

## Ri Off the Shelf Masterclass: Satellite Vision

### Light Spinner Instructions

You are going to make a rainbow light spinner, to demonstrate how different colour light adds together to make white light.

#### **Instructions for making a light spinner:**

*If you have been given a pre-made spinner, skip ahead to Step 9.*

**Step 1:** Cut out the two paper spinner circles using scissors, and make two holes in the middle of each, following the cutting template. You may wish to ask an adult to help you with this.

**Step 2:** If your paper spinner circles are coloured in already, skip to step 3. If your spinner templates are white, you will need to colour them in. Colour each of the six segments in a separate colour, starting with green, then light blue, dark blue, purple, red, and lastly yellow. Do this for both white paper spinner templates.

**Step 3:** You now need to get a circle of card or cardboard to stick the paper circle spinners to. If you do not have a pre-made one, use one of the paper circle spinners as a template to draw one. To do this, place the paper circle on top of some card or cardboard, take a pencil and trace around the paper circle, to form a circle on the card underneath.

**Step 4:** Cut out the card circle using scissors.

**Step 5:** Stick a paper circle spinner on to one side of the card circle, and the other paper circle spinner on to the other side of the card circle, so that the white circles in the middle of the spinner line up on either side.

**Step 6:** Using scissors or a sharp pencil, make two holes through the middle of the spinner, following the cutting template on either side of the paper spinners. You may wish to ask an adult to help you with this.

**Step 7:** Cut a length of string, approximately an arm's length (or around 60cm) long.

**Step 8:** Thread one end of the string through one of the holes, and the other end of the string through the other hole.

**Step 9:** With the spinner in the middle, in one hand hold both ends of the string, and in the other hand hold the looped string.

**Step 10:** Swing the string so that the spinner moves round in a circle motion, and after doing this a few times so the string has wound up, pull your hands apart. The spinner should spin round very fast. What can you see when it spins?