

Key Stage 1

Cycle A

Autumn Term

Manor Leas Infant School Knowledge Organiser

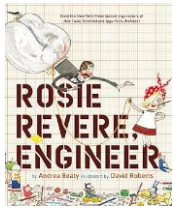
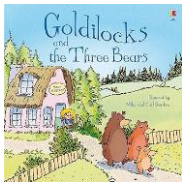
Design and Technology

Freestanding Structures – Baby Bear’s Chair



Star Words	Definition
Structure	Something that has been made and put together that can usually stand on its own.
Strong	Does not break easily.
Stiff	Does not bend easily.
Stable	Does not easily topple over.
Design Criteria	Features a product needs to make it good for the user.

Helpful Books



Home Learning Ideas

- Use a construction kit to make furniture for one of your toys.
- Look at the chairs you have at home. What materials are they made from?

Helpful Websites

BBC Bitesize - <https://www.bbc.co.uk/bitesize/subjects/z9mwtcw>

You tube clip -

<https://www.youtube.com/watch?v=ZvcCqVDzTE0&t=155s>

Sticky Knowledge



A structure needs to be strong, stiff and stable.

Flat, wide bases make a structure more stable.

The shape of a structure affects its strength.

Paper can be folded and rolled to improve its strength.

Paper can be overlapped to make it stiffer.

The cylinder is the strongest column because it has no corners.

A wider, shorter cylinder is more stable than a narrower, taller one.



Often structures are made for a purpose. For example, chairs are made for sitting on. They need to be strong, stable and comfortable.

Do you think Baby Bear’s chair was strong, stable and comfortable?