



Tudor Grange Primary Academy Yew Tree

DT Curriculum Map

EYFS

	0-3 Preschool	3-4 EYFS 1	Reception EYFS 2	Links to KS1 Curriculum
EYFS area of Learning	Expressive Arts & Design: exploring and using media and materials			
<b>Fundamental Knowledge</b>	<p>Uses 3D and 2D structures to explore materials and/or to express ideas</p>	<p>Talks about their plans</p> <p>Uses different materials, tools and techniques in a variety of ways to join and make structures</p> <p>Talks about their ideas, solve problems and tries different ways of doing things</p>	<p>Plans before they make</p> <p>Chooses the most appropriate materials and tools for a task, manipulating materials and joining materials in different ways</p> <p>Talks about their design, solves problems, makes changes and modifies their designs when necessary</p>	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).</p> <p>Select from and use a wide variety of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p>Explore and evaluate a range of existing products.</p> <p>Evaluate their ideas and products against design criteria.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms (for example, levers, sliders, wheels and axles) in their products.</p>
<b>Early Learning Goal</b>	<p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <p>Share their creations, explaining the process they have used.</p> <p>Make use of props and materials when role playing characters in narratives and stories.</p>			

	Autumn (1.1)	Spring (1.2)	Summer (1.3)
Year 1	Mechanisms	Structure	Cooking
Fundamental Knowledge	<p><b>Moving story book</b>  Explaining how to adapt mechanisms, using bridges or guides to control the movement.</p> <ul style="list-style-type: none"> <li>• Designing a moving story book for a given audience.</li> <li>• Designing a vehicle that includes wheels, axles and axle holders, that when combined, will allow the wheels to move.</li> <li>• Creating clearly labelled drawings that illustrate movement.</li> <li>• Following a design to create moving models that use levers and sliders.</li> <li>• Adapting mechanisms, when: they do not work as they should; to fit their vehicle design; to improve how they work after testing their vehicle.</li> <li>• Testing a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed.</li> <li>• Reviewing the success of a product by testing it with its intended audience.</li> <li>• Testing wheel and axle mechanisms, identifying what stops the wheels from turning, and recognising that a wheel needs an axle to move.</li> <li>• To know that a mechanism is the parts of an object that move together.</li> <li>• To know that a slider mechanism moves an object from side to side.</li> <li>• To know that a slider mechanism has a slider, slots, guides and an object.</li> <li>• To know that bridges and guides are bits of card that purposefully restrict the movement of the slider.</li> <li>• To know that wheels need to be round to rotate and move.</li> <li>• To understand that for a wheel to move it must be attached to a rotating axle.</li> <li>• To know that an axle moves within an axle holder which is fixed to the vehicle or toy.</li> </ul>	<p><b>Windmill (London Eye)</b></p> <ul style="list-style-type: none"> <li>• Learning the importance of a clear design criteria</li> <li>• Including individual preferences and requirements in a design.</li> <li>• Making stable structures from card, tape and glue</li> <li>• Learning how to turn 2D nets into 3D structures</li> <li>• Following instructions to cut and assemble the supporting structure of a windmill</li> <li>• Making functioning turbines and axles which are assembled into a main supporting structure.</li> <li>• Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't.</li> <li>• Suggest points for improvements.</li> <li>• To understand that the shape of materials can be changed to improve the strength and stiffness of structures.</li> <li>• To understand that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses).</li> <li>• To understand that axles are used in structures and mechanisms to make parts turn in a circle.</li> <li>• To begin to understand that different structures are used for different purposes.</li> <li>• To know that a structure is something that has been made and put together.</li> <li>• To know that a client is the person I am designing for.</li> <li>• To know that design criteria is a list of points to ensure the product meets the clients needs and wants.</li> <li>• To know that a windmill harnesses the power of wind for a purpose like grinding grain, pumping water or generating electricity.</li> <li>• To know that windmill turbines use wind to turn and make the machines inside work.</li> </ul>	<p><b>Fruit and Vegetables</b></p> <ul style="list-style-type: none"> <li>• Designing smoothie carton packaging by-hand or on ICT software.</li> <li>• Chopping fruit and vegetables safely to make a smoothie.</li> <li>• Tasting and evaluating different food combinations.</li> <li>• Describing appearance, smell, and taste.</li> <li>• Suggesting information to be included on packaging.</li> <li>• Understanding the difference between fruits and vegetables.</li> <li>• To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber).</li> <li>• To know that a blender is a machine which mixes ingredients together into a smooth liquid.</li> <li>• To know that some fruit has seeds and a vegetable does not.</li> <li>• To know that fruits grow on trees or vines.</li> <li>• To know that vegetables can grow either above or below ground.</li> <li>• To know that vegetables can come from different parts of the plant (e.g., roots: potatoes, leaves: lettuce, fruit: cucumber).</li> </ul>

	<ul style="list-style-type: none"> <li>• To know that the frame of a vehicle (chassis) needs to be balanced.</li> <li>• To know that in Design and technology we call a plan a 'design'.</li> <li>• To know some real-life items that use wheels such as wheelbarrows, hamster wheels and vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>• To know that a windmill is a structure with sails that are moved by the wind.</li> <li>• To know the three main parts of a windmill are the turbine, axle and structure</li> </ul>	
	Autumn 1 (2.1)	Spring (2.2)	Summer (2.3)
Year 2	Cooking	Textiles	Structures
Fundamental Knowledge	<p><b>A balanced diet</b></p> <ul style="list-style-type: none"> <li>• Designing a healthy wrap based on a food combination which work well together.</li> <li>• Slicing food safely using the bridge or claw grip.</li> <li>• Constructing a wrap that meets a design brief.</li> <li>• Describing the taste, texture and smell of fruit and vegetables.</li> <li>• Taste testing food combinations and final products</li> <li>• Describing the information that should be included on a label.</li> <li>• Evaluating which grip was most effective.</li> <li>• To know that 'diet' means the food and drink that a person or animal usually eats.</li> <li>• To understand what makes a balanced diet.</li> <li>• To know where to find the nutritional information on packaging.</li> <li>• To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar.</li> <li>• To understand that I should eat a range of different foods from each food group, and roughly how much of each food group.</li> <li>• To know that nutrients are substances in food that all living things need to make energy, grow and develop.</li> <li>• To know that 'ingredients' means the items in a mixture or recipe.</li> <li>• To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy.</li> </ul>	<p><b>Puppets</b></p> <ul style="list-style-type: none"> <li>• Designing a puppet.</li> <li>• Selecting and cutting fabrics for sewing.</li> <li>• Decorating a puppet using fabric glue or running stitch.</li> <li>• Threading a needle.</li> <li>• Sewing running stitch, with evenly spaced, neat, even stitches to join fabric.</li> <li>• Neatly pinning and cutting fabric using a template.</li> <li>• Troubleshooting scenarios posed by teacher.</li> <li>• Evaluating the quality of the stitching on others' work.</li> <li>• Discussing as a class, the success of their stitching against the success criteria.</li> <li>• Identifying aspects of their peers' work that they particularly like and why.</li> <li>• To know that sewing is a method of joining fabric.</li> <li>• To know that different stitches can be used when sewing.</li> <li>• To understand the importance of tying a knot after sewing the final stitch.</li> <li>• To know that a thimble can be used to protect my fingers when sewing.</li> </ul>	<p><b>Baby bear's chair</b></p> <ul style="list-style-type: none"> <li>• Generating and communicating ideas using sketching and modelling.</li> <li>• Learning about different types of structures, found in the natural world and in everyday objects.</li> <li>• Making a structure according to design criteria.</li> <li>• Creating joints and structures from paper/card and tape. • Building a strong and stiff structure by folding paper.</li> <li>• Exploring the features of structures.</li> <li>• Comparing the stability of different shapes.</li> <li>• Testing the strength of own structures.</li> <li>• Identifying the weakest part of a structure.</li> <li>• Evaluating the strength, stiffness and stability of own structure.</li> <li>• To know that shapes and structures with wide, flat bases or legs are the most stable.</li> <li>• To understand that the shape of a structure affects its strength.</li> <li>• To know that materials can be manipulated to improve strength and stiffness.</li> <li>• To know that a structure is something which has been formed or made from parts.</li> <li>• To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move.</li> <li>• To know that a 'strong' structure is one which does not break easily.</li> <li>• To know that a 'stiff' structure or material is one which does not bend easily.</li> </ul>

	<ul style="list-style-type: none"> <li>• To know that many foods and drinks we do not expect to contain sugar do; we call these 'hidden sugars'.</li> </ul>		<ul style="list-style-type: none"> <li>• To know that natural structures are those found in nature.</li> <li>• To know that man-made structures are those made by people.</li> </ul>
	Autumn 1 (3.1)	Spring (3.2)	Summer (3.3)
Year 3	Textiles	Digital world	Cooking
Fundamental Knowledge	<p><b>Stockings</b></p> <ul style="list-style-type: none"> <li>• Designing and making a template from an existing stocking and applying individual design criteria.</li> <li>• Following design criteria to create a Christmas/ Festive stocking</li> <li>• Selecting and cutting fabrics with ease using fabric scissors.</li> <li>• Threading needles with greater independence.</li> <li>• Tying knots with greater independence.</li> <li>• Sewing cross stitch to join fabric.</li> <li>• Decorating fabric using appliqué.</li> <li>• Completing design ideas with stuffing and sewing the edges or embellishing based on design ideas.</li> <li>• Evaluating an end product and thinking of other ways in which to create similar items.</li> <li>• To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces.</li> <li>• To know that when two edges of fabric have been joined together it is called a seam.</li> <li>• To know that it is important to leave space on the fabric for the seam.</li> <li>• To understand that some products are turned inside out after sewing so the stitching is hidden.</li> </ul>	<p><b>Electronic charm</b></p> <ul style="list-style-type: none"> <li>• Problem solving by suggesting potential features on a Micro: bit and justifying my ideas.</li> <li>• Developing design ideas for a technology pouch.</li> <li>• Drawing and manipulating 2D shapes, using computer-aided design, to produce a point-of-sale badge.</li> <li>• Using a template when cutting and assembling the pouch.</li> <li>• Following a list of design requirements.</li> <li>• Selecting and using the appropriate tools and equipment for cutting, joining, shaping and decorating a foam pouch.</li> <li>• Applying functional features such as using foam to create soft buttons.</li> <li>• Writing a program to control (button press) and/or monitor (sense light) that will initiate a flashing LED algorithm.</li> <li>• Analysing and evaluating an existing product.</li> <li>• Identifying the key features of a pouch.</li> <li>• To understand that, in programming, a 'loop' is code that repeats something again and again until stopped.</li> <li>• To know that a Micro: bit is a pocket-sized, codable computer.</li> <li>• To know what the 'Digital Revolution' is and features of some of the products that have evolved as a result.</li> <li>• To know that in Design and technology the term 'smart' means a programmed product.</li> <li>• To know the difference between analogue and digital technologies.</li> </ul>	<p><b>Eat seasonally</b></p> <ul style="list-style-type: none"> <li>• Creating a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell, and appearance of the dish.</li> <li>• Knowing how to prepare themselves and a workspace to cook safely in, learning the basic rules to avoid food contamination.</li> <li>• Following the instructions within a recipe.</li> <li>• Establishing and using design criteria to help test and review dishes.</li> <li>• Describing the benefits of seasonal fruits and vegetables and the impact on the environment.</li> <li>• Suggesting points for improvement when making a seasonal tart.</li> <li>• To know that not all fruits and vegetables can be grown in the UK.</li> <li>• To know that climate affects food growth.</li> <li>• To know that vegetables and fruit grow in certain seasons.</li> <li>• To know that cooking instructions are known as a 'recipe'.</li> <li>• To know that imported food is food which has been brought into the country.</li> <li>• To know that exported food is food which has been sent to another country.</li> <li>• To understand that imported foods travel from far away and this can negatively impact the environment.</li> <li>• To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals, and fibre.</li> </ul>

		<ul style="list-style-type: none"> <li>• To understand what is meant by ‘point of sale display.’</li> <li>• To know that CAD stands for ‘Computer-aided design’.</li> </ul>	<ul style="list-style-type: none"> <li>• To understand that vitamins, minerals, and fibre are important for energy, growth and maintaining health.</li> <li>• To know safety rules for using, storing, and cleaning a knife safely.</li> <li>• To know that similar coloured fruits and vegetables often have similar nutritional benefits.</li> </ul>
	<b>Autumn (4.1)</b>	<b>Spring (4.2)</b>	<b>Summer (4.3)</b>
<b>Year 4</b>	<b>Structures</b>	<b>Electrics</b>	<b>Mechanisms</b>
<b>Fundamental Knowledge</b>	<b>Pavilions / Parthenon</b> <ul style="list-style-type: none"> <li>• Designing a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect.</li> <li>• Building frame structures designed to support weight.</li> <li>• Creating a range of different shaped frame structures.</li> <li>• Making a variety of free-standing frame structures of different shapes and sizes.</li> <li>• Selecting appropriate materials to build a strong structure and cladding.</li> <li>• Reinforcing corners to strengthen a structure.</li> <li>• Creating a design in accordance with a plan.</li> <li>• Learning to create different textural effects with materials.</li> <li>• Evaluating structures made by the class.</li> <li>• Describing what characteristics of a design and construction made it the most effective.</li> <li>• Considering effective and ineffective designs.</li> <li>• To understand what a frame structure is.</li> <li>• To know that a ‘free-standing’ structure is one which can stand on its own.</li> <li>• To know that a pavilion is a a decorative building or structure for leisure activities.</li> <li>• To know that cladding can be applied to structures for different effects.</li> <li>• To know that aesthetics are how a product looks.</li> </ul>	<b>Torch</b> <ul style="list-style-type: none"> <li>• Designing a torch, considering the target audience, and creating both design and success criteria focusing on features of individual design ideas.</li> <li>• Making a torch with a working electrical circuit and switch.</li> <li>• Using appropriate equipment to cut and attach materials.</li> <li>• Assembling a torch according to the design and success criteria.</li> <li>• Evaluating electrical products.</li> <li>• Testing and evaluating the success of a final product.</li> <li>• To understand that electrical conductors are materials which electricity can pass through.</li> <li>• To understand that electrical insulators are materials which electricity cannot pass through.</li> <li>• To know that a battery contains stored electricity that can be used to power products</li> <li>• To know that an electrical circuit must be complete for electricity to flow.</li> <li>• To know that a switch can be used to complete and break an electrical circuit.</li> <li>• To know the features of a torch: case, contacts, batteries, switch, reflector, lamp, lens.</li> <li>• To know facts from the history and invention of the electric light bulb(s) - by Sir Joseph Swan and Thomas Edison.</li> </ul>	<b>Slingshot car / catapult</b> <ul style="list-style-type: none"> <li>• Designing a shape that reduces air resistance.</li> <li>• Drawing a net to create a structure from.</li> <li>• Choosing shapes that increase or decrease speed because of air resistance.</li> <li>• Personalising a design.</li> <li>• Measuring, marking, cutting, and assembling with increasing accuracy.</li> <li>• Making a model based on a chosen design.</li> <li>• Evaluating the speed of a final product based on the effect of shape on speed and the accuracy of workmanship on performance.</li> <li>• To understand that all moving things have kinetic energy.</li> <li>• To understand that kinetic energy is the energy that something (object/person) has by being in motion.</li> <li>• To know that air resistance is the level of drag on an object as it is forced through the air.</li> <li>• To understand that the shape of a moving object will affect how it moves due to air resistance.</li> <li>• To understand that products change and evolve over time.</li> <li>• To know that aesthetics means how an object or product looks in design and technology.</li> <li>• To know that a template is a stencil you can use to help you draw the same shape accurately.</li> <li>• To know that a birds-eye view means a view from a high angle (as if a bird in flight).</li> </ul>

	<ul style="list-style-type: none"> <li>• To know that a product's function means its purpose.</li> <li>• To understand that the target audience means the person or group of people a product is designed for.</li> <li>• To know that architects consider light, shadow and patterns when designing</li> </ul>		<ul style="list-style-type: none"> <li>• To know that graphics are images which are designed to explain or advertise something.</li> <li>• To know that it is important to assess and evaluate design ideas and models against a list of design criteria.</li> </ul>
	Autumn (5.1)	Spring 1 (5.2)	Summer (5.3)
Year 5	Textiles	Digital world	Cooking
Fundamental Knowledge	<b>Stuffed toys</b> <ul style="list-style-type: none"> <li>• Designing a stuffed toy, considering the main component shapes required and creating an appropriate template.</li> <li>• Considering the proportions of individual components.</li> <li>• Creating a 3D stuffed toy from a 2D design.</li> <li>• Measuring, marking and cutting fabric accurately and independently</li> <li>• Creating strong and secure blanket stitches when joining fabric.</li> <li>• Threading needles independently.</li> <li>• Using appliqué to attach pieces of fabric decoration.</li> <li>• Sewing blanket stitch to join fabric.</li> <li>• Applying blanket stitch so the spaces between the stitches are even and regular.</li> <li>• Testing and evaluating an end product and giving point for further improvements.</li> <li>• To know that blanket stitch is useful to reinforce the edges of a fabric material or join two pieces of fabric.</li> <li>• To understand that it is easier to finish simpler designs to a high standard.</li> <li>• To know that soft toys are often made by creating appendages separately and then attaching them to the main body.</li> <li>• 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.</li> </ul>	<b>Monitoring devices</b> <ul style="list-style-type: none"> <li>• Researching (books, internet) for a particular (user's) animal's need.</li> <li>• Developing design criteria based on research.</li> <li>• Generating multiple housing ideas using building bricks.</li> <li>• Understanding what a virtual model is and the pros and cons of traditional and CAD modelling.</li> <li>• Placing and manoeuvring 3D objects, using CAD.</li> <li>• Changing the properties of, or combining one or more 3D objects, using CAD.</li> <li>• Understanding the functional and aesthetic properties of plastics.</li> <li>• Programming to monitor the ambient temperature and coding an (audible or visual) alert when the temperature rises above or falls below a specified range.</li> <li>• Stating an event or fact from the last 100 years of plastic history.</li> <li>• Explaining how plastic is affecting planet Earth and suggesting ways to make more sustainable choices.</li> <li>• Explaining key functions in my program (audible alert, visuals).</li> <li>• Explaining how my product would be useful for an animal carer including programmed features.</li> <li>• To know that a 'device' means equipment created for a certain purpose or job and that monitoring devices observe and record.</li> </ul>	<b>What could be healthier</b> <ul style="list-style-type: none"> <li>• Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute, or add additional ingredients.</li> <li>• Writing an amended method for a recipe to incorporate the relevant changes to ingredients.</li> <li>• Designing appealing packaging to reflect a recipe.</li> <li>• Cutting and preparing vegetables safely.</li> <li>• Using equipment safely, including knives, hot pans, and hobs.</li> <li>• Knowing how to avoid cross-contamination.</li> <li>• Following a step-by-step method carefully to make a recipe.</li> <li>• Identifying the nutritional differences between different products and recipes.</li> <li>• Identifying and describing healthy benefits of food groups.</li> <li>• To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed, including key welfare issues.</li> <li>• To know that I can adapt a recipe to make it healthier by substituting ingredients.</li> <li>• To know that I can use a nutritional calculator to see how healthy a food option is.</li> <li>• 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 object</li> </ul>

		<ul style="list-style-type: none"> <li>• To know that a sensor is a tool or device that is designed to monitor, detect and respond to changes for a purpose.</li> <li>• To understand that conditional statements (and, or, if Booleans) in programming are a set of rules which are followed if certain conditions are met</li> <li>• To understand key developments in thermometer history.</li> <li>• To know events or facts that took place over the last 100 years in the history of plastic, and how this is changing our outlook on the future.</li> <li>• To know the 6Rs of sustainability.</li> <li>• To understand what a virtual model is and the pros and cons of traditional vs CAD modelling.</li> </ul>	
	Autumn 1 (6.1)	Spring 1 (6.2)	Summer 1 (6.3)
Year 6	Structures	Electrics	Mechanism
Fundamental Knowledge	<p><b>Anderson shelters</b></p> <ul style="list-style-type: none"> <li>• Designing an Anderson Shelter featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.</li> <li>• Building a range of apparatus structures drawing upon new and prior knowledge of structures.</li> <li>• Measuring, marking and cutting wood to create a range of structures.</li> <li>• Using a range of materials to reinforce and add decoration to structures.</li> <li>• Improving a design plan based on peer evaluation.</li> <li>• Testing and adapting a design to improve it as it is developed.</li> <li>• Identifying what makes a successful structure.</li> <li>• To know that structures can be strengthened by manipulating materials and shapes.</li> <li>• To understand what a 'footprint plan' is.</li> <li>• To understand that in the real world, design, can impact users in positive and negative ways.</li> <li>• To know that a prototype is a cheap model to test a design idea.</li> </ul>	<p><b>Steady Hand Game</b></p> <ul style="list-style-type: none"> <li>• Designing a steady hand game - identifying and naming the components required. • Drawing a design from three different perspectives.</li> <li>• Generating ideas through sketching and discussion.</li> <li>• Modelling ideas through prototypes.</li> <li>• Understanding the purpose of products (toys), including what is meant by 'fit for purpose' and 'form over function'.</li> <li>• Constructing a stable base for a game.</li> <li>• Accurately cutting, folding, and assembling a net.</li> <li>• Decorating the base of the game to a high-quality finish.</li> <li>• Making and testing a circuit.</li> <li>• Incorporating a circuit into a base.</li> <li>• Testing own and others finished games, identifying what went well and making suggestions for improvement.</li> <li>• Gathering images and information about existing children's toys.</li> <li>• Analysing a selection of existing children's toys.</li> </ul>	<p><b>Automata Toys</b></p> <ul style="list-style-type: none"> <li>• Experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement.</li> <li>• Understanding how linkages change the direction of a force.</li> <li>• Making things move at the same time.</li> <li>• Understanding and drawing cross-sectional diagrams to show the inner workings of my design.</li> <li>• Measuring, marking, and checking the accuracy of the jelutong and dowel pieces required.</li> <li>• Measuring, marking, and cutting components accurately using a ruler and scissors.</li> <li>• Assembling components accurately to make a stable frame.</li> <li>• Understanding that for the frame to function effectively the components must be cut accurately and the joints of the frame secured at right angles.</li> <li>• Selecting appropriate materials based on the materials being joined and the speed at which the glue needs to dry/set.</li> </ul>

		<ul style="list-style-type: none"> <li>• To know that batteries contain acid, which can be dangerous if they leak.</li> <li>• To know the names of the components in a basic series circuit, including a buzzer.</li> <li>• To know that 'form' means the shape and appearance of an object.</li> <li>• To know the difference between 'form' and 'function'.</li> <li>• To understand that 'fit for purpose' means that a product works how it should and is easy to use.</li> <li>• To know that form over purpose means that a product looks good but does not work very well.</li> <li>• To know the importance of 'form follows function' when designing: the product must be designed primarily with the function in mind.</li> <li>• To understand the diagram perspectives 'top view', 'side view' and 'back'.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluating the work of others and receiving feedback on own work.</li> <li>• Applying points of improvement to their toys.</li> <li>• Describing changes, they would make/do if they were to do the project again.</li> <li>• To understand that the mechanism in an automata uses a system of cams, axles, and followers.</li> <li>• To understand that different shaped cams produce different outputs.</li> <li>• To know that an automata is a hand powered mechanical toy.</li> <li>• To know that a cross-sectional diagram shows the inner workings of a product.</li> <li>• To understand how to use a bench hook and saw safely.</li> <li>• To know that a set square can be used to help mark 90° angles.</li> </ul>
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