

1. Fold the postcard in half and then in half again as shown.

2. Cut the plastic to the same size as the postcard.

3. Lay the plastic on top of the postcard and use a ruler to score lines on it to match the postcard folds.

4. Cut out a piece of foil the same size as the postcard.

5. Glue the foil onto the postcard.

6. Lay the plastic on the foil and fold the postcard into a triangular tube, then tape together.

7. Cut out a piece of tracing paper larger than the end of the tube.

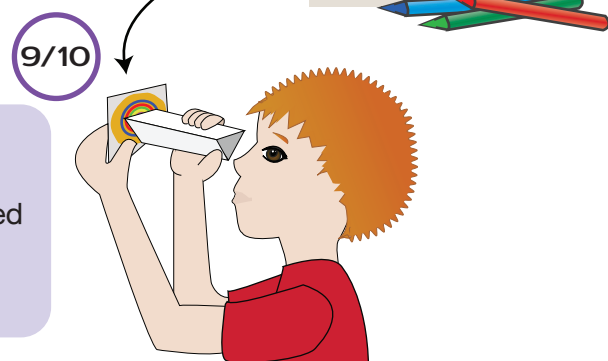
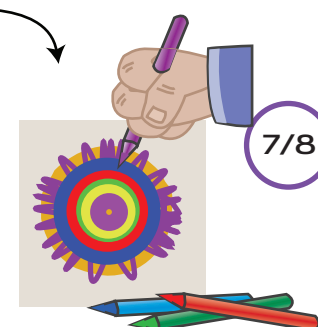
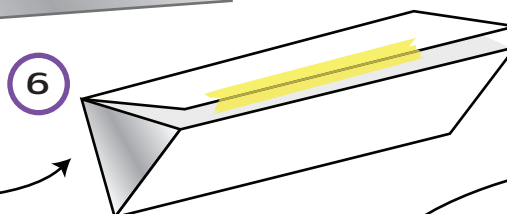
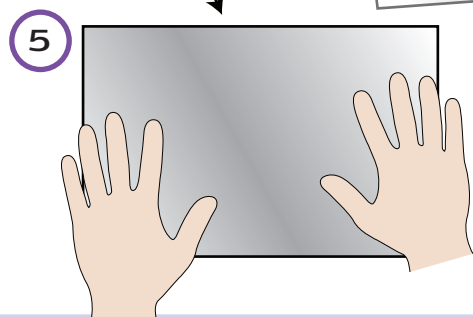
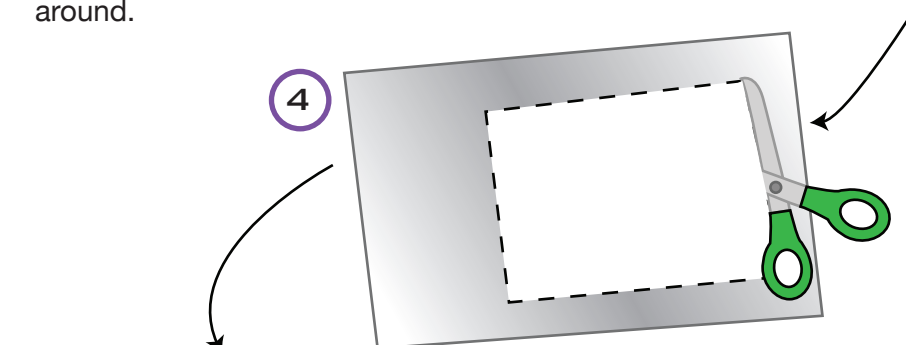
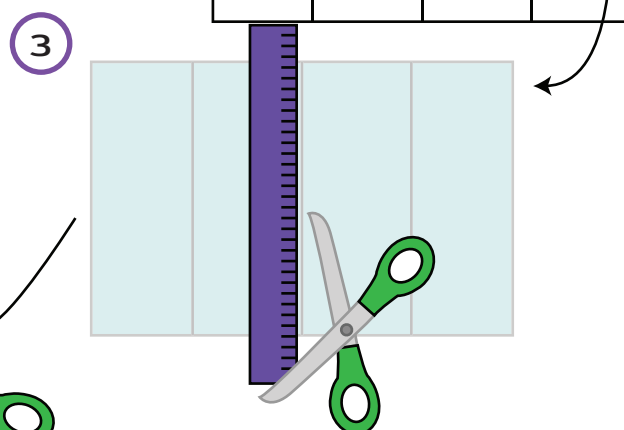
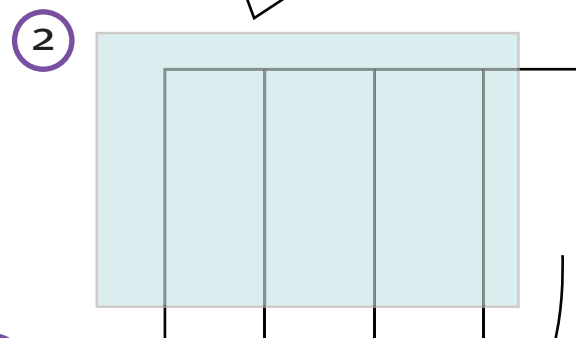
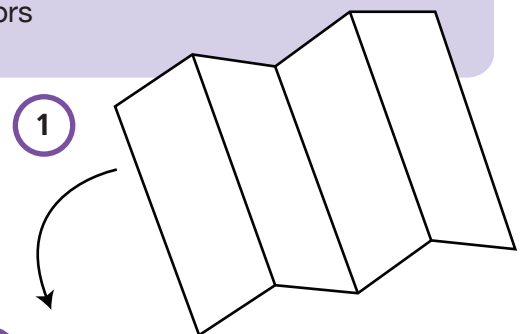
8. Draw a coloured pattern on the tracing paper.

9. Look through one end of the tube and hold the patterned tracing paper at the other.

10. Point the kaleidoscope to the light and move the paper around.

Resources (per kaleidoscope):

- Postcard
- Stiff plastic
- Foil
- Sticky tape
- Tracing paper
- Coloured pens
- Scissors
- Ruler



Explaining the Science

The foil inside the kaleidoscope acts like a mirror and reflects the light that shines through the patterned tracing paper. This reflected light then reflects from the other foiled sides of the kaleidoscope, creating interesting patterns.