

# 1st and 2nd Grade Outreach Programs

Maximum class size: 30 students per presentation

### First Grade:

### Let's Get Moving: Pushes and Pulls

You can't see forces, but you can see what they do: pushing and pulling on objects to make them move, change direction, speed up and slow down. Experiment with toys to learn about forces and different kinds of motion. Is there a force that can make things jump around, almost like magic?

Scientific Investigation; Force, Motion, and Energy SOLs: 1.1, 1.2

Presentation Requirements: Remain in one room for all presentations, 4 station tables, water source, electrical outlet.

### **Mixing It Up**

At first, the mystery substances seem alike, so you will use your senses to observe the differences. Perform experiments to find out what dissolves and what does not. Can you mix a solid and liquid to create a gas?

Scientific Investigation, Matter SOLs: 1.1, 1.3

Presentation Requirements: Must remain in one room for all presentations, display table, students seated at desks or tables in 4 groups, water source with sink, electrical outlet.

### Who Am I? Where Do I Live?

Fur, feathers or scales; legs, fins or wings; run, jump, climb, swim or fly — Who am I? Water or land; nest or den; shell or not — Where do I live? Am I wild or tame? Explore how animals are alike and different in their habitats, body coverings, and how they move.

Life Processes SOLs: 1.5

Presentation Requirements: Remain in one room for all presentations, display table, 4 station tables.



## Second Grade:

### **Encompassing: Magnets and Compasses**

Find out how magnets work and what it takes to make a magnet. Why do magnets attract some materials and not others? What do magnets and compasses have in common?

Force, Motion, and Energy SOLs: 2.2

Presentation Requirements: Display table, students seated at desks or tables in 4 groups.

### **Seasonal Changes in Plants and Animals**

Investigate the many changes that plants and animals experience throughout the seasons. How are plant and animal life cycles related to seasonal changes? Why do we have seasons?

Life Processes, Earth Patterns SOLs: 2.4, 2.7

Presentation Requirements: Remain in one room for all presentations, display table, 4 station tables.

### "Solid State" and Other Forms of Matter

Experiment with solids, liquids, and gases. Will two objects of the same shape and size necessarily weigh the same? Investigate differences between mass, weight, and volume. Observe matter as it changes state.

Scientific Investigation, Matter SOLs: 2.1, 2.3

Presentation Requirements: Remain in one room for all presentations, display table, students seated at desks or tables in 4 groups, water source with sink, electrical outlet.

### Storm Team: Weather Makers

Learn about what makes weather, why it changes, and how we can measure it. Explore the formation of different kinds of storms and their effects.

Scientific Investigation; Matter; Earth/Space Systems SOLs: 2.1, 2.3, 2.6

Presentation Requirements: Remain in one room for all presentations, display table, 4 station tables, water source with sink, electrical outlet.