

Walking Rainbow Experiment

There are millions of colours in the world. We can mix red, blue, and yellow paint to make every colour of the rainbow. Let's experiment.

You will need:

- 6 jars, containers, or cups
- Paper towels or kitchen roll (6 sheets)
- Liquid watercolour or food colouring (red, blue, and yellow)
- Water

Step 1

Fill three of the jars with water (about three quarters full) and add a different colour to each (red, yellow, or blue).

Step 2

Place all six jars in a circle so that they alternate - a filled jar, then an empty jar.

Step 3

Let's make a prediction: what colours do you think will appear in the empty jars? Colour in the circles with your prediction.

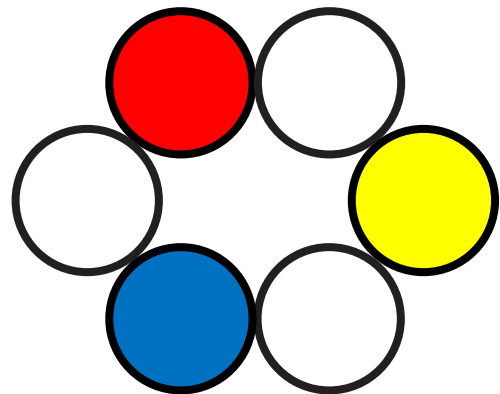
Step 4

Prepare the kitchen towels. Fold each towel in half and in half again. You then need to put one end of the towel into a jar filled with water and one end into an empty jar. Each jar should have two towel ends in.

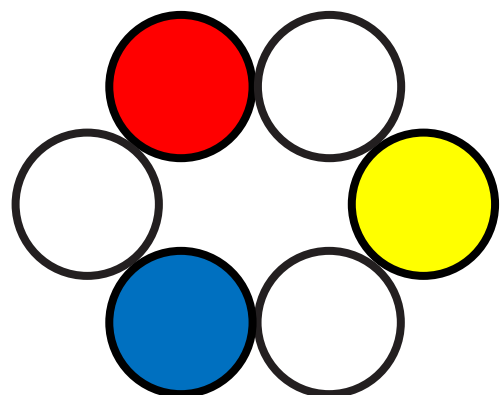
Step 5

Watch closely to see the coloured water being absorbed by the kitchen roll. The coloured water will start to travel up the kitchen roll and after a while you should see the colours mixing in the empty jars.

Prediction



Result



Mixing Light

It's a little bit different when we are mixing light. Light that comes from the sun or from other sources such as lightbulbs is called white light. White light is made up of lots of different colours.

Let's try splitting up the light

You will need:

- A torch
- A CD
- A blank wall or piece of paper

Shine the torch onto the shiny side of the CD and reflect the light onto your wall or paper. What colours can you see? Does the pattern change if we change the angle of the CD?

Why not try painting the patterns you can see?

Mixing light

You will need:

- A torch
- Plastic recycling- fruit containers or bottle are perfect
- Red, green and blue Sharpies (or other permanent markers)
- Blue Tac or Playdoh

Step 1

Cut out three rectangles of plastic recycling and colour each one red, green or blue

Step 2

Shine your torch onto a wall or piece of paper. You may need to close the curtains to make it easier to see the colours. Hold different coloured plastics in front of the light or use Blue Tac or Playdoh to hold them up.

What colours can you make?

Try shining different coloured lights together to see what happens.