



# Micklands Primary School

## Progression in Learning - DT

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Design</b>		<p>Learning the importance of a clear design criteria.</p> <p>Including individual preferences and requirements in a design</p> <p>Using a template to create a design</p>	<p>Designing a product for a specific audience in accordance with a design criteria.</p> <p>Designing a healthy wrap based on a food combination which work well together.</p>	<p>Designing a stable structure that is aesthetically pleasing and selecting materials to create a desired effect.</p> <p>Creating a healthy and nutritious recipe using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.</p> <p>Designing and making a template from an existing product and applying individual design criteria.</p>	<p>Designing a shape that reduces air resistance.</p> <p>Choosing shapes that increase or decrease speed as a result of air resistance.</p> <p>Designing a product within a given budget, drawing upon previous taste testing judgements.</p> <p>Writing design criteria for a product, articulating decisions made.</p>	<p>Designing a variety of different structures, considering how the structures will be used, considering effective and ineffective designs.</p> <p>Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients.</p> <p>Designing a product, considering the main component shapes required and creating an appropriate template.</p>	<p>Experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement.</p> <p>Understanding how linkages change the direction of a force.</p> <p>Writing a recipe, explaining the key steps, method and ingredients.</p> <p>Designing a product in accordance to a specification linked to set of design criteria.</p>
<b>Make</b>		<p>Making stable structures from card, tape and glue .</p> <p>Learning how to turn 2D nets into 3D structures.</p> <p>Following instructions to cut and assemble</p> <p>Making functioning turbines and axles which are assembled</p>	<p>Making linkages using card for levers and split pins for pivots.</p> <p>Cutting and assembling components neatly.</p> <p>Slicing food safely using the bridge or claw grip.</p> <p>Threading a needle.</p>	<p>Making a variety of free standing frame structures of different shapes and sizes.</p> <p>Reinforcing corners to strengthen a structure.</p> <p>Knowing how to prepare themselves and a work space to cook safely in, learning the basic rules to avoid food contamination.</p>	<p>Measuring, marking, cutting and assembling with increasing accuracy.</p> <p>Following a baking recipe, from start to finish, including the preparation of ingredients.</p> <p>Measuring, marking and cutting fabric</p>	<p>Measuring, marking and cutting wood to create a range of structures.</p> <p>Cutting and preparing vegetables safely.</p> <p>Measuring, marking and cutting fabric accurately and independently.</p>	<p>Measuring, marking and cutting components accurately using a ruler and scissors.</p> <p>Following a recipe, including using the correct quantities of each ingredient.</p> <p>Working safely and hygienically with independence.</p>

		<p>into a main supporting structure.</p> <p>Chopping fruit and vegetables safely to make a smoothie.</p> <p>Cutting fabric neatly with scissors.</p>	<p>Sewing running stitch, with evenly spaced, neat, even stitches to join fabric.</p> <p>Neatly pinning and cutting fabric using a template.</p>	<p>Selecting and cutting fabrics with ease using fabric scissors.</p> <p>Threading needles with greater independence.</p> <p>Sewing cross stitch to join fabric.</p>	<p>using a paper template.</p> <p>Selecting a stitch style to join fabric.</p> <p>Working neatly by sewing small, straight stitches.</p> <p>Incorporating a fastening to a design.</p>	<p>Creating strong and secure blanket stitches when joining fabric.</p> <p>Threading needles independently.</p> <p>Applying blanket stitch so the spaces between the stitches are even and regular.</p>	<p>Sewing a strong running stitch, making small, neat stitches and following the edge.</p>
<b>Evaluate</b>		<p>Evaluating a product according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't.</p> <p>Suggest points for improvements.</p> <p>Tasting and evaluating different food combinations.</p> <p>Suggesting information to be included on packaging.</p>	<p>Evaluating own designs against design criteria.</p> <p>Describing the taste, texture and smell of fruit and vegetables.</p> <p>Identifying aspects of their peers' work that they particularly like and why.</p>	<p>Evaluating structures made by the class.</p> <p>Describing what characteristics of a design and construction made it the most effective.</p> <p>Describing the benefits of seasonal fruits and vegetables and the impact on the environment.</p> <p>Evaluating an end product and thinking of other ways in which to create similar items.</p>	<p>Evaluating the speed of a final product based on: the effect of shape on speed and the accuracy of workmanship on performance</p> <p>Evaluating a recipe, considering: taste, smell, texture and appearance.</p> <p>Suggesting modifications to a recipe</p> <p>Testing and evaluating an end product against the original design criteria.</p>	<p>Improving a design plan based on peer evaluation.</p> <p>Testing and adapting a design to improve it as it is developed.</p> <p>Identifying the nutritional differences between different products and recipes.</p> <p>Identifying and describing healthy benefits of food groups.</p> <p>Testing and evaluating an end product and giving point for further improvements.</p>	<p>Evaluating the work of others and receiving feedback on own work.</p> <p>Describing changes they would make/do if they were to do the project again.</p> <p>Evaluating a recipe, considering: taste, smell, texture and origin of the food group.</p> <p>Evaluating health and safety in production to minimise cross contamination.</p>
<b>Cooking and Nutrition</b>		<p><b>Understanding the difference between fruits and vegetables.</b></p> <p>To know that a fruit has seeds and a vegetable does not.</p> <p>To know that vegetables can grow either above or below ground.</p>	<p>To know that 'diet' means the food and drink that a person or animal usually eats.</p> <p>To know that 'ingredients' means the items in a mixture or recipe.</p> <p>To know where to find the nutritional</p>	<p>To know that not all fruits and vegetables can be grown in the UK.</p> <p>To know that vegetables and fruit grow in certain seasons.</p> <p>To know that cooking instructions are known as a 'recipe'.</p>	<p>To know that the amount of an ingredient in a recipe is known as the 'quantity.'</p> <p>To know that it is important to use oven gloves when removing hot food from an oven.</p>	<p>To understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects.</p> <p>To understand where meat comes from -</p>	<p>To know that 'flavour' is how a food or drink tastes.</p> <p>To know that 'processed food' means food that has been put through multiple changes in a factory.</p> <p>To understand that it is important to wash</p>

		<p>To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber).</p> <p>To know that a blender is a machine which mixes ingredients together into a smooth liquid.</p> <p>To know that fruits grow on trees or vines.</p> <p>To know that vegetables can come from different parts of the plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).</p>	<p><b>information on packaging.</b></p> <p>To understand what makes a balanced diet.</p> <p>To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar.</p> <p>To understand that I should eat a range of different foods from each food group, and roughly how much of each food group.</p> <p>To know that nutrients are substances in food that all living things need to make energy, grow and develop.</p>	<p>To know that climate affects food growth.</p> <p>To understand that imported foods travel from far away and this can negatively impact the environment.</p> <p>To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals and fibre.</p> <p>To understand that vitamins, minerals and fibre are important for energy, growth and maintaining health.</p>	<p><b>To know the following cooking techniques: sieving, creaming, rubbing method, cooling.</b></p> <p>To understand the importance of budgeting while planning ingredients for biscuits.</p>	<p><b>learning that beef is from cattle and how beef is reared and processed, including key welfare issues.</b></p> <p><b>To know that I can adapt a recipe to make it healthier by substituting ingredients.</b></p> <p>To know that I can use a nutritional calculator to see how healthy a food option is.</p>	<p><b>fruit and vegetables before eating to remove any dirt and insecticides.</b></p> <p>To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).</p>
<b>Textiles</b>		<p><b>To know that 'joining technique' means connecting two pieces of material together.</b></p> <p><b>To understand that a template (or fabric pattern) is used to cut out the same shape multiple times.</b></p> <p><b>To know that drawing a design idea is useful to see how an idea will look.</b></p> <p>To know that there are various temporary methods of joining fabric by using staples, glue or pins.</p>	<p><b>To know that sewing is a method of joining fabric.</b></p> <p><b>To know that different stitches can be used when sewing.</b></p> <p><b>To understand the importance of tying a knot after sewing the final stitch.</b></p> <p>To know that a thimble can be used to protect my fingers when sewing.</p>	<p><b>To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces.</b></p> <p><b>To know that when two edges of fabric have been joined together it is called a seam.</b></p> <p><b>To understand that some products are turned inside out after sewing so the stitching is hidden.</b></p> <p>To know that it is important to leave</p>	<p><b>To know that a fastening is something which holds two pieces of material together for example a zipper, toggle, button, press stud and velcro.</b></p> <p><b>To know that different fastening types are useful for different purposes.</b></p> <p><b>To know that creating a mock up (prototype) of their design is useful for checking ideas and proportions.</b></p>	<p><b>To know that blanket stitch is useful to reinforce the edges of a fabric material or join two pieces of fabric.</b></p> <p><b>To know that soft toys are often made by creating appendages separately and then attaching them to the main body.</b></p> <p><b>To know that small, neat stitches which are pulled taut are important to ensure that the soft toy is strong and holds the stuffing securely.</b></p>	<p><b>To understand that it is important to design product with the client/ target customer in mind.</b></p> <p><b>To know that using a template (or pattern) helps to accurately mark out a design on fabric.</b></p> <p><b>To understand the importance of consistently sized stitches.</b></p>

		To understand that different techniques for joining materials can be used for different purposes.		space on the fabric for the seam.		To understand that it is easier to finish simpler designs to a high standard.	
<b>Structures</b>		<p><b>To understand that the shape of materials can be changed to improve the strength and stiffness of structures.</b></p> <p>To understand that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses).</p> <p>To understand that axles are used in structures and mechanisms to make parts turn in a circle.</p> <p>To begin to understand that different structures are used for different purposes.</p> <p>To know that a structure is something that has been made and put together.</p>		<p><b>To know that a 'free-standing' structure is one which can stand on its own.</b></p> <p>To understand what a frame structure is.</p>		<b>To know that structures can be strengthened by manipulating materials and shapes.</b>	
<b>Mechanical Systems</b>			<b>To know that mechanisms are a collection of moving parts that work together as a machine to produce movement.</b>		<p><b>To understand that kinetic energy is the energy that something (object/person) has by being in motion.</b></p> <p>To understand that all moving things have kinetic energy.</p>		<p><b>To understand that the mechanism in an automata uses a system of cams, axles and followers.</b></p> <p>To understand that different shaped cams</p>

			<p>To know that there is always an input and output in a mechanism.</p> <p>To know that a lever is something that turns on a pivot.</p> <p>To know that a linkage mechanism is made up of a series of levers.</p>		<p>To know that air resistance is the level of drag on an object as it is forced through the air.</p> <p>To understand that the shape of a moving object will affect how it moves due to air resistance.</p>		<p>produce different outputs.</p>
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