

Design & Technology Disciplinary Knowledge Progression

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	Develop their own ideas and explore a variety of resources, including blocks and construction kits to create 'small worlds' and objects linked to their interests. Create collaboratively, share ideas and use a variety of resources to make products inspired by existing products, stories or their own ideas, interests or experiences.	Create a design to meet simple design criteria. Use design software to create a simple plan for a design.	Generate and communicate their ideas through a range of different methods. Use design software to create a simple labelled design or plan.	Develop design criteria to inform a design. Write a program to make something move on a tablet or computer screen. Plan which materials will be needed for a task and explain why.	Use annotated sketches and exploded diagrams to test and communicate their ideas. Write a program to control a physical device, such as a light, speaker or buzzer.	Use pattern pieces and computer-aided design packages to design a product. Use electrical circuits of increasing complexity in their models or products, showing an understanding of control.	Plan a healthy daily diet, justifying why each meal contributes towards a balanced diet. Select the most appropriate materials and frameworks for different structures, explaining what makes them strong. Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways. Understand and use electrical circuits that incorporate a variety of components (switches, lamps, buzzers and motors) and use programming to control their products.
Make	Make simple structures and models using a range of materials. Choose and explore appropriate tools for simple practical tasks. Explore and choose freely from a variety of materials when making. Help to prepare a range of healthy snacks	Use wheels and axles to make a simple moving model. Construct simple structures, models or other products using a range of materials. Select and use a range of materials, beginning to explain their choices.	Use a range of mechanisms (levers, sliders, wheels and axles) in models or products. Create an operational, simple series circuit. Explore how a structure can be made stronger, stiffer and more stable. Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.	Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products. Create shell or frame structures using diagonal struts to strengthen them. Prepare and cook a simple savoury dish.	Explore and use a range of mechanisms (levers, axles, cams, gears and pulleys) in models or products. Prototype shell and frame structures, showing awareness of how to strengthen, stiffen and reinforce them. Identify and use a range of cooking techniques to prepare a simple meal or snack. Design a healthy snack or packed lunch and explain why it is healthy.	Use an increasing range of preparation and cooking techniques to cook a sweet or savoury dish. Link a physical device to a computer or tablet so that it can be controlled (such as changing motor speed or turning an LED on and off) by a program. Build a framework using a range of materials to support mechanisms. Use mechanical systems in their products, such as pneumatics.	Follow a recipe that requires a variety of techniques and source the necessary ingredients independently. Choose the best materials for a task, showing an understanding of their working characteristics. Explain and use mechanical systems in their products to meet a design brief.

Evaluate	Share their creations with others and respond to questions and suggestions about how it was made.	Name and explore a range of everyday products and describe how they are used.	Explain how an everyday product could be improved.	Explain how an existing product benefits the user.	Investigate and identify the design features of a familiar product.	Survey users in a range of focus groups and compare results.	Create a detailed comparative report about two or more products or inventions.
	Share their creations with others and begin to notice how the work of others is the same or different to their own. Explore and try a range of foods and suggest where they come from. Describe what, why and how something was made and compare with others. Adapt and refine their work as they are constructing and making.	Talk about their own and each other's work, identifying strengths or weaknesses and offering support. Describe the similarities and differences between two products.	Explain how closely their finished products meet their design criteria and say what they could do better in the future. Compare different or the same products from the same or different brands.	Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account. Explain the similarities and difference between the work of two designers.	Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others when making improvements. Create and complete a comparison table to compare two or more products.	Evaluate meals and consider if they contribute towards a balanced diet. Test and evaluate products against a detailed design specification and make adaptations as they develop the product.	Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others.

Practical Skills	Explore simple tools within practical tasks and experiment with joining materials.	Select the appropriate tool for a simple practical task.	Select the appropriate tool for a task and explain their choice.	Use tools safely for cutting and joining materials and components.	Select, name and use tools with adult supervision.	Use applique to add decoration to a product or artwork.	Use different methods of fastening for function and decoration, including press studs, Velcro and buttons.
	Select appropriate materials when constructing and making.	Cut and join textiles using glue and simple stitches. Use gluing, stapling or tying to decorate fabric, including buttons and sequins. Measure and weigh food items using non-standard measures, such as spoons and cups.	Use different methods of joining fabrics, including glue and running stitch. Add simple decorative embellishments, such as buttons, prints, sequins and appliqué. Prepare ingredients by peeling, grating, chopping and slicing.	Cut and join wools, threads and other materials to a loom. Decorate a loom weaving using embellishments, such as natural or silk flowers, tassels and bows.	Hand sew a hem or seam using a running stitch. Create detailed decorative patterns on fabric using printing techniques.	Select and combine materials with precision. Combine stitches and fabrics with imagination to create a mixed media collage. Name and select increasingly appropriate tools for a task and use them safely. Explain how the design of a product has been influenced by the culture or society in which it was designed or made.	Pin and tack fabrics in preparation for sewing and more complex pattern work. Select appropriate tools for a task and use them safely and precisely. Use a sensor to monitor an environmental variable, such as temperature, sound or light. Analyse how an invention or product has significantly changed or improved people's lives.