



"Whatever you do, work at it with all your heart"

Colossians 3:23

Paper Engineering

Year 4 Autumn 2

Key Knowledge:

To know that:



The user of a product will affect design choices.

Making a prototype allows the designer to make improvements before making the final product

Different effects can be created by using different styles of pop-up

Design criteria identifies the needs the design should meet.

More than one idea should be evaluated to decide which would meet the brief best.

Different scissors create different cutting techniques and are used for different purposes.

Different fonts can be used to create different effects

I can use line guides and stencils when presenting my work.

Using a prototype reduces cost and wasting materials

A hinge pop up can be used to make an image stand out from the page when it is opened.

A mouth pop up needs precise folding to be successful.

Different pop ups can be used together to create more advanced effects e.g. layer pop up.

Key Vocabulary:

Design Brief—A set of instructions for a project outlining its purpose

Design criteria— Precise goals that a project must achieve to be successful

Target audience— The person who will be using the product

Annotate— To add notes

⇒ **Mechanism**—The working or moving part

⇒ **Prototype**— A first version



Key People / Dates/
Phrases:

Robert Sabuda

Paper Engineering

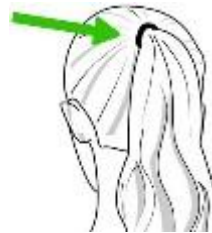
Are you ready to create?



Clear your work area.
Move around the room with care and always tuck your chair under when you get up.



Get out the equipment and resources you will need



Check long hair is tied back. You may want to roll up your sleeves or put on an art shirt for some activities.



Think about what you are going to do and plan what order you want to do the things.

Scissors

Remember to carry scissors by the blade in your fist.

Always use round-ended scissors – teacher to use pointed scissors if needed.

If you are left-handed always use left-handed scissors.

For neatness and safety, remember how to hold both the scissors and the material to be cut.

Paper scissors



Cardboard snips



Craft Scissors



Craft Knife

Craft knives can be used to make neat, straight line slits in paper, e.g. for use with levers.

Craft knives should only be used by adults in Year 4.

Always use a safety rule and cutting mat.

Remember to keep fingers behind cutting edge of sharp tools.

Craft knives must be stored securely when not in use.

Craft knives should only be used under direct supervision.

Craft knives should only be used when there is no other method available.