



What should I already know?

- There are many interesting and imaginative pop up books that use different mechanisms.
- How to use tools such as scissors safely.
- Materials can be joined in different ways such as glue, staples and tape.

What will I know by the end of this unit?

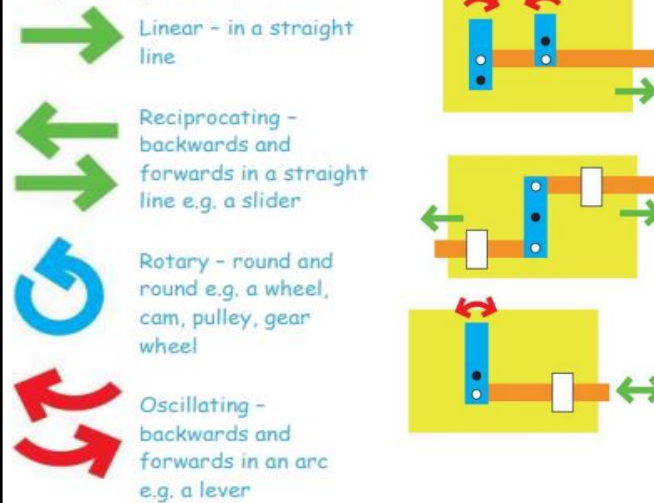
- How to create a pop up card that uses different mechanisms and appeals to a certain user.
- To experiment with different lever and linkage mechanisms.
- What is the purpose of these mechanisms? What is the mechanism that helps move each picture?
- Think about interesting design and aesthetics.
- Know what a prototype is and create one for their product.
- Decide which material is most appropriate through testing.
- Ask the question—does my card meet the needs of the user and achieve its purpose?



Diagrams and Images

Lever and linkage mechanisms usually produce oscillating or reciprocating movement:

● Fixed pivot
○ Loose pivot



Design and Technology: Skills and Enquiry

- Design a pop-up card whilst thinking about appropriate materials to make it look appealing.
- Investigate and explore different joining methods

Health and Safety

Hold scissors safely: blades closed, hand around the blade, always walk when carrying scissors.

Use a pencil and blue-tack to safely make a hole to insert the split pins.

Vocabulary

fixed pivot	A paper fastener that joins system
lever	A bar used to pry or move something
linear	Arranged in or extending along a straight or nearly straight line
linkage	The action of linking
loose pivot	A paper fastener that joins two strips of card together
mechanism	A system of parts working together
purpose	The reason why something is made and how this changes depending on who it is created for
rotary	Revolving around a centre or axis

What will I be able to do by the end of this unit?

Design:

- Use my research to create my own pop-up card design on paper. Label the design with the linkages which will be used.

Make:

- Various mechanisms.
- Use different materials to decorate the pop-up card.

Evaluate:

- Consider the strengths of my product and how it could be improved. Think of ways to make the product better.