

GRADES 6-8

FINCHES AND CODING

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 Computer Science & Cybersecurity Standards: MS.DD.1

BRIDGE DESIGN CHALLENGE

Students act as structural engineers and learn about forces and load distributions as they follow the steps of the engineering design process to design and build small-scale bridges that can carry a load. (60 min)

ND Science Standards: MS-ET1-3; MS-ET1-4

LITTLEBITS AND ELECTRICITY

Learn how electrons flow and explore the basics of circuitry and electric engineering with littleBits electronic building blocks. (45 min)

ND Science Standards: MS-PS2-3

STURDY STRUCTURES

Students are challenged to build the tallest earthquake-proof skyscraper. Using the engineering design process, they will design and build skyscrapers for height, stability, and strength to withstand a simulated earthquake. (60 min)

ND Science Standards: MS-ET1-3; MS-ET1-4

BUCKET TOWERS

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: MS-ET1-3; MS-ET1-4

MARBLE ZIPLINES

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 our marble passenger? Use your math and engineering skills to safely deliver your marble to the landing zone. (60 min)

ND Science Standards: MS-ET1-3, 4; MS-PS2-1

DISSECTION (EARTHWORMS)

Study the body systems of an earthworm. Dissect the digestive, circulatory, reproductive, and nervous systems. (45 min)

**Non-refundable materials fee of \$50 and 4 weeks advanced booking required.*

ND Science Standards: MS-LS2-1; MS-LS2-3

DISSECTION (GRASSHOPPERS)

Insects are the most diverse class of animals on the planet with over 1 million named species. Examine the entire grasshopper, explore basic insect anatomy, identify the major subdivisions and parts of the body. (45 min)

**Non-refundable materials fee of \$50 and 4 weeks advanced booking required.*

ND Science Standards: MS-LS1-1; MS-LS1-3

FORENSICS

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, powders, and blood evidence to determine the criminal's identity. (60 min)

ND Science Standards: MS-LS1-1; MS-PS1-2