



## Jerry Clay Academy Subject Knowledge Organiser

Subject: D&T Year Group: 5 Term: Spring

### Core Learning of This Unit:

The children will create a **structure** as part of their **What is the difference between living and surviving? theme**. As part of this, pupils should be able to Select appropriate materials, tools and techniques; measure and mark out accurately ; use skills in using different tools and equipment safely and accurately ; cut and join with accuracy to ensure a good-quality finish to the product.

Pupils will respond to a more specific challenge such as focussing on the balance of a particular object (e.g. House with chicken legs 2020) by needing to reinforce the base and stilts according to testing and through continual evaluation.

### Prior Learning:

- Select appropriate tools and techniques for making their product
- Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques
- Join and combine materials and components accurately in temporary and permanent ways
- Sew using a range of different stitches, weave and knit
  - Measure, tape or pin, cut and join fabric with some accuracy
  - Use simple graphical communication techniques
- Evaluate their work both during and at the end of the assignment
  - Evaluate their products carrying out appropriate tests

### National Curriculum Statements:

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- 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
  - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures

### Key Vocabulary:

Flow chart  
Design proposal  
Model  
Modify  
Product analysis  
Section drawing  
Quality finish  
Layering  
Set square  
Interior  
Exterior  
Mouldable  
Reinforce  
Stiffen  
Strengthen

### Significant People

The shepherds in the Landes region of France were using **stilts** to get around the bogs in the early 18th century. **Stilts** are poles, posts or pillars that allow a person or structure to stand at a height above the ground. In flood plains, and on beaches or unstable ground, buildings are often constructed on stilts to protect them from damage by water, waves or shifting soil or sand. Stilts for walking have platforms for the feet and may be strapped to the user's legs. Stilts have been used for many hundreds of years. Aluminium stilts are commonly used by fruit farmers in California to prune and harvest their peach, plum, and apricot trees. Stilts have been used for washing large windows, repairing roofs, and installing or painting high ceilings. Stilts are used for drywall construction, finish painting, and hanging suspended ceiling tiles.