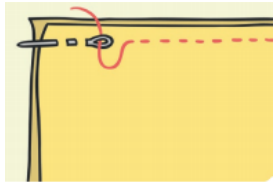
DT - Textiles - Must Knows – Lower KS2

You should already know....

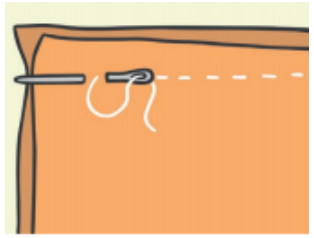
Previously Learned Vocabulary		
fabric (sometimes also called material or cloth)	Textiles is when we sew. We are sewing	needle
thread (sometimes called 'cotton')	Stitch (running stitch)	fabric (sometimes also called material or cloth)



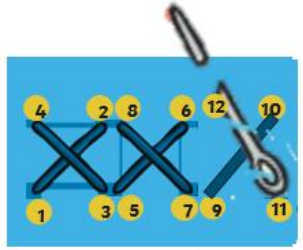
running stitch

New Vocabulary	
Back stitch	Cross stitch
Applique (sew onto other fabrics)	Pattern
Fastening	finishing technique
seam	Annotated sketch

Technical Skills - Stitches



backstitch

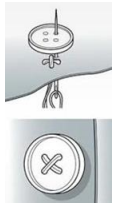


cross stitch

- Learn how to sew using a back stitch and cross stitch.
- Join fabrics together using these stitches or running stitch.

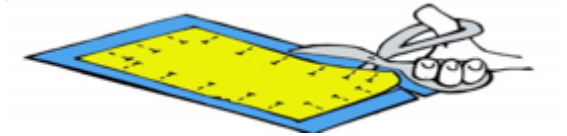
Technical Skills - Decoration

- Sew fabric onto other fabric (applique)
- Attach buttons for purpose or decoration



Technical Skills – Pattern cutting

- Use a paper template (or pattern piece) to cut out.
- Position it so we don't waste fabric
- Pin template to fabric so it doesn't move.
- Cut out carefully with fabric scissors.

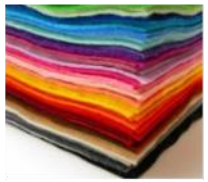


fabric scissors

Equipment

needle threader

needle and thread



felt

buttons

Famous Designers

Coco Chanel

Famous French designer famous in post-WW1 era . Influential in handbags and other fashion.

Keeping Safe

Equipment that you are using can be sharp. Be careful when using and never run when holding them.

Scissors

Cut away from yourself. Turn the material when at a corner. Hold with the blade down when passing or walking with them

Long hair should be tied back.

DT - Structures - Must Knows - Lower KS2

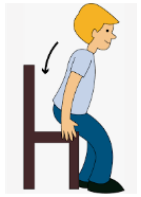
Top Vocabulary	
Construct	Repair
support	purpose
Previously Learnt Vocabulary	
Gluing	stable
Materials	Structure
Strengthen	product

Keeping Safe

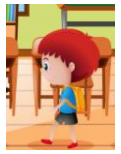
Keep your work area clear.

Listen carefully to all instructions.

Sit down in your seat when using scissors.

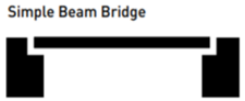


Walk around the classroom.



Long hair tied back

Technical Knowledge



Structures need to hold a load.

Structure (swing)

Structures have a purpose (why are we making it?) and a user (who is it for?).

Equipment

Scissors

Hot glue gun

Lolly sticks

Masking tape

Plasticine

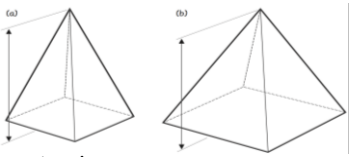
Card

Famous Designers

Islambard Kingdom Brunel - from history (1806-1859)

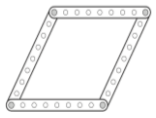
An influential English mechanical and civil engineer, who was also a famous for his bridge building.

You should already know....

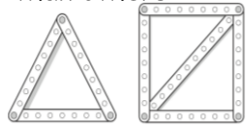


3D shapes are stronger and more stable with a wider base. Pyramid b here will be more stable.

Some shapes and structures are stronger than others



This is easy to push over



Strong or reinforced shapes can't be pushed over

Technical Skills -

- Being to cut materials by selecting appropriate tools with support.
- Being to measure and mark out to the nearest millimetre.
- Select appropriate joining techniques.
- Choose suitable techniques to construct products or to repair items.
- Strengthen materials using suitable techniques.

DT – Mechanisms and Mechanical Systems- Must Knows – Lower KS2

Top Vocabulary	
linkage	pivot
guide	bridge

Previously Learnt Vocabulary		
Product	Mechanism	Lever
Pop up	Slider	Split pin
Wheel	Axel	chassis

Keeping Safe

Listen carefully to all instructions.

Keep your work area clear.

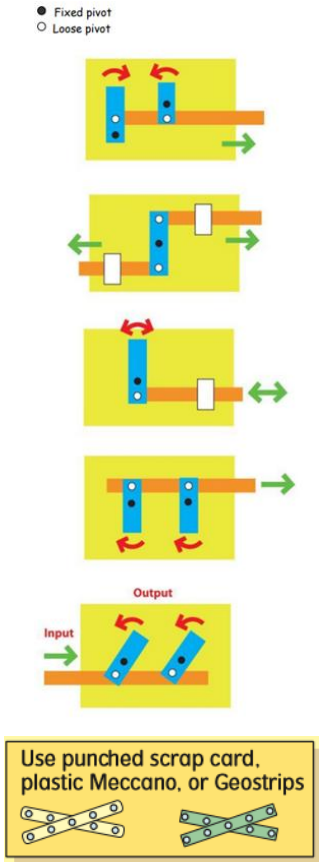
Walk around the classroom.

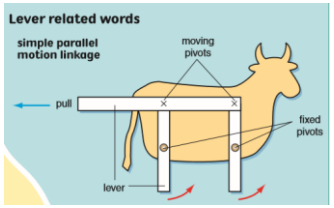
Long hair tied back

Technical Skills

Lever and linkage mechanisms usually produce oscillating or reciprocating movement:

- Linear – in a straight line
- Reciprocating – backwards and forwards in a straight line e.g. a slider
- Rotary – round and round e.g. a wheel, cam, pulley, gear wheel
- Oscillating – backwards and forwards in an arc e.g. a lever





Equipment

Scissors

Meccano

Glue

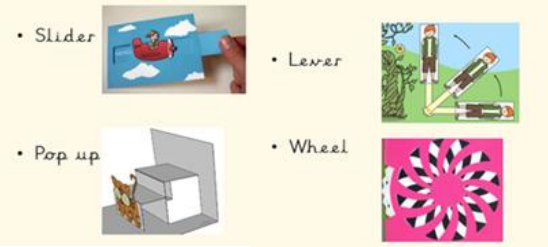
Card

Famous Designers

Mary Jackson

Mary Jackson was an American mathematician and aerospace engineer at the National Advisory Committee for Aeronautics, which in 1958 was succeeded by the National Aeronautics and Space Administration. She worked at Langley Research Center in Hampton, Virginia, for most of her career.

You should already know....



Technical Skills -

Explore & use mechanical systems (different levers and linkages) to create a moving product.

Consider the different placement of the linkages & levers for success of the product.

DT – Electrical Systems- Must Knows – Lower KS2

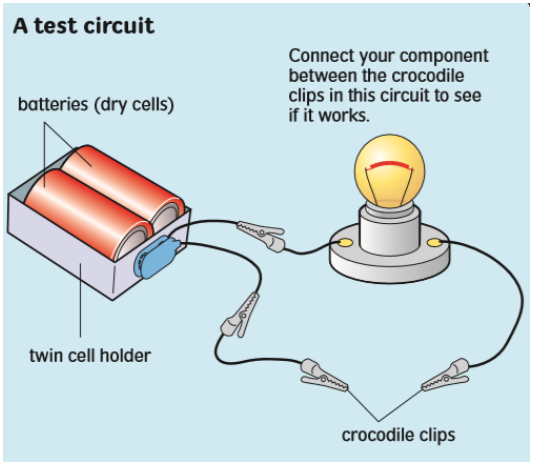
Top Vocabulary	
Electrical system	Electronics
Series circuit	Bulb
Cell	Wires

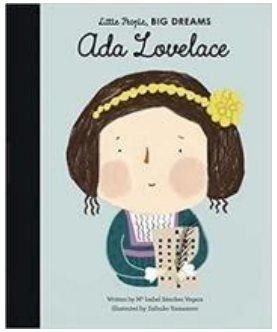
Famous Designers

Ada Lovelace

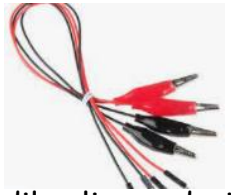
Augusta Ada King, Countess of Lovelace was an English mathematician and writer, chiefly known for her work on Charles Babbage's proposed mechanical general-purpose computer, the Analytical Engine.

Technical Skills

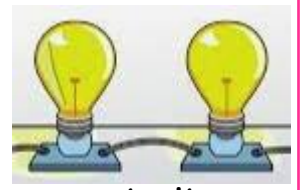




Equipment



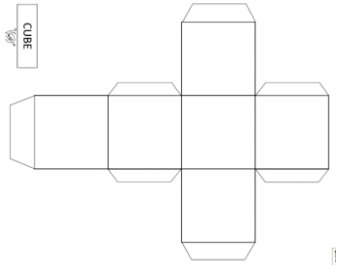
Crocodile clips and wires



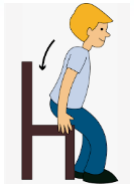
bulb

Cell

Technical Skills



Keeping Safe



Keep your work area clear.

Listen carefully to all instructions.

Sit down in your seat when using scissors.

Walk around the classroom.

Long hair tied back

Technical Skills -

Create series circuits using electronics kits (with 2 sparkles - bulbs)

Begin to write code to control and monitor models or product