

# Workshop Offerings 2024-25 Field Trips

### Workshops all touch on grade-specific science standards.

#### Wonders of Weather

Grades: K-3

Meteorologists study and measure the weather! Through crafts and experiments, students will step into the shoes of a meteorologist to explore different kinds of weather and how they are formed as well as the tools used to observe them. Come find out how the sun, air, and water work together to create all different types of weather we see.

NGSS: K-LS1-1, K-ESS2-1, K-ESS3-1, K-ESS3-2, 1-ESS1-2, 2-PS1-1, 2-PS1-4, 2-ESS2-3,

K-2-ETS1-2

## Sun, Earth, Moon

Grades: K-5

Through this workshop, students will be introduced to the two astronomical objects that are most significant in their lives, the sun and the moon, along with a deeper understanding of our own planets' special features and how all three act together

**NGSS:** K-PS2-1, K-PS3-1, 1-PS4-2, 1-ESS1-1, 2-ESS1-1, ESS1.C, K-1-ETS1-2, 3-PS2-1, 4-PS3-1, 4-PS3-2, 4-PS3-3, 5-PS2-1, 5-ESS1-1, 5-ESS2-1

### Mars Lander Challenge

#### Grades: 3-8

Perseverance, our most recent Mars rover, was deployed in February 2021: but how did it successfully arrive? Come build your own lander to keep our rovers safe on their journeys! In this workshop, young engineers will be briefed on the challenges of landing scientific instruments on Mars. Then, they will take on the task of designing a Mars lander, testing it, and testing again, to see if it can successfully tackle the red planet.

NGSS: 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, MS-ETS1-2, MS-ETS1-3, MS-ETS1-4

# **Energy Engineering**

#### Grades: 4-8

Things are heating up, so come on down and shoot the breeze! Where does all of our energy come from? How do different types of energy influence life on our planet? In this workshop students will learn about different sources of energy, including wind and solar energy. They will also design wind turbine models and test their ability to produce energy. They will leave this workshop with engineering/experimentation skills and an understanding of the impact renewable and non-renewable energy sources have on our environment.

NGSS: 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, MS-ETS1-2, MS-ETS1-3, MS-ETS1-4