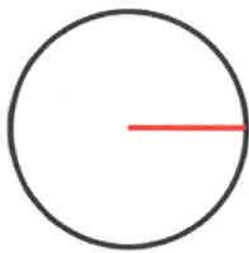


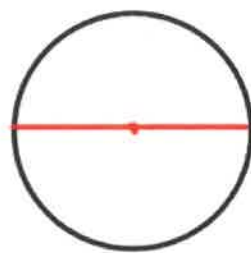
Name: _____

This is your maths pack for the next week. I have put together a help sheet so that you should be able to complete the work. If you have any problems please call the school, leave a message for me and I will call you and try to guide you through. Michelle

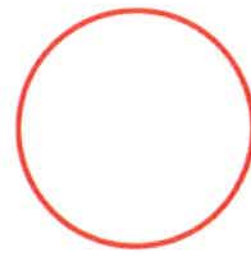
Parts of a Circle



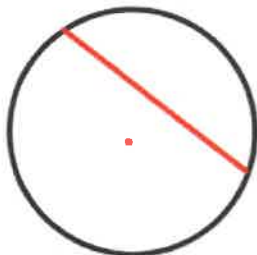
Radius



Diameter



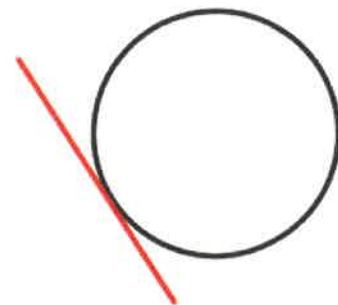
Circumference



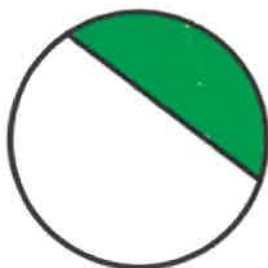
Chord



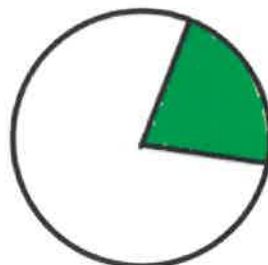
Arc



Tangent



Segment



Sector

Remember the diameter is all the way across a circle from the centre and the radius is from the centre to the edge.

The diameter is 2 x the radius.

The radius is $\frac{1}{2}$ of the diameter.

π has a value of 3.14

Finding the circumference of a circle:

The formula for this is

Circumference = πd (this means π multiplied by the diameter of the circle)

So the calculation of the circumference of a circle with a diameter of 6cm would be: $\pi \times 6 = 3.14 \times 6 = 18.84\text{cm}$

I only expect you to go to 1 or 2 decimal places so use your knowledge of rounding rules please.

Finding the area of a circle:

The formula for this is

Area = πr^2 (this means π multiplied by the radius then again multiplied by the radius of the circle)

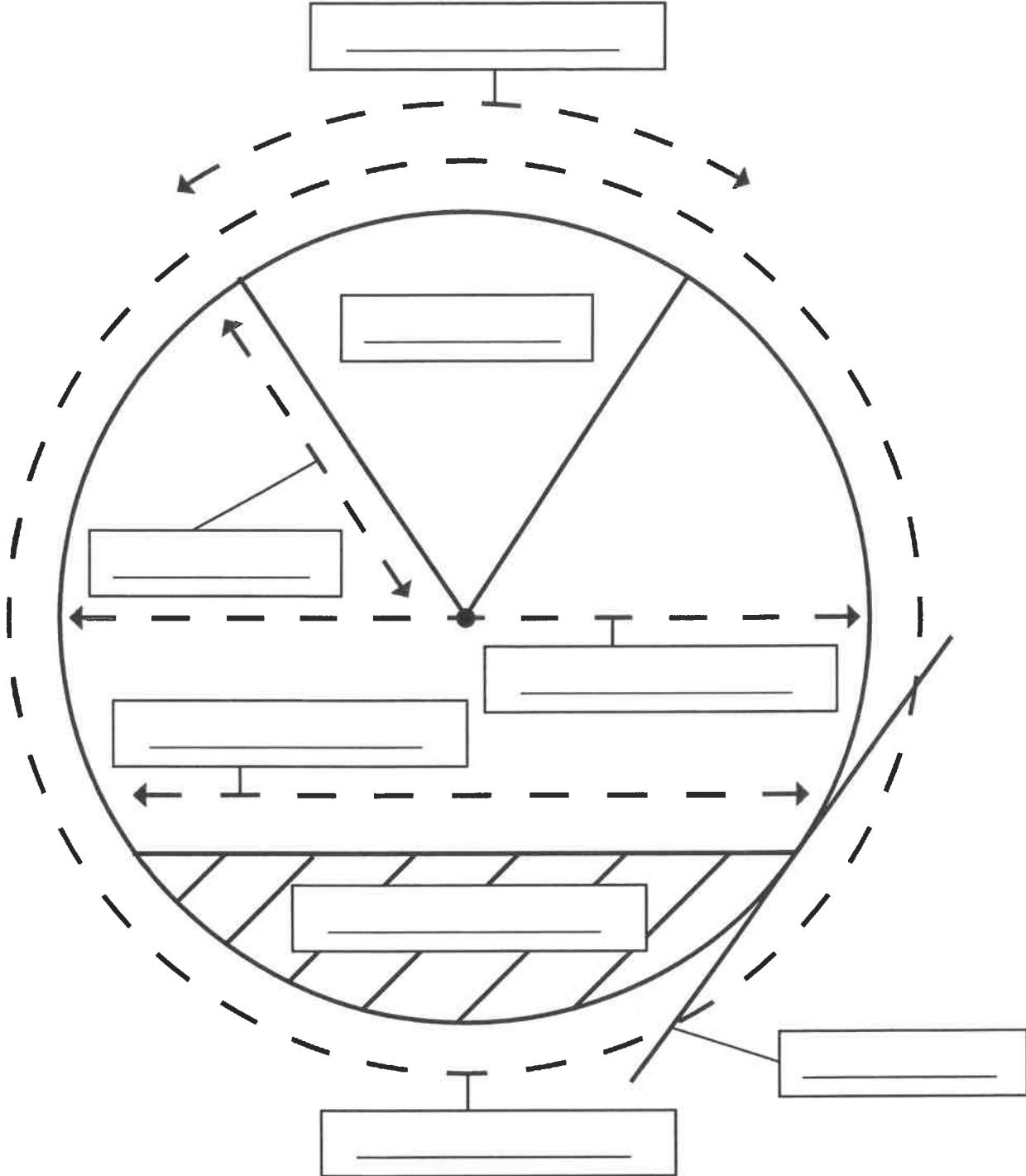
So the calculation of the area of a circle with a radius of 3cm would be:

$$\pi \times 3 \times 3 = 3.14 \times 3 \times 3 = 28.26\text{cm}$$

I only expect you to go to 1 or 2 decimal places so use your knowledge of rounding rules please.

Parts of a Circle

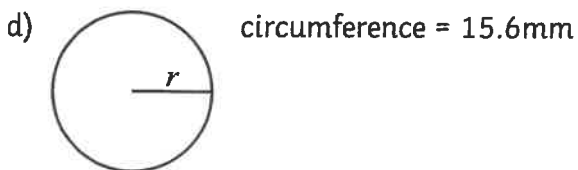
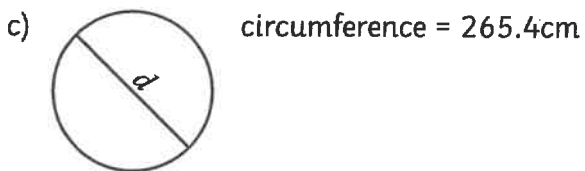
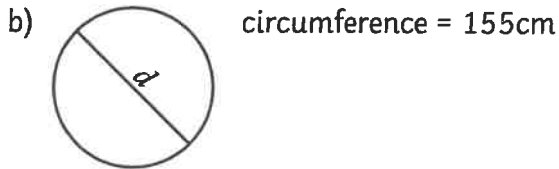
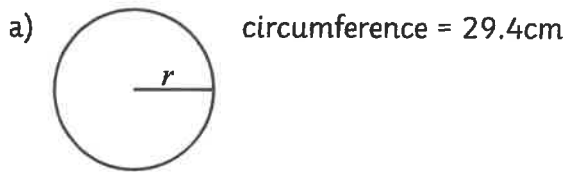
Label the circle below.



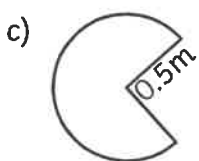
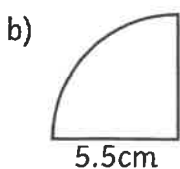
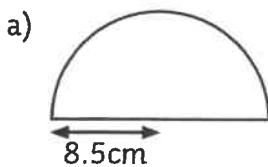
circumference	radius	diameter	arc
sector	chord	segment	tangent

Circles Circumference

1. Calculate the length of the diameter or radius of each circle, rounding your answers to two significant figures.



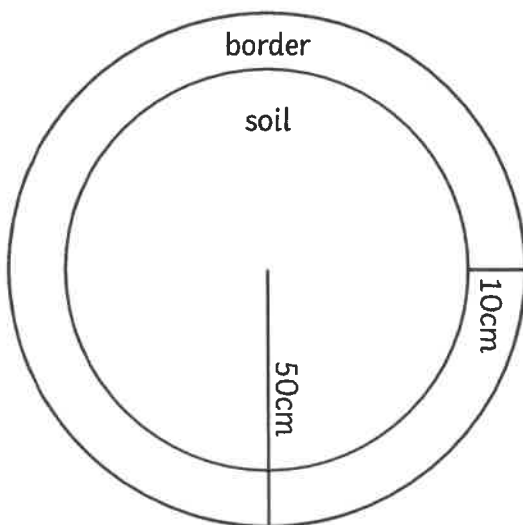
2. Calculate the perimeter of each shape, rounding your answers to one decimal place.



3. A trundle wheel is a device used to measure distance. Each revolution of the wheel measures a distance of 1m. Calculate the radius, in centimetres, of the wheel, rounding your answer to one decimal place.

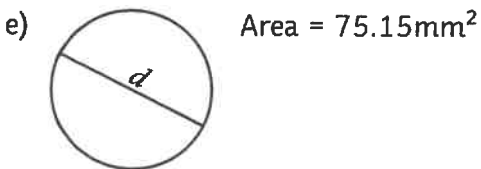
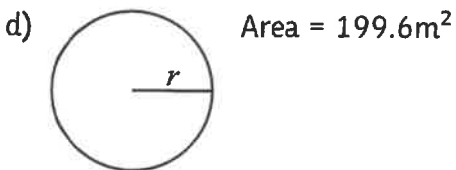
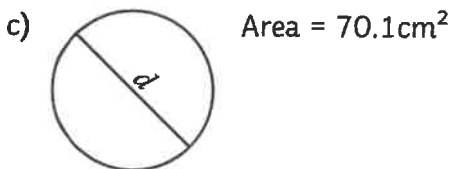
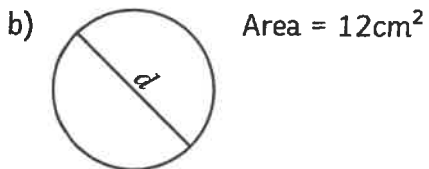
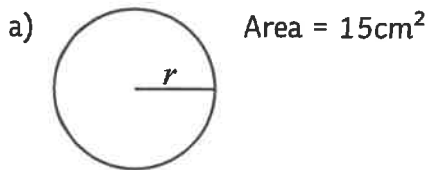
_____ cm

4. A flower bed has a circular stone border. Joanna wants to plant a daffodil bulb every 200mm along the inside edge of the border. She says she can plant 15 bulbs. Prove that she is incorrect and state the maximum number of bulbs that she can plant.

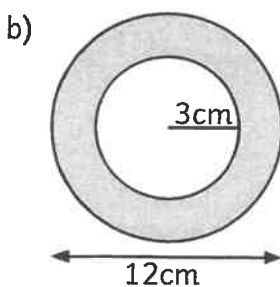
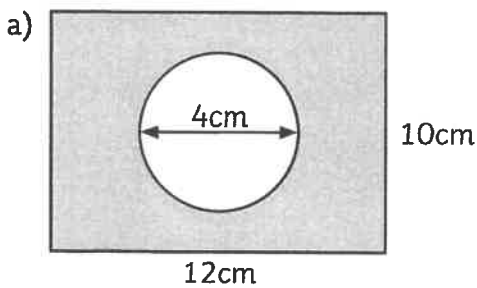


Circles Area

1. Calculate the length of the diameter or radius of each circle, rounding your answers to two significant figures.



2. Calculate the shaded area of the following shapes, rounding your answers to two decimal places.



3. A trundle wheel is a device used to measure distance. Each revolution of the wheel measures a distance of 1m. Calculate the area, in centimetres squared, of the wheel, rounding your answer to one decimal place.

_____cm

4. A 2 pence coin has a diameter of 26mm. A 5 pence coin has a radius of 0.85cm. Calculate the total area, in centimetres squared, of 19 pence using only 5 pence and 2 pence coins. (You must use more 5p coins than 2p coins.) Leave your answer in terms of π and round the coefficient of π to three significant figures.



