



Design and Technology Topic: To design, make and evaluate a shelter.

Year: 6 **Term:** Autumn 1

Key Knowledge/Content:

- To understand what a 'footprint plan' is.
- To understand that in the real world, design, can impact users in positive and negative ways.
- To know that a prototype is a cheap model to test a design idea.
- To know that structures can be strengthened by manipulating materials and shapes.

Links to:

Prior learning:

The children designed and made their own pull cord bag. The bag will be sewn, and the children will practise their sewing and knotting techniques.

Future learning:

The children are going to design & create a piece of Clothing/accessory - promote their individuality.

Key vocabulary with definition:

Prior vocabulary:

- Applique- Decorative needlework to create a design or picture on fabric.
- Blanket stitch – A line of stitching that hooks over the edge of material.
- Cross stitch – A stitch that forms the shape of a cross.
- Fastening – Ways of joining fabric, for example buttons, poppers, hook and eye.

New vocabulary:

- Footprint plan – A building footprint provides the outline of a building drawn along the exterior walls, with a description of the exact size, shape, and location of its foundation.
- Architects - A person who is qualified to design buildings and to plan and supervise their construction.
- Triangulation - The practice of using multiple sources of data or multiple approaches to analyse data.

By the end of this unit

All children can: **build** a range of structures drawing upon new and prior knowledge of structures and **test** and adapt a design to improve it as it is developed.

Most children can: **demonstrate** how to measure, marking and cut a range of materials to create a range of structures. Children are **use** a range of materials to reinforce and add decoration to structures

Some children can: **explain** and **identify** what makes a successful structure.

Background understanding for teachers and parents:

The children are going to design, make and evaluate a shelter. The children will research a range of architects. The children need to design carefully ensure their strong is strong and is purposeful.

Curriculum Driver (one):

Communication

Evidence outcome:

The children are going to be discussing and comparing a range of architects.