

Our School Values- DT

Love	We show love by learning and exploring different materials, mechanisms, designers and architects.
Courage	We show courage by sharing and talking about our designs.
Unity	We show unity by helping each other and sharing techniques.
Inspiration	We show inspiration by expressing ourselves and being proud of what we have achieved.



Year 2
D & T
Structures



Aim: To build structures exploring how they can be made stronger, stiffer and more stable.
Explore and evaluate their ideas and products against design criteria.

Knowledge I already know

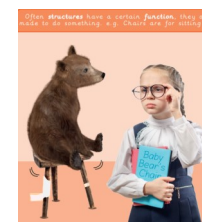
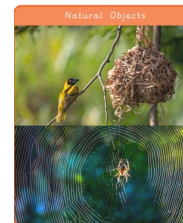
- I can describe the purpose of structures
- I understand the importance of a clear design criteria
- I know that the shape of materials can be changed to improve the strength and stiffness of structures.
- I know how to follow instructions to cut and assemble a design.

Knowledge I will learn

- I can identify natural and man-made structures
- I know what is meant by stability and can identify when a structure is more or less stable than another.
- I know that shapes and structures with wide, flat bases or legs are the most stable.
- I know the meaning of the words strength, stiffness and stability.
- I know there are different ways paper can be folded to improve its strength and stiffness.
- I know how to build a strong and stiff structure by folding paper.
- I know how to test the strength of my structure.
- I know that chairs are structures and need to be strong, stiff and stable.
- I know how to create joints and structures from paper/card and tape.
- I know that the chair I design for Baby Bear needs to: support Teddy; be strong, stiff and stable.
- I know how to create joints and structures.

Key Vocabulary

Word	Definition
function	How something works.
man-made	Made by people.
mould	To form different shapes out of soft, squishy materials.
natural	Found in nature. E.g. spiders web, sheep's wool.
stable	Object does not easily topple over.
stiff	A material or object that doesn't bend easily. E.g. wood.
strong	Something that is not easily broken.
structure	Something that has been made and put together and can usually stand on its own.
test	To find out whether something works the way it should.
weak	Something that is easily broken.



LI: To understand what makes a stable structure.	LI: To understand how the shape of the structure effects the strength	LI: To design a strong stable chair	LI: To make Baby Bear's chair	LI: To test the structure of Baby Bear's chair	LI: To evaluate a made structure, thinking about strength, stiffness and stability,
To explore the stability of 3D shapes that have been moulded.	Exploring different paper shapes that can support weight.	Draw design for chair	Make the chair	Apply different weights to their model.	Evaluate their product.