



# Design & Technology

Progression Map  
EYFS to Year 6

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## EYFS and Key Stage 1

|           | EYFS   | Year 1  | Year 2   |
|-----------|--|---|--|
| Designing | <ul style="list-style-type: none"> <li>• Think of what they want to make with a given set of resources</li> <li>• Begin to be aware that the resources they have will limit what they can make</li> <li>• Talk to an adult about what they want to make</li> <li>• Make decisions about how to approach a task before starting</li> <li>• Start to choose the resources they need to make a product</li> </ul> | <ul style="list-style-type: none"> <li>• Begin to research existing products before designing their own</li> <li>• When researching, find out how products work and which materials have been used.</li> <li>• Use own ideas to design something</li> <li>• Describe how their own idea works</li> <li>• Design a product which moves</li> <li>• Explain to someone else how they want to make their product</li> <li>• Make a simple plan before making</li> <li>• Begin to develop their own ideas through drawings, and where appropriate, make templates or mock ups of their initial ideas using ICT (if needed).</li> </ul> | <ul style="list-style-type: none"> <li>• Begin to develop their design ideas using research and discussion with peers and adults.</li> <li>• Understand the purpose of their product</li> <li>• Have an identified target group in mind when designing and making a simple product.</li> <li>• Think of an idea and plan what to do next</li> <li>• Explain why they have chosen specific textiles or materials</li> <li>• Draw a simple design and label the parts of their product</li> <li>• Develop their own ideas through drawings, and where appropriate, make templates or mock ups of their initial ideas using ICT (if needed).</li> </ul> |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## EYFS and Key Stage 1

|        | EYFS  | Year 1   | Year 2  |
|--------|---|--|---|
| Making | <ul style="list-style-type: none"> <li>• Handle equipment safely</li> <li>• Explore a variety of materials, tools and techniques, for example know how lego joins together</li> <li>• Begin to appreciate that glue does not work on all materials</li> <li>• Show increasing levels of independence in the making stage</li> </ul> | <ul style="list-style-type: none"> <li>• Use own ideas to make something</li> <li>• Assemble and join materials using a variety of methods</li> <li>• Begin to build structures, exploring how they can be made stronger, stiffer and more stable.</li> <li>• Explore the use of different mechanisms (for example sliders, wheels and axles) in their products.</li> <li>• With help, measure, mark out and cut a range of materials.</li> <li>• Use tools safely (e.g. scissors and a hole punch).</li> <li>• Begin to assemble, join and combine materials and components together using a variety of temporary methods (e.g. glue or sellotape).</li> <li>• Begin to use simple finishing techniques to improve the appearance of their products.</li> </ul> | <ul style="list-style-type: none"> <li>• Choose tools and materials and explain why they have chosen them</li> <li>• Join materials and components in different ways, including glue, sellotape and masking tape.</li> <li>• Can identify and name a simple selection of hand tools (e.g. scissors).</li> <li>• Carry out finishing techniques that have been modelled by the teacher</li> <li>• Use simple sewing techniques including cutting, shaping and joining fabric to make a simple product.</li> <li>• Build structures, exploring how they can be made stronger, stiffer and more stable.</li> <li>• With help, measure, cut and score with some accuracy.</li> <li>• Start to assemble, join and combine materials in order to make a product.</li> <li>• Start to choose and use appropriate finishing techniques based on their own ideas.</li> </ul> |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## EYFS and Key Stage 1

|                     | EYFS  | Year 1   | Year 2   |
|---------------------|---|--|--|
| Evaluating          | <ul style="list-style-type: none"> <li>• Be prepared to stop to check how well their product is developing</li> <li>• Changing strategy as needed when they know their product is not turning out the way they wanted</li> <li>• Be able to explain to others how they made their product and be able to offer a simple explanation as to how they would improve on it</li> </ul> | <ul style="list-style-type: none"> <li>• Describe how something works</li> <li>• Explain what works well and not so well in the model they have made</li> <li>• Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.</li> </ul> | <ul style="list-style-type: none"> <li>• Evaluate their work against their design criteria.</li> <li>• Look at a range of existing products and what they like and dislike about products and why.</li> <li>• Start to evaluate their products as they are developed, identifying strengths and possible changes they might make.</li> <li>• With confidence talk about their ideas, saying what they like and dislike about their product.</li> </ul> |
| Technical Knowledge | <ul style="list-style-type: none"> <li>• Think of a range of ways of joining two resources together</li> <li>• Begin to use a wider range of tools carefully and skilfully</li> <li>• Begin to understand which materials are suitable for certain tasks.</li> </ul>  | <ul style="list-style-type: none"> <li>• Make their own model stronger</li> <li>• Make a product that has at least one moving part e.g. wind/ simple motor powered boat</li> </ul>   | <ul style="list-style-type: none"> <li>• Make a model stronger and more stable</li> <li>• Use wheels and axles, when appropriate to do so</li> <li>• Know how simple mechanisms work e.g. sliders and linkages</li> <li>• Make a product that has at least two moving parts.</li> </ul>  |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## EYFS and Key Stage 1

|                 | EYFS  | Year 1  | Year 2   |
|-----------------|---|---|--|
| Food Technology | <ul style="list-style-type: none"> <li>• Know why it is important to wash their hands before handling food</li> <li>• Begin to understand which foods go together and which do not</li> <li>• Begin to name certain foods such as sandwich, samosas etc.</li> </ul> | <ul style="list-style-type: none"> <li>• Cut food safely</li> <li>• Know that all food comes from either plants or animals.</li> <li>• Use basic food handling, hygiene practices and personal hygiene</li> <li>• Know how to prepare simple dishes safely and hygienically without using a heat source.</li> <li>• Know how to use techniques such as cutting, peeling and grating.</li> </ul> | <ul style="list-style-type: none"> <li>• Know that everyone should eat at least five portions of fruit and vegetables each day.</li> <li>• Demonstrate how to prepare simple dishes safely and hygienically without using a heat source.</li> <li>• Demonstrate how to use techniques such as cutting, peeling and grating.</li> <li>• Weigh ingredients to use in a recipe</li> <li>• Describe the ingredients used when making a dish or cake</li> <li>• Can talk about which food is healthy and which is not</li> <li>• Follow safe procedures for food safety and hygiene.</li> </ul> |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Lower Key Stage 2

### Year 3

### Year 4

## Designing

- Research independently and generate some ideas before thinking about resources.
- Consider the purpose and audience for their product
- Order the main stages of making a product, continually referring to purpose and establish criteria for a successful product.
- Prove that a design meets the specification
- Design a product and make sure that it meets the design criteria including looking attractive (if needed)
- Draw annotated designs with labels that detail their material choices and suitability of the given materials
- Learn about inventors, designers, engineers, chefs and manufacturers who have developed groundbreaking products.
- Start to understand whether their products can be recycled or reused.
- When planning, explain their choices of materials and components, including function.
- Develop their own ideas through drawings, making templates or mock ups of their initial ideas using ICT (if needed).

- Research as a matter of course before considering designing a product.
- Use ideas from other people when designing e.g., creating a mood board of existing products
- Confidently make labelled drawings from different views, showing specific features.
- Produce a plan and explain the use of materials, equipment and processes
- Persevere and adapt work when original ideas do not work
- If the first attempt fails, identify strengths and future areas for development.
- Communicate ideas through annotated sketches that show different viewpoints of the product
- Begin to be very familiar with different inventors, designers, engineers, chefs and manufacturers who have developed groundbreaking products.

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Lower Key Stage 2

### Year 3

### Year 4

## Making

- Follow a step-by-step plan, choosing the right equipment and materials
- Select the most appropriate tools and techniques for a given task
- Work accurately to measure, mark out, make cuts, score, make holes and assemble components with more accuracy.
- Start to work safely and accurately with a range of simple tools.
- Choose finishing techniques to improve the appearance of their products using a range of equipment including ICT
- Start to understand that mechanical systems (such as levers and linkages) create movement.
- Start to think about their ideas as they make their product and be willing to change things if they help them to improve their work.
- Start to measure, tape or pin, cut and join fabric with some accuracy.

- Know which tools to use for a particular task and show knowledge of handling the tool accurately and safely.
- Know which material is likely to give the best outcome based on its properties
- Mark, measure and cut accurately a range of materials using appropriate tools, equipment and techniques.
- Start to join and combine materials and components accurately in temporary and permanent ways.
- Sew, weave or knit using a range of stitches
- Show high levels of perseverance when things do not go as they would wish in the first instance.
- Start to understand the mechanical and electrical systems have an input, process and output.
- Know how mechanical systems (such as pulleys or gears) create movement.
- Know how simple electrical circuit and components can be used to create functional products.
- Understand how to reinforce and strengthen a 3D framework.
- Begin to use finishing techniques to strengthen and improve their appearance of their product using a range of equipment, including ICT

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Lower Key Stage 2

|                     | Year 3  | Year 4  |
|---------------------|---|---|
| Evaluating          | <ul style="list-style-type: none"><li>• Explain how to improve a finished model</li><li>• Know why a model has or has not been successful</li><li>• Evaluate their product against their original design criteria (e.g. how well it meets its intended purpose).</li><li>• Begin to disassemble and evaluate familiar products and consider the views of others to improve them.</li><li>• Evaluate the key designs of individuals in DT has helped shaped the world.</li></ul> | <ul style="list-style-type: none"><li>• Evaluate and suggest improvements for designs</li><li>• Evaluate products for both their purpose and appearance</li><li>• Evaluate their own and others work</li><li>• Evaluate their product, carrying out appropriate tests.</li><li>• Evaluate their product both during and at the end of the assignment.</li><li>• Present a product in an interesting way</li><li>• Be able to disassemble and evaluate familiar products and consider the views of others to improve them.</li></ul> |
| Technical Knowledge | <ul style="list-style-type: none"><li>• Know how to strengthen a product by stiffening a given part or reinforce a part of the structure</li><li>• Use a simple IT program within the design</li><li>• Create a product that incorporates a pulley mechanism.</li></ul>   | <ul style="list-style-type: none"><li>• Link scientific knowledge by using lights, switches or buzzers</li><li>• Use IT where appropriate to add to the quality of the product</li><li>• Create a product that incorporates at least one lever.</li><li>• Use appropriate sewing techniques.</li></ul>  |



# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Lower Key Stage 2

|                 | Year 3   | Year 4  |
|-----------------|--|---|
| Food Technology | <ul style="list-style-type: none"><li>• Describe how food ingredients come together</li><li>• Weigh out ingredients and follow a given recipe to create a dish</li><li>• Know when food is ready for harvesting</li><li>• Demonstrate hygienic food preparation</li><li>• Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of heat source.</li><li>• Begin to understand how to use a range of techniques, such as peeling, chopping, slicing, gracing, mixing, spreading, kneading and baking.</li><li>• Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.</li></ul> | <ul style="list-style-type: none"><li>• Bring a creative element to the food product being designed</li><li>• Know which season various foods are available for harvesting</li><li>• Recognise safe practices in the kitchen and can identify hazards e.g. hazards when using an oven</li><li>• Know how to use a range of techniques, such as peeling, chopping, slicing, gracing, mixing, spreading, kneading and baking.</li><li>• know that to be active and healthy, food and drink are needed to provide energy for the body.</li></ul> |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Upper Key Stage 2

|           | Year 5  | Year 6  |
|-----------|---|---|
| Designing | <ul style="list-style-type: none"><li>• Competently research products similar to the one they are intending to design and evaluate strengths and weakness to be incorporated into their own design.</li><li>• Research and use ICT where appropriate</li><li>• Design, with a range of initial ideas, after collecting information from investigating existing products</li><li>• Produce a detailed, step-by-step plan</li><li>• Explain how a product will appeal to a specific audience and how it meets the purpose</li><li>• Create annotated 3D designs of their design on isometric or squared paper from a range of viewpoints.</li><li>• With growing confidence, apply a range of finishing techniques including those from art and design.</li><li>• Start to appreciate how much the product costs to make.</li></ul> | <ul style="list-style-type: none"><li>• When researching, be competent in discriminating as to what would be and would not be helpful for their intended product.</li><li>• Use market research of existing products to inform their design</li><li>• Follow and refine original plans, justifying it in a convincing way</li><li>• Draw detailed 3D designs using exploded diagrams or cross-sectional drawing where appropriate to display finer details</li><li>• Show that culture and society is considered in plans and design specification</li><li>• Show thought has been given to materials relating to recycling and sustainability.</li><li>• Know how much products cost and make choices accordingly.</li></ul> |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Upper Key Stage 2

|        | Year 5   | Year 6  |
|--------|--|---|
| Making | <ul style="list-style-type: none"><li>• Name and use a range of tools and equipment competently</li><li>• Select appropriate materials, tools and technique (e.g. cutting, shaping, joining and finishing) accurately.</li><li>• Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</li><li>• Incorporate mechanical systems (such as pulleys or gears) to create movement in their products.</li><li>• Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</li><li>• Use finishing techniques to strengthen and improve the appearance of their products using a range of equipment including ICT.</li><li>• Make a prototype before making a final version</li><li>• Carry out finishing techniques to enhance the appearance and function of their product</li></ul> | <ul style="list-style-type: none"><li>• Confidently select appropriate tools, materials, components and techniques and use them efficiently.</li><li>• Know how to use any tool correctly and safely</li><li>• Know what each tool is used for</li><li>• Explain why a specific tool is best for a specific action</li><li>• Make modifications as they go along and explain their reasons.</li><li>• Construct products using permanent joining techniques.</li><li>• Use mechanical systems such as pulleys and gears competently to create movement in their products.</li><li>• Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</li><li>• Use finishing techniques to strengthen and improve the appearance of their products using a range of equipment including ICT.</li><li>• Pin, sew and stitch materials together to create a product</li></ul> |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Upper Key Stage 2

|                     | Year 5  | Year 6   |
|---------------------|---|--|
| Evaluating          | <ul style="list-style-type: none"> <li>• Evaluate a product against original design specifications and by carrying out tests.</li> <li>• Suggest alternative plans; outlining the positive features and drawbacks</li> <li>• Evaluate appearance and function against original criteria</li> <li>• Begin to evaluate their product personally and seek evaluation from others.</li> </ul> | <ul style="list-style-type: none"> <li>• Test and evaluate designed products with specified audience where possible</li> <li>• Explain how products should be stored and give reasons</li> <li>• Evaluate product against clear criteria</li> <li>• Evaluate their work both during and at the end of the assignment.</li> <li>• Record their evaluations using drawing with labels.</li> </ul>                  |
| Technical Knowledge | <ul style="list-style-type: none"> <li>• Suggest alternative plans; outlining the positive features and drawbacks</li> <li>• Evaluate appearance and function against original criteria</li> <li>• Create a product that incorporates gears.</li> </ul>   | <ul style="list-style-type: none"> <li>• Know which IT product would further enhance a specific product</li> <li>• Use knowledge to improve a made product by strengthening, stiffening or reinforcing</li> <li>• Use electrical systems correctly and accurately to enhance a given product</li> <li>• Know when a product they have made is improved by either the use of pulleys, levers or gears.</li> </ul> |

# DESIGN TECHNOLOGY: DISCIPLINARY KNOWLEDGE

## Upper Key Stage 2

|                 | Year 5  | Year 6   |
|-----------------|---|--|
| Food Technology | <ul style="list-style-type: none"><li>• Be both hygienic and safe in the kitchen</li><li>• Know how to prepare a meal by collecting the ingredients in the first place</li><li>• Weigh and measure accurately (timings, dry ingredients and liquids)</li><li>• Begin to understand that seasons may affect the food available.</li><li>• Understand how food is processed into ingredients that can be eaten or used in cooking.</li><li>• Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically, including where appropriate, the use of a heat source.</li><li>• Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.</li></ul> | <ul style="list-style-type: none"><li>• Explain how food ingredients should be stored and give reasons</li><li>• Work within a budget to create a meal</li><li>• Understand the difference between a savoury and sweet dish</li><li>• Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically, including where appropriate, the use of a heat source.</li><li>• Know different food and drink contain different substances – nutrients, water and fibre – that are needed for health.</li></ul> |

