



**Year 3**

**National Curriculum Aims and Objectives**

- Design:**
- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
  - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- Make:**
- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
  - 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
- Evaluate:**
- Investigate and analyse a range of existing products
  - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world
- Cooking and Nutrition:**
- Understand and apply the principles of a healthy and varied diet
  - prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed
- Technical knowledge:**
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
  - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
  - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
  - apply their understanding of computing to program, monitor and control their products

| <b>Autumn</b>  | <b>Spring</b>  | <b>Summer</b>   |
|--|--|---|
| <p><b>Construction / Technical Knowledge</b><br/>           Make structures more stable by giving them a wide base.<br/>           Prototype frame and shell structures.<br/>           Use glue gun with close supervision (one to one).<br/>           Choose materials based on their functional properties and aesthetic qualities</p> <p><b>Textiles/Sheet Materials</b><br/>           Create a simple pattern.<br/>           Understand the need for patterns.</p> | <p><b>Food – Nutrition / Hygiene</b><br/>           Develop sensory vocabulary/knowledge using, smell, taste, texture and feel.<br/>           Follow instructions.<br/>           Make healthy eating choices from and understanding of a balanced diet.<br/>           Join and combine a range of ingredients e.g. snack foods.<br/>           Work safely and hygienically.<br/>           Prepare and cook a range of predominately savoury dishes using a range of cooking techniques.</p> | <p><b>Construction / Technical Knowledge</b><br/>           Make structures more stable by giving them a wide base.<br/>           Prototype frame and shell structures.<br/>           Use glue gun with close supervision (one to one).<br/>           Choose materials based on their functional properties and aesthetic qualities</p> <p><b>Sheet Materials</b><br/>           Cut slots.<br/>           Cut internal shapes.<br/>           Use lolly sticks/card to make levers and linkages.<br/>           Create nets</p> |