

In this project we are going to be making moving pictures using levers and linkages.

### What you need:

- Card (cereal packet thickness) enough to cut out a few strips plus a larger piece as backing.
- Split pins (paper fasteners)
- · A sharp pencil
- Glue
- Ruler
- Scissors
- · Hole punch or use a sharp pencil to make holes in the card
- · Blu tack or a rubber

### What to do:

Cut out strips of card and follow the video tutorial and templates on the following pages to make a range of mechanisms.

# Key: fixed pivot ● loose pivot (linkage) ○

'<u>Fixed pivot</u>' means the split pin needs to go <u>through the lever and the backing card</u> to hold it in place.

'Loose pivot (linkage)' means the split pin only goes through the lever and so moves when you push or pull the card strip.

Use a hole puncher or make holes using a sharp pencil and a piece of blu tack or a rubber behind to protect your fingers. be careful not to punch the hole too near the edge of the card.

A guide is used to keep the leaver and linkage mechanisms in place and control movement.

## Inputs and outputs

The <u>'input'</u> is where the user <u>pushes or pulls</u> the card strip. The <u>'output'</u> is Where one or more parts <u>move</u>.

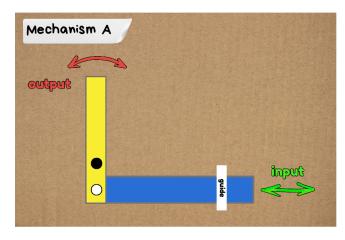


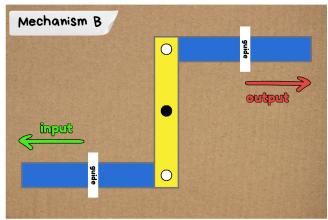


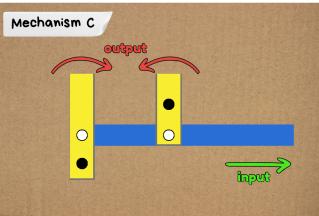
Here are some example lever and linkage mechanisms for you to try.

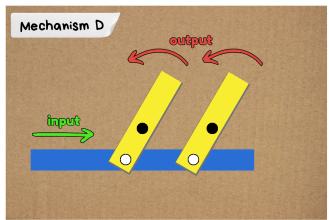
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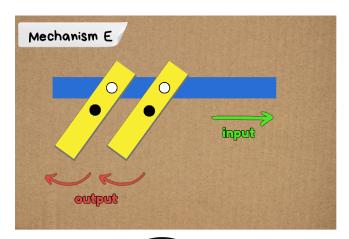
# fixed pivot ● loose pivot (linkage) ○

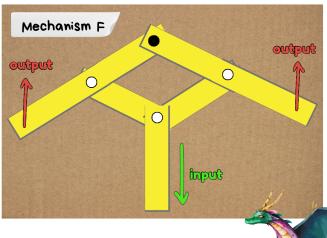














Can you invent your own linkage mechanism?



XONY STEXE

# Lever templates