

DAY & NIGHT

GRADE LEVELS Kindergarten

DESCRIPTION

Students learn about the Big Dipper and the North Star and take an imaginary trip to the Moon. Program will run for two hours.

30 MINUTES - PLANETARIUM SHOW
One World One Sky, ALL STUDENTS

30 MINUTES - LAB

- Students will explore the concepts of Day & Night and explore the effects of gravity

30 MINUTES - GALLERY TIME

Students will go on a scavenger hunt looking for cars, trains and spacecraft. Students will discuss different careers in transportation.

30 MINUTES

Store & Lobby for Foucault Pendulum

TAKE HOME ITEMS

Gliders

GEORGIA PERFORMANCE STANDARDS

SKP3, SKE1, SKCS6

GALACTIC WEATHER

GRADE LEVELS 1st & 4th

DESCRIPTION

The PBS award winning Zula Patrol's zany characters discover all about weather, both on Earth and on other planets. Students will enjoy an introduction to the night sky, find the Big Dipper and a few seasonal constellations. Program will run for two hours.

30 MINUTES - PLANETARIUM SHOW
Under the Weather, 1st Grade
Wildest Weather in the Solar System - 4th

30 MINUTES - LAB

- First Grade - explore weather using weather stations
- Fourth Grade - explore temperature with thermometers; explore weather instruments used in predicting weather

30 MINUTES - GALLERY TIME

- First Grade – explore Science in Motion gallery by discovering how weather affects transportation
- Fourth Grade – exploring and contrasting clouds on other planets and the Earth. Students will use Science in Motion gallery to discover ways to study clouds.

30 MINUTES

Store & Lobby for cloud/weather activity

TAKE HOME ITEMS

- First Grade – Weather Log
- Fourth Grade – Cloud Viewer

GEORGIA PERFORMANCE STANDARDS

S1E1a, S1CS4a, S1E2a-b, S4E3e, S4E4a-c

STARS & CONSTELLATIONS

GRADE LEVELS 2nd & 4th

DESCRIPTION

Are all stars alike? What is the difference between stars and planets? Do they really move through the sky each night? How do you find the constellations and why are they in different places throughout the year? How do astronomers know what stars and planets are really like? We will look at these questions and more in this two-hour program.

30 MINUTES - PLANETARIUM SHOW
Live Presentation & A Trip Through Space - A tour of the solar system and beyond.

30 MINUTES - LAB

- Second Grade - use models to investigate stars; observe major constellations through Constellation Viewers; create your own constellation exercise
- Fourth Grade - use models to investigate stars and compare to planets and moons; observe apparent movement of stars; build a simple telescope and experiment with different lenses

30 MINUTES - GALLERY TIME

use reflector and refractor telescopes; investigate inventions leading to space travel and exploration

30 MINUTES

Store & Foucault Pendulum / Coin Vortex, Observe how Earth's rotation/revolution cause stars to appear to move in the sky

TAKE HOME ITEMS

- Second Grade – Constellation Finder for the current month
- Fourth Grade – Rotary Star Chart

GEORGIA PERFORMANCE STANDARDS

S2CS4, S2CS6, S2E1, S2E2, S2E3, S4CS4, S4E1, S4P1, S4P3

EXPLORING MOONS & SOLAR SYSTEM

GRADE LEVELS 4th & 6th

DESCRIPTION

Take a tour of the solar System in the planetarium show "Oasis in Space". This show explores the planets, moons and some of the smaller objects in the solar system. A hands on activity in the lab will examine Sun –Earth-Moon model and will reinforce why the Moon has phases and where to locate the Moon in the night sky. Program will run for two hours.

30 MINUTES - PLANETARIUM SHOW
Oasis in Space, ALL STUDENTS

30 MINUTES - LAB

- Moon Phase activity using models and hands-on activity
- A demonstration of the movement of the Earth and Moon around the Sun

30 MINUTES - GALLERY TIME

- A demonstration using models of how we got to the Moon and back
- Scavenger hunt emphasizing space exploration and how we got to the Moon

30 MINUTES

Store & Lobby for Foucault Pendulum

TAKE HOME ITEMS

Moon Phase Bookmark

GEORGIA PERFORMANCE STANDARDS

S4E1, S4E2, S6E1b, S6E1c, S6E2a, S6E2b

ALTERNATIVE ENERGY: FARMING FOR FUEL

GRADE LEVELS 6th & High School

DESCRIPTION

This program explores the energy we use to power cars, aircraft, and rockets. In the planetarium show, "Dynamic Earth" we learn about the energy that flows from the Sun into the Earth's climate. Alternative energy sources, with an emphasis on Biofuels made from non-food plants, are appropriate for transportation and do not put as much carbon dioxide into the atmosphere as fossil fuels. Students will investigate how plants can be converted into fuels for combustion engines. In the Science in Motion gallery students will investigate how combustion engines work and how other engines propel on the ground, into the air, and out to the planets. Program will run for two hours and ten minutes.

40 MINUTES - PLANETARIUM SHOW
Dynamic Earth, Carbon Cycle Demo, and Solar D-House introduction, ALL STUDENTS

30 MINUTES - LAB

Making ethanol, measuring sugar levels, and investigating planet cells

30 MINUTES - GALLERY TIME

Observe engines in the Science in Motion gallery. Investigate engines using a scavenger hunt.

30 MINUTES

Store & Lobby for Foucault Pendulum

TAKE HOME ITEMS

SwitchGrass Kit

GEORGIA PERFORMANCE STANDARDS

S5CS1, S5CS4c, S5CS7, S5E1a-c, S6E5a, S6E5c-g, SES1a-e, SES2a-e, SES3a-e, SESa-e, SG1a, SG1d, SG2a-d, SG3a-d, SG3f, SG4a-d, SG5a-b, SO1a-c, SZ2a

SUN & SOLAR ENERGY

GRADE LEVELS 8th, 9th-12th & College

DESCRIPTION

This program explores the Sun as a star and how we can harness its energy to use here on Earth. In the planetarium we learn about our closest star, the Sun, in our program "Stars: Powerhouses of the Universe." In the Science in Motion gallery we investigate alternative energies that are used to power vehicles and rockets. We will also tour the Georgia Tech Solar Decathlon House to allow students to see an environment totally run by energy from the Sun. In addition, students will investigate the large solar panels that help power the Tellus Science Museum. Program will run for two hours and ten minutes.

40 MINUTES - PLANETARIUM SHOW
Stars: Powerhouses of the Universe and Solar Cell introduction, ALL STUDENTS

30 MINUTES

Solar Decathlon House exploration and scavenger hunt

30 MINUTES - GALLERY TIME

Investigate fuels for rockets and alternative energies that are used to power other vehicles

30 MINUTES

Store & Solar Viewing
(Inclement Weather Birth & Death of Stars)

TAKE HOME ITEMS

Solar bead backpack pulls or bracelets
Solar Glasses

GEORGIA PERFORMANCE STANDARDS

S8P1, S8P2, SAST5, SEV1, SEV2, SEV4, SEV5, SM4, SM5

METEORITES, MOON ROCKS & COLLISIONS

GRADE LEVELS 4th & 6th

DESCRIPTION

What risks do we on Earth face due to those cosmic elements still swirling around our solar system? Students will answer that question as they explore solar system formation and learn to distinguish between planets, moons, asteroids, and comets. Each activity will leave an impression that tells a story.

30 MINUTES - PLANETARIUM SHOW

Fire Fall, ALL STUDENTS

30 MINUTES - LAB

- Discuss solar system elements that can impact the Earth and other cosmic bodies.
- Participate in a meteorite activity with focus on impact creation and analysis.

30 MINUTES - GALLERY TIME

- See full sized and scaled replicas, as well as actual equipment used to adventure into space. Experience the largest Moon rock in the state of GA, as well as Apollo tools used for collecting lunar samples and Moonscape murals showing cosmic impacts.
- Gain an even larger perspective on our solar system's scale and gravity's effects on orbits of objects of varying mass.

30 MINUTES

Store & Lobby for Foucault Pendulum

TAKE HOME ITEMS

Asteroid bookmarks and Moon maps

GEORGIA PERFORMANCE STANDARDS

S6E1c, S6E1d, S6E1e, S6E1f, S6E2