

Noble Planetarium Classroom Companion

Audio Universe: Tour of the Solar System

SHOW OVERVIEW

Audio Universe: Tour of the Solar System is a planetarium show, but unlike traditional shows the soundtrack takes the lead role.

All of the objects in space are represented with rich sounds as well as with incredible visuals. The audience can listen to the stars appear and hear the planets orbit around their heads. Audio Universe: Tour of the Solar System is an immersive experience that can be enjoyed irrespective of level of vision.

EXTENSION IDEAS FOR TEACHERS:

Astronaut Audio Journal - Students record a short audio journal describing what they might hear, feel, and experience while visiting a planet.

Mystery Planet Challenge - Students listen to clues about a planet's size, atmosphere, temperature, or location and identify which planet is being described.

Build a Tactile Solar System - Students create a tactile model of the Solar System using a variety of textured materials to represent each planet.

Solar System Soundscape - Students use classroom instruments or everyday objects to create sounds that represent the Sun and each planet, building their own "audio universe."

Critical Thinking Questions:

Ask students, *"Based on what you learned in the show, which planet was the most interesting to you and why?"*

Ask students, *"Based on what you learned in the show, what did you learn about how scientists can study places they cannot see directly?"*

Ask students, *"Based on what you learned in the show, what surprised you about exploring the Solar System through sound?"*

Length: 35 minutes
Grade level: K-12

PROGRAM TEKS

K.9A - Observe, describe, and predict patterns of objects in the sky, including the Sun, Moon, and stars.

1.9A - Observe, record, and compare how the Sun, Moon, and stars appear to move in the sky.

2.9A - Observe, describe, and record patterns of objects in the sky, including the Sun and Moon.

3.10A - Explore and explain how the Sun and stars are different in size, temperature, and characteristics.

3.10B - Identify and compare the physical characteristics of the Sun, Earth, and Moon.

4.10A - Model and describe the relative positions and movements of the Earth, Moon, and Sun.

4.10B - Identify and explain the role of the Sun as a star at the center of our Solar System.

5.10A - Compare and contrast the physical properties of the Sun, Earth, and Moon.

5.10B - Model the Solar System and identify the planets in order from the Sun.

6.11A - Describe the physical properties, locations, and movements of objects in our Solar System, including planets, moons, asteroids, and comets.

6.11B - Understand the role of gravity in the motions of objects within the Solar System.

7.12A - Analyze characteristics of the Solar System and explain the role of gravity in orbital motion.

8.13A - Describe the characteristics of the universe, including stars, galaxies, and the Solar System.

8.13B - Explain the life cycle and properties of stars.

IPC.9A - Investigate and describe the relationship between force and motion, including gravitational forces acting within the Solar System.

Astronomy.6A - Compare the characteristics of the planets and other bodies within the Solar System.

Astronomy.6B - Describe the structure and scale of the Solar System.

Astronomy.7A - Explain the role of gravity in planetary motion.

Astronomy.8A - Compare and contrast the properties of terrestrial and Jovian planets.

Astronomy.9A - Investigate the characteristics of the Sun and its relationship to the Solar System.

Physics.4A - Describe and analyze gravitational forces and orbital motion.