

## MAKE YOUR OWN NORTHERN LIGHTS

## TWILIGHT AT HOME

When the sun's energy hits some of the chemicals in the air in the sky, it gets them really excited and they shine fluorescent light in separate, different colours. This only happens at the North and South Pole and they are called auroras. You can separate the colours from a felt tip pen to make your own auroras on paper.

### YOU WILL NEED:

- 3 x short glasses or small glass jars
- 3 x coffee filter papers or circles of paper
- 3 x different coloured non-permanent felt tip pens
- Water



1. Take one coffee filter or paper circle per pen.
2. In the centre of each paper circle, draw a thick circle using a different pen for each paper circle. If you are using a coffee filter, draw a line about 5cm from the bottom on both sides (see picture 1).
3. If you are using paper circles, fold each one into a cone shape (see picture 2).
4. Get a short glass with about 3 cm of water in it.
5. Pull apart the cone shaped paper so it balances right in the glass with the tip of the cone just touching the water. Make sure not to let the coloured circles you have drawn go in the water.

6. Let it sit and watch what happens as the water begins to be sucked up by the paper. Filter paper will be faster than ordinary paper, but you will see a change in just five minutes for both.
7. After the water has reached the outer edge of the coffee filter, take it out of the water and place it to dry.
8. Once dry you can see all the different colours separated out that made up the colour of the pen. This is called chromatography.

