

Class Title	Description	Subject Focus
Design it, Build it, Test it (Elementary)	In "Exploring the Solar System: Design, Build, Test," participants will imagine a scientific mission to space, draw inspiration from existing spacecraft, and then design and build their own simple model spacecraft to accomplish the goals of their mission. After assembling a spacecraft and attaching tools, participants' creations will have to complete a series of tests to ensure that they're ready for launch. Did they include the necessary tools? Can the spacecraft withstand the vibration of launch, or the spin of navigating through space? If not, it's back to the drawing board—the design/build/test cycle begins again!	Engineering / Space Exploration / Scientific Method
Mars Rover (Elementary)	In "Exploring the Solar System: Mars Rovers," participants learn about how scientists and engineers use robotic rovers and other vehicles to explore distant worlds, and experience some of the challenges and teamwork required to navigate a rover across the surface of a planet millions of miles away. Players acting as "Mission Control" and a "Rover" must work together to navigate a large obstacle course.	Space Exploration / Coding
Squishy Circuits (Elementary)	Squishy Circuits uses conductive and insulating play dough to teach the basics of electrical circuits, a perfect blend of play and learning! Squishy Circuits teaches problem solving and engineering concepts and inspires creativity and independent thinking.	Engineering / Electricity / Scientific Method
The Fossil Files (Elementary)	What are fossils, where do they come from, and what can we learn from them? The Fossil Files gives students the chance to observe fossil specimens and hypothesize on facts about ancient life based upon their findings. Participants will have the chance to study and handle real fossilized materials.	Earth Science / Scientific Method / Ecology

Conductivity of Gatorade (Middle School)	Students use conductivity meters to measure various electrolyte and water solutions, relating the conductivity of a material to the electrolyte concentration. This class includes experience with qualitative vs. quantitative data and graphing related variables on axes.	Electrical Engineering
Prehistoric Pickin's (Middle OR High School)	Become a field paleontologist and decode the mysteries of the past! Participants will excavate their own fossil site, document their findings, and use context clues to determine what kinds of environments were present at the time of their fossils' deposition.	Earth Science / Scientific Method / Ecology

