Noble Planetarium Classroom Companion

This is Your Captain Speaking

SHOW OVERVIEW

This is Your Captain Speaking is a brief run-through of all eight planets in our solar system plus our most famous dwarf planet, Pluto. The film itself only runs 10 minutes long, and it is a great introduction to the planets for both young children and families.

Length: 10 minutes
Grade level: K-2, Families

EXTENSION IDEAS FOR TEACHERS:

Design a Planet – Students draw and label their own planet, including temperature, surface features, and atmosphere. They should explain how conditions on their planet would affect whether living things could survive there.
Planet Packing List – Students choose one planet from the film and create a list or drawing of items they would need to survive there. They should explain how the planet's environment (hot, cold, windy, rocky, etc.) influenced their choices.
Solar System Size Sort – Students arrange planet cards from smallest to largest or closest to farthest from the Sun. They should describe patterns they notice about planet size, temperature, or distance.
Rocky vs. Gas Giant Sort – Students sort planets into two groups: rocky planets and gas giants. They should explain how scientists classify planets based on their observable characteristics.
Orbit Model Movement – Students act out how planets move around the Sun, demonstrating that planets orbit at different distances and speeds. They should explain why some planets take longer to travel around the Sun than others.

Critical Thinking Questions:
"Based on what you observed in the film, why might planets closer to the Sun be hotter than planets farther away? What evidence supports this idea?"

"If scientists cannot easily travel to most planets, how do they learn about their size, temperature, and surface features? How might new technology change what we know about our solar system?"

"Why is Earth able to support life while other planets cannot? What conditions make Earth unique compared to the other planets shown in the film?"

PROGRAM TEKS

3.8(B) describe and illustrate the Sun as a star composed of gasses that provides light and thermal energy

3.8(C) construct models that demonstrate the relationship of the Sun, Earth, and Moon, including orbits and positions

3.8(D) identify the planets in Earth's solar system and their position in relation to the Sun

5.8(D) identify and compare the physical characteristics of the Sun, Earth, and Moon

6.11(A) describe the physical properties, locations, and movements of the Sun, planets, moons, meteors, asteroids, and comets

7.9(A) analyze the characteristics of objects in our solar system that allow life to exist such as the proximity of the Sun, presence of water, and composition of the atmosphere