



Skills Progression Map: Design and Technology

	Nursery	Reception	Year 1	Year 2
Designing	Develop ideas and decide which materials to use to express them	Represent ideas through drawing	Create a design to meet simple design criteria.	Generate and communicate ideas through a range of different methods.
Making	Explore different materials freely, to develop ideas about how to use them and what to make.	Select different materials with a purpose in mind, for example, a tube to make a telescope.	Select and use a range of materials, beginning to explain their choices.	Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect.
Evaluating	Explore a range of real everyday items in role play. Be proud of their creations and tell an adult or friend what they have made and what it does.	Select and use a range of real everyday items in role play and use them appropriately. Share creations, explaining the processes used and what aspects were enjoyable.	Name and explore a range of everyday products and describe how they are used. Talk about their own and each other's work, identifying strengths or weaknesses and offering support.	Explain how an everyday product could be improved. Explain how closely their finished products meet their design criteria and say what they could do better in the future.
Technical Skills	Structures: Make imaginative and complex 'small worlds' with blocks and construction kits. Textiles: Join different materials and explore different textures. Textiles: Experiment with different decorations to enhance their creations.	Mechanisms: Explore how things work. Structures: Use a variety of construction materials to build and balance. Textiles: Join different materials using glue, staples or tape. Textiles: Use decorations to make a pattern or simple design.	Mechanisms: Use wheels and axles to make a simple moving model. Structures: Construct simple structures, models or other products using a range of materials.	Structures: Explore how a structure can be made stronger, stiffer and more stable. Textiles: Use different methods of joining fabrics, including glue and running stitch. Textiles: Add simple decorative embellishments.
Cooking and Nutrition	Take part in cooking activities to make simple foods. Explore and discuss healthy and unhealthy food. Experience growing and eating fruits and vegetables.	Take part in cooking activities to make simple foods and understand the importance of good hygiene when preparing food. Sort healthy and unhealthy foods and begin to understand why some foods are not healthy. Begin to understand that food grows in different ways and know the journey food has before it arrives in the supermarket.	Measure and weigh food items using non-standard measures, such as spoons and cups. Select healthy ingredients for a fruit or vegetable salad. Sort foods into groups by whether they are from an animal or plant source.	Prepare ingredients by peeling, grating, chopping and slicing. Describe the types of food needed for a healthy and varied diet and apply the principles to make a simple, healthy meal. Identify the origin of some common foods (milk, eggs, some meats, common fruits and vegetables).

	Year 3	Year 4	Year 5	Year 6
Designing	Develop design criteria to inform a design.	Use annotated sketches to test and communicate their ideas.	Use exploded diagrams to test and communicate their ideas.	Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways.
Making	Plan which materials will be needed for a task and explain why.	Choose from a range of materials, showing an understanding of their different characteristics.	Select and combine materials with precision.	Choose the best materials for a task, showing an understanding of their working characteristics.
Evaluating	Explain how an existing product benefits the user. Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account.	Investigate and identify the design features of a familiar product. Identify what has worked well and what aspects of their products could be improved, acting on their own suggestions and those of others	Explain how the design of a product has been influenced by the culture or society in which it was designed or made. Test and evaluate products against a detailed design specification and make adaptations as they develop the product.	Analyse how an invention or product has significantly changed or improved people's lives. Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others.
Technical Skills	Mechanisms: Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products. Structures: Create shell or frame structures using diagonal struts to strengthen them.	Mechanisms: Explore and use a range of mechanisms (levers, axles, cams, gears and pulleys) in models or products. Textiles: Hand sew a hem or seam using a running stitch. Textiles: Create detailed decorative patterns on fabric using printing techniques. Electrical systems: Incorporate circuits that use a variety of components into models or products.	Mechanisms: Use mechanical systems in their products, such as pneumatics and hydraulics. Structures: Build a framework using a range of materials to support mechanisms.	Structures: Select the most appropriate materials and frameworks for different structures, explaining what makes them strong. Textiles: Pin and tack fabrics in preparation for sewing and more complex pattern work. Textiles: Use different methods of fastening for function and decoration, including press studs, Velcro and buttons. Electrical systems: Understand and use electrical circuits that incorporate a variety of components (switches, lamps, buzzers and motors) and use programming to control their products.
Cooking and Nutrition	Prepare and cook a simple savoury dish. Identify the main food groups (carbohydrates, protein, dairy, fruits and vegetables, fats and sugars). Identify and name foods that are produced in different places.	Identify and use a range of cooking techniques to prepare a simple meal. Design a healthy snack or packed lunch and explain why it is healthy. Identify and name foods that are produced in different places in the UK and beyond.	Use an increasing range of preparation and cooking techniques to cook a savoury dish. Evaluate meals and consider if they contribute towards a balanced diet. Understand seasonality and explain some of the reasons why it is beneficial.	Follow a recipe that requires a variety of techniques and source the necessary ingredients independently. Plan a healthy weekly diet, justifying why each meal contributes towards a balanced diet. Explain how organic produce is grown.