

RAINBOW SPINNER

MATHS: STRANDS AND STRAND UNITS

Number:	<i>operations</i>
Shape and Space:	<i>2D space, Lines and Angles</i>
Measures:	<i>Length, area, measure and construct angles in degrees</i>
Data:	<i>Record data in tables and charts</i>

1) Shape

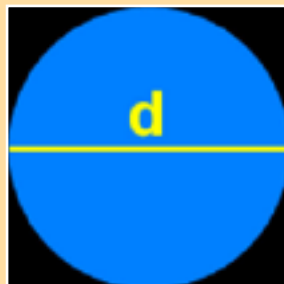
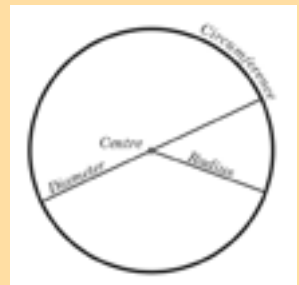
What is the shape of a rainbow?



2) Diameter

What is the diameter of the circle which you drew to make the rainbow spinner?

(You can use a ruler. Do you need to know where the centre of the circle is?)



3) Radius

What is the radius of your circle?

(You can measure from the centre to the edge of the circle or you can divide the diameter by 2)



4) Circumference and Arc

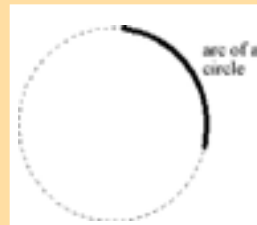
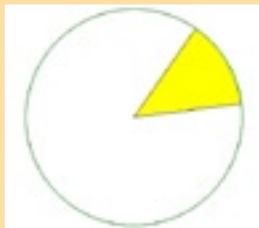
(a) What is the circumference of the circle?

(This is the distance around the edge. You can do this with a piece of string and then lay the string beside a ruler)

RAINBOW SPINNER

5) Area

- (a) What is the area of the circle? (You can do this on squared paper)
- (b) What is the area of the yellow part of the spinner (i.e. one sector)?
(You can do this using squared paper, or by using your answer from (a))



6) Circumference and Area – is there a Connection?

Make a chart like this and record measurements from different spinners:

Diameter	Circumference	About how many times is circumference greater than diameter?

Did you notice anything?

(The circumference of any circle is always a little over 3 times its diameter. It is actually 3.14 times its diameter. This 3.14 is called π (pronounced 'pi'). It is a letter from an alphabet from a European country. Do you know which one? (Greece))

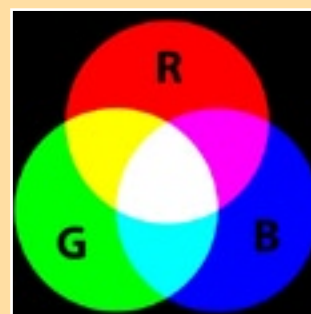
7) Angles

The three primary colours of light are Red, Green and Blue.

Take a new piece of circular cardboard and, using a protractor, divide it into three equal segments (what size and kind of angles are these – Acute? Obtuse? Right angles?).

Now colour them in – red, green and blue - and spin it as before. What do you see?

What do you think is meant by these three colours being called 'primary'?
(When combined they make white light)



8) Colour Puzzle

If all odd numbers are red and all even numbers are green, what colour is: an odd number + an even number?
(Answer: red)

ODD	EVEN
1	0
3	2
5	4
7	6
9	8