

Make your own film projector

You don't need a professional projector to play your camp films on a big screen. Show your young people how to make their very own projector using an iPhone. You can then use it to watch the camp re-enactments on movie night.

(Offline activity)

Suitable for Cubs, Scouts and Explorers

You will need:

- A shoebox (for best results, paint the inside of the shoebox a dark colour or cover it with black paper)
- Scissors or a craft knife
- Duct tape
- A pen
- A magnifying glass
- A large paperclip
- A Smartphone

TIME NEEDED

30-40 minutes

THIS ACTIVITY LINKS

WITH THE FOLLOWING
BADGE



Digital Citizen Badge

Instructions

1. Take the shoe box and cover the inside with black paper or paint black.
2. On one end of the shoebox trace around the magnifying glass lens to make a circle. Cut out the circle to make a hole. Cover the hole with the magnifying glass, attaching it with a bit of tape.
3. Use duct tape to cover any other gaps in the shoebox. This will ensure that light only exits the box through the lens.
4. Make a stand for the smartphone using a paperclip: Straighten out the paper clip. Bend it in half around a pen to give it shape. Curl up the ends of each leg to make two little feet. Bend the opposite end of the clip upwards so the clip sits upright on a table. Stretch the two legs out at 45-degree angles so the phone can lean comfortably between the feet and the DIY stand's back.
5. Adjust the settings on your smartphone so the screen flips and does not play the film upside down. Go to Settings>General>Accessibility and turn on AssistiveTouch. An orb will pop on screen allowing you to click Device, from there choose Rotate Screen.
6. Place the phone on your paperclip stand near the back of the shoebox, press play and close the shoebox with its lid.
7. Project the image onto a bare white wall (or hang up a sheet) and walk forwards and backwards until the image is in focus.
8. For best results turn the brightness of your phone screen up and the lights in the room down. Press play, turn up the sound and pass around the popcorn.

OUTCOMES

By the end of this activity, your young people will have used their creative, digital and some science skills to host their very own movie night!