KNOWLEDGE ORGANISER

DESIGN AND TECHNOLOGY	STANDALONE STRUCTURES	KEY STAGE 1

Cross curricular links

Art - drawing and sketching existing products and their new ideas.

Science – thinking about the suitability of different materials based on its properties.

Geography – discuss the human and physical features you can see in your local area.

Pictures/photos relevant to topic

Key skills

Design a product for self that is functional, based on design criteria.

Select a range of materials and components appropriate to their characteristics.

Build structures exploring how they can be made stronger, stiffer and more stable.

Use tools appropriately to perform practical tasks (e.g. cutting, shaping, joining and finishing).

Evaluate the purpose of the product made according to design criteria.

Key Vocabulary/definitions

Structure – something that has been made and has different parts.

Stability – the strength and ability to stand alone.

Design - a plan or drawing produced to show the look and function or something before it is made.

Function - work or operate in a proper or particular way.

Purpose - the reason for which something is done or created.

Material - the matter from which a thing is or can be made.

Audience – who the product has been made for.

Key facts

Visit a local playground and think about how the structures have been made stable and safe for children to use.

Look around at some of the human features in your local area. Why are they there? What is there intended use? How do you think have they been made stable?

Use the link below to get ideas for other items you could design and make.
https://www.bbc.co.uk/teach/class-clips-video/design-and-technology-ks1-ks2-i-want-to-design/zkkkhbk