



GRADES 2-3

## Our Solar System

Explore the many worlds—planets, moons, dwarf planets, comets, and asteroids—that orbit the Sun. Our Solar System is much more than a star and eight planets; it is home to a set of diverse and amazing objects that we are only beginning to understand.

### Guide Overview

This guide includes suggestions for how to engage your students and facilitate an age-appropriate learning experience in the **Our Solar System** exhibit.

## Highlights & Related Questions



- FIND** Have the students find their favorite planet on the information panel and investigate to find out more.
- DO** Encourage students to interact with the iPads, seeing the planet and its moons up close.
- ASK** Why is this your favorite planet? What new things did you learn?



- FIND** Have the students find the meteorite on the large table near the café.
- DO** Encourage the students to touch the meteorite sample. It's from space!
- ASK** What is a meteorite? **A rock from space that has fallen to Earth.** What do you think it's made of? **Metal!**

- FIND** Direct the students to the Make an Impact station near the meteorite.



- DO** After the students wait for the countdown to reach zero, have them press the red button. Beware! The sound is loud!
- ASK** What happened when you pushed the button? **Something shot at the powder.** What do you see in the white powder? **You can see a crater, or hole that results from an impact.** Does this shape look like anything else you see on the panels around the gallery? **It looks like craters on the Moon, or Mercury.**



- FIND** Have the students locate the model of the Mars Rover. Explain that this is a model of the Spirit and Opportunity rovers that have been on Mars since 2004, investigating the surface and sending back information to Earth.
- DO** The rover moves at about 1 centimeter a second. A centimeter is about the size of an M&M candy. Have the students move 1 centimeter a second for 10 seconds.
- ASK** Did you move fast or slowly? Why do you think the rover moves so slow? **Answers can include time to receive and send signals, so that the rover doesn't crash, the rover is taking scientific measurements.** What do you notice about the rover? Can you name any specific parts of the rover? **Wheels, Camera, Solar Panels.** What might they be for? **Wheels to move around, a camera to take pictures, solar panels for energy.** What do you think it would be like to visit Mars? **Cold, dusty, empty.**



- FIND** Have the students find the three stations near the windows where they can touch rocks from other worlds.
- DO** Direct the students to choose one station to investigate and touch the rock sample. They can also press the buttons at the stations to hear scientists explain how we know where these rocks come from.
- ASK** Based on the what scientist in the video says, can you explain how the sample is different from rocks on Earth? How does the rock feel? **It has a different composition.**