



Design Technology End of Year Expectations

Nursery
<ul style="list-style-type: none">▪ Safely use and explore a variety of tools and techniques.▪ Share their creations explaining the processes used.
Reception
<ul style="list-style-type: none">▪ Safely use and explore a variety of tools and techniques.▪ Share their creations explaining the processes used.
Year 1
<ul style="list-style-type: none">• Create a simple design• Select the appropriate tool for a simple practical task.• Cut and join textiles using glue and simple stitches, use wheels and axles to make a simple moving model.• Describe the similarities and differences between two products.• Name and explore a range of everyday products and describe how they are used and why they are important.• Talk about their own and each other's work, identifying strengths or weaknesses and offering support.• Construct simple structures, models or other products using a range of materials.• Measure and weigh food items using non-standard measures, such as spoons and cups.• Follow the rules to keep safe during a practical task.
Year 2
<ul style="list-style-type: none">• Generate and communicate their ideas through a range of different methods.• Select the appropriate tool for a task and explain their choice.• Prepare ingredients by peeling, grating, chopping and slicing.• Use different methods of joining fabrics, including glue and running stitch and 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.• Compare different or the same products from the same or different brands.• 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.• Use a range of mechanisms (levers, sliders, wheels and axles) in models or products.• Work safely and hygienically in construction and cooking activities.
Year 3
<ul style="list-style-type: none">• Develop design criteria to inform a design.• Use tools safely for cutting and joining materials and components, create shell or frame structures using diagonal struts to strengthen them.• Cut and join wools, threads and other materials to a loom.• Plan which materials will be needed for a task and explain why.• 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.• Explain the similarities and difference between the work of two designers and how key design events have helped to shape the world.• Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products.• Prepare and cook a simple savoury dish.• Use appliances safely with adult supervision.



Year 4

- Use annotated sketches and exploded diagrams to test and communicate their ideas.
- Select, name and use tools with adult supervision.
- Hand sew a hem or seam using a running stitch.
- Create and complete a comparison table to compare two or more products.
- Investigate and identify the design features of a familiar product.
- Identify what has worked well and needs improvement through their own and others' suggestions.
- Explain how and why a significant designer or inventor shaped the world.
- Prototype shell and frame structures, showing awareness of how to strengthen, stiffen and reinforce them.
- Explore and use a range of mechanisms (levers, axles, cams, gears and pulleys) in models or products.
- Design a healthy snack or packed lunch and explain why it is healthy.
- Identify and use a range of cooking techniques to prepare a simple meal or snack.
- Work safely with everyday chemical products under supervision, such as disinfectant hand wash and surface cleaning spray.

Year 5

- Use pattern pieces and computer-aided design packages to design a product.
- Name and select increasingly appropriate tools for a task and use them safely and select and combine materials with precision.
- Use applique to add decoration to a product or artwork.
- Combine stitches and fabrics with imagination to create a mixed media collage.
- Explain how the design of a product has been influenced by the culture or society in which it was designed or made.
- Survey users in a range of focus groups and compare results.
- Test and evaluate products against a detailed design specification and make adaptations as they develop the product.
- Describe the social influence of a significant designer or inventor.
- Build a framework using a range of materials to support mechanism, use mechanical systems in their products, such as pneumatics.
- Evaluate meals and consider if they contribute towards a balanced diet.
- Use an increasing range of preparation and cooking techniques to cook a sweet or savoury dish.
- Explain the functionality and purpose of safety features on a range of products.

Year 6

- Develop design criteria for a functional and appealing product that is fit for purpose, communicating ideas clearly in a range of ways.
- Select appropriate tools for a task and use them safely and precisely.
- Pin and tack fabrics in preparation for sewing and more complex pattern work.
- Choose the best materials for a task, showing an understanding of their working characteristics.
- Use different methods of fastening for function and decoration, including press studs, Velcro and buttons.
- Analyse how an invention or product has significantly changed or improved people's lives and report on a favourite inventor or designer.
- Demonstrate modifications made to a product as a result of ongoing evaluation by themselves and to others.
- Select the most appropriate materials and frameworks for different structures, explaining what makes them strong.
- Plan a healthy daily diet, justifying why each meal contributes towards a balanced diet.
- Follow a recipe that requires a variety of techniques and source the necessary ingredients independently.
- Demonstrate how their products take into account the safety of the user.