

# Year 1 **Design and Technology** Knowledge Organiser

## Key Knowledge

**By the end of this unit pupils will..**

In this unit, children will be working together to produce a den for different woodland animals. They will explore how their structures can be made stiffer, stronger and more stable using a range of tools, resources and techniques.



**Structures are things that are built for a purpose.**

Structures can be large (e.g. buildings and bridges) or small (e.g. chairs and tables).

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

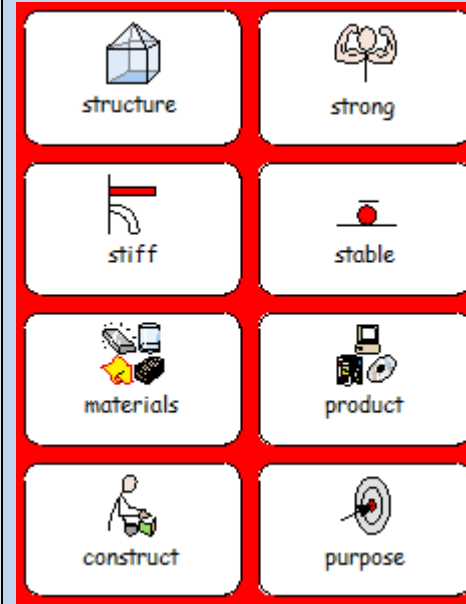
Structures are more stable when they have a wider base. A structure that is strong and rigid is able to support more weight.

Some materials are stronger and more rigid (stiffer) than others, e.g. card is stronger and more rigid than paper.

Structures can also be made stronger and more rigid by making sure that parts and materials are properly joined together, e.g. with glue, tape, clips.

Folding and layering (adding an extra layer) of materials can also be used to strengthen and stiffen structures.

## Key Vocabulary



## Key skills

- Explore initial ideas using drawings and mock-ups.
- Use tools for different purposes: cutting, sticking, curling, bending, joining etc.
- Select and use a range of materials and components, such as paper, card, plastic and wood according to their characteristics.
- Build structures by selecting appropriate materials and investigating ways to strengthen them.
- Evaluate their ideas throughout the process and review their products against original criteria.

