

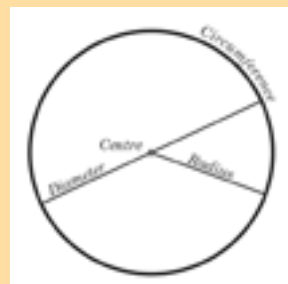
# RAINBOW SPINNER

## MATHS: STRANDS AND STRAND UNITS

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

### 1) Shape

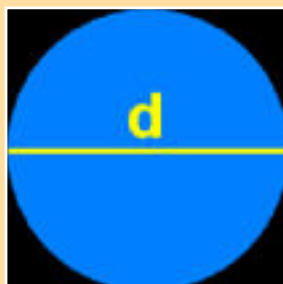
What is the shape of a rainbow?



### 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

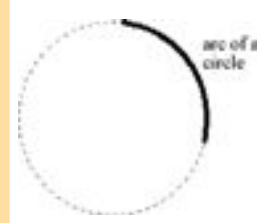
(a) What is the circumference of the circle?

*(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  $\pi$  (pronounced 'pi'). It is a letter from an alphabet from a European country. Do you know which one? (Greece))

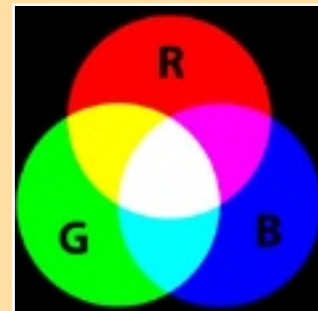
## 7) Angles

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