



Design and Technology end of year milestones 2021-22

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	<ul style="list-style-type: none"> • Articulate their ideas and thoughts in well-formed sentences. <p>Ask questions to find out more and to check they understand what has been said to them (C&L)</p> <ul style="list-style-type: none"> • Explore, use and refine a variety of artistic effects to express their ideas and feelings. (PD) • Explore how things work. (UtW) 	<ul style="list-style-type: none"> • Design appealing products for a particular user based on simple design criteria. • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. • Communicate these ideas through talk and drawings. 	<ul style="list-style-type: none"> • Develop and communicate ideas through drawings and mock-ups. • Design appealing products for a particular user based on simple design criteria. • Generate initial ideas and design criteria through investigating a variety of fruit and vegetables. • Communicate these ideas through talk and drawings. 	<ul style="list-style-type: none"> • Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and purpose of the product. • Develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas. 	<ul style="list-style-type: none"> • Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and purpose of the product. • Develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas. • Make design decisions that take account of the availability of resources 	<ul style="list-style-type: none"> • Carry out research, using surveys, interviews, questionnaires and web-based resources • Identify the needs, wants, preferences and values of particular individuals and groups • Generate innovative ideas, drawing on research 	<ul style="list-style-type: none"> • Carry out research, using surveys, interviews, questionnaires and web-based resources • Identify the needs, wants, preferences and values of particular individuals and groups • Develop a simple design specification to guide their thinking • Generate innovative ideas, drawing on research • Make design decisions, taking account of constraints such as time, resources and cost
Make	<ul style="list-style-type: none"> • Develop their small motor skills so that they can use a range of tools competently, safely and confidently • Use one-handed tools and equipment, for example, making snips in paper with scissors. . (PD) • They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (EAD) 	<ul style="list-style-type: none"> • Plan by suggesting what to do next. • Select and use appropriate tools, explaining their choices. • Use simple finishing techniques suitable for the product they are creating. 	<ul style="list-style-type: none"> • Plan by suggesting what to do next. • Use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • Assemble, join and combine materials and components 	<ul style="list-style-type: none"> • Order the main stages of making. • Select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy. • Explain their choice of materials according to functional properties and aesthetic qualities. • Use finishing techniques suitable for the product they are creating 	<ul style="list-style-type: none"> • Order the main stages of making. • Select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy. • Explain their choice of materials according to functional properties and aesthetic qualities. 	<ul style="list-style-type: none"> • Select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy. • Explain their choice of materials according to functional properties and aesthetic qualities. • Produce appropriate lists of tools, equipment and materials that they need 	<ul style="list-style-type: none"> • Select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy. • Explain their choice of materials according to functional properties and aesthetic qualities. • Formulate step-by-step plans as a guide to making • Use techniques that involve a number of steps
Evaluate	<ul style="list-style-type: none"> • Uses talk to organise, sequence and clarify thinking, ideas, feelings and events (CL) • Share their creations, explaining the process they have used. (EAD) 	<ul style="list-style-type: none"> • Evaluate ideas and finished products against design criteria, including intended user and purpose. 	<ul style="list-style-type: none"> • Talk about their design ideas and what they are making • Make simple judgements about their products and ideas against design criteria • suggest how their products could be improved 	<ul style="list-style-type: none"> • Test and evaluate their own products against design criteria and the intended user and purpose. • Refer to their design criteria as they design and make • Use their design criteria to 	<ul style="list-style-type: none"> • Test and evaluate their own products against design criteria and the intended user and purpose. • Refer to their design criteria as they design and make • Use their design criteria to 	<ul style="list-style-type: none"> • Identify the strengths and areas for development in their ideas and products • Consider the views of others, including intended users, to improve their work 	<ul style="list-style-type: none"> • Identify the strengths and areas for development in their ideas and products • Consider the views of others, including intended users, to improve their work

				evaluate their completed products	evaluate their completed products	<ul style="list-style-type: none"> • Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make 	<ul style="list-style-type: none"> • Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make • Evaluate their ideas and products against their original design specification
Technical Knowledge and Understanding	<ul style="list-style-type: none"> • Use new vocabulary in different contexts. (C&L) • Return to and build on their previous learning, refining ideas and developing their ability to represent them. (EA&D) 	<ul style="list-style-type: none"> • How freestanding structures can be made stronger, stiffer and more stable • Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> • Know about the simple working characteristics of materials and components • Know about the movement of simple mechanisms such as levers, sliders, wheels and axles • Know and use technical vocabulary relevant to the project. 	<ul style="list-style-type: none"> • Know how to use learning from science to help design and make products that work • Know that materials have both functional properties and aesthetic qualities • Know the correct technical vocabulary for the projects they are undertaking 	<ul style="list-style-type: none"> • Know how to use learning from mathematics to help design and make products that work • Know that materials have both functional properties and aesthetic qualities • Know that mechanical and electrical systems have an input, process and output • Know the correct technical vocabulary for the projects they are undertaking 	<ul style="list-style-type: none"> • Know how more complex electrical circuits and components can be used to create functional products • Know that a recipe can be adapted by adding or substituting one or more ingredients • Know the correct technical vocabulary for the projects they are undertaking 	<ul style="list-style-type: none"> • Know how mechanical systems such as cams or pulleys or gears create movement • Know how to reinforce and strengthen a 3D framework • Know that a 3D textiles product can be made from a combination of fabric shapes • Know that a recipe can be adapted by adding or substituting one or more ingredients • Know the correct technical vocabulary for the projects they are undertaking