

# CLASS/GROUP VISIT PROGRAMS

All featured programs are aligned to both Ohio Learning Standards and Next Generation Science Standards. Each program is also scalable for grades K-2, 3-5, 6-8, and 9-12.



## CATCHING THE WIND - PROJECT SKYSAIL | 1.5 HOURS

Your students' interest will soar as they learn about the forces of flight through a study of kites and how they fly. During this program, students will determine the key components necessary for a kite to fly by examining various types of kites and investigating materials in our wind tunnel. Students will then put their knowledge to the test by building and testing their own kites!

### KEY CONCEPTS

1. Kites have three essential elements required to fly.
2. The shape of an object impacts the amount of drag the object experiences when moving through the air.
3. Kites fly only when lift is greater than the force of gravity.

### ACTIVITIES

1. Kite Investigation
2. Materials Testing
3. Kite Design Challenge

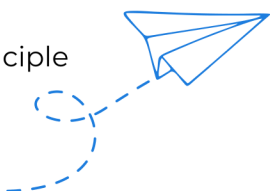


## FAST & EFFICIENT FLIGHT - PROJECT AEROSPACE ADVANCEMENT - 2 HOURS

Unlocking the mysteries of flight, students soar into the realm of aerodynamics and Bernoulli's Principle. Empowered as aerospace engineers, they craft, test, and refine experimental paper aircraft, mastering the art of speed and efficiency.

### KEY CONCEPTS

1. Bernoulli's Principle
2. Aerodynamics



### ACTIVITIES

1. Bernoulli's Principle Investigation
2. Building Wind Tunnel Flyers
3. Designing & Testing Experimental Paper Airplanes

## SPACE EXPLORATION - PROJECT SKYWARD SOJOURN & PROJECT STRANDED STARS | 2 HOURS

Spark student curiosity and fuel their creativity through an exhilarating exploration of aerodynamics and propulsion by constructing straw rockets. After launching their creations, teams collaborate to construct a retrieval mechanism, ensuring their spacecraft's safe return to Earth. An immersive journey awaits as innovation propels learning beyond the stars.

### KEY CONCEPTS

1. Aerodynamics
2. Newton's 3rd Law

### ACTIVITIES

1. Stomp Rockets
2. Project Skyward Sojourn: Straw Rocket Challenge
3. Project Stranded Stars: Building a Retrieval Device

