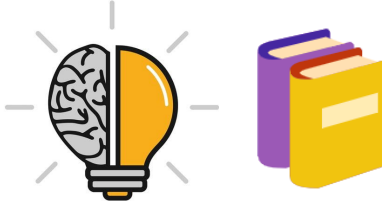




Year 3/4 DT Medium Term Plan - Cycle B

	Autumn 2 - Mechanisms	Spring 2 - Structure	Summer 2 - Food and Nutrition (Bread)
Big Concept			
Big Question	What are the different ways we can make things move?	How can a structure fly?	Are all breads the same?
Vision and purpose	Children will develop their understanding of mechanical systems. Following instructions on how to make different types of lever and linkage mechanisms gives children experience and information to draw on when developing their own ideas. They will sketch a design based on their ideas, make a prototype, and then create their 'Lever and Linkage Poster' using the context of recycling.	Children will develop their understanding of frame structures and how they can be strengthened and stiffened. They will discover information about a key event involving a kite that helped shape the world. Children will gain knowledge and understanding about the parts and shapes of kites, which will help them when designing and making their own .	Children will gain an insight into the history of bread production, then investigate and evaluate existing bread products. They will create design criteria which will be referred to when designing, making and evaluating their own bread product
Prior knowledge	- Children can begin to select tools and materials; use correct vocabulary to name and describe them. - can measure, cut and score with some accuracy. - can evaluate my work against my design criteria.	- Children can build structures, exploring how it can be made stronger, stiffer and more stable. - They can evaluate their work against their design criteria. - They can, with confidence, talk about their ideas, saying what I like and dislike about them	- Children can explain why it is important that everyone should eat at least five portions of fruit and vegetables every day. - Children can explain that food has to be farmed, grown elsewhere (e.g. home) or caught.
Knowledge skill	I can explore and use fixed and freely moving axles. I can use technical vocabulary relevant to the project	I can develop and use knowledge of how to construct strong, stiff shell structures.	I know that we need a varied balanced diet and know the correct proportions I know how to use appropriate equipment and utensils to prepare and combine food.
Specific vocabulary for a sequence of work	Construct, function, linkage, join, construct, mechanism, template, pneumatics, rotary, Attach, hinge , fold, evaluate, lever, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating	Design criteria, measure, joints, movement, purpose, material, decorate, fabric, evaluate, research, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy , stiff, strong, reduce, reuse, recycle,	Kneading, baking, Ingredients, weigh, mix, evaluate, research, flavour, healthy, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet name of products,



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To make a mechanical lever and linkage poster.

To design, make and evaluate their own kites.

To design, make and evaluate their own bread product.

Cross Curricular links

Geography- Environmental changes
A walk around the local area would allow children to investigate the places where people can recycle.

An educational visit to a local recycling centre, to see how materials are sorted and prepared for reuse.

English- A rich variety of texts.
'The Kite That Bridged Two Nations: Homan Walsh and the First Niagara Suspension Bridge' by Alexis O'Neill. " Stuck' Delightful chaos ensues when a young boy gets his kite stuck in a tree in this laugh-out-loud picture book from award winning, best-selling author-illustrator Oliver Jeffers.

History- Understand how key events and individuals in design and technology have helped shape the world in the context of the history behind Warburtons.
Science - Changing states - baking bread

Resources

Split pins, Sellotape, cardboard, colours, different materials

Sellotape, plastic bags, cartridge paper, kebab sticks, glue, string, tissue paper

Salt dough, Raisins, mixed dried fruit, cinnamon, banana, apple, honey, orange/ lemon/ lime zest, ginger, chocolate, cheese, sun dried tomatoes, dried herbs, onion, potato, cumin, curry powder, olives, Sweet peppers, garlic, seeds, ,kitchen equipment: baking trays. Weighing scales, sieves, mixing bowls. Measuring spoons, measuring jugs. Oven gloves, cooling racks.
Ingredients to make the Bread Rolls Recipe. A selection of ingredients for adding to the bread.