

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
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.	Coding/ Space Exploration
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 teach	Electricity/ Engineering/ Scientific Method

	<p>problem solving and engineering concepts and inspire creativity and independent thinking.</p>	
<p>Conductivity of Gatorade (Middle School)</p>	<p>Students use conductivity meters to measure various salt and water solutions, as indicated by the number of LEDs (light emitting diodes) that illuminate on the meter.</p>	<p>Electrical Engineering</p>
<p>Chemical Conundrum (Middle School)</p>	<p>Students will analyze data from 73 double-replacement reactions, allowing them to develop an answer to the question, "How can scientists predict the properties of the products of a chemical reaction or design a chemical reaction to produce products with specific properties?"</p>	<p>Chemistry</p>