

## DT progression of Knowledge and Skills

	EYFS	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6
Structures	<ul style="list-style-type: none"> <li>• Think and talk about what they are going to make before they do it.</li> <li>• Plan what they are going to make by drawing it first.</li> <li>• Use a tick list to say what resources they are going to need to make their product or outcome.</li> <li>• Choose the resources needed for the activity.</li> <li>• Handle simple hand tools and equipment effectively</li> <li>• Select appropriate materials</li> </ul>	<ul style="list-style-type: none"> <li>• Learn the importance of clear design criteria.</li> <li>• Include individual preferences and requirements in a design.</li> <li>• Make stable structures from card, tape and glue.</li> <li>• Follow instructions to cut and assemble the supporting structure</li> </ul>	<ul style="list-style-type: none"> <li>• Generate and communicate ideas using sketching and modelling.</li> <li>• Learn about different types of structures found in the natural world and in everyday objects.</li> <li>• Make a structure according to given design criteria.</li> <li>• Create joints and structures from paper or card and tape or glue.</li> </ul>	<ul style="list-style-type: none"> <li>• Design a structure e.g. a castle or one linked to the learning project, with key features to appeal to a specific person or purpose.</li> <li>• Draw and label a design for the structure using 2D shapes, labelling: - the 3D shapes that will create the features - the materials needed and its colours.</li> <li>• Construct a range of 3D geometric shapes using nets.</li> <li>• Create special features for individual designs.</li> </ul>	<ul style="list-style-type: none"> <li>• I know how to build frame structures designed to support weight.</li> <li>• Design a stable structure, linked to the learning project or scheme unit, that is aesthetically pleasing, and select materials to create a desired effect.</li> <li>• Create a range of different shaped frame structures.</li> <li>• Make a variety of free-standing frame structures of different shapes and sizes.</li> <li>• Reinforce corners to strengthen a structure</li> </ul>	<ul style="list-style-type: none"> <li>• Learn how to create a frame structure with a focus on triangulation.</li> <li>• Design a stable structure that is able to support weight.</li> <li>• Build a wooden structure independently.</li> <li>• Select appropriate tools and equipment for particular tasks.</li> <li>• Use the correct techniques to saw safely.</li> <li>• Identify where a structure needs reinforcement and use card corners for support.</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to design a scenario featuring a variety of different structures, considering how the structures will be used, and what are effective and ineffective designs based on prior knowledge and experience.</li> <li>• Use a range of materials to reinforce and add decoration to structures.</li> </ul>
Mechanisms	<ul style="list-style-type: none"> <li>• I know how to represent own ideas, thoughts and feelings through design and technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Explain how to adapt mechanisms</li> <li>• Know how design a mechanism</li> <li>• Create clearly labelled drawings</li> </ul>	<ul style="list-style-type: none"> <li>• I know to create class design criteria for a moving</li> <li>• I understand how to select a suitable linkage system to produce</li> </ul>	<ul style="list-style-type: none"> <li>• I know how to develop design criteria from a design brief.</li> <li>• Learn that different types of drawings are used in design to</li> </ul>	<ul style="list-style-type: none"> <li>• Understand how to draw a net to create a structure from.</li> <li>• I know how to choose shapes that increase or decrease speed</li> </ul>	<ul style="list-style-type: none"> <li>• I know how to name each mechanism, input and output accurately</li> <li>• Make things move at the same time.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand how linkages change the direction of a force.</li> <li>• I know how to make things move at the same time.</li> </ul>

	<ul style="list-style-type: none"> <li>• Use a split pin to create a mechanism that opens and closes (a simple hinge).</li> </ul>	<p>which illustrate movement.</p> <ul style="list-style-type: none"> <li>• Follow a design to create moving models that use levers and sliders.</li> <li>• Adapt simple mechanisms</li> </ul>	<p>the desired motions.</p> <ul style="list-style-type: none"> <li>• Select appropriate materials based on their properties.</li> <li>• Experiment with linkages adjusting the widths, lengths and thicknesses of card used.</li> <li>• Cut and assemble components neatly.</li> </ul>	<p>explain ideas clearly.</p> <ul style="list-style-type: none"> <li>• Manipulate materials to create different effects by cutting, creasing, folding, weaving.</li> <li>• Select materials due to their functional and aesthetic characteristics</li> </ul>	<ul style="list-style-type: none"> <li>• Personalise a design.</li> <li>• Measure, mark, cut and assemble with increasing accuracy.</li> <li>• Make a model based on a chosen design.</li> </ul>	<ul style="list-style-type: none"> <li>• Make mechanisms and/or structures using sliders, pivots and folds to produce movement.</li> <li>• Use layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result.</li> </ul>	<ul style="list-style-type: none"> <li>• Assemble components accurately to make a stable frame</li> <li>• Measure, mark and cut components accurately using a ruler and scissors.</li> <li>• Use a craft knife safely to cut shapes accurately</li> </ul>
Textiles	<ul style="list-style-type: none"> <li>• Know that different materials and fabrics are used for different purposes e.g. wool for a jumper, rubber for wellies.</li> <li>• Weave string in and out of a threading card or weaving basket.</li> </ul>	<ul style="list-style-type: none"> <li>• I understand how to use a template to create a design</li> <li>• Cut fabric neatly with scissors.</li> <li>• Use joining methods to decorate a product.</li> <li>• Sequence the steps for construction.</li> </ul>	<ul style="list-style-type: none"> <li>• I know how to design a textile product.</li> <li>• Select and cut fabrics for sewing.</li> <li>• Decorate a product using fabric glue or running stitch.</li> </ul>	<ul style="list-style-type: none"> <li>• I understand how to design and make a template from an existing product and apply individual design criteria.</li> <li>• Select and cut fabrics with ease using fabric scissors.</li> <li>• Sew cross stitch to join fabric.</li> <li>• Decorate fabric using appliqué.</li> <li>• Complete design ideas with stuffing and sewing the edges.</li> </ul>	<ul style="list-style-type: none"> <li>• I know how to write design criteria for a product, articulating decisions made.</li> <li>• Design a personalised product</li> <li>• Select a stitch style to join fabric, working neatly to sew small stitches.</li> <li>• Incorporate a fastening to a design.</li> <li>• Measure, mark and cut fabric using a paper template.</li> </ul>	<ul style="list-style-type: none"> <li>• I know how to design a product considering the main component shapes required and creating an appropriate.</li> <li>• Consider proportions of individual components.</li> <li>• Use appliqué or embroidery to attach pieces of fabric decoration.</li> <li>• Measure, mark and cut fabric accurately and independently.</li> </ul>	<ul style="list-style-type: none"> <li>• I know how to design a product in accordance with specification linked to a set of design criteria and a theme.</li> <li>• Annotate designs and explain any changes made.</li> <li>• Mark and cut fabric accurately, in accordance with a design.</li> <li>• Sew a strong stitch, making small, neat stitches and following the edge.</li> </ul>

Food	<ul style="list-style-type: none"> <li>• Use a knife safely to chop a range of soft food.</li> <li>• Roll out dough and use cutters with accuracy.</li> <li>• Use jugs, scoops and spoons in cooking.</li> </ul>	<ul style="list-style-type: none"> <li>• Learn where and how fruits and vegetables grow.</li> <li>• Chop fruit and vegetables safely with a knife.</li> <li>• Identify if a food is a fruit or a vegetable.</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to design a healthy product based on a food combination which works well together.</li> <li>• Slice food safely using the appropriate grip.</li> <li>• Construct a healthy product that meets a design brief.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand how to create a healthy and nutritious recipe for a savoury meal using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.</li> <li>• Know how to prepare themselves and a work space to cook safely in.</li> <li>• Learn the basic rules to avoid food contamination.</li> <li>• Follow the instructions in a recipe.</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to design a product within a given budget, drawing upon previous taste tastings.</li> <li>• Cook safely, following basic hygiene rules.</li> <li>• Follow a baking recipe.</li> <li>• Adapt a recipe</li> </ul>	<ul style="list-style-type: none"> <li>• Write an amended method for a recipe to incorporate the relevant changes to ingredients.</li> <li>• Understand appealing packaging to reflect a recipe</li> <li>• Cut and prepare vegetables safely.</li> <li>• Use equipment safely, including knives, hot pans and hobs.</li> <li>• Know how to avoid food cross contamination.</li> <li>• Follow a step by step method carefully to make a recipe.</li> </ul>	<ul style="list-style-type: none"> <li>• Write a recipe, explaining the key steps, method and ingredients.</li> <li>• Include facts and drawings from research undertaken.</li> <li>• Follow a recipe using the correct quantities of each ingredient.</li> <li>• Adapt a recipe based on research.</li> <li>• Work to a given timescale.</li> <li>• Work safely and hygienically with increasing independence.</li> </ul>
Topic		Shade and shelter  Taxi  Chop slice and mash	Remarkable recipes  Beach hut  Cut stich and join  push ad pull	Cook well, eat well  Making it move  Green House	Healthy food  Functional fancy fabrics  Tomb builders	Moving Mechanisms  Eat the seasons  Architecture	Make do and mend  Food for life  Engineer