



Square spinner

This task is about investigating probability with a spinner.

Practical task: How to make a spinner

- Carefully cut out the arrow, washer, and base from the card.
- Make a hole through the centre of the arrow, shown by the , using a hole-punch.



- Make a hole through the centre of the washer, shown by the , using a hole-punch.



- Bend open one end of a paper clip so that it looks like this:

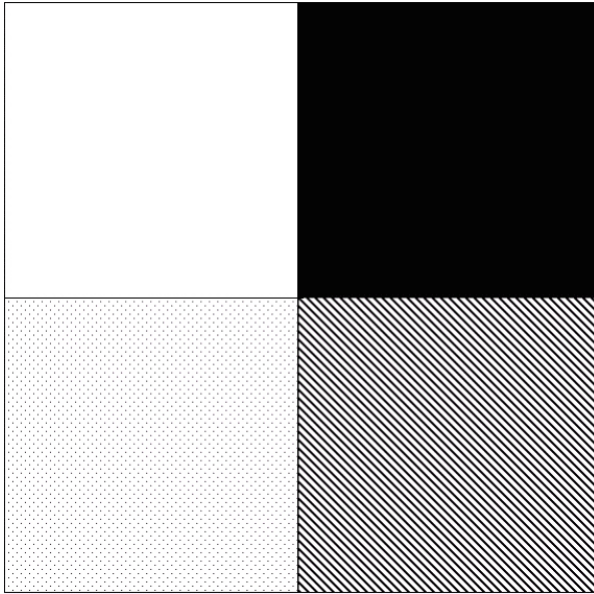


- Push the unfolded end of the paper clip through the base at its centre. Thread the washer and then the arrow onto the paper clip.
- Now fold the sharp end of the paper clip over so that the arrow will not fall off.
- Make sure the folded over end of the paper clip does not touch the arrow.



- Tape the flat part of the paper clip onto the underside of the base of the spinner to hold it in place.

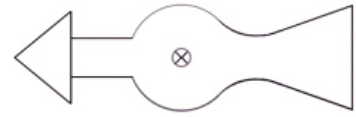
Base



Washer



Arrow



Practical Task

a) When you have made your spinner answer the following questions.

i) If the arrow on the spinner was spun 80 times, how many times would you expect it to point to the black area when it stops? (*Circle one*)

- (A) 0-9 (B) 10-30 (C) 31-50 (D) 51-70 (E) 71-80

ii) Explain why you would predict this.

b) Carry out an investigation to test your prediction.

- Draw a table in the box below so you can record your results in an organised way.
- Give your table headings to show the results you are recording.

c) Now use the spinner to test your prediction. Record your results in your table.