

## Space Exploration Syllabus

Week	Topic	Details
1	What's Hidden Inside	gather information about items you cannot see using limited senses
2	Cool Suit	measure temperature in black and white "suits" to understand the relationship between energy reflection/absorption and color
3	Making Regolith	make simulated regolith (moon dust) and observe its properties
4	Soda Straw Rocket Design	build, test, and modify rockets designs
5	Food for Space Flight	select and compare foods for spaceflight suitability and package them for spaceflight
6	Cleaning Water	create and test a water filtering system
7	Robot Arm Challenge	design and create an arm that can grab objects at a distance
8	Moon Mining	locate and mine "moon rocks" for oxygen
9	Crew Exploration Vehicle (CEV)	design and build a model of a Crew Exploration Vehicle (CEV)
10	Leg Up	simulate the fluid shift felt by astronauts upon entering space
11	Astronaut Lander	design and build a lander to safely land astronauts
12	Ray Shielding	analyze different materials to simulate space radiation shielding on a spacecraft