

CURRICULUM CORRELATIONS

Students will:

- Study the motion of objects in our solar system and the effects of their movements. **S6E2a; S6E2b; S6E2c**
- Explore gravity and its effects on celestial bodies. **S6E1d**
- Explore the relative sizes and distances of objects in our solar system. **S6E1c**
- Discover the non-planetary objects within our solar system. **S6E1e**
- Discuss Earth's position in the solar system and perspective in celestial events. **S6E2a; S6E2b; S6E2c**

ESSENTIAL QUESTION

What objects are in space and *how* do they affect each other?

PROGRAM VOCABULARY

Gravity
Planet

Star
Eclipse

Orbit
Rotation

Solar System
Galaxy

ASSOCIATED VOCABULARY

Day
Night

Big Bang
Moon

Sun
Patterns

PRE-VISIT ACTIVITIES

As a class, review vocabulary. Discuss the patterns students may be familiar with, like the phases of the moon and the day/night cycle.

AT THE MUSEUM

Visit **Fantastic Forces** and explore the interactive exhibits. Ask students where else in our solar system we might find these forces.

POST-VISIT ACTIVITIES

Have students research which astronomical objects are visible in our sky this time of year. Draw a model together depicting the relative locations of the Sun, Earth, and those astronomical objects. Alternatively, students can track a full lunar cycle in a journal.