

# Skills Progression: Design Technology

## EYFS

### Expressive Arts and Design - Nursery

- Explore different materials freely, in order to develop their ideas about how to use them and what to make.
- Develop their own ideas and then decide which materials to use to express them.
- Join different materials and explore different textures.
- **Physical Development**
- Choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel.
- Use one-handed tools and equipment, for example, making snips in paper with scissors.
- Show a preference for a dominant hand.

### Expressive Arts and Design - Reception

- Explore, use and refine a variety of artistic effects to express their ideas and feelings.
- Return to and build on their previous learning, refining ideas and developing their ability to represent them.
- Create collaboratively sharing ideas, resources and skills.
- **Physical Development**
- Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.
- Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.

### Creating with Materials - Early Learning Goals

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Share their creations, explaining the process they have used.
- Make use of props and materials when role playing characters in narratives and stories.
- **Fine Motor**
- Use a range of small tools, including scissors, paintbrushes and cutlery.



## YEAR 1

### Design

- D1 I can use my own ideas to make something.
- D2 I can describe how something works.
- D3 I can make a simple plan before making.
- D4 I can explain to someone else how I want to make my product.
- D5 I can develop my design ideas by applying findings from my earlier research of existing products.

### Make (inc. Technical Knowledge)

- M1 Make their design using appropriate techniques.
- M2 With help, measure, mark out, cut and shape a range of materials.
- M3 Use tools, e.g. scissors, safely.
- M4 Assemble, join and combine materials together using a variety of temporary methods e.g. glues or masking tape.
- M5 Explore ways of building simple structures.
- M6 Explore and use a simple slider mechanism in a product.

### Evaluate

- E1 Evaluate their product by discussing how well it works in relation to the purpose.
- E2 Evaluate their product by asking questions about what they have made and how they have gone about it.

### Cooking and Nutrition

- CN1 I can follow basic food hygiene rules when preparing and cooking food.
- CN2 With supervision, I can get ready to cook: tie back long hair, wash and dry hands, put on a clean apron.
- CN3 I can cut food safely, using the appropriate techniques.
- CN4 I can select and use appropriate fruit and vegetables, processes and tools.



## YEAR 2

### Design

- D1 Generate ideas by drawing on existing products.
- D2 Develop their design ideas through discussion, observation and drawing.
- D3 Identify a purpose for what they intend to design and make.
- D4 Identify simple design criteria.
- D5 Make simple drawings and label parts.

### Make (inc. Technical Knowledge)

- M1 Begin to select tools and materials; use vocab' to name and describe them.
- M2 Measure and cut with some accuracy.
- M3 Use tools safely and appropriately.
- M4 Assemble, join and combine materials in different ways.
- M5 Cut, shape and join fabric to make a simple product, using basic sewing techniques.
- M6 Build structures, exploring how they can be made stronger, stiffer and more stable.
- M7 Explore and use a winding mechanism in their product.

### Evaluate

- E1 Evaluate against their design criteria.
- E2 Evaluate their products as they are developed, identifying strengths and possible changes they might make.
- E3 Talk about their ideas, saying what they like and dislike about them.

### Cooking and Nutrition

- CN1 Follow safe procedures for food safety and hygiene.
- CN2 Make healthy choices when cooking.
- CN3 Understand that food gives us energy.
- CN4 With supervision, take part in simple clearing up tasks such as clearing and cleaning tables, collecting and disposing of rubbish, sweeping floor.
- CN5 With supervision, get ready to cook: tie back long hair, wash and dry hands, put on a clean apron.

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## YEAR 3

### Design

- D1 Plan the order of my work before starting.
- D2 Model ideas using card and paper.
- D3 Make drawings with labels when designing.
- D4 Identify a purpose and establish criteria for a successful product.
- D5 I can design a product and make sure that it looks attractive.
- D6 I can choose a textile for both its suitability and its appearance.

### Make (inc. Technical Knowledge)

- M1 I can follow a step by step plan choosing the right equipment and materials.
- M2 Work safely and accurately with a range of simple tools.
- M3 I can work accurately to measure, make cuts and make holes.
- M4 I can select the most appropriate tools and techniques for a given task.
- M5 Measure, tape or pin, cut and join fabric with some accuracy.
- M6 Use finishing techniques to strengthen and improve the appearance of their product.
- M7 Understand and use levers and linkages in their product.

### Evaluate

- E1 I can prove that my design meets some set criteria.
- E2 Disassemble and evaluate existing/familiar products.
- E3 Recognise how designers and individuals have helped shape the world.

### Cooking and Nutrition

- CN1 Know and can follow basic food and safety rules.
- CN2 Know how to get ready to cook: tie back long hair, wash and dry hands, put on a clean apron.
- CN3 Understand what a balanced diet is.
- CN4 Understand where and how a variety of ingredients are grown, reared, caught and processed.
- CN5 Take part in simple clearing up tasks such as clearing and cleaning tables, collecting and disposing of rubbish, sweeping floor.
- CN6 I can describe how food ingredients come together.



## YEAR 4

### Design

- D1 I can use ideas from other people when I am designing.
- D2 Generate ideas, considering the purposes for which they are designing.
- D3 Make labelled drawings from different views, showing specific features.
- D4 Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods, in case the first attempt fails.

### Make (inc. Technical Knowledge)

- M1 Think about their ideas as they make progress and be willing to change things if this helps them improve their work.
- M2 I can measure accurately.
- M3 I can preserve and adapt my work when my original ideas do not work.
- M4 Select appropriate tools and techniques for making their product.
- M5 Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.
- M6 Join and combine materials and components accurately in temporary and permanent ways to strengthen structures.
- M7 Weave materials.

### Evaluate

- E1 I can evaluate and suggest improvements for my designs.
- E2 I can evaluate by carrying out appropriate tests.
- E3 I can evaluate products for both their purpose and appearance.
- E4 I can explain how I have improved my original design.
- E5 Evaluate products and identify criteria that can be used for their own designs.

### Cooking and Nutrition

- CN1 Know and can follow basic food and safety rules
- CN2 Demonstrate hygienic food preparation and storage.
- CN3 Know how to get ready to cook: tie back long hair, wash and dry hands, put on a clean apron.
- CN4 With guidance follow procedures for clearing up such as washing and drying utensils, clearing and cleaning tables, sweeping the dloow, disposing of rubbish, putting equipment away.

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## YEAR 5

<p><b>Design</b></p> <ul style="list-style-type: none"> <li>• D1 I can come up with a range of ideas after collecting information from different sources, including research online.</li> <li>• D2 I can produce a detailed, step-by-step, plan.</li> <li>• D3 I can explain how a product will appeal to a specific audience.</li> <li>• D4 I can draw up a specification for my design.</li> <li>• D5 I can communicate my ideas through detailed labelled drawings.</li> </ul>	<p><b>Make (inc. Technical Knowledge)</b></p> <ul style="list-style-type: none"> <li>• M1 I can make a product which uses electrical components.</li> <li>• M2 I can use a range of tools and equipment competently.</li> <li>• M3 I can select appropriate materials, tools and techniques.</li> <li>• M4 I can measure and mark out accurately.</li> <li>• M5 I can cut and join with accuracy to ensure a good-quality finish to my product.</li> <li>• M6 I can use levers and wheels in my products.</li> <li>• M7 Start to apply their understanding of computing to program products.</li> </ul>	<p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• E1 Understand how individuals in design and technology have helped shape the world.</li> <li>• E2 I can evaluate appearance and function against original criteria.</li> <li>• E3 I can evaluate it personally and seek evaluation from others.</li> </ul>	<p><b>Cooking and Nutrition</b></p> <ul style="list-style-type: none"> <li>• CN1 Are able to get ready to cook independently: tie long hair back, wash and dry hands, put on a clean apron.</li> <li>• CN2 Demonstrate good food safety practices when getting ready to store, prepare and cook.</li> <li>• CN3 Know, and can follow, food safety rules and understand their purpose.</li> <li>• CN4 Can independently follow procedures for clearing up.</li> <li>• CN5 Start to use a range of cooking techniques safely with confidence.</li> </ul>
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## YEAR 6

<p><b>Design</b></p> <ul style="list-style-type: none"> <li>• D1 I can use market research to inform my plans and ideas.</li> <li>• D2 I can develop a design specification.</li> <li>• D3 I can justify my plans in a convincing way.</li> <li>• D4 I can show that I consider culture and society in my plans and designs.</li> <li>• D5 I can make a prototype before making a final version.</li> </ul>	<p><b>Make (inc. Technical Knowledge)</b></p> <ul style="list-style-type: none"> <li>• M1 Select appropriate tools, materials, components and techniques.</li> <li>• M2 Assemble components to make working models.</li> <li>• M3 Use all tools safely and accurately.</li> <li>• M4 Construct products using permanent joining techniques.</li> <li>• M5 Make modifications as they go along.</li> <li>• M6 Pin, sew or stitch materials together.</li> <li>• M7 Achieve a high quality product.</li> <li>• M8 Apply their understanding of computing to program, monitor and control their products.</li> </ul>	<p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• E1 Investigate and analyse a range of existing products.</li> <li>• E2 Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.</li> <li>• E3 Evaluate against the original criteria and suggest ways that their product could be improved.</li> <li>• E4 Understand how individuals in design and technology have helped shape the world.</li> </ul>	<p><b>Cooking and Nutrition</b></p> <ul style="list-style-type: none"> <li>• CN1 Weigh and measure accurately (time, dry ingredients, liquids).</li> <li>• CN2 I can explain how products should be stored and give reasons.</li> <li>• CN3 I can follow recipes independently.</li> <li>• CN4 Are able to get ready to cook independently: tie long hair back, wash and dry hands, put on a clean apron.</li> <li>• CN5 Know, and can follow, food safety rules and understand their purpose.</li> <li>• CN6 Safely, use a range of cutting and cooking techniques independently.</li> </ul>
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