

Overview of Design & Technology- National Curriculum (Layer 1)

	Statutory Framework for EYFS 2021 -Early Learning Goals	Statutory Framework for EYFS 2021 -Characteristics of effective learning	Development Matters 2021
Reception	<p>Creating with Materials Children at the expected level of development will: -</p> <ul style="list-style-type: none"> • 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; • Make use of props and materials when role playing characters in narratives and stories. 	<p>Playing and exploring Make independent choices. Do things independently that they have been previously taught.</p> <p>Active learning Use a range of strategies to reach a goal they have set themselves. Begin to correct their mistakes themselves. For example, instead of using increasing force to push a puzzle piece into the slot, they try another piece to see if it will fit. Keep on trying when things are difficult</p> <p>Creating and thinking critically Review their progress as they try to achieve a goal. Check how well they are doing. Know more, so feel confident about coming up with their own ideas. Make more links between those ideas. Concentrate on achieving something that's important to them. They are increasingly able to control their attention and ignore distractions.</p>	<p>Expressive arts and design</p> <ul style="list-style-type: none"> • Return to and build on their previous learning, refining ideas and developing their ability to represent them. <p>Create collaboratively, sharing ideas, resources and skills</p>

	Design	Make	Evaluate	Technical Knowledge
Key Stage 1	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]			
	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • design purposeful, functional, appealing products for themselves and other users based on design criteria • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology 	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics 	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • explore and evaluate a range of existing products • evaluate their ideas and products against design criteria 	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • build structures, exploring how they can be made stronger, stiffer and more stable • explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Key Stage 2	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].			
	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities 	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world 	<p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products.