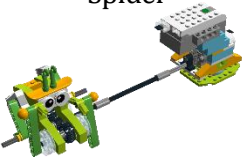
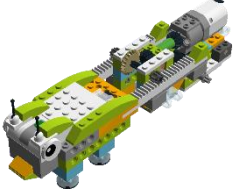




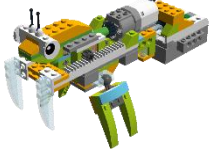




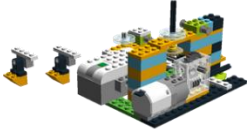




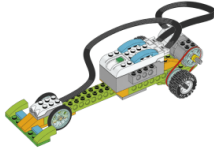
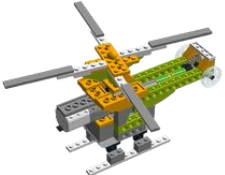


CENTRE FOR ROBOTICS LEARNING – LEGO WEDO 2.0 SUMMER CAMP OUTLINE

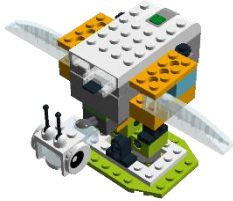
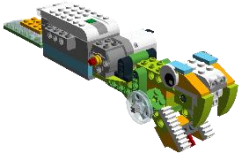

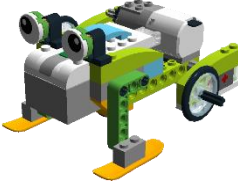

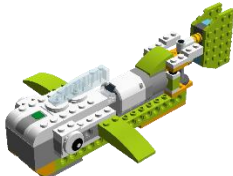



Junior Naturalist Camp Programme Outline

Time	Monday	Tuesday	Wednesday	Thursday	Friday
0745 - 0800	Check In & Registration				
0800 - 0900 (1 hour)	Introduction to Robotics and the LEGO® WeDo 2.0 system	Topic Exploration: How does a caterpillar move?	Topic Exploration: Why do earthquakes happen?	Topic Exploration: Brachiosaurus	Topic Exploration: Triceratops
0900 - 1000 (1 hour)	Project: Spinne Spider 	Project: Caterpillar 	Project: Earthquake 	Project: Brachiosaurus 	Project: Triceratops 
1000 - 1015	Break Time				
1015 - 1100 (45 mins)	Topic Exploration: How do spiders spin web?	Topic Exploration: How does a praying mantis hunt for food?	Topic Exploration: Dimetrodon	Topic Exploration: T-Rex	Student Project
1100 - 1200 (1 hour)	Project: Spider on the web 	Project: Praying Mantis 	Project: Dimetrodon 	Project: T-Rex 	Student Project
1200 - 1215	Dismissal				


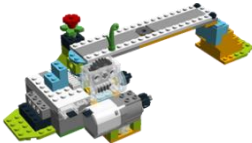

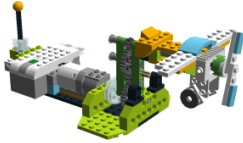
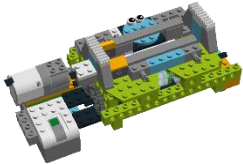
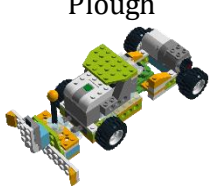

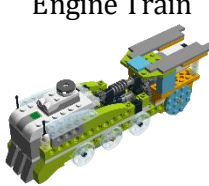

Junior Mechanic Camp Programme Outline

Time	Monday	Tuesday	Wednesday	Thursday	Friday
0745 - 0800	Check In & Registration				
0800 - 0900 (1 hour)	Introduction to Robotics and the LEGO® WeDo 2.0 system	Topic Exploration: Robot in Factories	Topic Exploration: How do pulley systems work?	Topic Exploration: How does 4 wheel drive work?	Topic Exploration: Momentum and spinning motion
0900 - 1000 (1 hour)	Project: Milo the Exploration Rover 	Project: Pulling Robot 	Project: Cable Car 	Project: Buggy 	Project: Spinning Carousel 
1000 - 1015	Break Time				
1015 - 1100 (45 mins)	Topic Exploration: Mars Exploration	Topic Exploration: Autonomous Robots	Topic Exploration: Engine & Aerodynamics	Topic Exploration: Science of Helicopter Flight	Student Project
1100 - 1200 (1 hour)	Project: Mars Rover 	Project: Scan Robot Rover 	Project: Race Car 	Project: Helicopter 	Student Project
1200 - 1215	Dismissal				

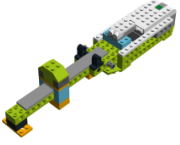

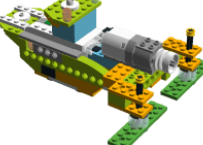
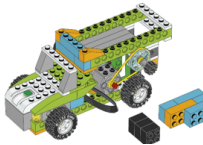
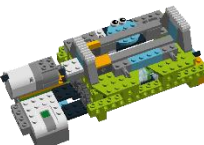



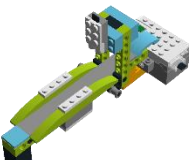
Junior Biologist Programme Outline

Time	Monday	Tuesday	Wednesday	Thursday	Friday
0745 - 0800	Check In & Registration				
0800 - 0900 (1 hour)	Introduction to Robotics and the LEGO® WeDo 2.0 system	Topic Exploration: How does a snake move?	Topic Exploration: How do birds fly?	Topic Exploration: Frog Movement	Topic Exploration: Penguins and the vanishing Antarctica
0900 - 1000 (1 hour)	Project: Firefly 	Project: Snake 	Project: Bird Nest 	Project: Frog 	Project: Penguin 
1000 - 1015	Break Time				
1015 - 1100 (45 mins)	Topic Exploration: Fish & Ocean Habitat	Topic Exploration: How do spiders spin web?	Topic Exploration: Why are bees important?	Topic Exploration: Lifecycle of a Frog	Student Project
1100 - 1200 (1 hour)	Project: Fish 	Project: Spider 	Project: Bee Pollination 	Project: Frog Lifecycle 	Student Project
1200 - 1215	Dismissal				

Junior Engineer Programme Outline

Time	Monday	Tuesday	Wednesday	Thursday	Friday
0745 - 0800	Check In & Registration				
0800 - 0900 (1 hour)	Introduction to Robotics and the LEGO® WeDo 2.0 system	Topic Exploration: Where do you see retractable bridges?	Topic Exploration: Steam Engine & Combustion (Part 1)	Topic Exploration: Science of Flight (Part 1)	Topic Exploration: Sensors and Automation
0900 - 1000 (1 hour)	Project: Tower Crane 	Project: Retractable Bridge 	Project: Steam Engine 	Project: Propeller Plane 	Project: Paper Counter 
1000 - 1015	Break Time				
1015 - 1100 (45 mins)	Topic Exploration: How do snow ploughs work?	Topic Exploration: Why is oil drilling bad for the environment?	Topic Exploration: Steam Engine & Combustion (Part 2)	Topic Exploration: Science of Flight (Part 2)	Student Project
1100 - 1200 (1 hour)	Project: Snow Plough 	Project: Oil Pump 	Project: Steam Engine Train 	Project: Aeroplane 	Student Project
1200 - 1215	Dismissal				

Junior Machinist Programme Outline

Time	Monday	Tuesday	Wednesday	Thursday	Friday
0745 - 0800	Check In & Registration				
0800 - 0900 (1 hour)	Introduction to Robotics and the LEGO® WeDo 2.0 system	Topic Exploration: How do we reduce our waste footprint?	Topic Exploration: Why are there so much trash in our oceans?	Topic Exploration: Why should we recycle?	Topic Exploration: Sensors and Automation
0900 - 1000 (1 hour)	Project: Measuring Device 	Project: Floor Sweeper 	Project: Ocean Clean Up 	Project: Recycling Truck 	Project: Paper Counter 
1000 - 1015	Break Time				
1015 - 1100 (45 mins)	Topic Exploration: How garbage trucks work?	Topic Exploration: How do we make fans spin fast?	Topic Exploration: Where do we find security alarms?	Topic Exploration: Where do we find detectors?	Student Project
1100 - 1200 (1 hour)	Project: Garbage Truck 	Project: Spinning Fan 	Project: Security Alarm 	Project: Checkout Detector 	Student Project
1200 - 1215	Dismissal				