

Hardwick Green Primary Academy

STEM (Science and Design & Technology) – Subject Overview 2024-25

Long Term Overview

	1	2	3	4	5	6
Nursery	Where do I belong?	Once upon a time (natural materials, senses)	Where in the world? (materials)	All creatures great and small (life cycles, living things)	Growing and farms (plants)	Do you like to be beside the seaside? (materials, senses)
Reception	Where do I belong? (recycling, soup-making, Autumn)	Once upon a time (Baking)	Where in the world? (Winter, melting ice)	All creatures great and small (minibeasts, animals, habitats, life cycles)	Growing and farms (food, plating, bread, healthy food, farms)	Do you like to be beside the seaside? (sea creatures, floating and sinking)
	Science - Materials: Everyday materials	Science - Forces and space: Seasonal changes	Science - Animals: Sensitive bodies	Science - Plants: Introduction to plants		Science - Animals: Comparing animals
Year 1	DT - Textiles: Puppets			DT - Cooking & nutrition: Fruit and vegetables	DT - Mechanisms: Wheels and axels	
			DT - Mechanisms: Making a moving monster	-	DT - Cooking and nutrition: A balanced diet	DT - Textiles: Pouches
	Science - Living things: Habitats	Science - Living things: Microhabitats		Science - Animals: Life cycles and health	Science - Materials: Uses of everyday materials	Science - Plants: Plant growth
Year 2			DT - Mechanisms: Making a moving monster	DT - Cooking and nutrition: A balanced diet		DT - Textiles: Pouches

Year 3 / 4 (Cycle A)	Science - Animals: Digestion and food	Science - Materials: States of matter	Science - Energy: Electricity and circuits	Science - Living things: Classification and changing habitats		Science - Energy: Sound and vibrations
	DT- Cooking & Nutrition: Eating Seasonally		DT – Electrical Systems: Torches		DT- Textiles: Cushions and Fastenings	
Year 3 / 4 (Cycle B)	Science - Animals: Movement and nutrition	Science - Energy: Light & shadows	Science - Materials: Rocks and soils	Science - Forces and space: Forces and magnets	Science - Plants: plant reproduction	
Yea (Cyc				DT - Mechanical Systems: Pneumatic Toys		DT - Stiffening Structures: Constructing a Castle
Year 5 / 6 (Cycle B)		Science - Forces and space: Earth & Space	Science - Forces and space: Imbalanced Forces	Science - Materials: properties & changes / Mixtures and separation	Science - Living things: Life cycles and reproduction	Science - Animals: Human timeline
	DT – Stiffening Structures: Bridges		DT - Mechanical Systems: Pop-up Book			DT - Cooking & Nutrition: What could be healthier?
Year 5 / 6 (Cycle A)	Science - Living things: Classifying big and small	Science - Living things: Evolution and inheritance	Science - Animals: Circulation and exercise		Science - Energy: Light and reflection	Science - Energy: Circuits, batteries and switches
				DT – Mechanical systems: Automata toys		DT – Electrical Systems: Steady hand games

Design & Technology Subject Overview (by key area)

	Cooking & nutrition	Mechanical systems	Structures	Textiles	Electrical systems
Year 1	DT - Cooking & nutrition: Fruit and vegetables	DT - Mechanisms: Wheels and axels		DT - Textiles: Puppets	
Year 2	DT - Cooking and nutrition: A balanced diet	DT - Mechanisms: Making a moving monster		DT - Textiles: Pouches	
Year 3 / 4 Cycle A	DT- Cooking & Nutrition: Eating Seasonally			DT- Textiles: Cushions and Fastenings	DT – Electrical Systems: Torches
Year 3 / 4 Cycle B		DT - Mechanical Systems: Pneumatic Toys	DT - Stiffening Structures: Constructing a Castle		
Year 5 / 6 Cycle A	DT – Cooking & Nutrition: What could be healthier	DT – Mechanical Systems: Pop-up Book	DT – Stiffening Structures: Bridges		
Year 5 / 6 Cycle B		DT – Mechanical systems: Automata toys			DT – Electrical Systems: Steady hand games