

### HOW DOES IT GROW?

**Grades K & 1** - Can you believe how much your students grow in one year? Neither can we! Growth is a great topic for exploring what living things need to grow and survive. Build a window greenhouse for a seed. (45 min)

ND Science Standards: K-PS3-1; K-LS1-1; 1-LS1-1

### WHAT'S THE MATTER?

**Grades K, 1 & 2** - Explore the properties of the matter and make some fascinating discoveries about how matter changes. Investigate solids, measure liquids, and observe gases that fizz and bubble. Students will make slime, a non-Newtonian fluid and take it home. (45 min)

ND Science Standards: 2-PS1-1, 2, 4

### SUN, MOON, AND STARS

**Grades 1 & 2** – What causes day and night? Why can we see different constellations at different times of the year? Ever wonder why the Sun only appears during the day but the moon can appear day or night? Students become astronomers as they build a pocket solar system, see the stars, investigate the moon, and make a constellation. (45 min)

ND Science Standards: 1-PS4-2; 1-ESS1-1

### MAGNIFICENT MAGNETS

**Grades 1, 2 & 3** - From the refrigerator door to rollercoasters - magnets are everywhere! But what exactly is a magnet? Students explore magnetism as they observe how magnets interact with each other, make a flying kite, a maze, and a compass. (45 min)

ND Science Standards: 3-PS2-1; 3-PS2-3, 4

### FINCHES AND CODING

**Grades 2 & up** - Learn the basics of coding with our Finch robots. Robots will follow lines and perform other programmed tasks, based on how the student progresses. Depending on age range and skill level, several concepts will be introduced using this whimsical bird. (60 min)

ND Science Standards: 4-PS4-3 / ND Computer Science & Cybersecurity Standards: ES.DD.1

### PAPER STRUCTURES

**Grades 2 & up** - Student engineers will be challenged to construct the tallest freestanding structure that they can in a limited amount of time and with a limited amount of supplies. (45 min)

ND Science Standards: 3-ESS3-1; 4-ESS3-2; 5-ET1-3

### LITTLEBITS AND ELECTRICITY

**Grades 3 & up** - Learn how electrons flow and explore the basics of circuitry and electric engineering with littleBits electronic building blocks. (45 min)

ND Science Standards: 4-PS3-2, 4

### CANDY SKYSCRAPERS

**Grades 3 & up** - Challenge your construction engineers with this sweet skyscraper-building workshop. Students analyze the strength of different shapes, collect data, and use their observations to construct a sturdy building that can withstand the forces of nature. (60 min)

ND Science Standards: 3-ESS3-1; 3-ET1-2,3; 4-ESS3-2; 4-ET1-1, 2, 3; 5-ET1-1, 2, 3

### BUCKET TOWERS

**Grades 3 & up** - Students will collaborate in groups to design a tower that is sturdy and strong. Each tower will be put to the test - how many washers can we add before the tower collapses? Learn about 3D shapes, variables, and construction engineering. (60 min)

ND Science Standards: 3-ET1-1, 3; 4-ET1-3; 5-ET1-3

### MARBLE ZIPLINES

**Grades 3 & up** - Fight gravity in this STEM workshop designed to challenge your best engineers. Can you work as a group to build a safe yet fast zip line for a marble passenger? Use your math and engineering skills to safely deliver your marble to the landing zone. (60 min)

ND Science Standards: 3-PS2-1, 2; 3-ET1-1; 4-ET1-1, 2, 3; 4-PS3-1; 5-ET1, 2, 3

### DISSECTION (OWL PELLETS)

**Grades 4 & up** – Introductory dissection activity that helps students understand predator-prey relationships and the food cycle. Identify an owl pellet’s content, record and analyze data. (45 min) *\*Non-refundable materials fee of \$50 and 4 weeks advanced booking required.*

ND Science Standards: 4-LS1-1, 5-LS-2-1

### FORENSICS

**Grades 4 & up** – Work as forensic investigators and use techniques of forensic science to analyze evidence left behind at a crime scene. Use deductive reasoning to evaluate fingerprints, chromatography, fibers, smells, liquids, and powders to determine the criminal’s identity. (60 min)

ND Science Standards: 4-LS1-1; 5PS1-2, 3