

Howard Community Academy

Design Technology Overview 2024-25

Year/Class		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception / Year 1	Cycle A	<b>Mechanisms</b> <a href="#">Taxi</a> - Children learn about joining materials, mechanisms and moving parts; making a moving vehicle ( <i>Taxi!</i> )		<b>Product Design</b> <a href="#">Puppets and Pop Ups</a> - Children learn about making a product for an audience		<b>Cooking and Nutrition</b> <a href="#">Chop, slice, mash</a> - children learn about food processes about healthy eating.	
	Cycle B	<b>Structures</b> Homes and Houses – inspired by the story of the Three Little Pigs, children learn about choosing materials for their properties.		<b>Textiles</b> Imaginary Pet – children work with textiles to make their own sock puppet, using various fabrics.		<b>Cooking and Nutrition</b> Bring on Breakfast – children learn about making a ‘balanced’ meal, and the benefits of healthy eating.	
Year 2 / 3 Rabbit	Cycle A	<b>Joining Materials</b> Children learn to construct a model community village (linked to <a href="#">Street Detectives</a> )		<b>Cooking and Nutrition</b> <a href="#">Remarkable Recipes</a> – Children learn about sources of food and tools used for food preparation. The children choose and make a new school meal that fulfils design criteria.		<b>Structures</b> <a href="#">Towers, Tunnels and Turrets</a> – Children learn about constructing towers and strengthening materials for a given purpose.	
	Cycle B	<b>Structures</b> Freestanding Structures <i>project on a page</i> – children learn to join materials and make a model village.		<b>Textiles</b> Templates and Joining <i>project on a page</i> – children learn to join fabric by stitching to make a bag or apron.		<b>Cookery and Nutrition</b> Party time – children learn to use a variety of kitchen equipment safely to make food for a picnic or party.	
Year 3/4 Badger	Cycle A	<b>Materials</b> <a href="#">Iron Age Jewellery</a> - Children learn about different clothing and jewellery from the past, then make their own.		<b>Mechanisms</b> <a href="#">Making it Move</a> – Children learn about cam mechanisms. They experiment with different shaped cams before designing, making and evaluating a child's automaton toy.		<b>Cooking and Nutrition</b> <a href="#">Cook well, eat well</a> - Children learn about healthy foods; design and make their own healthy snacks	

	<b>Cycle B</b>	<b>Mechanisms</b> Levers and Linkages <i>project on a page</i> – children learn to make a simple moving toy using linkages and levers.	<b>Structures</b> Shell structures <i>project on a page</i> – children use 2D nets to make 3 structures by folding and joining materials.	<b>Cooking and Nutrition</b> Get baking – children learn to measure and mix ingredients to follow a recipe and bake bread rolls.
<b>Year 4/5 Otter</b>	<b>Cycle A</b>	<b>Structures</b> <a href="#">Invaders</a> - Children learn about different tools, linked to their cross-curricular topic; to build a boat.	<b>Cooking and Nutrition</b> <a href="#">Fresh food, good food</a> - children learn about food decay and preservation. They discover key inventions in food preservation and packaging, then make examples.	<b>Product Design (TESLA Project)</b> Children learn about designing a vehicle for a specific purpose and create their own model prototype.
	<b>Cycle B</b>	<b>Textiles</b> 2D shape to 3D product <i>project on a page</i> – children cut and join materials to make a garment of their design.	<b>Structures (woodwork)</b> Frame Structures <i>project on a page</i> – children make model buildings by cutting and joining wood safely using a variety of tools.	<b>Cooking and Nutrition</b> Lovely lunch – children write their own recipes for making a meal inspired by food from other cultures.
<b>Year 5/ 6 Fox</b>	<b>Cycle A</b>	<b>Structures</b> <a href="#">Engineer</a> - Children learn about remarkable engineers and significant bridges, learning to identify features, such as beams, arches and trusses. They complete a bridge-building engineering challenge to create a bridge prototype.	<b>Cooking and Nutrition</b> <a href="#">Hola Mexico</a> - Children learn about food from around the world; prepare and make their own Mexican meal.	<b>Mechanisms and Circuits</b> Children learn about using different electrical components, to create programmable models for a given purpose (Linked to unit <a href="#">Tomorrow's World</a> ).
	<b>Cycle B</b>	<b>Cooking and Nutrition</b> Serve a salad – children learn to plan, make and evaluate a meal of their own design for a given audience.	<b>Textiles</b> Make Do and Mend, combining different shapes <i>project on a page</i> – children learnt to repair ripped and torn fabrics.	<b>Electrical</b> Simple switches and circuits <i>project on a page</i> – children learn to design and make products with electrical components for a given purpose.