

**Come back for the full festival – we've *SO MUCH MORE* to show you!**

➡ Activities + robots + mechanical dragon  
+ scientists + music + dance + food + more!



## Split a sunbeam

### How?

- 1 Take the piece of card and carefully cut a small vertical slit from the bottom up past the centre. Try and make the slit as narrow as possible.
- 2 Tape the card to the side of the glass of water. Place the whole thing on the white paper.
- 3 Position the light source so that it shines through the slit in the card into the water. The water will split the light into the colours the light contains onto the paper.

### Why?

Light is a form of energy that travels in waves. When a beam of light passes through water, the water makes the light refract (bend). The different colours in light have different wavelengths so will bend by different amounts, which makes them separate, producing a rainbow with natural light.

### ➡ **TOP TIP**

*Try different light sources (e.g. LEDs). What happens?*

### Kit list

Piece of black card  
Scissors  
Straight-sided glass filled with water  
Sticky tape  
White paper  
Sunny day (or torch)