

## DT LTP and Progression of objectives

### EYFS:

<b>Expressive Arts and Design (NC-DT)</b>	<b>Expressive Arts and Design (links to NC Design Technology): General learning throughout the year:</b> <ul style="list-style-type: none"> <li>• Children can self-select from a range of tools and materials in the continuous provision.</li> <li>• Children learn by experimenting with tools such as scissors, staplers and hole punches. They make use of fixing and joining materials such as cellotape, masking tape, string, pipe cleaners and glue.</li> <li>• Through questioning children are encouraged to talk about what they like about their work and other children's designs and how they would improve it.</li> <li>• Help to design and make small worlds in line with topic.</li> </ul>						
	<b>Autumn 1:</b> Models of our houses.  Gingerbread biscuits  Threading-with paper (Elmer and Handas surprise).	<b>Autumn 2:</b> Bird feeders-threading  Christmas decorations-threading with beads.	<b>Spring 1:</b> Junk modelling-superhero vehicles.  Chinese New Year-dragon, lanterns, envelopes, Chinese food- noodles/stir fry	<b>Spring 2:</b> Models of castles/pirate ships/space rockets etc.  Mothers' Day gift-sewing.  Easter garden.	<b>Summer 1:</b> Junk modelling- bugs/flowers/ beanstalks.  Bug hotel.  Pop-up puppet.	<b>Summer 1:</b> Seaside-moving picture.  Design and make a kite that flies.  Design and make a boat that floats.	
<b>Reception 'sticky knowledge'</b>	<ul style="list-style-type: none"> <li>• I know how to use scissors safely.</li> <li>• I can cut along a straight line.</li> <li>• I can cut along a wavy line.</li> <li>• I know how to thread.</li> <li>• I can join to items using tape.</li> <li>• I can use glue to fix items together.</li> <li>• I know how draw a plan.</li> <li>• I know that I can adapt and change something I have made.</li> <li>• I can work with a friend, sharing ideas.</li> <li>• I know that some materials are better for building with than others.</li> <li>• I can talk about what I have made and say why.</li> </ul>						
<b>KEY VOCABULARY</b>	scissors, cut, straight, join, hold, fix, glue, shape, safely, colour, design, plan, create, make, explain, why, change, together, features, pieces.						

Year A	Autumn	Spring	Summer
<p>Class 2</p> <p>Design and creativity</p> <p>Technical and practical skills</p> <p>Problem solving and evaluation.</p>	<p><b>Textiles: Bookmarks</b></p> <ul style="list-style-type: none"> <li>Explore and evaluate a range of existing products (in the context of fabrics) and explore their characteristics.</li> <li>Select materials and shape them.</li> <li>Explore and select from different tools to join fabrics and materials.</li> <li>To learn what a template is and how to cut around one.</li> <li>To create design criteria and use these to generate ideas and create my design.</li> <li>To select materials and tools and use this to follow my design to create and evaluate my end product.</li> </ul>	<p><b>Cooking and nutrition: Dips and Dippers</b></p> <ul style="list-style-type: none"> <li>Evaluate existing products (in the context of dips and dippers) and start to think about where the food comes from.</li> <li>Explore the basic principles of a healthy diet and explain why a balanced diet is important.</li> <li>To select from and use a range of tools and equipment to perform practical tasks (for example, cutting) in the context of making a Dip and Dipper.</li> <li>To create design criteria and use these to generate ideas and create my design.</li> <li>Use the principles of a healthy and varied diet and my own plan to prepare dishes (in the context of following a design to make a new dip and dipper)</li> <li>Evaluate my ideas and products against design criteria.</li> </ul>	<p><b>Levers, sliders, wheels and axels: Moving Pictures, Traditional Tales.</b></p> <ul style="list-style-type: none"> <li>Explore and evaluate existing products (in the context of moving books).</li> <li>Learn about sliders as mechanisms and explore using them.</li> <li>Learn about levers as mechanisms and explore using them.</li> <li>Learn about wheel mechanisms and explore using them.</li> <li>Use design criteria to design purposeful, functional and appealing products for themselves and other users (in the context of designing an appealing moving picture).</li> <li>Communicate my ideas through talking, drawing, templates and mock-ups e.g. through drawing an annotated sketch to show their ideas about a moving picture.</li> <li>Explore the combination of mechanisms and learn how to refine my skills to create my product.</li> <li>Evaluate my product against the design criteria.</li> </ul>
<p>Class 3</p>	<p><b>Design, make and evaluate a product: Electric Personalities: To explore existing products</b></p> <ul style="list-style-type: none"> <li>To learn how electrical systems work and create my own circuit.</li> <li>To develop a design criteria.</li> <li>To use sketches and/or diagrams to communicate my design incorporating an electric circuit.</li> <li>use my plan to construct my model.</li> </ul>	<p><b>Design, make and evaluate a product: Let's go fly a kite.</b></p> <ul style="list-style-type: none"> <li>To explain how key events and individuals in design and technology have helped shape the world (in the context of kites).</li> <li>To name and explain the function of the different parts of a kite</li> </ul>	<p><b>Cooking and nutrition: Edible garden (Science link)</b></p> <ul style="list-style-type: none"> <li>To name some herbs and know how to grow them.</li> <li>To explain what makes a diet healthy and varied learn what a healthy balanced meal looks like.</li> <li>To explain where, when and how strawberries are grown in the United Kingdom, evaluate existing products.</li> </ul>

	<ul style="list-style-type: none"> <li>• Select from tools and equipment to make my model safely.</li> <li>• Apply my knowledge of how to stiffen/reinforce structures.</li> <li>• To evaluate my electric personality using my design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>• To explore existing products, investigate kite shapes and design my kite.</li> <li>• To select from and use different materials and components.</li> <li>• To accurately measure and cut the shape of the body of the kite and join it to the frame structure.</li> <li>• To make a strong and stiff frame structure to support the kite.</li> <li>• To evaluate my kite.</li> </ul>	<ul style="list-style-type: none"> <li>• To use kitchen tools correctly to prepare and make a tasty and nutritious drink and evaluate it.</li> <li>• To explain when tomatoes are in season in the United Kingdom and can say where and how they are grown.</li> <li>• To learn how to prepare and cook/assemble a healthy and tasty meal using tomatoes as my main ingredient.</li> <li>• To evaluate my meal.</li> </ul>
Class 4	<p><b>Design, make and evaluate a product (Textiles): Felt Phone Cases</b></p> <ul style="list-style-type: none"> <li>• To evaluate existing phone cases and write a design criteria for my own mobile phone case.</li> <li>• To generate a range of design ideas and clearly communicate my final design.</li> <li>• To make a paper template.</li> <li>• To practise using different types of stitches and choose the best one to use on my final felt phone case.</li> <li>• To organise my ideas in a step by step plan.</li> <li>• To select decorative techniques and fastenings according to their functional properties and aesthetic qualities.</li> <li>• To evaluate my product.</li> </ul>	<p><b>Design, make and evaluate a product (Cams, Systems and Joins): Automata Animals</b></p> <ul style="list-style-type: none"> <li>• To research ideas about different animals to inform my design.</li> <li>• To explain how simple cam mechanisms work.</li> <li>• To select materials according to their functional properties.</li> <li>• To research and develop design criteria to inform my design.</li> <li>• To build a framework, accurately using a wider range of tools and equipment.</li> <li>• To understand and use a mechanical system</li> <li>• To evaluate my product.</li> </ul>	<p><b>Cooking and nutrition: Global Food – Greek Link</b></p> <ul style="list-style-type: none"> <li>• To say where in the world ingredients come from.</li> <li>• To explain that diets around the world are based on similar food groups.</li> <li>• To demonstrate a range of food skills and techniques.</li> <li>• To demonstrate a range of basic and advanced food skills and cooking techniques</li> <li>• To explain why rice is a good staple food. To cook rice.</li> <li>• To accurately and mainly independently follow a recipe demonstrating a range of cooking techniques.</li> <li>• To evaluate my food.</li> </ul>

Year B	Autumn	Spring	Summer
Class 2	<p><b>Cooking and nutrition: <i>Sensational Salads.</i></b></p> <ul style="list-style-type: none"> <li>To name different foods and explain where some food grows.</li> <li>To explore and evaluate existing products.</li> <li>To explain why I need to eat fruit and vegetables.</li> <li>To prepare and make a healthy salad made from root vegetables.</li> <li>To explain where different fruits come from.</li> <li>To prepare and evaluate a tasty fruit salad.</li> </ul>	<p><b>Textiles: <i>Fabric Bunting. (Easter or Castle)</i></b></p> <ul style="list-style-type: none"> <li>To evaluate bunting.</li> <li>To design my bunting flag.</li> <li>To use a paper template to help create my fabric shape.</li> <li>To use a running stitch to join fabric.</li> <li>To select fabrics that are suitable for decorating my bunting.</li> <li>To join fabrics.</li> <li>To evaluate my bunting.</li> </ul>	<p><b>Designing and creating a product: <i>A Pirate's Packed Lunch.</i></b></p> <ul style="list-style-type: none"> <li>To evaluate a product's ability to do a job well.</li> <li>To investigate and evaluate existing products.</li> <li>To explore different materials and decide which will be useful for making my product.</li> <li>To design a new product that meets the design criteria.</li> <li>To select and use tools and equipment to make a product.</li> <li>To test a product and then evaluate it</li> <li>To improve my product by making it stronger, stiffer, more stable and more waterproof.</li> </ul>
Class 3	<p><b>Textiles: <i>Juggling Balls</i></b></p> <ul style="list-style-type: none"> <li>To investigate and evaluate juggling balls.</li> <li>To follow a design criteria to help me create and communicate my ideas.</li> <li>To perform tie-dye as a technique for decorating my fabric.</li> <li>To research and trial different fillings for my juggling ball and decide upon the most functional one.</li> <li>To cut around a template and use a running stitch to create a hem.</li> <li>To use a functional technique to carefully decorate my fabric.</li> <li>To join my juggling ball using an appropriate stitch to create my finished shape.</li> <li>To evaluate my product.</li> </ul>	<p><b>Cooking and nutrition: <i>The Great Bread Bake off</i></b></p> <ul style="list-style-type: none"> <li>To find out about important people and events in the past that have shaped the way bread is made and sold today.</li> <li>To investigate and analyse existing products according to their characteristics.</li> <li>To develop a design criteria.</li> <li>To shape dough.</li> <li>To think of original ideas for a product based on my design criteria.</li> <li>To develop designs based on my design criteria and clearly communicate my final design.</li> <li>To select ingredients and kitchen equipment to help me follow a bread making recipe.</li> <li>To knead and bake.</li> <li>To evaluate my bread.</li> </ul>	<p><b>Design, make and evaluate a product (mechanical systems – levers and linkages): <i>Mechanical posters</i></b></p> <ul style="list-style-type: none"> <li>To investigate mechanical systems.</li> <li>To make mechanical systems which use levers and linkages.</li> <li>To develop design criteria to help me design innovative product.</li> <li>To use sketches to develop and communicate ideas.</li> <li>To use prototypes to develop my ideas.</li> <li>To select and use the correct tools and equipment accurately.</li> <li>To carefully select materials and use different techniques.</li> <li>To name the parts and functions of a lever and linkage mechanical system.</li> <li>To evaluate my poster.</li> </ul>

Class 4	<p><b>Design, create and program: Microbit Mania</b></p> <ul style="list-style-type: none"> <li>• To look at existing products and evaluate them.</li> <li>• To 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</li> <li>• To use sketches and/or diagrams to communicate my design</li> <li>• I can research a range of materials.</li> <li>• To use appropriate materials based on research.</li> <li>• Apply their understanding of computing to program, monitor and control their products.</li> <li>• To evaluate a finished product.</li> </ul>	<p><b>Create and evaluate (Cutting, shaping and joining): Marbulous Structures</b></p> <ul style="list-style-type: none"> <li>• To investigate and apply my knowledge of free-standing structures.</li> <li>• To use a wider range of tools and equipment to perform practical tasks accurately.</li> <li>• To develop a range of practical skills to create bends.</li> <li>• To investigate free standing structures.</li> <li>• To select from and use materials and components to make a marble run.</li> <li>• To evaluate and improve my design and technology work.</li> </ul>	<p><b>Cooking and nutrition: Super Seasonal Cooking</b></p> <ul style="list-style-type: none"> <li>• To explain what seasonality means and know when different fruit and vegetables are in season in the United Kingdom.</li> <li>• To explain where, when and how a variety of ingredients are reared, caught and processed.</li> <li>• To taste and evaluate seasonal foods and recognise that sometimes we need to try a new food a few times to find out if we like it.</li> <li>• To explain the importance of protein as a proportion of a healthy varied diet.</li> <li>• To work as a group to generate, evaluate and refine recipe ideas.</li> <li>• To take feedback and improve my designs.</li> <li>• To explain how to correctly store and handle meat and fish.</li> <li>• To prepare, cook and evaluate a healthy seasonal meal.</li> </ul>
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