Kingsway Infant School- Design and Technology Overview

Purpose of study

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making

Concepts (NC)	Evaluating existing products	Designing (including using design criteria)	Making (using tools, developing techniques)	Evaluating own work and considering improvements
Threads (School)	Textiles	Structures	Mechanism	Cooking and nutrition

Pupils should be taught to:

Design:

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make:

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate:

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge:

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Kingsway Infant School- Design and Technology Overview

	Topics	Topic Vocabulary	Threads
Year 1	**Smoothies** To identify fruits To describe where fruits and vegetables grow To practice food preparation skills- cutting, juicing To select ingredients for a recipe- testing ingredients To apply food preparation skills to a recipe- making smoothies To evaluate against design brief	plant seed fruit juicer crush cross contamination ingredients food reaction recipe method sequence	Cooking and nutrition
	Making Puppets To join materials- gluing, stapling, safety pin To design a puppet To make puppet and join material To decorate puppet To evaluate puppet	materials template design details resources evaluate improve	Textiles
	Windmills To explore stable structure To design a windmill To assemble the turbine for the windmill To make a stable structure To attach roof to the structure To test turbine for rotation To evaluate the windmill	stable structure freestanding design axle turbine criteria assemble base rotate test attach evaluate/improve	Structures Mechanism

Kingsway Infant School- Design and Technology Overview

Year 2	**<u>Fairground Wheel</u>** To design a fairground wheel To plan the build choosing materials with appropriate properties To build and test a moving wheel To conduct a simple survey to gather opinion To build a structure with a rotating wheel To evaluate the structure with a rotating wheel	axle mechanism fairground wheel materials properties stable survey opinion criteria decorate evaluation test feedback	Structures Mechanism
	<u>Balanced meal</u> To identify the balance of food groups in a meal. To prepare and taste foods from different food groups. To design based on criteria. To make and evaluate a dish based on design criteria.	diet balanced meal food groups protein dairy carbohydrate fruits and vegetables oils and spreads prepare taste safety hygienic design criteria evaluate	Cooking and nutrition
	<u>Making a pouch</u> To sew a running stitch To use a template to create a pouch To join fabrics using running stitch	sew needle thread running stitch	Textiles

	To decorate a pouch using stitching To review the product	template fabric decorate product skills review improve	

Opportunities for personal development:

- Breakfast club
- One World Week
- Outdoor classroom days
- Christmas card Art Project
- Christmas decorations
- Christmas card/ Easter Card/ Mother's Day card/ Father's Day card
- Calendar making
- Hungry Caterpillar Workshops – healthy eating