

Date	Activity	Timing		Key Point / Learning Objective
		From	To	
Sunday	Introduction	9:00	9:30	
	Strong Straw Structures	9:30	10:30	Civil Engineering: Understand the engineering design process to help design and build structures that will be stress tested!
	Break	10:30	10:45	
	Crystal Feathers + Lab Experiment	10:45	12:00	Chemical Engineering: Learning the key principles behind Precipitation, Saturation, Rust & Corrosion. Observing and recording the chemical reactions that occur
	Robotics	12:00	1:00	Robotics: Mechanics, Logic & Coding
	Break	1:00	1:30	
	Coding	1:30	2:30	Logic based Computer Programming
Monday	Introduction	9:00	9:30	
	Building Shelters	9:30	10:30	Environmental Engineering: Whether you live in hot or cold countries, shelters play an important role for humans and animals. Students will design and create their own shelters and test these in outdoor conditions to measure the impact of their constructions
	Break	10:30	10:45	
	Archimedes' Floating Challenge	10:45	12:00	The Archimedes Principle to test different materials submerged in liquid. Will they sink and float and does shape matter?
	Water Collector	12:00	12:45	The important principles of water desalination, water vapours and condensation
	Break	12:45	1:15	
	Robotics & Coding	1:15	2:30	Robotics and Computer Programming
Tuesday	Introduction	9:00	9:30	
	Stress Ball + Calming Bottle	9:30	10:30	Students will create their own Stress Balls, understand why these are used and then create a calming bottle
	Break	10:30	10:45	
	Galaxy STEM Ornaments	10:45	12:00	Science in a bottle. Students will created a galaxy ornament, test and perfect their creations
	Robotics	12:00	1:00	Robotics: Mechanics, Logic & Coding
	Break	1:00	1:30	
	Coding	1:30	2:30	Logic based Computer Programming
Wednesday	Introduction	9:00	9:30	
	The STEM Detective! Fingerprint Dusting	9:30	10:30	Bio-Medical Engineering: What are fingerprints and why is each one different? How can we test this? Students will engage in a fingerprint dusting exercise to understand this further
	Break	10:30	10:45	
	Pasta Skeletons and X-Rays	10:45	12:00	Bio-Medical Engineering: The human body - what's it made up of and how do bone structures allow us to function?
	Robotics	12:00	1:00	Robotics: Mechanics, Logic & Coding
	Break	1:00	1:30	
	Coding	1:30	2:30	Logic based Computer Programming
Thursday	Introduction	9:00	9:30	
	Light Card Challenge and Electrical Fruits	9:30	10:30	Electrical engineering: Conductors and Electricity tests
	Break	10:30	10:45	
	Electric Glow in the Dark Challenge	10:45	12:00	Electrical Engineering:
	Coding	12:00	1:00	Logic based Computer Programming
	Break	1:00	1:30	
	Robotics	1:30	2:30	Robotics: Mechanics, Logic & Coding