

Newquay Primary Academy – Design and technology Summer Term 1 Sequence



	YEAR 3	YEAR 4	YEAR 5	YEAR 6
	N/A Prior knowledge...	<p>Prior knowledge...</p> <p>Pupils can:</p> <ul style="list-style-type: none"> Draw accurate diagrams with correct labels, arrows and explanations. Correctly identify definitions for key terms. Identify five appropriate design criteria. Communicate two ideas using thumbnail sketches. Communicate and develop one idea using an exploded diagram. Select appropriate equipment and materials to build a working pneumatic system. Assemble their pneumatic system within the housing to create the desired motion. Create a finished pneumatic toy that fulfils the design brief. 	N/A Prior knowledge...	N/A Prior knowledge...

INTENT

Mechanical systems: making a slingshot car.
Pupils will design and make their own slingshot car

VOCABULARY / STICKY KNOWLEDGE

Chassis, energy, kinetic, mechanism, air resistance, design, structure, graphics, research, model, template

**SEQUENCE OF
LESSONS**

Lesson 1: Chassis and launch mechanism

To build a car chassis

Lesson 2: Designing the car body

To design a shape that reduces air resistance

Lesson 3: Making the car body

To make a model based on a chosen design

Lesson 4: Assembly and testing

To assemble and test my completed product

**OUTCOME /
COMPOSITE**

To design and make an aerodynamic slingshot car