## Subject Progression



## **Design and Technology**



## Year 6

## 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

Autumn	Spring	Summer
Construction / Technical Knowledge	Food	Textiles/Sheet Materials
Use bradawl to mark hole positions.	Know the properties of ingredients and sensory	Create 3D products using pieces and seam
Build frameworks using a range of materials (eg	characteristics.	allowance.
wood, card and corrugated plastic to support	Understand how to feed now and in the future.	Pin and tack fabric pieces together.
mechanisms).	Taste a range of ingredients and food items to	Join fabrics using back stitch, blanket stitch or
Choose materials based on their functional	develop a sensory food vocabulary for use when	machine stitching.
purposes and aesthetic qualities.	designing.	Make quality products.
Apply their understanding on how to strengthen	Weigh and measure using scales.	Sheet Materials
and stiffen more complex structures.	Cut and shape ingredients (eg grating)	Use craft knife ,cutting mat and safety ruler under
Understand and use mechanical systems (gears,	Join and combine foods (beating or rubbing in)	one to one supervision.
pulleys, cams, leverages and linkages).		