



# DT Long Term Curriculum Plan

Design and Technology at a Glance at Eastfield Primary School						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Materials / Construction joining		Materials / Construction Joining, constructing, balancing		Materials / Construction Designing, joining, constructing, balancing	
Year 1				Textiles		Materials / Construction (Cardboard)
Year 2		Mechanisms – Levers		Food		Materials / Construction (Wood)
Year 3		Food		Materials/Construction (clay)		
Year 4	Textiles			Electrics/Computing		Mechanisms - Pulleys
Year 5			Food			Mechanisms – Converting rotary linear motion using CAMS
Year 6		Textiles			Electrics/Computing	

Design Technology at Eastfield Primary School			
	Autumn	Spring	Summer
EYFS	<p>The children will have a range of opportunities to explore each objective with a range of materials to construct with throughout the continuous provision, in the natural environment and through expressive art and design activities both adult-led and child initiated. They will be encouraged to think about and discuss what they want to make, discuss problems and how they might be solved as they arise, and staff will reflect with children on how they have achieved their aims. The children will be provided with a range of both natural and man-made materials and tools and the children will be taught to use them with care and precision e.g. Arts and crafts: pencils, felt tips, paint brush, sponges, printing blocks, erasers, glue, spatula, tape Cooking: wooden spoons, spatula, peeler, rolling pin.</p> <p>The children will be taught different techniques for joining materials, such as how to use adhesive tape, different sorts of glue and fastenings e.g. split pins and paper clips. The children will be asked to define colours, shapes, texture and smells in their own words.</p>		
	<p><b>Materials / Construction</b> The children will make their own Stick Man, learning how to join materials together using masking tape and string. Children will be taught how to tear masking tape.</p>	<p><b>Materials / Construction</b> The children will build a house for the Three Little Pigs using junk modelling and construction within the provision. They will use adhesive and join materials together using masking tape to secure. Children will be encouraged to practise using scissors to cut tape.</p>	<p><b>Materials / Construction</b> The children will the Giant’s castle from Jack and the Beanstalk using junk modelling and construction within the provision. They will learn to construct from a design and follow their own thoughts and ideas as to how to construct their castle and join materials together. They will be able to talk about what they have used to make their model and why they have chosen a certain adhesive to join it together. Children will use a variety of techniques and skills throughout the process.</p>

<p><b>Year 1 DT</b></p>		<p><b>Spring 2</b>  <b>Textiles: Design, make and evaluate a toy hand puppet.</b>  <b>Topic focus – History/Old and New Toys</b>                  The children will make a very simple puppet using felt material and embellish its features using other materials. They will use a simple stitch to fasten the front and back of the puppet and create a 3D product using stuffing.</p>	<p><b>Summer 2</b>  <b>Materials/Construction: Design, build and evaluate a functional structure (<u>money box</u>) for other users, using card.</b>                  The children will design and make freestanding structures. The structures will be 3D and used to store small objects. The project will focus on measuring, marking out, cutting and joining techniques.</p>
<p><b>Year 2 DT</b></p>	<p><b>Autumn 2</b>  <b>Mechanics: Design, make and evaluate a card using a lever to move an object.</b>                  The children will look at sliders and levers. They will investigate how they have been made and then make their own examples of different sliders and levers. They will use this knowledge to make a sliding or levered picture move on a Christmas card.</p>	<p><b>Spring 1</b>  <b>Food: Design, make and evaluate a Healthy Sandwich</b>                  The children will look at healthy eating and a range of salad ingredients and healthy sandwich fillings. They will then design and make their own healthy sandwich using a choice of ingredients.</p>	<p><b>Summer 2</b>  <b>Structures/Construction: Design, make and evaluate a picture frame using wood and strengthening corners</b>                  The children will design and make a picture frame structure from wooden materials. They will concentrate on using the best cutting, joining and decorative techniques for wooden materials (sawing, gluing, drilling)</p>

<p><b>Year 3 DT</b></p>	<p><b>Autumn 2</b> <b>Food and nutrition: Design, Make and Evaluate a Healthy Salad using seasonal produce</b> Knowledge also required to enhance understanding: Science – Nutrition The children will look at healthy eating and what a balanced diet means. They will learn about food safety and the need for good hygiene. The skills they will use to prepare the salad will be slicing, grating, chopping and peeling.</p>	<p><b>Spring 2</b> <b>Materials/construction: Design, make and evaluate a clay pot</b> <b>Topic focus – History/ Stone-Age Britain</b> The children will experiment with 2 different techniques to make a Stone-Age replica of a clay pot. They will experiment with both the thumb pressing technique and the coiling technique. Pupils will create their final design using the coiling technique. Pupils will use equipment to make marks and patterns to decorate the pot.</p>	
<p><b>Year 4 DT</b></p>	<p><b>Autumn 1</b> <b>Textiles: Design, make and evaluate a bag using cross-stitch to write initials (Enterprise)</b> The children will make a very simple bag using felt material. They will build on sewing skills taught in year 1 and use several stitch techniques to join the bag together and attach a handle. They will learn to use cross-stitch to sew their initial to decorate the bag.</p>	<p><b>Spring 2</b> <b>Electrics/computing: Design, make and evaluate a revolving fairground ride using electrics and computing components</b> Knowledge also required to enhance understanding: Science – Electricity Pupil will create simple circuits and switches (including programming and control. The children will investigate how to make simple circuits. They will then design, make and evaluate a fairground ride using these components.</p>	<p><b>Summer 2</b> <b>Mechanisms: Design, make and evaluate a mechanism for lifting objects using a pulley</b> Knowledge also required to enhance understanding: History (Ancient Egypt) Understand how key events and individuals in design and technology have helped shape the world – Building the pyramids and other buildings in Ancient Egyptian times. PULLEYS – making a mechanism for lifting a heavy object. The children will investigate a range of mechanisms which use pulleys. They will then create their own mechanism to lift an object.</p>



<p><b>Year 5 DT</b></p>		<p><b>Spring 1</b>  <b>Food: Create a savoury dish using typically South-American ingredients</b>                  Celebrating culture and seasonality. The children will look at the history of ingredients local to South America and how they differ from products grown here and why. They will then design, making and evaluate their own savory South-American themed dish.</p>	<p><b>Summer 2</b>  <b>Mechanisms: Convert rotary motion to linear using CAMS.</b>                  Knowledge also required to enhance understanding: Science – Forces                  Children learn what a cam and follower are. They are asked to identify cams and followers on mechanisms. Children also learn how rotary motion is converted into linear motion in a mechanical system. They will design their own product using CAMS.</p>
<p><b>Year 6 DT</b></p>	<p><b>Autumn 2</b>  <b>Textiles: Design, make and evaluate stitched household craft products</b>                  Knowledge also required to enhance understanding: History – WW2 and the need for ‘Make do and Mend’                  Combing different shapes.                   The children will look at a range of simple fabric Christmas tree decorations. They will then look at how the decorations are made and put together. With this knowledge the children will then design, make and evaluate their own/pairs tree decoration.</p>		<p><b>Summer 1</b>  <b>Electrics/Computing: Design, make and evaluate a moving chariot using electronic kits</b>                  Knowledge also required to enhance understanding: Science – Electricity and y6 computer coding skills.                   More complex switches and circuits (including programming, monitoring and control) The children will investigate, design and make an electrical circuit using the Crumble kits which will use a motor to create movement for their Greek chariot.</p>