

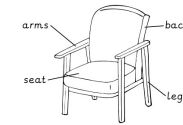
Year 2 - Structures - A Chair for a Bear - Term 3

Key Vocabulary

Freestanding	Able to stand without support.
Stiff	Difficult to bend.
Flexible	Easy to bend.
Strong	Not easily broken or changed in shape.
Cylinder	A solid shape with two circular ends.
Design brief	A description of who a product is for and why.
Design criteria	Things a product must have or do.
Evaluate	To judge how well something works.
Improve	To change a product to make it better.

Parts of a chair

A chair is made from different parts, such as its legs, seat, arms and back.



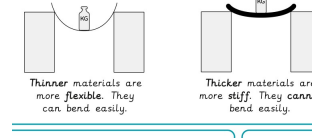
A chair is a freestanding structure made from different parts.

Strong shape

A chair must support its user.

Stiff or flexible?

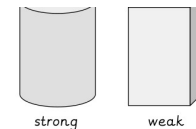
Thin materials often bend more easily; thicker materials are usually stiffer.



Choose materials to suit the job.

Strong shapes

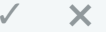
A cylinder is a strong shape because its curved surface can help spread a load.



Cylinders are strong shapes because they are curved.

Try different shapes and test their strength.

To know statements



To evaluate existing structures.

To explore how shape affects the strength of a tower.

To explore how thickness affects the strength of materials.

To make a strong and stable chair for a user.

To evaluate and improve a structure.

What can you remember from previous units?

How can you make a structure stable?

What is a wide base useful for?

Anything else you have learnt?

What have you enjoyed?