



Design and Technology end of year milestones 2024-25

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	 Articulate their ideas and thoughts in well- formed sentences. Ask questions to find out more and to check they understand what has been said to them (C&L) Explore, use and refine a variety of artistic effects to express their ideas and feelings. (PD) Explore how things work. (UtW) 	 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. 	 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. 	 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. 	 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 	 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 	 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	 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) 	 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. 	 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 	 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 	 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. 	 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 	 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	 Uses talk to organise, sequence and clarify thinking, ideas, feelings and events (CL) Share their creations, explaining the process they have used. (EAD) 	 Evaluate ideas and finished products against design criteria, including intended user and purpose. 	 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 	 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 	 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 	 Identify the strengths and areas for development in their ideas and products Consider the views of others, including intended users, to improve their work 	 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	Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make	 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	 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) 	 How freestanding structures can be made stronger, stiffer and more stable Know and use technical vocabulary relevant to the project. 	 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. 	 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 	 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 	 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 	 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