



# Meadow Primary School Progression Map



## Subject: Design and Technology

### Intent

Our DT curriculum will develop imaginative thinking in children to enable them to talk about what they like and dislike when designing and making. It will enable children to talk about how things work, and to draw and model their ideas. Throughout this curriculum children will be encouraged to select appropriate tools and techniques for making a product, whilst following safe procedures.

	EYFS	Key Stage 1		Key Stage 2			
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Autumn</b>							
Knowledge	<b>All About Me/ Autumn and Around the World</b> Food tasting Junk modelling Construction blocks	<b>Moving picture cards</b>  To design appealing products for themselves and other users based on design criteria	<b>Making boats</b> Knowing what materials would be best to use. Knowing what shape to make their boat so that it will be functional.	<b>Structures: Design an earthquake proof building</b> How shapes and structures can be used to make an effective earthquake proof building. Knowledge of materials. Build frame structures Making structures stronger Selecting and working with different materials.	<b>European Sandwich</b> Knowledge of what makes a sandwich. Knowledge of food hygiene and safe preparation. Knowledge of where different foods come from.	How to make movement using different mechanisms to achieve a desired outcome How to identify a lever. Explain how a mechanism works and identify different types of mechanisms.	Features of a poor and wealthy Victorian household. Life work of William Morris. Victorian wallpaper/ Features of a Victorian living room. Style and design of Victorian furniture. Furniture required in a Victorian household. Features of a wealthy Victorian living room. Knowledge of how to make model furniture.
Skills	Experiments to create different textures. Understands that different media can be combined to create new effects. Manipulates materials to achieve a planned effect. Constructs with a purpose in mind, using a variety of resources.	Use scissors correctly cutting, shaping, joining and finishing Draw Christmas pictures and designs Follow how to make a mechanism Evaluate my card	Designing a functional product based on design criteria. Communicating their ideas through drawings. Selecting from and using a range of suitable tools/material. Evaluating their own product. Explore joining techniques to increase strength.	Build frame structures Making structures stronger Selecting and working with different materials. Cutting Joining Designing Evaluating	Evaluate a range of ingredients from around European. Use research to design different sandwiches. Write instructions for how to make it. Make a sandwich -using knives and paying attention to food hygiene. Evaluation/ peer evaluation.	Folding Cutting Angles and how they affect movement Design and evaluate existing products Design and evaluate own product, suggesting improvements.	Observing, Copying, Note-taking, Recounting information. Copying work, Creating. Planning (notes, measurements and diagrams), recall, designing, building, creating. Cutting, folding, sticking, creating, designing, arranging, trouble shooting. evaluating.

Spring	EYFS	Key Stage 1		Key Stage 2			
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge	<b>Transport and My Imagination</b> Junk modelling Construction blocks	Art units covered	<b>Catapults</b> Look at wing up mechanism using elastic bands- explore elasticity.  Test the strength of different materials.	<b>Making Cornish Pasties</b> Learning about healthy and seasonal foods.	<b>Money Bags</b> Knowledge of different types of money containers. Knowledge of different materials and ways to join them.	<b>Fairground Rides</b> Knowledge of how pulleys change speed, direction and rotation.  Knowledge of how pulleys, mechanisms, movement, gears, levers, pivot, motor operate.	N/A
Skills	Uses simple tools and techniques competently and appropriately. Selects appropriate resources and adapts work where necessary. Selects tools and techniques needed to shape, assemble and join materials they are using. Uses simple tools and techniques competently.	Art units covered	Follow a given design and make own adaptations.  Evaluate the materials used and how to increase the distance of the projectile.  Use a range of cutting and joining techniques.  Lever/wind up mechanism	Designing a pasty using a balanced variety of ingredients, cutting skills, designing an instructive recipe, creating a pasty that meets the set criteria and evaluating a pasty.	Evaluate existing money containers. Learn how to do backstitch, running stitch and overstitch. Design and make own money bag – selecting appropriate material and ways to construct suited to its purpose. Evaluate finished product and suggest improvements.	Making a circuit that powers a motor How to create a sturdy structure  Planning Designing Measuring Safe use of tools (saw, glue gun) Create a fair ground using pulley wheels which change speed and direction of rotation.	N/A

Summer	EYFS	Key Stage 1			Key Stage 2		
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge	<b>Animals and Traditional Tales</b> Cooking  Junk modelling  Construction blocks	<b>Cooking and nutrition</b> Breakfasts & fruit kebabs. Animal Masks	<b>Food Technology</b> Food health and safety.  Understanding where food comes from.  Understanding what a healthy and balanced diet consists of.	<b>Magnetic board games/Kites</b> How shapes and structures can be used to make an effective kite that will fly. Knowledge of materials.	<b>Game with an electric component</b>  Knowledge of a variety of board games.	<b>Food technology</b>  Knowledge food preparation equipment safely  Trying different foods	<b>Re-purpose clothing</b>  Knowing why it is important to recycle clothing
Skills	They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Design purposeful, functional, appealing products for themselves Make select from and use a range of tools and equipment to perform practical tasks Evaluate their ideas and products against design criteria	Selecting appropriate tools/ingredients.  Evaluating their own product.	Build frame structures Making structures stronger Selecting and working with different materials. Cutting Joining Designing Evaluating	Group project – teamwork Make a simple electrical circuit. Create a board game – with rules which includes an electrical component. Construct game – use of cutting skills Evaluate and suggest improvements.	Cutting, evaluating Grating, Dicing Slicing, Designing and planning based on previous experience	Paired and class discussion. Using iPads for research. Practicing a range of stitching techniques. Selecting the appropriate or most effective stitching for clothing project. To evaluate the stitching practiced in the lesson. Creating an effective and relevant design criteria. Cutting and stitching different types of materials. Using different types of stitching in their product. Evaluating your own project. Evaluating a peer’s project.

## Impact (End Points)

EYFS	Key Stage 1		Key Stage 2			
Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children junk model confidently, evaluating and changing their models. Children handle equipment and tools effectively.</p>	<p>Children should be confident using different types of media to create moving pictures. They should be able to design their ideas and think about the materials used before making them. They are able to use different tools safely and competently.</p>	<p>Children will be able to use a range of cutting and joining techniques. Children will be able to make simple plans, and design according to a criteria.</p>	<p>Children should know how shapes and structures can be used to make effective products. They should be able to select appropriate materials for their final pieces of work. Children should have a clear understanding of characteristics and properties of food ingredients. Children can evaluate their final product and suggest improvements to their designs.</p>	<p>Children would know a variety of techniques to join different materials. They would be able to select appropriate material fit for the purpose. Children will be able to investigate and evaluate a range of existing products. They can evaluate their final product and suggest improvements to their designs.</p>	<p>Children would have consolidated their knowledge of different materials and how to strengthen where appropriate. They will have learnt how to create simple circuits to power motors and solve problems when they arrive. Children can plan then evaluate, identifying areas for improvement.</p>	<p>Children have a very good understanding of the purpose and target market of a product. They will be able to use refined skills to create a range of projects that link to their foundation topics and wider world issues.</p>