Upminster Infant School

Design and Technology Progression and Overview

DESIGN AND TECHNOLOGY LONG TERM MAP

	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
Year 1		**Mechanisms: sliders & Levers** **To design & make moving Xmas Cards for a younger child**		**Textiles** **To design & make a puppet for a younger child to retell a story**		**Food Tech** **Fruit Salad/kebabs**
Year 2		**Mechanisms: Wheels & axles** **To design & make a vehicle for Bob the Man on the Moon to transport tourists around the moon**		**Free Standing Structures** **To design & make a bird feeder for the small Birds in the Quad**		**Food Tech** **Vegetable Wrap**

DESIGN AND TECHNOLOGY
National Curriculum Objectives

FOCUS	KS1
Design	To design purposeful, functional, appealing products for themselves and other users based on design criteria To generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
Make	To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
Evaluate	To explore and evaluate a range of existing products To evaluate their ideas and products against design criteria
Technical knowledge	To build structures, exploring how they can be made stronger, stiffer and more stable To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Cooking & Nutrition	To use the basic principles of a healthy and varied diet to prepare dishes To understand where food comes from.

DESIGN AND TECHNOLOGY PROGRESSION
I can Statements

FOCUS	Year 1	Year 2
Textiles	*Design Brief: To design, make and evaluate a puppet for a younger child to retell a story* I can ask simple questions about existing products *by exploring different puppets* I can create a simple design for my product I can use pictures and words to describe what I want to do. I can select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing I can use a range of simple tools to cut, join and combine materials and components safely. I can ask simple questions about products I have made.	
VOCABULARY	Names of existing products Joining and finishing techniques Tools Fabrics Components Template Pattern pieces Mark out Join Decorate finish Features Suitable Quality Mock up Make Evaluate User Purpose function	
Mechanisms	*Design Brief: To design, make and evaluate a moving card for a parent for Xmas* I can ask simple questions about existing products I can create a simple design for my product. I can use pictures and words to describe what I want to do. I can select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing. I can use a range of simple tools to cut, join and combine materials and components safely. I can ask simple questions about products I have made.	*Design Brief: To design, make and evaluate a vehicle for Bob the Man on the Moon to transport tourists around the moon* I can design useful, pleasing products for myself and others based on a design brief. I can safely measure, mark out, cut and shape materials and components using a range of tools. I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock ups and IT. I can choose tools I would like to use and select materials based on my knowledge of their properties.

	I can build structures, exploring how they can be made stronger, stiffer, and more stable.	I can evaluate and assess existing products and those that I have made using design criteria. I can investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable. I can explore and use mechanisms such as levers, sliders, wheels and axles in products.
VOCABULARY	Moving Lever Slider Pivot Split pin Mechanism Assemble Design Cut Hole Sketch Annotate Equipment Design criteria scissors	
Structures		*Design Brief: To design, make & evaluate a bird feeder for the small Birds in the Quad* I can design useful, pleasing products for myself and others based on a design brief. I can safely measure, mark out, cut and shape materials and components using a range of tools. I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock ups and IT. I can choose tools I would like to use and select materials based on my knowledge of their properties. I can evaluate and assess existing products and those that I have made using design criteria. I can investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable.
VOCABULARY		
Food	*Design Brief: To design, make and evaluate a fruit kebab* I can talk about what I eat at home and begin to discuss what healthy foods are. I can say where food comes from and give examples of food that is grown. I can use simple tools with help to prepare food safely.	*Design Brief: To design, make and evaluate a puppet for a vegetable wrap* I understand the need for variety in diet. I understand that all food has to be farmed, grown or caught. I can use a wider range of cookery techniques to prepare food safely.
Vocabulary	Healthy Unhealthy	

	Animals Plants Underground Above ground Grown Names of fruit Chopping boards Knife Skewers	