

# **Design and Technology**

### Curriculum End Points EYFS and KS1

### By the end of Nursery

- Explore different materials freely
- State what they are making
- Join different materials together using a variety of materials.

### By the end of Reception

- Explore different materials freely
- State what they are making
- Join different materials together using a variety of materials.

### By the end of Year 1

- State the purpose of the products they are designing and making and the intended user
- Contribute to a simple design criteria as part of the class
- Draw simple designs with some labels
- Plan by suggesting what to do next
- Begin to identify which tools and materials they will need and explain their selections
- Describe the characteristics of the tools and materials which they use
- Cut, assemble, join and combine materials with increasing accuracy
- Follow procedures for basic food safety and hygiene
- Explore and make sliders and levers
- Evaluate existing products as well as their own, describing what they like and dislike, materials used and how they work

### By the end of Year 2

- State the purpose of the products they are designing and making and the intended user
- Develop a simple design criteria with increasing independence
- Draw simple designs with some detailed labels
- Begin to select tools and materials by name
- Measure, mark out, cut and shape with developing accuracy
- Use hand tools safely and appropriately
- assemble, join and combine materials, including using basic sewing techniques
- Follow procedures for basic food safety and hygiene
- Explain how axles are used to turn wheels
- Evaluate design ideas and final products against their design criteria, identifying strengths and what could be improved upon

## Curriculum End Points LKS2

### By the end of Year 3

- Generate design ideas for a product, considering its purpose and the user
- Use research of existing products to develop their own design criteria
- Produce annotated sketches, highlighting what will appeal to the intended user
- Develop a clear idea of the steps needed and the appropriate order of carrying them out
- Select appropriate tools and techniques for the task



- Measure, mark out, cut and assemble with more accuracy
- Demonstrate hygienic food handling and discuss appropriate preparation and storage
- Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught.
- Develop and use knowledge of how to construct strong, stiff shell structures
- Evaluate the ongoing work and the final product with reference to the design criteria and the views of others.
- Consider the views of others to improve their work throughout the design and making process, changing things as they go if needed
- By the end of Year 4
- Generate design ideas for a product, considering its purpose and the user
- Use research of existing products to develop their own design criteria
- Generate realistic ideas and produce annotated sketches from different views
- Explain their choice of tools and equipment in relation to the skills and techniques they will be using
- develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail
- Measure, mark out, cut, shape and assemble a range of materials using appropriate equipment and techniques
- Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities
- Evaluate their products by conducting appropriate tests against their own design criteria and identify the strengths and areas for improvement in their work.

### Curriculum End Points UPKS2

#### By the end of Year 5

- conduct research, using surveys, interviews, questionnaires and web-based resources
- identify the needs, wants, preferences and values of particular individuals and groups
- communicate their ideas through detailed labelled drawings, indicating the features that will appeal to intended users and how particular parts will work
- Formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used.
- Competently select from and use appropriate tools to accurately measure, mark out, cut, shape, and join construction materials to make frameworks.
- Develop skills of threading needles and joining textiles using a range of stitches.
- Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients.
- Understand about seasonality in relation to food products and the source of different food products.

### By the end of Year 6

- conduct research, using surveys, interviews, questionnaires and web-based resources
- identify the needs, wants, preferences and values of particular individuals and groups
- Present their ideas through detailed labelled drawings, indicating the features that will appeal to intended users and how particular parts will work
- accurately measure, mark out, cut and shape materials and components
- accurately assemble, join and combine materials and components
- accurately apply a range of finishing techniques, including those from art and design
- use techniques that involve a number of steps
- understand how mechanical systems such as cams or pulleys or gears create movement
- demonstrate resourcefulness when tackling practical problems
- Understand how key chefs have influenced eating habits to promote varied and healthy diets.

