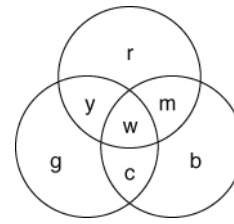


**Introduction**

All colours can be made from the three primary colours red, green and blue. We see white light when our eyes detect all three primary colours together. Secondary colours are made when primary colours mix. Use this idea to investigate what happens when you add different colours to a circle of card and then spin it.



- r = red
- y = yellow
- g = green
- c = cyan
- b = blue
- m = magenta
- w = white

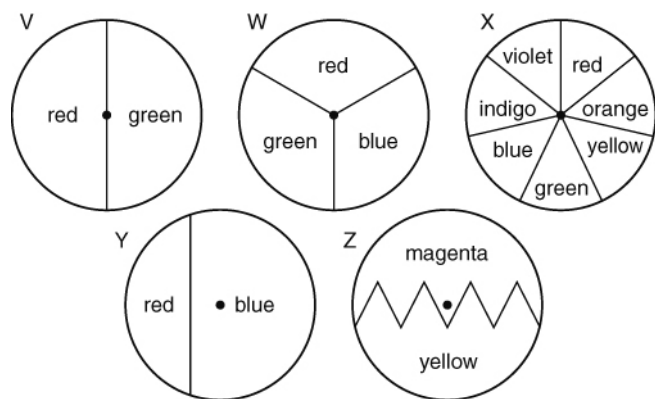
**Prediction**

- 1 Which mixture of colours do you think will look nearest to white when spun? Explain your answer.
- 2 Look at the patterns below and predict what you will see when you spin each one. You could describe your predictions in words or sketches.

**Method**

**Apparatus**

- compass
- pencil
- scissors
- coloured pens or pencils
- card cut into circles
- a pencil or small motor to spin the circles



- A Colour in the circles as shown above.
- B Connect the circles to a motor or spin them by hand.

**Recording your results**

- 3 Put your results in a neat table.

**Considering your results/conclusions**

- 4 Did you produce white from several colours? Which colour combinations made white?
- 5 Did you produce any secondary colours from primary colours? If so, which colours?
- 6 Did you produce any primary colours from secondary colours? If so, which ones?
- 7 Did you notice a particular pattern from your designs when they were spinning? Was this what you expected to find?

**Further work**

- 8 If you have time, make a pattern of your own and predict what will happen before you spin it.

**I can...**

- carry out an investigation
- record my results
- draw conclusions and use them to make predictions.