

Design Brief

To design and make a pop-up book that includes a range of different design mechanisms.

Key Vocabulary

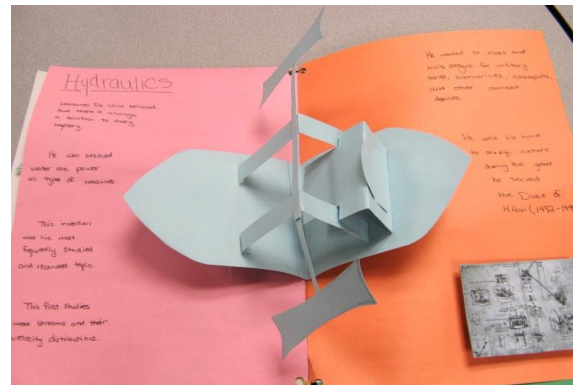
lever	A rigid bar resting on a pivot.
hinge	A movable joint or mechanism on which a door, gate, or lid swings as it opens and closes, or which connects linked objects.
mechanism	A system of parts working together.
pivot	The central point, pin, or shaft on which a mechanism turns.
precision	The quality, condition, or fact of being exact and accurate.
3-dimensional	Having or appearing to have length, breadth, and depth.
pop-up	Containing folded cut-out pictures that rise up to form a three-dimensional scene or figure when the page is turned.

Key Skills

- Use what I have found from picture pop-up books to help design my own background illustrations and character.
- Share my ideas through talking and drawing.
- Draw annotated diagrams to show how the pop-up book will work.
- Make a step-by-step plan of the making process, including the which materials will be used for each step.
- Investigate what materials and equipment is needed to make different mechanisms. Building on from previous knowledge of joining, cutting and combining with accuracy.

What I Should Already Know

- Levers and sliders can be found in existing products such as pop-up books.
- A slider allows for movements from side to side or up and down. You can use slot-in paper to do this.
- You can adapt materials to allow them to move.
- Different joins have different effects.





Key Information

- The term pop-up book is often applied to any book with three-dimensional pages, although it is an overall term for movable books, pop-ups, tunnel books, transformations, flaps, pull-tabs, pop-outs, pull-downs.
- Most of the scenes in a pop-up book are built using multiple pop-up mechanisms that work together to create height and motion across two pages. The pages of pop-up books can be made from paper or cardboard.
- Pop-up books are ideal books for children as they create opportunities for active engagement.

Links to other Learning

- History - Egyptians
- English - reading, writing across a range of genres
- Maths - measures
- D & T - mechanisms all year groups and moving illustrations year 1

Key Questions

- Appearance/aesthetics - how will it look? What design choices will you make and what might influence these?
- Cost - will there be costs involved in making this product?
- Customer - who is it for and how does this influence your design choices?
- Environment - can it be recycled?
- Size - how big or small is it?
- Safety - what safety considerations may be needed when making this?
- Function/purpose - how does it work?
- Materials - what are the most appropriate tools, equipment and materials needed to produce this product?
- Manufacture - how will you make it? How might I improve my final product or adapt it as I make it?

