

In DT we are learning about... **Shell Structures - Can you make a strong and stable chair for Prince John?**

Key vocabulary



Structures - a building or object made from more than one part
Freestanding - something that can stand on its own
Support - something used to keep something standing
Weight - how heavy something is
Strong/stable - something that stays standing when weight or force is put on it
Rigid - not able to bend or change shape
Base - the bottom part of something
Materials - what something is made from
Layering - putting materials on top of each other
Purpose - How your product is going to be used
User - Who is going to be using your product

Characteristics needed for this topic:



- Resilience
- Imagination
- Problem solving

Sticky knowledge and skills



- A chair that is stable will not fall over and will support weight
- Structures are more stable when they have a wider base
- I can name different types of chairs
- A chair can have legs, a back, a seat, joins, arms and support
- Some materials are stronger and more rigid (stiffer) than others, e.g. card is stronger and more rigid than paper
- Joining materials together e.g. with glue or tape can make them stronger
- Folding or rolling paper/card into a tube makes it stronger
- Adding an extra layer of materials can make it rigid
- I can explain the purpose of my structure and how it works
- I can begin to talk about the user
- I can use drawing to design my structure and label key parts
- I can identify the tools and materials I am going use and why
- I can use simple one-handed tools safely and with increasing confidence e.g. a pencil/paintbrush, scissors and a glue spreader
- I can use a ruler to begin to measure
- I can join materials using glue and tape in different ways that my teacher has shown me

Links to previous learning



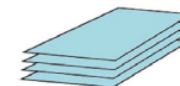
- Using one- handed tools such as scissors
- Exploring through play and joining more than one material together using glue or tape
- Talking about what I have made and how I made it



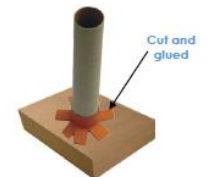
Key Designers



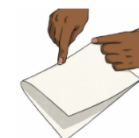
Jasper Morrison
 Charles Rennie Mackintosh



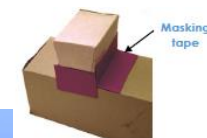
layering



Cut and glued



folding



Masking tape



rolling into a tube

Aspirations



- Structural Engineer
- Furniture designer
- Architect
- Carpenter