



Knowledge and Skills – Subject Overview

<p style="text-align: center;">Subject: Design and Technology (DT) Key Stage: 1</p>		
AREAS	KNOWLEDGE	SKILLS
Design	<ul style="list-style-type: none"> Knows what design criteria are and key elements which make it up. Understands that design is a cyclical process. Knows designing can be for oneself and for a user. Understands 'purpose' and 'user.' 	<ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, annotated sketches and prototypes, templates, mock-ups and, where appropriate, information and communication technology. Mind mapping, sketching, labelled drawings, simple modelling (2D).
Make	<ul style="list-style-type: none"> The name of a range of tools and equipment and how they work. The name and characteristics of key materials and components. Understands how to measure materials and ingredients. Knows how to break down a practical task into individual steps. Knows how to tie a knot. Knows sewing is for decoration and attachment. 	<ul style="list-style-type: none"> Select from and use a range of tools and equipment to perform practical tasks. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Measure materials and ingredients accurately. Follow instructions accurately. Use running and blanket stitch for decorating and attachment. To know how to thread a wide-eye needle. Apply decoration using needle and thread: buttons, sequins.
Evaluate	<ul style="list-style-type: none"> Knows what products are and how to identify them. Can name key products of current day and from the past. 	<ul style="list-style-type: none"> Explore and evaluate a range of existing products. Evaluate their ideas and products against design criteria and consider the views of others to improve their work.

		<ul style="list-style-type: none"> Ask questions.
Technical Awareness	<ul style="list-style-type: none"> Knows key principles of structure building including: leverage, weight-loading, strong shapes e.g. arches/triangles etc. Understand what a mechanism is, such as levers, switches and linkages, and begin to understand how they work. Know how to improve a structure. 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms, in their products. Explores a range of construction principles and comments on successes.
Cooking and Nutrition	<ul style="list-style-type: none"> Understand where food comes from. Know the principles of a healthy and balanced diet. 	<ul style="list-style-type: none"> Use the basic principles of a healthy and varied diet to prepare dishes.

<p style="text-align: center;">Subject: Design and Technology (DT) Key Stage: 2</p>		
AREAS	KNOWLEDGE	SKILLS
Design	<ul style="list-style-type: none"> Understanding that user's requirements support direction of design process. Knowledge of research methodology including: surveys/questionnaires/interviews. Know and understand different types of diagrams and ways of presenting ideas. 	<ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design (3D).
Make	<ul style="list-style-type: none"> The name of a wide range of tools and equipment and how they work, such as saws, hammers, drills, clamps, glue guns, batteries, knives, cutters, needles and rulers. The name and characteristics of a wider range of key materials and components. The aim of design to create a balance between function and aesthetics, and a knowledge of products which have achieved this well. 	<ul style="list-style-type: none"> Select from and use a wider range of tools and equipment to perform practical tasks accurately. Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. Textiles: use back stitch and cross stitch for decoration and attachment. To know how to thread a narrow-eye needle. Apply decoration using needle and thread: buttons, sequins.
Evaluate	<ul style="list-style-type: none"> Understand how key events and individuals in design and technology have helped shape the world. Knowledge of products which have achieved 	<ul style="list-style-type: none"> Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to

	aesthetics and design well.	improve their work.
Technical Awareness	<ul style="list-style-type: none"> • Understand mechanical systems. • Understand electrical systems. • Knowledge of how products could be improved. • Know how to increase the strength of a knot. 	<ul style="list-style-type: none"> • Apply their understanding of how to strengthen, stiffen and reinforce more complex structures • Apply their understanding of computing to programme, monitor and control their products. • Use mechanical systems in their products e.g. gears, pulleys, levers. • Use electrical systems in their products e.g. circuits.

Cooking and Nutrition	<ul style="list-style-type: none"> Understand the principles of a healthy and varied diet. Understand the source, seasonality and characteristics of a broad range of ingredients. Understand the name and uses of utensils and electrical equipment. Understand the heating and cooking processes and the scientific reasoning behind the changes where applicable. 	<ul style="list-style-type: none"> Apply the principles of a healthy and varied diet. Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet. Become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes].
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