

# Studio One - Little Explorers STEM and Robotics

## Week 1 - March 28th to April 1st

Date	STEM	Coding
04/04/22	<p style="text-align: center;"><b>Spinning Tops</b></p> <p>Help Sam and Sara build a device that will help spinning tops spin!</p>	<p style="text-align: center;">Be a robot</p> <p style="text-align: center;">KUBO and TagTiles</p> <p style="text-align: center;">(Understanding directions and movements using KUBO)</p>
05/04/22	<p style="text-align: center;"><b>Raft</b></p> <p>Help build a sail that will help Sam and Sara's raft go faster. Explore balance, buoyancy, wind energy.</p>	<p style="text-align: center;">KUBO's First Day</p> <p style="text-align: center;">Remembering Routes</p> <p style="text-align: center;">(Building routes on maps using KUBO's coding tiles)</p>
06/04/22	<p style="text-align: center;"><b>Ice Hockey Player</b></p> <p>Build a third team member that is good at playing long shots. Explore stability, motion, movement, energy.</p>	<p style="text-align: center;">KUBO plays</p> <p style="text-align: center;">KUBO takes the bus</p> <p style="text-align: center;">(Make KUBO 'memorize' the routes – using functions)</p>
07/04/22	<p style="text-align: center;"><b>Sam's Dog</b></p> <p>Help Sara build a buddy-look-alike with big eyes that move. Explore pulley mechanisms and movement.</p>	<p style="text-align: center;">KUBO Has Recess</p> <p style="text-align: center;">KUBO's Weekend Outing</p> <p style="text-align: center;">(Create a game for KUBO to play using functions)</p>
08/04/22	<p style="text-align: center;"><b>Measuring Car</b></p> <p>Build a car that can measure how far it travels on its own. Explore energy, forces and friction, and non-standard measuring</p>	<p style="text-align: center;">KUBO takes a trip</p> <p style="text-align: center;">Your turn to be a robot</p> <p style="text-align: center;">(Make two functions to complete a route and turn a function into a subroutine)</p>

## Week 2 - April 4th to April 8th

Date	STEM	Robotics
28/03/22	<p style="text-align: center;"><b>Three Little Piggies</b></p> <p style="text-align: center;">Design a house that is strong enough to withstand the huffing and puffing of the wolf</p>	<p style="text-align: center;"><b>The Perfect Swing</b></p> <p style="text-align: center;">Build a swing for Maria to ride</p>
29/03/22	<p style="text-align: center;"><b>Goldilocks and the Three Bears</b></p> <p style="text-align: center;">Design a bed that will be the exact size of Goldilocks</p>	<p style="text-align: center;"><b>Treehouse Camp</b></p> <p style="text-align: center;">Build a treehouse so Sofia can see the Moon</p>
30/03/22	<p style="text-align: center;"><b>Jack and the Beanstalk</b></p> <p style="text-align: center;">Design a parachute for Jack to land safely when he jumps off the cloud</p>	<p style="text-align: center;"><b>Arctic Ride</b></p> <p style="text-align: center;">Build a snowmobile to help Leo visit polar bears</p>
31/03/22	<p style="text-align: center;"><b>Gingerbreadman</b></p> <p style="text-align: center;">Design a bridge for the Gingerbreadman to cross the river without getting wet</p>	<p style="text-align: center;"><b>Twirling Cups</b></p> <p style="text-align: center;">Build a teacup ride for Sofia and Leo to try</p>
01/04/22	<p style="text-align: center;"><b>Three Billy Goats Gruff</b></p> <p style="text-align: center;">Design a boat for the three Billy Goats so that they can reach the river bank safely</p>	<p style="text-align: center;"><b>Snack Stand</b></p> <p style="text-align: center;">Build the snack stand so that Daniel can get another snack</p>