

# Pinhole viewer

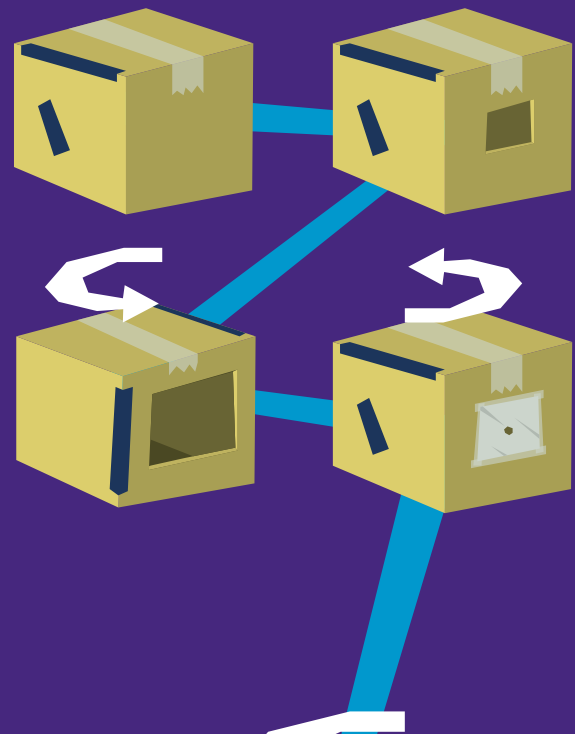
## You will need:

- Foil
- Scissors
- Safety pin or very sharp pencil
- Tape
- Electrical tape
- Light source (bike light/torch bulb etc)
- Carboard box
- Greaseproof paper



## What to do:

- 1 Tape the box shut.
- 2 Cover any holes with electrical tape so no light gets in.
- 3 Cut a small square hole at one end.
- 4 Cut a large square hole at the other end.
- 5 Cut a square of foil to cover the smaller hole. Poke a hole in it with the pin or pencil. The smaller the hole the better.
- 6 Tape the foil over the smaller square hole.
- 7 Cut a larger square of greaseproof paper big enough to cover the larger square. Tape it over the hole.
- 8 Find a dark room or draw the curtains.
- 9 Add a light source. Put it at the foil end of your viewer and look at the image on the greaseproof paper screen.



## Challenges:

- Experiment using different light sources.
- If you have an adult to help you try using a candle flame. You must ask permission first! What do you notice about the image of the flame? (answer below)
- If you use a torch try marking a black dot at the bottom of the bulb using a drywipe pen. Where does it appear on your viewfinder image? (answer below)

