



What should I already know?

- I can use sliders in a product to create movement
- I can join materials together in a way that allows them to move
- I have cut card with scissors and joined card with glue

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Inventors look for problems so that they can plan, design, make and evaluate solutions to make the world better.

Technical vocabulary

mechanism	a device used to create movement in a product.
lever	a rigid bar which moves around a pivot. Levers are used in many everyday products.
linkage	the card strips joining one or more levers to produce the type of movement required.
slot	the hole through which a lever is placed to enable part of a picture to move.
guide or bridge	a short card strip used to keep lever and linkage mechanisms in place and control movement.
loose pivot	a paper fastener that joins card strips together.
fixed pivot	a paper fastener that joins card strips to the backing card.
system	a set of related parts or components used to create an outcome.

Investigating



Skills



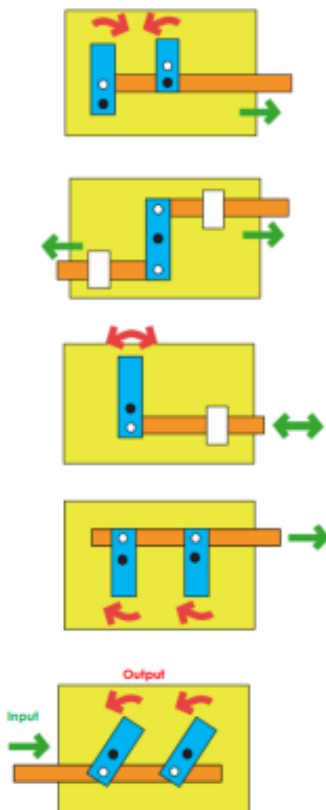
Designing



Making



Evaluating



When you push the card strip (input movement), the two levers move (output movement).

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

Measuring

Use a ruler to measure accurately and cut along the marked out lines.

Systems have an input, process and an output. In a lever and linkage mechanism, the 'input movement' is where the user pushes or pulls a card strip. The 'output movement' is where one or more parts of the picture move.