* Science of Bubbles (Scaffolded for Grades K-3)
	+ Students will combine ingredients to create the perfect bubble mixture and learn about the science of how bubbles are formed.
* Lego Engineering (Scaffolded for Grades K-5th)
	+ Students will think like architects and engineers to plan and create a building by developing a blueprint and constructing it, all while applying the concepts of physics to ensure its sturdy structure.
* History and Engineering of Catapults (Scaffolded for Grades K-12)
	+ Students will apply concepts of physics and engineering to create a catapult that can transport objects through the air. Students will also learn about the history of this tool, and the use of it within science. This lesson can be modified to emphasis projectile motion.
* Engineering a Roller Coaster (Scaffolded for Grades 1-12)
	+ Students will build rollercoasters while learning about the forces and energy involved. This lesson can be modified to emphasize potential and kinetic energy, physics calculations, and friction.
* [Strawberry DNA Extraction](https://www.scientificamerican.com/article/squishy-science-extract-dna-from-smashed-strawberries/) (Scaffolded for Grades 3-12)
	+ Students will learn about DNA by extracting it from strawberries. This lesson focuses on DNA and the importance of what scientists do with extracted DNA.
* pH of Food (Scaffolded for Grades 3-12)
	+ Students will learn about the concept of pH, and how it relates to foods. Students will investigate the pH for a variety of foods and investigate what happens when substances of difference pH’s are mixed.
* [Engineering a Boat](https://pbskids.org/designsquad/pdf/parentseducators/DS_Act_Guide_complete.pdf) (Scaffolded for Grades 3-12)
	+ Students will be challenged with the task to create a boat that can successfully float with limited materials. This lesson can be modified to emphasize buoyancy and wind energy with sails.
* Shark Tank: A Lesson on Product Design (Scaffolded for Grades 3-12)
	+ Students will think innovatively by identifying a problem and then designing a product as a solution. They will then work in groups to develop a pitch to market the product to investors.
* [Density Challenge](https://www.flinnsci.com/api/library/Download/012482699e924291a428cccdaaad87e4) (Scaffolded for Grades 5-12)
	+ Students will engage in a challenge by using their knowledge of density to make an object float at a specific level in water. This lesson can be modified to emphasize volume, mass, and specific gravity.
* Creating Topographic Maps from 3D Models (Scaffolded for Grades 8-12)
	+ Students will create 3D landscapes and then collect data to make a topographic map of their model.

Pre-K:

* Stations
	+ Students will investigate how different liquids flow at different speeds based on the type of liquid. Students will then explore different stations, where they will build their scientific skill sets by learning about foundational concepts through hands on activities.