

Company

SMARTPHONE PROJECTOR



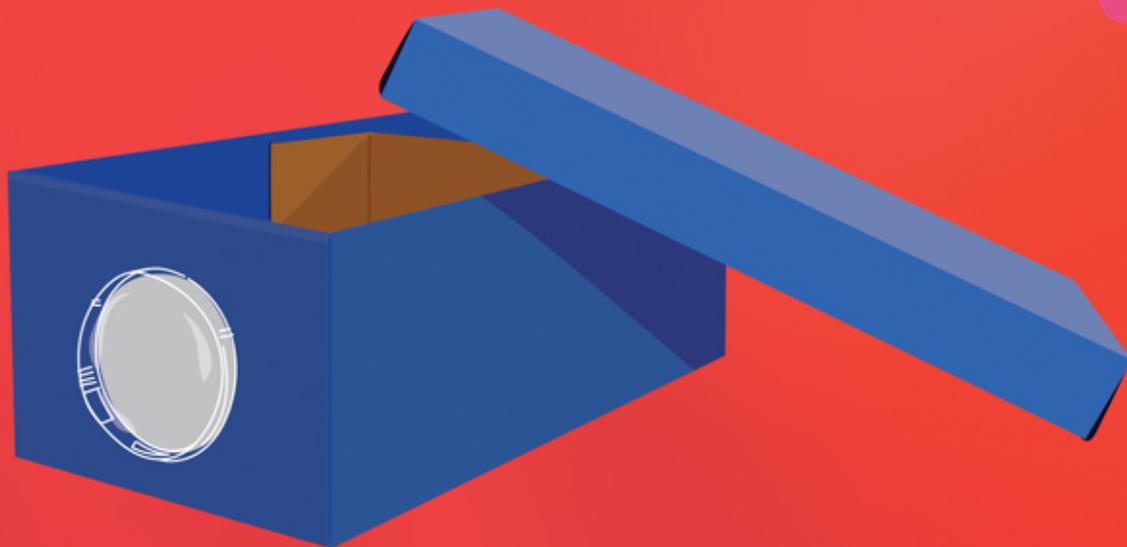
GET CREATIVE



45 MINUTES



PREPARATION
NEEDED



AIM

Transform a shoe box and a magnifying glass into an impressive projector for your smartphone, capable of projecting your phone's screen onto a nearby wall.

WHAT YOU'LL NEED

- > Shoe Box
- > Craft Knife
- > Magnifying Glass
- > Black Paper
- > Glue
- > Foam Board
- > Glue Gun

GET CREATIVE: SMARTPHONE PROJECTOR

THEME: ARTY & CRAFTY



LEADER PREPARATION

A leader will need to gather the equipment needed to create the shoebox projector. You'll need one set of kit for each young person taking part.



GETTING INTO THE ACTIVITY

- 1 Saw the handle off your magnifying glass. Try to do this as close to the edge of the magnifying glass as possible.
- 2 Draw a circle on one end of the shoebox, where you'll be placing the magnifying glass. You could draw around the magnifying glass to get the size correct.
- 3 Use a craft knife to cut this circle out of the shoebox. Make sure not to go any larger than the width of the magnifying glass, otherwise the projector will leak light later on. If the box is unstable after doing this, then reinforce the box with a couple of strips of thick card above and below the hole.
- 4 Cover the inside of the shoe box and lid with black paper. Stick the paper down with glue. Making the inside of the box black, will improve the performance of the projector.
- 5 Use a glue gun to stick the magnifying glass in place. This should hopefully fit tightly in the hole created earlier.
- 6 Use foam board (or strong card) to create a stand for the phone to sit on, inside the projector. To do this you'll need to cut a piece of the board, roughly the width of the shoebox. Use another piece of board to create a base. Glue these together using the glue gun.
- 7 Your projector is now ready to use. Turn up the brightness of your phone and select a video. Place the phone on the stand and close the lid. Point the projector at a white wall / surface and turn off the lights. It may be worthwhile using a Bluetooth speaker for the sound.
- 8 You may need to adjust the stand inside the box to get a clearer image. Moving the stand closer or further from the magnifying glass should help with this. You can also move the projector closer to or further from the wall.
- 9 If your image is being projected upside down, then rotate the screen to how you want it and use screen lock to fix the screen.



IDEAS TO TAKE THIS FURTHER...

Consider also painting / decorating the outside of the shoebox to make the shoebox projector look even better.



KEEPING EVERYONE SAFE

Care should be taken when using craft knives. Leaders should provide young people with safety instructions beforehand and supervision during.