

DT
Whole School Subject Overview



	Autumn 1	Autumn2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	<u>Structures: Junk modelling</u> Investigating materials and construction techniques. Develop motor skills.	<u>Christmas: Sliding Santa chimneys.</u> Children explore a simple paper slider mechanism as part of a practical example and then apply it to create their own sliding Santa chimney picture.	<u>Cooking and nutrition: Soup</u> Exploring vegetables, where they come from and how they can be prepared for cooking.	<u>Textiles: Beach towel</u> Developing fine motor skills through a range of threading activities.		<u>Structures: Boats</u> Investigating the properties of materials through water play to discover which materials are waterproof.
Year 1		<u>Structures: Stable structures</u> Investigating stable shapes and using an understanding of balance.		<u>Textiles: Simple stitches</u> Examining fabrics, practising basic sewing techniques and identifying how different materials are made from threads.		<u>Mechanisms: Wheels and axles</u> Developing an understanding of how wheels, axles and axle holders work.

Year 2		<u>Mechanisms:</u> <u>Levers</u> Investigating different types of levers and how they work in everyday mechanisms.		<u>Cooking and nutrition:</u> <u>Balanced diet</u> Learning about the importance of a balanced diet and using that knowledge to create a tasty wrap.		<u>Structures: A chair for bear</u> Investigating strong shapes and the properties of stiff and flexible materials by designing a chair inspired by the story 'There's a Bear on My Chair'.
Year 3		<u>Structures:</u> <u>Product packaging</u> Exploring how 3D shell structures are created from nets and used in packaging, pupils evaluate what makes good packaging and follow a simple design criteria to create their own.		<u>Digital world:</u> <u>Wearable technology</u> Developing an understanding of programmable products by designing, coding and promoting wearable technology for use in low-light conditions.		<u>Cooking and nutrition: Eating seasonally</u> Discovering where and when fruit and vegetables are grown by learning about seasonality. Designing a seasonal tart.
Year 4		<u>Cooking and nutrition:</u> <u>Adapting a recipe</u>		<u>Mechanical systems:</u> <u>Mechanical cars</u> Exploring mechanical		<u>Structures:</u> <u>Helmets</u> Investigating shell structures and how they can be

		Designing and making biscuits for a chosen target audience by exploring existing products.		systems by building and testing prototype cars.		strengthened to protect or contain objects and people. Pupils apply layering techniques to design and make a helmet for a specific user.
Year 5		<u>Electrical systems: Wobble bots</u> Building on existing knowledge of circuits by introducing motors and exploring how they create movement in products.		<u>Mechanical systems: Gears and pulleys</u> Build a gear-and-pulley mechanism before applying their understanding to design an eco-bike.		<u>Structure: Bridges</u> Investigating different types of bridges and how structural strength is affected by shape and design.
Year 6		<u>Textiles: Bags</u> Creating a bag for a specific user using pattern piece templates.		<u>Cooking and nutrition: Developing a recipe</u> Considering how recipes can be adapted to improve nutritional value		<u>Digital world: Navigating the world</u> Designing a product and programming it to function as a compass and a pedometer.

				by modifying a traditional Bolognese sauce.		
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