

DESIGN AND TECHNOLOGY CURRICULUM PROGRESSION

	Units of learning	Design	Make	Evaluate	Technical Knowledge
EYFS	To develop D&T knowledge in EYFS, children have regular opportunities during adult and child led learning to:	<ul style="list-style-type: none"> • Talk about what they would like to make, how they will do it and what they think about it when it is finished. 	<ul style="list-style-type: none"> • Make their own creations using a wide range of different materials, fixings and tools which are freely available in continuous provision. 	<ul style="list-style-type: none"> • Evaluate what they have made and make changes as appropriate. 	<ul style="list-style-type: none"> • Know how to use tools such as scissors, hole punch, string, sellotape, cutters etc.
Year 1	<p>Mechanisms Making a Moving Story Book</p> <p>Structures Construct a Windmill</p> <p>Textiles Puppets</p>	<ul style="list-style-type: none"> • Draw clearly labelled designs, suggesting which parts of their designs will move and how they will appeal to the intended user. 	<ul style="list-style-type: none"> • Make a picture, which meets the design criteria, with parts that move purposefully as planned. • Make stable structures, which will eventually support the turbine, out of card, tape and glue. • Make functioning turbines and axles that are assembled into the main supporting structure. • Join fabrics together using pins, staples or glue. 	<ul style="list-style-type: none"> • Say what is good about their product and what they could do better. 	<ul style="list-style-type: none"> • Identify whether a mechanism is a side-to-side slider or an up-and-down slider and determine what movement the mechanism will make. • Know that 'joining technique' means connecting two pieces of material together.
	<p>Food Fruit and vegetables</p>	<ul style="list-style-type: none"> • Design packaging and suggest information to be on there. 	<ul style="list-style-type: none"> • Prepare fruits and vegetables to make a smoothie. 	<ul style="list-style-type: none"> • Taste and evaluate different food combinations. 	<ul style="list-style-type: none"> • Describe fruits and vegetables and explain why they are a fruit or a vegetable. • Name a range of places that fruits and vegetables grow.
Year 2	<p>Mechanisms Making a Moving Monster</p> <p>Structures Baby Bear's Chair</p> <p>Textiles Pouches</p>	<ul style="list-style-type: none"> • Design products suitable for a given audience which satisfy a given set of design criteria. 	<ul style="list-style-type: none"> • Select and assemble materials to create their products. • Make products that are structurally strong. • Prepare and cut fabric to make a pouch from a template. • Use a running stitch to join the two pieces of fabric together. • Decorate their products using materials provided. 	<ul style="list-style-type: none"> • Evaluate their designs against the design criteria, using this information and the feedback of their peers to choose their best design. 	<ul style="list-style-type: none"> • Know the correct terms for levers, linkages and pivots. • Identify man-made and natural structures. • Identify stable and unstable structural shapes.
	<p>Food A Balanced Diet</p>	<ul style="list-style-type: none"> • Think of four different wrap ideas, considering flavour combinations. 	<ul style="list-style-type: none"> • Construct a wrap that meets the design brief and their plan. 	<ul style="list-style-type: none"> • Describe the taste, texture and smell of a given food. 	<ul style="list-style-type: none"> • Name the main food groups and identify foods that belong to each group.

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Year 3	<p>Structures Constructing a Castle</p> <p>Electrical Systems Electric Posters</p> <p>Digital World Electronic Charm</p>	<ul style="list-style-type: none"> Carry out research to gain ideas for initial designs. Design products with key features that satisfy a given purpose. Begin to use computer aided design. 	<ul style="list-style-type: none"> Build a complex structure from simple geometric shapes. Score or cut along lines on the net of a 2D shape. Write a program that initiates a flashing LED panel or pattern. Assemble a product that includes a functional simple circuit. 	<ul style="list-style-type: none"> Test their product, identify and correct errors as needed. Evaluate their work by answering simple questions. 	<ul style="list-style-type: none"> Know what 'information design' is and understand its impact. Know what is meant by 'point of sale display'. Know that a castle is made up of multiple 3D shapes.
	<p>Food Eating Seasonally</p>	<ul style="list-style-type: none"> Design their own tart recipe using seasonal ingredients. 	<ul style="list-style-type: none"> Understand the basic rules of food hygiene and safety. Follow the instructions within a recipe. 	<ul style="list-style-type: none"> Suggest points for improvement when making a seasonal tart. 	<ul style="list-style-type: none"> Know that fruits and vegetables grow in countries based on their climates. Know that 'seasonal' fruits and vegetables are those that grow in a given season and taste best then. Know that eating seasonal fruit and vegetables has a positive effect on the environment.
Year 4	<p>Mechanisms Making a Slingshot Car</p> <p>Structures Pavillion</p> <p>Textiles Fastenings</p>	<ul style="list-style-type: none"> Write their own set of design criteria for a product. Sketch more than one initial idea. Design a product that meets design criteria and is aesthetically pleasing. 	<ul style="list-style-type: none"> Select appropriate materials and construction techniques to create a stable, free-standing structure. Make a template for their product. Choose an appropriate stitch they are comfortable with. Produce appropriate products where parts are assembled effectively. 	<ul style="list-style-type: none"> Conduct a trial accurately and draw conclusions and improvements. Evaluate the product on the aesthetics and original design criteria. 	<ul style="list-style-type: none"> Know that air resistance is the level of drag on an object as it is forced through the air. Know that a 'free-standing' structure is one that can stand on its own. Know the features, benefits and disadvantages of a range of fastening types.
	<p>Food Adapting a recipe</p>	<ul style="list-style-type: none"> Plan a recipe within a given budget. 	<ul style="list-style-type: none"> Follow a recipe, with some support. Adapt a recipe by adding extra ingredients to it. 	<ul style="list-style-type: none"> Evaluate, compare and suggest improvements. 	<ul style="list-style-type: none"> Describe some of the features of a biscuit based on taste, smell, texture and appearance. Know the following cooking techniques: sieving, creaming, rubbing method, cooling.
Year 5	<p>Mechanisms Making a Pop Up Book</p> <p>Electrical Systems Doodlers</p> <p>Digital World Monitoring Devices</p>	<ul style="list-style-type: none"> Research key information and test existing products to develop a list of design criteria for a given purpose. Develop design criteria with consideration for the target user. Explain simply why their product has a certain configuration. 	<ul style="list-style-type: none"> Assemble the components necessary for all their structures/mechanisms. Use a range of mechanisms to make their product interactive. Create a functional Doodler that creates scribbles on paper with or without a switch. Build a variety of brick models to invent Micro:bit cases. 	<ul style="list-style-type: none"> Explain key pros and cons of virtual modelling vs physical modelling. Evaluate the work of others and receive feedback on their own work. 	<ul style="list-style-type: none"> Know how to use sliders, pivots and folds to create paper-based mechanisms. Know simple circuit components with a basic explanation of their function. Know that a series circuit is assembled in a loop to allow the electricity to flow along one path. Know what monitoring devices are.
	<p>Food What could be healthier?</p>	<ul style="list-style-type: none"> Design packaging that promotes the ingredients of the bolognese. 	<ul style="list-style-type: none"> Work as a team to amend a bolognese recipe with healthy adaptations. Follow a recipe to produce a healthy bolognese sauce. 	<ul style="list-style-type: none"> Evaluate the end meal in terms of nutritional values. 	<ul style="list-style-type: none"> Understand how beef gets from the farm to our plates. Know what a 'healthy meal' means. Notice the nutritional differences between different products.

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Year 6	Structures Playgrounds Textiles Waistcoats	<ul style="list-style-type: none"> ● Consider a range of factors in their design criteria and use this to create a design. ● Create a range of designs, applying the design criteria to their work. 	<ul style="list-style-type: none"> ● Make a range of structures using a variety of materials which will enhance their product. ● Use a running stitch to join fabric to make a functional waistcoat. ● Attach a secure fastening, and decorative objects. 	<ul style="list-style-type: none"> ● Make suitable changes to their work after peer evaluation. ● Evaluate their final product and explain in depth their choices. 	<ul style="list-style-type: none"> ● Know that structures can be strengthened by manipulating materials. ● Know that it is important to design clothing with the client in mind.
	Food Come dine with me	<ul style="list-style-type: none"> ● Find a suitable recipe for their course. ● Record ingredients and equipment needed. 	<ul style="list-style-type: none"> ● Follow a recipe, including using the correct quantities of each ingredient. ● Write a recipe, explaining the process taken. 	<ul style="list-style-type: none"> ● Evaluate a recipe, considering: taste, smell, texture and origin of the food group. 	<ul style="list-style-type: none"> ● Explain where certain key foods come from before they appear on the supermarket shelf.