

PK Kaleidoscope

What is this activity about?

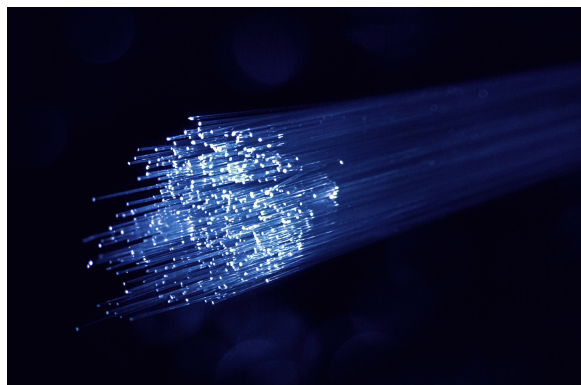
To build a simple kaleidoscope and explore colours and reflections

What you need:

- a pin
- some greaseproof paper or something similar
- kitchen foil or other shiny material
- scissors
- sellotape
- a ruler
- colouring pens or pencils
- template - print the last page of this document or draw your own



How is it linked to PK Porthcurno?



Blue and white light emerging from a bundle of optical fibres

Fast communication around the world uses fibre optic cables.

These work by reflecting light.

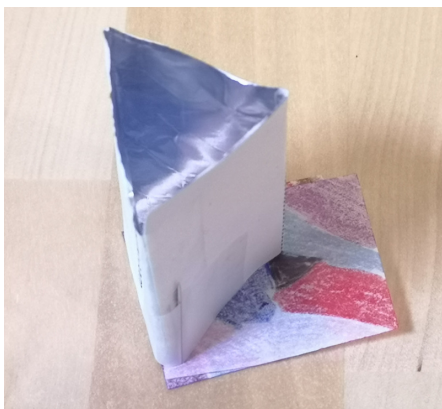
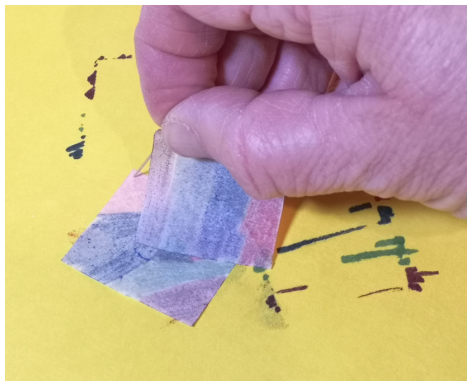
Kaleidoscopes also use reflection, and are a good way to start thinking about how light and colours behave.

What to do

- Cut out the template from this document, or copy it and make your own - it works best on card, but paper will do. If you draw your own, make sure the dotted lines make three equal size parts.
- Glue kitchen foil to the blank side and trim to fit.
- Fold along the dotted lines to make a triangle with the foil on the inside.
- Tape the edges together.
- Cut out two 2cm squares of greaseproof paper. Use coloured pens or pencils to make patterns on them.
- Poke a pin through the coloured squares and tape it to the line marked on the template.
- Look through your kaleidoscope from the opposite end to the squares.



For some stages, like gluing and colouring, it's a good idea to use some scrap paper or card to protect your work surface.



Stay safe

Make sure an adult supervises the use of scissors, glue and pin.

Do not point the kaleidoscope towards very bright lights.

Did you know?

The word kaleidoscope is built from three Greek words:

kalos - beautiful

eidos - shape, pattern

skopeo - look

so it is an instrument for looking at beautiful patterns.

Can you think of any other things with scope in their name, that help us to look at things?

Things to explore

What happens if you scrunch up your foil before using it?

Are there other shiny materials you can use for the inside of your kaleidoscope? We had a try with the mylar that is used to make emergency blankets.

What else can use use to make the coloured squares?

Connect with us

Decorate your kaleidoscopes you make, photograph the view in them, and share on our social media channels- we'd love to see them!



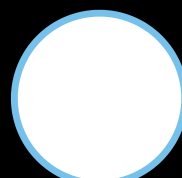
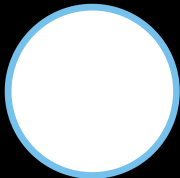
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Four Kaleidoscope templates

