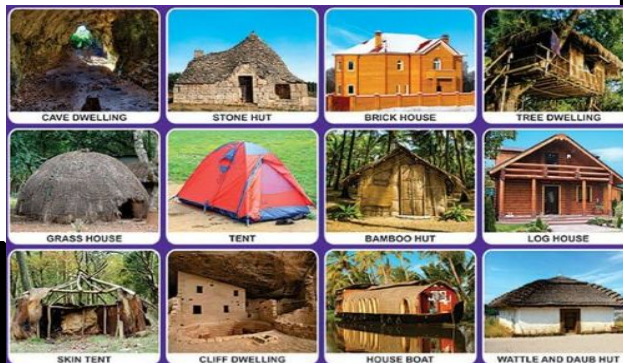




What I should already know:

- To build structures, exploring how they can be made stronger, stiffer and more stable.
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

Year 3 DT – Shelters



Key Facts:

A structure that is stable is less likely to fall over.

How to make a strong, stable and rigid shelter:

- Use a wider base
- Buttress
- Triangulation
- Reinforcement

Vocabulary

Stiffen	Support or strengthen
Framework	An essential supporting structure of a building, vehicle, or object.
Secure	Fixed or fastened so as not to give way, become loose, or be lost.
Reinforce	To strengthen or make something stronger by adding materials.
Protection	The action of protecting, or the state of being protected.
Waterproof	Impervious to water.
Join	Link; connect.
Assemble	Fit together the separate component parts of (a machine or other object).
Construct	Build or make (something, typically a building, road, or machine).
Design	A plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is made.
Diagram	A simplified drawing showing the appearance, structure, or workings of something.
Evaluate	Form an idea of the amount, number, or value of; assess.
Stable	Not likely to give way or overturn; firmly fixed.

At the end of this topic, I will know:

- Identify a purpose and establish criteria for a successful product.
- Plan the order of their work before starting-When planning, start to explain their choice of materials and components including function and aesthetics
- Generate ideas for an item, considering its purpose and the user/s
- Make drawings with labels when designing
- With growing confidence, carefully select from a range of tools and equipment, explaining their choice
- Work safely and accurately with a range of simple tools
- Measure, mark out, cut, score and assemble components with more accuracy
- Think about their ideas as they make progress and be willing change things if this helps them improve their work
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products
- Evaluate their product against original design criteria e.g. how well it meets its intended purpose.