

Long Term Overview: **Key Stage 1**

Cycle B 2021-22	Mechanics	Structure	Food Technology
<b>Rationale</b>	Problem Solving Creativity Resilience	Creativity Problem Solving Aspirations Resilience	Healthy Life Styles Wellbeing Life Skills Aspirations
<b>Focus</b>	Children experiment with <b>sliders</b> before planning and making three pages of a moving story book, based on a familiar story. They will draw the page backgrounds, make the moving parts and assemble it.	Using the tale of Goldilocks and the Three Bears as inspiration, children help poor Baby Bear by making him a brand new chair. When designing the chair, they consider his needs and what he likes and explore ways of building it so that it is a strong and <b>stable structure</b> and doesn't break again!	Children handle and explore fruits and vegetables and learn how to identify which category they fall into, before undertaking taste testing to establish their chosen ingredients for <b>fruit kebabs</b>
<b>Focus Designer/ World Wise</b>	<u>Book Link:</u> Pop-Up House of Inventions: Hundreds of Fabulous Facts about Your Home Encourage children to recognise everything we use has been designed and made through the use of a moving story book.	Eileen Gray <u>Furniture Designer</u> (Ireland 1878 – 1976)	<u>Book Link:</u> Handa's Surprise The Very Hungry Caterpillar
<b>Extra Opportunities</b>	Christmas Card: Explore existing products as part of DT cycle to inspire designs.		

Cycle A 2022-23	Mechanics	Textiles	Food Technology
<b>Rationale</b>	Problem Solving Creativity Aspirations	Creativity Problem Solving Aspirations Resilience	Healthy Life Styles Wellbeing Life Skills
<b>Focus</b>	In this topic, children are given the opportunity to problem solve and experiment with mechanisms to help them develop a clear understanding of how they work. The children assume the role of a mechanic and troubleshoot why certain <b>wheels</b> don't rotate. They then demonstrate their learning by designing and building their own moving trains just like the trains on our jumpers.	Children are given their first opportunity to sew in this topic. By making their own template, children can ensure that their pieces of fabric will be exactly the right size. With their fabric cut out, pupils use a simple <b>running stitch</b> to join two pieces together before decorating the front of it, according to their designs. This is an opportunity to explore other ways of joining fabrics.	Through their exploration of what makes a balanced diet, children taste test food combinations of different food groups. They will also aim to make a <b>pizza</b> that includes a healthy mix of protein, vegetables and dairy, and learn about the term 'hidden sugars'.
<b>What sort of job could I get if I develop these skills?</b>	John Boyd Dunlop <u>Inventor</u> - the air tyre (Scotland- 1800)	Orla Kiely <u>Textiles Designer</u> (England)	Joe Wicks <u>Chef and Nutritionist</u> (England)
<b>Extra Opportunities</b>	Christmas Card: Incorporate a mechanics element (revisit sliders)		

Long Term Overview: **Lower Key Stage 2**

Cycle B 2022-23	Mechanics	Textiles	Food Technology
<b>Rationale</b>	Problem Solving Creativity Aspirations	Creativity Problem Solving Aspirations Resilience	Healthy Life Styles Wellbeing Life Skills Culture
<b>Focus</b>	After learning the terms; pivot, <b>lever and linkage</b> , children set to designing a monster that will move using a linkage mechanism. After practising making linkages of different types and varying the materials they use, children can also bring their monsters to life with the gift of movement.	Having already learnt the basics of sewing and decorating fabric in earlier years, this topic offers extra challenge by introducing two new skills to add to their repertoire: <b>cross stitch and appliqué</b> . After learning these techniques, they apply their knowledge to the design, decoration and assembly of their very own <b>cushions</b>	Children discover when and where fruits and vegetables are grown and also learn about <b>seasonality</b> in the UK. They will also learn about the relationship between the colour of fruits and vegetables and their health benefits by making a <b>vegetable stew</b> .
<b>What sort of job could I get if I develop these skills?</b>	Joshua Lee <u>Animatronic Designer</u> (England)	Cath Kidston <u>Textile designer</u> (England Born 1958)	Matilda Ramsay <u>CBBC Chef</u>
<b>Extra Opportunities</b>	Christmas Card: Incorporate a textiles element (revisit running stitch)		

Cycle A 2021-22	Structures	Programmable Products	Food Technology
<b>Rationale</b>	Problem Solving Creativity Aspirations	Creativity Problem Solving Aspirations Resilience	Healthy Life Styles Wellbeing Life Skills Financial awareness
<b>Focus</b>	Learning about the features of a castle, children design using <b>computer aided design</b> and make one of their own. They will also be using configurations of <b>handmade nets and recycled materials</b> to make towers and turrets and constructing a base to secure them.	Apply their understanding of computing to <b>program, monitor and control their products</b> . This will be taught in conjunction with the computing curriculum during to support the programming unit using Lego Wedo.	Children work in groups to adapt a simple recipe, to create a <b>scone</b> . While making they will also ensure that their creation comes within the given budget of overheads and costs of ingredients.
<b>What sort of job could I get if I develop these skills?</b>	Antonio Gaudi <u>Architect</u> (Spain 1852 – 1926)	Garrett Morgan (1877-1963) Inventor of the 3-signal traffic light.	Nadiya Hussain <u>British TV chef</u>
<b>Extra Opportunities</b>	Christmas Card: Incorporate mechanics element (revisit levers)		

Long Term Overview: **Upper Key Stage 2**

Cycle B 2022-23	Mechanic	Electronic	Food Technology
<b>Rationale</b>	Problem solving Aspiration Resilience Creativity	Aspiration Our locality Creativity Problem Solving	Healthy Life Styles Wellbeing Life Skills Ethics
<b>Focus</b>	Using <b>woodworking</b> materials and skills, pupils construct a window display using an automata mechanism; measuring and cutting their materials, assembling the frame, choosing cams, designing the characters that sit on the followers and also finishing with a foreground and background.	Children explore how circuits can be adapted to suit different purposes. They will explore <b>flat circuits</b> using graphite or tape. They also design and create light-up greetings cards in accordance with their own design criteria.	Focusing on nutrition, children research and create a <b>tomato and carrot soup</b> . The children understand some of the basic processes to get food from farm to plate and understand some of the ethical dilemmas associated with the food people choose to buy.
<b>What sort of job could I get if I develop these skills?</b>	Marcel Breuer <u>Carpentry Designer</u> (Hungary 1902 – 1981)	Thomas Edison <u>Electrical Inventor</u> 1847-1931	Jamie Oliver <u>Chef and Nutritionist</u> (England)
<b>Extra Opportunities</b>	Christmas Card: Incorporate a textiles element (revisit cross stitch)  Upper KS2 Textiles Focus Week SUM 2- Fashion show (upcycling)- revisiting previous skills.		

Cycle A 2021-22	Structures	Electronic	Food Technology
<b>Rationale</b>	Our locality- Sankey Viaduct Cultural heritage. Problem solving Aspiration	Aspiration Problem Solving Creativity Resilience	Healthy Life Styles Life Skills Aspiration Well Being Financial awareness
<b>Focus</b>	This topic develops children’s understanding of secure structures and introduces them to <b>measuring, sawing and joining wood accurately</b> . After learning about different types of bridges and also exploring how the strength of structures can be affected by the shapes used. Children create their own wooden bridge and test its durability.	Using their understanding of electrical systems and design, pupils are challenged with designing and creating a steady hand game. Pupils will use nets to create their bases and their knowledge of electrical circuits to <b>build a circuit with a buzzer</b> which closes when the handle makes contact with the wire frame	Create a healthier, savoury snack building on baking skills learnt in previous years to make <b>cheese straws</b> , comparing different versions of the dish and identifying how they would change the recipe next time.
<b>What sort of job could I get if I develop these skills?</b>	William Allcard <u>Engineer</u> (England 1800 Sankey Viaduct design) <i>Pre learn- George Stephenson History KS1</i>	Martin Cooper <u>Inventor</u> - the first mobile phone. (America- born 1928)	<u>World of Work Week</u> Representative from the Industry
<b>Extra Opportunities</b>	Christmas Card: Overlearning- Incorporate a textiles element (revisit applique) Upper KS2 Textiles Focus Week SUM 2- - Fashion show (upcycling)- revisiting previous skills.		