

Field Trip Options

Planetarium Suggestions:

- **K-2**
 - **Night Sky Live** Journey through the night sky of each season during this engaging live production. You'll find out why we have seasons, and discover how the sky changes throughout the year. On each stop, you'll learn about bright constellations and dazzling deep sky objects. To wrap up, you'll receive a preview of tonight's sky, so you can go out and stargaze yourself! (1-ESS1-2)
- **3-5**
 - **Apollo 11**
 - **Night Sky Live** Journey through the night sky of each season during this engaging live production. You'll find out why we have seasons, and discover how the sky changes throughout the year. On each stop, you'll learn about bright constellations and dazzling deep sky objects. To wrap up, you'll receive a preview of tonight's sky, so you can go out and stargaze yourself! (5-ESS1-1)
 - **Oasis in Space** transports the audience on a beautiful voyage through our universe, galaxy, and solar system in search of liquid water, a key ingredient for life on Earth. (5-ESS1-1)
 - **Destination Mars** Explore the work being done around the globe to help make the dream of getting humans to Mars a reality. Fly through the International Space Station, where astronauts are already living and working in space, and follow the rockets and vehicles that will take humans beyond the Moon and, one day, all the way to Mars! Travel along as we imagine this remarkable journey. (3-5-ETS1-1; 3-5 ETS1-2; 3-5-ETS1-3)
- **6-8**
 - **Night Sky Live** Journey through the night sky of each season during this engaging live production. You'll find out why we have seasons, and discover how the sky changes throughout the year. On each stop, you'll learn about bright constellations and dazzling deep sky objects. To wrap up, you'll receive a preview of tonight's sky, so you can go out and stargaze yourself! (MS-ESS1-1; MS-ESS1-3)
 - **Destination Mars** Explore the work being done around the globe to help make the dream of getting humans to Mars a reality. Fly through the International Space Station, where astronauts are already living and working in space, and follow the rockets and vehicles that will take humans beyond the Moon and, one day, all the way to Mars! Travel along as we imagine this remarkable journey. (MS-ESS1-3; MS-ETS1-4)
 - **Apollo 11**
 - **Secret Lives of Stars:** Narrated by Patrick Stewart, viewers witness an amazing variety of stars and peer into their secret lives. Some stars are massive. Others are tiny, nearly insignificant. The specific characteristics of a star will determine what type of life it will lead, how long it might live and even the type of death it will die. (MS-ESS1-3)

- **9-12**
 - **Night Sky Live** Journey through the night sky of each season during this engaging live production. You'll find out why we have seasons, and discover how the sky changes throughout the year. On each stop, you'll learn about bright constellations and dazzling deep sky objects. To wrap up, you'll receive a preview of tonight's sky, so you can go out and stargaze yourself! (HS-ESS1-4)
 - **Apollo 11**
 - **Destination Mars** Explore the work being done around the globe to help make the dream of getting humans to Mars a reality. Fly through the International Space Station, where astronauts are already living and working in space, and follow the rockets and vehicles that will take humans beyond the Moon and, one day, all the way to Mars! Travel along as we imagine this remarkable journey. (HS-ETS1-1; HS-ETS1-2)
 - **Black Holes:** Narrated by actor Liam Neeson, the production features high-resolution visualizations of cosmic phenomena, working with data generated by supercomputer simulations, to bring the current science of black holes to the dome screen.
 - **CRISPR:** Learn about the gene editing discovery of CRISPR

30-Minute Options

- Gravity Challenge: Balance 14 nails on 1 nail
- [LEGO Communication Activity](#)
- Dexterity Challenge: Students try not to touch the wire with the loop (think Operation)
- Gift Shop
- Cos Kids
- Logic Puzzles

LaunchLearning Field Trip Options

K-2

- **Living in Space:** Presentation on how astronauts live and work in space (K-LS1-1; K-ESS2-2; KESS3-1)
- **Build a Better Lander:** Engineering design challenge for students to build a model lunar lander and land 6 astronauts to the ground safely (K-2-ETS1-1; K-2-ETS1-2)
- **LOXIC:** Presentation where an educator makes ice cream using liquid nitrogen
- **Radiation Art:** Create art using the sun (1-PS4-2; 1-PS4-3)
- **Race the Mouse:** Students try to make it through a maze faster than our trained Cosmosphere mouse
- **Characteristics of Life:** Students discuss the criteria of living vs. non-living things and create new alien life forms. (K-LS1-1; 1-LS1-2)

3-5

- **Living in Space:** Presentation on how astronauts live and work in space (3-LS4-3; LS3-2)

- **Radiation Art:** Create art using the sun
- **Build a Better Lander:** Engineering design challenge for students to build a model lunar lander and land 6 astronauts to the ground safely (3-5-ETS1-1; 3-5-ETS1-2; 3-5-ETS1-3)
- **LOXIC:** Presentation where an educator makes ice cream using liquid nitrogen
- **Race the Mouse:** Students try to make it through a maze faster than our trained Cosmosphere mouse
- **Challenge Course:** Complete various challenges using teamwork, collaboration, and communication skills
- **Air Rockets:** Launch a paper rocket using air pressure (3-5-ETS1-1; 3-5-ETS1-2; 3-5-ETS1-3)
- **Maze Robotics (limit 30/group):** Program a Sphero robot to make its way through a maze
- **Battery Build:** Build a replica of one of the earliest batteries using pennies and zinc washers (4-PS3-2; 4-PS3-4)
- **LB7 Switch Activity:** Create a unique switch to blast the door off the mini LB7 model (3-PS2-3)
- **Rocket Crawl:** Engineering design challenge for students to make a vehicle to deliver a rocket to the launch platform safely (3-PS2-3) (3-5-ETS1-1; 3-5-ETS1-2; 3-5-ETS1-3)
- **Acids and Bases:** Students test everyday household products to determine if they are acids or bases (5-PS1-3)

6-8

- **Living in Space:** Presentation on how astronauts live and work in space (MS-LS2-3)
- **Radiation Art:** Create art using the sun
- **Build a Better Lander:** Engineering design challenge for students to build a model lunar lander and land 6 astronauts to the ground safely (MS-PS2-1) (MS-ETS1-1; MS-ETS1-2; MS-ETS1-4)
- **LOXIC:** Presentation where an educator makes ice cream using liquid nitrogen
- **Race the Mouse:** Students try to make it through a maze faster than our trained Cosmosphere mouse
- **Challenge Course:** Complete various challenges using teamwork, collaboration, and communication skills
- **Air Rockets:** Launch a paper rocket using air pressure (MS-ETS1-1; MS-ETS1-2; MS-ETS1-4)
- **Maze Robotics (limit 30):** Program a Sphero robot to make its way through a maze
- **VR (limit 15)**
- **Battery Build:** Build a replica of one of the earliest batteries using pennies and zinc washers (MS-PS2-3)
- **LB7 Switch Activity:** Create a unique switch to blast the door off the mini LB7 model (MS-ETS1-1; MS-ETS1-2; MS-ETS1-4)
- **Rocket Crawl:** Engineering design challenge for students to make a vehicle to deliver a rocket to the launch platform safely (MS-ETS1-1; MS-ETS1-2; MS-ETS1-4)

- **Acids and Bases:** Students test everyday household products to determine if they are acids or bases (MS-PS1-2)
- **Apollo 13 Challenge:** Students recreate building the carbon dioxide filter on Apollo 13.
- **Spectroscopy:** Students study unique light patterns to determine if exoplanets could possibly sustain life (MS-PS4-2)
- **3D Printing:** Learn the basics of 3D printing

9-12

- **Living in Space:** Presentation on how astronauts live and work in space
- **Radiation Art:** Create art using the sun
- **Build a Better Lander:** Engineering design challenge for students to build a model lunar lander and land 6 astronauts to the ground safely (HS-PS2-3) (HS-ETS1-2; HS-ETS1-3)
- **LOXIC:** Presentation where an educator makes ice cream using liquid nitrogen
- **Race the Mouse:** Students try to make it through a maze faster than our trained Cosmosphere mouse
- **Challenge Course:** Complete various challenges using teamwork, collaboration, and communication skills
- **Air Rockets:** Launch a paper rocket using air pressure (HS-ETS1-2; HS-ETS1-3)
- **Maze Robotics (limit 30):** Program a Sphero robot to make its way through a maze
- **VR (limit 15)**
- **Battery Build:** Build a replica of one of the earliest batteries using pennies and zinc washers (HS-PS3-3)
- **LB7 Switch Activity:** Create a unique switch to blast the door off the mini LB7 model (HS-ETS1-2; HS-ETS1-3)
- **Rocket Crawl:** Engineering design challenge for students to make a vehicle to deliver a rocket to the launch platform safely (HS-ETS1-2; HS-ETS1-3)
- **Acids and Bases:** Students test everyday household products to determine if they are acids or bases (HS-PS2-6)
- **Apollo 13 Challenge:** Students recreate building the carbon dioxide filter on Apollo 13.
- **Spectroscopy:** Students study unique light patterns to determine if exoplanets could possibly sustain life
- **3D Printing:** Learn the basics of 3D printing
- **RTG:** Engineering Design challenge to build the best power source for a Martian colony (HS-PS3-3)

Goddard Standards

- K-PS2-1; K-PS2-2
- 3-PS2-1; 3-PS2-2
- MS-PS2-1; MS-PS2-2
- HS-PS2-1

Chemistry Standards

- 2-PS1-1; 2-PS1-3; 2-PS1-4

- 5-PS1-1; 5-PS1-3; 5-PS1-4
- MS-PS1-1; MS-PS1-2; MS-PS1-5
- HS-PS1-1; HS-PS1-2; HS-PS1-5; HS-PS1-7