Middlewich Primary School Curriculum

At Middlewich Primary School, we aim to provide pupils with a high-quality Design and Technology education that enables them to explore creativity, solve problems, and develop technical skills. Our D&T curriculum introduces pupils to a range of design challenges, encouraging them to think critically and analytically while using a variety of materials and tools. They explore real-world applications, learning how products are created and how technology can be used to improve everyday life. Through hands-on activities, students learn how to design, create, and evaluate several different products. Our D&T curriculum is structured to allow progression in knowledge and development of key skills throughout their time at school.

Learning across the school is based on the following key strands:

- Design
- Make
- Evaluate

Curriculum Overview EYFS

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	**Structures** **Junk modelling** In this unit, pupils will explore and learn about various types of permanent and temporary joins. They are encouraged to use a combination of materials and joining techniques in the junk modelling area.		**Textiles** **Bookmarks** In this unit, pupils will apply their knowledge and skills to design and sew their own bookmarks. Pupils will develop and practise threading and weaving techniques using various materials and objects.		**Structures** **Boats** In this unit, pupils will explore what is meant by 'waterproof,' 'floating,' and 'sinking,'. Pupils will make predictions and experiment with various materials to carry out a series of tests. They will learn about the different	

			They will explore the history of the bookmark from Victorian times versus modern-day styles.		features of boats and ships before investigating their shape and structures to build their own.	

Curriculum Overview Key Stage 1

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**Structures** **Constructing a windmill** In this unit, pupils will design, create and evaluate their own windmill once they have explored a range of existing products. Pupils will use tools and equipment accurately to make a stable structure.		**Textiles** **Puppets** In this unit, pupils will create their own puppets based on a character. Pupils will explore and practise a range of joining methods with fabric to construct and embellish their puppet.		**Cooking and nutrition** **Smoothies** In this unit, pupils will prepare foods by cutting and juicing to create a smoothie to meet a design brief. They will select fruits and vegetables and be able to describe where they grow.	
Year 2		**Structures** **Baby Bear's chair** In this unit, pupils will explore stability and methods to strengthen structures. They will produce a		**Mechanisms** **Fairground Wheel** In this unit, pupils will explore and evaluate wheels and mechanisms to design a functional		**Mechanisms** **Making a moving monster** In this unit, pupils will explore levers, linkages and pivots through existing

		chair structure and evaluate its strength, stiffness and stability.		fairground wheel which rotates and stands freely.		products and experimentation. They will then use this research to plan, construct and assemble materials to create a moving monster.

Curriculum Overview Key Stage 2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	**Cooking and Nutrition** **Apple Crumble** In this unit, pupils will explain why food comes from different places around the world and the benefits of seasonal foods. They will develop cutting and peeling skills to create an Apple Crumble.		**Digital World** **Wearable technology** In this unit, pupils will research and evaluate existing wearable technology. They will have the opportunity to use code to program and control a product. They will give a brief explanation of the digital revolution.		**Structures** **Constructing a castle** In this unit, pupils will identify and learn about the key features of a castle, before designing and making a recycled material castle.	
Year 4		**Structures** **Pavilions** In this unit, pupils will investigate and model frame structures to improve their stability, then apply this		**Mechanical Systems** **Mechanical cars** In this unit, pupils will design and make mechanical cars that use different methods of movement.		**Electrical systems** **Torches** In this unit, pupils will identify the difference between electrical and electronic products. They will evaluate a

		research to design and create a pavilion.				range of existing torches and their features to design a product to fit a set of specific user needs.
Year 5	**Electrical systems** **Doodlers** In this unit, pupils will explore circuits and investigate existing motorised products. They will apply the findings from research to develop a unique product.		**Mechanical Systems** **Gears and pulleys** In this unit, pupils will be required to create a working gear and pulley system and explain their functions. They will improve a working gear system and suggest some applications. Pupils will design and evaluate an eco-gadget bike using design criteria.		**Cooking and Nutrition** **Cheese and Biscuits** In this unit, pupils will design, create and evaluate a cheese and biscuit recipe. They will understand the farm to fork process and nutritional content of their recipe. Pupils will practice their food prepping skills to create a savoury biscuit that will complement their cheese choice.	
Year 6		**Textiles** **Waistcoats** In this unit, pupils will design, assemble and evaluate a waistcoat. They will use a collaboration of textiles skills such as attaching fastenings, applique and		**Structures/Digital World** **Bridges** In this unit, pupils will test and analyse various types of bridge to determine their strength and stability. They will explore material	**Cooking and Nutrition** **Make a two-course meal** In this unit, pupils will select and follow recipes to make a two-course meal. They will be able to explain the use of	

		decorative stitches to complete their product.		properties and sources. Pupils will create moving bridges culminating in a K'NEX workshop.	complementary flavours and explain where certain key foods come from before they appear on the supermarket shelf.	

Wider Opportunities

Year 6- Programming workshop, building bridges using K'NEX