

# DT Overview



Design and Technology is part of every child's immediate life experience. The subject encourages children to become creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas, and eventually making a range of products. Through the study of design and technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of the products functions. This allows them to reflect on, and evaluate, past and present design and technology. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

	Autumn	Spring	Summer
<b>EYFS</b>	<b>Many skills taught across the seven areas of learning from Birth to Five Matters are prerequisite skills for DT within the National Curriculum. The most relevant statements for skills to build upon for DT within the National Curriculum are taken from the following areas of learning:</b>		
<b>Range 5 36 – 48 months</b>	<b>Personal, Social and Emotional Development:</b> -Shows their confidence and self-esteem through being outgoing towards people, taking risks and trying new things. <b>Physical Development:</b> -Creates lines and circles pivoting from their shoulder and elbow. - Manipulates a range of tools and equipment in one hand, tools include paintbrushes, scissors, hairbrushes, toothbrushes, scarves and ribbons. - Takes practical action to reduce risk, showing their understanding that equipment and tools can be used safely. <b>Understanding The World:</b> - Talks about why things happen and how things work. - Shows an interest in technological toys with knobs and pulleys, real objects and touchscreen devices. - Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. <b>Expressive Arts and Design:</b> - Uses various construction materials, e.g. joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces. - Uses tools for a purpose. - Uses available resources to create props or creates imaginary ones to support play.		
<b>Range 6 48 – 60 months</b>	<b>Personal, Social and Emotional Development:</b> -Can describe their competencies, what they can do well and are getting better at. -Shows confidence in choosing resources and perseverance in carrying out a chosen activity. <b>Physical Development:</b> -Shows increasing control over an object. - Uses simple tools to effect changes to materials. - Handles tools, objects, construction and malleable materials safely and with increasing control and intention. - Describes a range of different textures and tastes when cooking and notices changes when they are combined or exposed to hot and cold temperatures. - Shows understanding of how to transport and store equipment safely.		

	<b>Expressive Arts and Design:</b> - Uses their increasing knowledge and understanding of tools and materials to explore their interests and enquires and develop thinking. - Develops their own ideas through experimentation with diverse materials. - Creates representation of both imaginary and real-life ideas, events, people and objects.		
ELG	<b>Personal, Social and Emotional Development:</b> - Explain the reasons for rules, knows right from wrong and try to behave accordingly. - Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. <b>Physical Development:</b> - Use a range of small tools, including scissors, paint brushes and cutlery. <b>Expressive Arts and Design:</b> - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. - Share their creations, explaining the process they have used.		
Year 1	<b>Textiles</b> <b>(Templates and joining)</b> Puppets <u>Parents workshop</u>	<b>Mechanisms</b> <b>(Sliders and Levers)</b> Moving Minibeasts	<b>Food Technology</b> <b>(Preparing fruit and veg)</b> Fruit & Veg Kebab
Year 2	<b>Mechanisms</b> <b>(Wheels and axles)</b> Making a space buggy for Neil Armstrong Vehicles	<b>Structures</b> <b>(Freestanding Structures)</b> Designing an animal enclosure <u>Parent workshop</u>	<b>Food Technology</b> <b>(Preparing fruit and veg)</b> Making a smoothie
Year 3	<b>Mechanisms</b> <b>(Levers and Linkages)</b> Christmas Card <u>Parents workshop</u>	<b>Structures</b> <b>(Shell Structures)</b> Design a package for a football for the World cup	<b>Food Technology</b> Making a healthy wrap - Kitchen staff to support.
Year 4	<b>Textiles</b> <b>(2D Shape to 3D product)</b> Tic Tac Toe game <u>Parents workshop</u>	<b>Electronics</b> <b>(Simple circuits and switches)</b> Creating a night light	<b>Food Tech</b> Healthy & Varied diet Designing and selling a healthy snack shop
Year 5	<b>Electronics</b> <b>(Combining different fabric shapes)</b> <b>Structures</b> <b>(Frame Structures)</b> Engineering project		<b>Food Tech</b> Creating a scone for afternoon tea <u>with parents.</u>
Year 6	<b>Electronics</b> <b>CAD</b> Tinker cad – Recreate the Engineering project	<b>Textiles</b> <b>(Combining different fabric shapes)</b> Drawstring Bag <u>Parent workshop</u>	<b>Food Tech</b> Creating a healthy muffin.