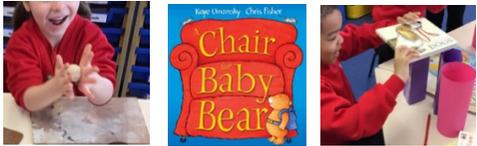


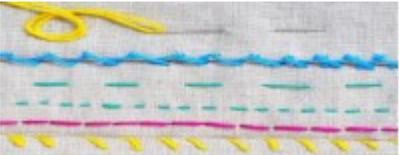


Dewhurst St Mary Primary School D&T Long Term Plan



Through Design and Technology our children use and develop their creativity and imagination, designing and making products that answer questions to a variety of problems. They acquire a broad range of subject knowledge and skills, drawing on and learning from mathematics, science, computing, history, English, RE, geography and art. Our high-quality curriculum reflects the essential contribution D&T makes to the creativity, culture, wealth and well-being of all of us, today and tomorrow.

	Autumn	Spring	Summer
EYFS	<p>Learning Journey All About Me & Transport</p>	<p>Learning Journey People who help us & Animal World</p>	<p>Learning Journey Growing/Life Cycles & Once upon a time</p>
<p>Physical Development and Expressive Arts and Design</p> <p>The themes, ideas and concepts covered form the basis for our KS1 & KS2 Design and Technology curriculum. Through their learning children begin to develop their small motor skills so that they can use a range of tools competently, safely and confidently. They explore, use and refine a variety of artistic effects to express their ideas and feelings. They explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children work independently or as a group. They are encouraged to share and talk about their creations, explaining the process they have used.</p>			
Year 1	<p>Unit DT1: How can we make it stronger?</p> <p>Using the tale of Goldilocks and the Three Bears as inspiration, children help poor Baby Bear by making him a brand-new chair. When designing the chair, the children consider his needs and explore which 3D shape helps to build a strong and stable structure.</p> 	<p>Unit DT7: What can we share for breakfast?</p> <p>Children handle and explore fresh and dried fruits, beginning to learn about where foods come from, seasonality and persevering before undertaking a taste test to establish their chosen ingredient for a fruit bread. They will make and design their own fruit breads considering flavour, shape, texture and appearance. The children will use the language they have developed over the unit to write their own bread labels and finally share their bread with their classmates.</p> 	<p>Unit DT13: How can we join these materials together?</p> <p>Children explore different ways of joining fabrics before creating their own hand puppets based upon characters from a well-known fairy tale or class book. They work to develop their technical skills of cutting, gluing, pinning and running stitch. Children record the process of making their puppet through a series of photographs, considering the process of making their product.</p> 
Year 2	<p>Unit DT2: How can you make it move?</p> <p>After learning the terms: pivot, lever and linkage, children set to designing a monster that will move using a linkage mechanism. After practising making linkages of different types and varying the materials they use, children can also bring their monsters to life with the gift of movement.</p> 	<p>Unit DT8: Where can I keep my tooth safe?</p> <p>Having already been introduced to basic sewing and decorating fabric in Yr1 this topic offers extra challenge by introducing new skills to add to their repertoire: new stitches and appliqué. After learning these techniques, the children apply their knowledge to the design, decoration and assembly of their very own Tooth Fairy Pillow.</p> 	<p>Unit DT14: What shall we take on our healthy picnic?</p> <p>Through their exploration of what makes a balanced diet, children taste test food combinations of different food groups. They will also aim to make a wrap that includes a healthy mix of protein, vegetables and dairy, and learn about the term 'hidden sugars'. The unit ends with a celebration of the food they made at a class picnic.</p> 

<p>Year 3</p>	<p>Unit DT3: Can you make an effective design using different stitches?</p> <p>Consolidating their sewing skills from previous years the children will then move on to practice and develop a wider variety of stitches and methods of joining and attaching fabrics. The children will design and produce their own sampler showcasing these skills. The ability to sew well and confidently use sewing techniques will be used in projects in Yr6.</p> 	<p>Unit DT9: How can the movement be used to create a surprise?</p> <p>Pupils design and create a toy with a pneumatic system, learning how trapped air can be used to create a product with moving parts while also building on their design knowledge. They will then be introduced to thumbnail sketches and exploded diagrams.</p> 	<p>UnitDT15: Can you follow a set of instructions accurately?</p> <p>The intention of this unit is to support the children to measure, cut and construct an item accurately. Working in small groups, the children need to follow a set of detailed instructions to create their own Roman Magonel (catapult). This unit supports the need to create a high-quality product. The finished catapults can then be used to recreate their own class siege warfare as part of their studies into Roman history.</p> 
<p>Year 4</p>	<p>Unit DT4: Can you make a seasonal dish?</p> <p>Children discover when, where and how fruits and vegetables are grown and learn about seasonality in the UK. They will also learn about the relationship between the colour of fruits and vegetables and their health benefits by making dishes using seasonal ingredients before making their own fruit crumbles.</p> 	<p>Unit DT10: Can you design the car of the future?</p> <p>Each child will transform lollipop sticks, wheels, dowels and straws into a moving car. They will be using a (heat safe) glue gun to construct the materials, make the launch mechanism, design and also make the body of the vehicle using nets and assembling these to the chassis.</p> 	<p>Unit DT16: Does your product meet the design criteria?</p> <p>In this unit, children apply their scientific understanding of electrical circuits to create a working torch. They will also design and evaluate their product against set design criteria. Link: Science Circuits</p> 

<p>Year 5</p>	<p>Unit DT5: How can you make this dish healthier?</p> <p>Focusing on nutrition, children research and modify a traditional pie recipe to make it healthier. They will cook their new and improved versions, making appropriate packaging and learning about the ethical considerations of farming cattle. They will also further their technical skills by making their own pastry as well as preparing and cooking meat and vegetable safely and hygienically.</p> 	<p>Unit DT11: How can we harness the power of the wind?</p> <p>This unit forms part of the children's learning about renewable energy. Combining learning in geography and D&T the children will work in pairs to construct and locate a model of a wind turbine. The unit can then be extended to encompass a STEM challenge, the children are given minimal materials, and asked to design a wind powered machine that can lift a weighted cup off the floor.</p> 	<p>UnitDT17: What could we sell in the gift shop?</p> <p>The intention of this unit is to encourage the children to focus on using detailed diagrams to explain their designs as well as considering the quality of finish they can achieve in a product. Following on from their study of Ancient Egyptian artefacts, the children need to pitch a product in a Dragons Den roleplay that would be sold in the British Museum gift shop.</p> 
<p>Year 6</p>	<p>UnitDT6: How can we make it move in an interesting way?</p> <p>Using woodworking materials and skills, pupils make and construct a window display using an automata mechanism; measuring and cutting their materials, assembling the frame, choosing cams, designing the characters that sit on the followers and also finishing with a foreground and background.</p> 	<p>Unit DT12: How can we use our D&T knowledge and skills to make a game?</p> <p>Using their understanding of electrical systems and design, pupils are challenged with designing and creating a steady hand game. Pupils will use nets to create their bases and their knowledge of electrical circuits to build a circuit with a buzzer which closes when the handle makes contact with the wire frame.</p> 	<p>Unit DT18: Can you make the slipper fit perfectly?</p> <p>Creating their own (wearable) padded slippers is a challenging project as children can bring their designing, decorating, garment cutting and sewing skills together. This project gives them the chance to apply skills they have learned in previous textile units to create a unique, made to measure product.</p> 