Upper-Elementary Starlab

A Museum of Science Traveling Program

Description

Starlab is a 50-minute immersive presentation that takes place inside an inflatable planetarium. It is designed to build on NGSS-based curricula.

NGSS: Next Generation Science Standards

Needs

We bring all materials and equipment. Access to 110- volt electricity is required.

Space Requirements

A planetarium fits in an accessible room with at least 25´ by 25´ of open space and 11´ of vertical clearance; all sessions are taught in that room.

Goals: Orienting the Sky

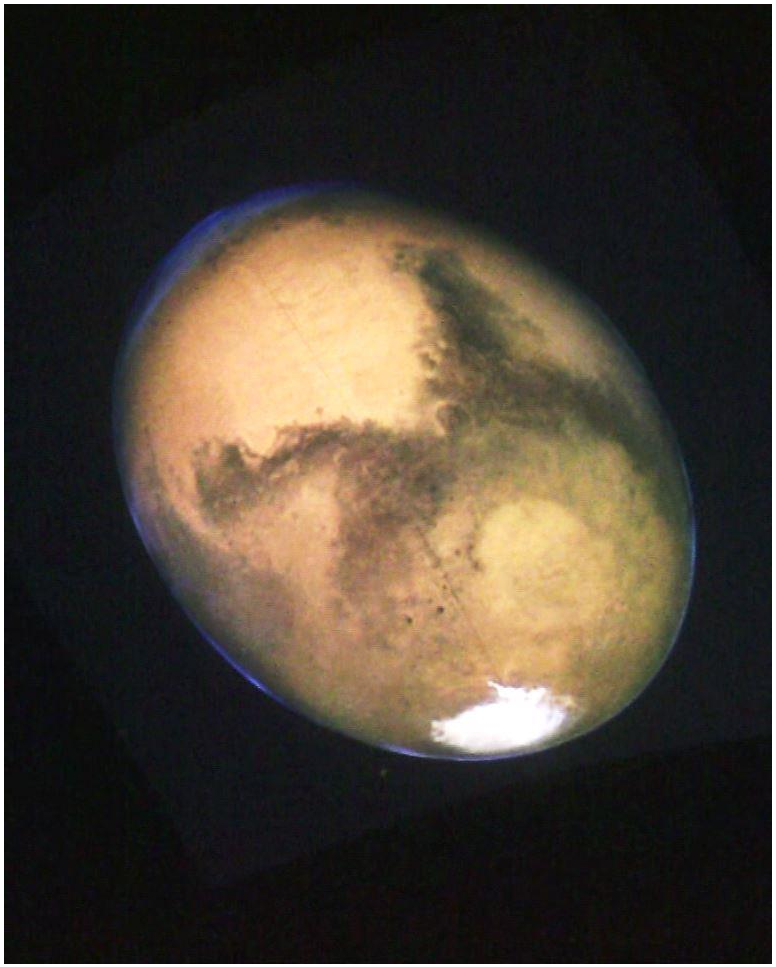
We show a simulated sky similar to what students will really see that night, and teach how to orient using patterns like the **Big Dipper**.

Goals: Finding Planets

The students learn how to spot star-like **planets** in the night sky, using clues like twinkling, or Mars' red color.

Goals: Planetary Features

Important **features** of planets, such as the minerals that give Mars its characteristic red color, are embellished with video images.



Goals: Orbits and Rotations

We teach about the motions of celestial bodies in different ways, such as the position of Orion visibly changing as the Earth **rotates**.

Goals: The Moon

The motion of the **Moon**, and the resulting **phases** observed from Earth, are explained with the model sky and computer simulations.

Additional Content

In addition to these core goals, other concepts are taught depending on the time of year and teacher requests.

Program Details

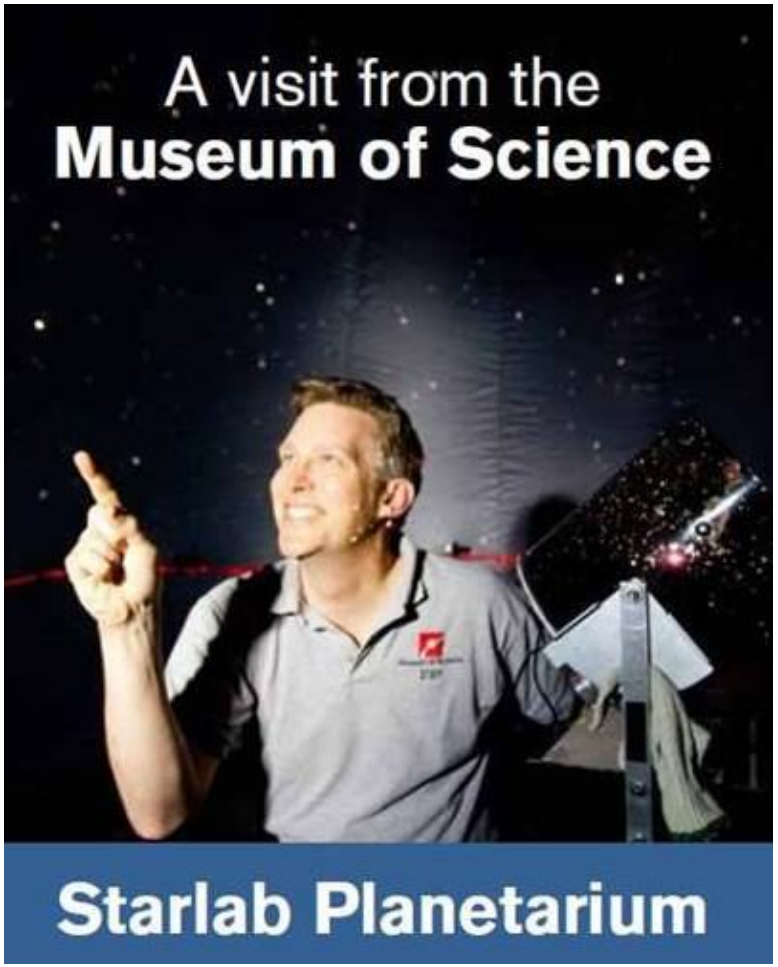
- Can only be booked for school groups during the school year.
- Only available for fifth-grade students studying the program content.

Program Details

- Capacity is one class (25 students) per session.
- Up to four sessions can be taught per day with a single educator and planetarium.
- Five to eight sessions can be taught per day with two educators teaching simultaneously in two planetariums in a full size Gym.

Social Story

If any students need extra preparation for out of the ordinary activities, we can provide a **social story** PDF highlighting what happens during Starlab presentations.



NGSS Connections

- *5-ESS1-1. Use observations, first-hand and from various media, to argue that the sun is a star that appears larger and brighter than other stars because it is closer to the Earth.*
- *5-ESS1-2. Use a model to communicate Earth's relationship to the sun, moon, and stars that explain: a. why people on Earth experience day and night; b. patterns in daily changes in length and direction of shadows over a day; and c. changes in the position of the sun, moon and constellations at different times during a day, over a month, and over a year.*

NGSS Scientific and Engineering Practices

- *Asking questions and defining problems.*
- *Planning and carrying out investigations.*
- *Developing and using models.*
- *Constructing explanations and designing solutions.*

2019 – 2020 Prices

Sessions per Day	Price
1 Session	$450
2 Sessions	$525
3 Sessions	$600
4 Sessions	$675

No mileage fees charged in New England in 2019-20 School Year.

2019 – 2020 Prices

Sessions per Day	Price
5 Sessions*	$750
6 Sessions*	$825
7 Sessions*	$900
8 Sessions*	$975

*Requires a full-size gym and two planetariums.

No mileage fees charged in New England in 2019-20 School Year.

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For information/reservations:

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