

# Zedua Experiments

## **Title:** Make Your Own Kaleidoscope

What is Kaleidoscope?

A toy consisting of a tube containing mirrors and pieces of coloured glass or paper, whose reflections produce changing patterns when the tube is rotated

What is reflection of light?

Reflection is when light bounces off an object

**Challenge:** Can you make a Kaleidoscope?

## **Materials Required:**

1. 3 pieces of mirrored perspex
2. A roll of duct tape or masking tape
3. Overhead transparency paper
4. Coloured see-through plastic
5. A pencil

## **Procedure:**

1. Take 3 pieces of mirrored perspex.
2. Tape them together to form a triangle shape. Make sure there are no wrinkles and the tape is on the outside of the triangle.
3. Trace a small triangle at the end of the kaleidoscope onto the overhead transparency paper (add another 1cm all the way around the triangle to allow for folding).
4. Place the transparency paper onto the end of the kaleidoscope and cut small slits at the corners so the edges can be folded down.
5. Tape the transparency paper into place firmly.
6. Draw another triangle, making this 2cm bigger than the previous one.
7. Take different coloured see-through plastic you would like to put inside your kaleidoscope. Cut out small pieces that sits on top of the transparency paper.
8. Place the coloured plastic over the end of the kaleidoscope that has the transparency paper, and on top of that add the other (slightly

bigger) triangle transparency paper. Tape the second triangle down on top so that there is still just enough space for the plastic to move between the two transparencies.

9. When your kaleidoscope is finished feel free to design and decorate a cover using cardboard, felt pens, glitter, tubing or any other craft materials.

### **What's happening?**

The patterns inside your kaleidoscope are made by light bouncing between the mirrors on the inside this phenomenon is called reflection of light. While you look through one end, light enters through the other and reflects off the mirrors. This forms varying colours and patterns thanks to the symmetric pattern created by the well placed mirrors.



KALEIDOSCOPE  
KIDS CRAFT

DarcyAndBrian.com

Source: pintrest