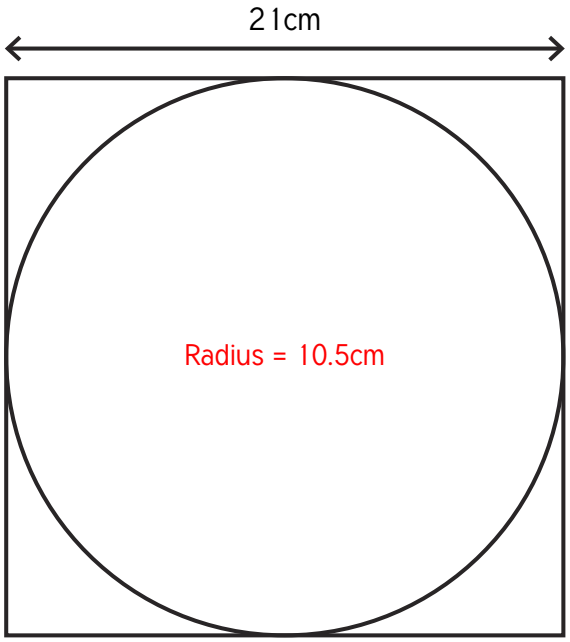
Circle Reasoning Discussion Adult Guidance

Question 1

This design is made up of a circle inside a square. Calculate the radius of the circle.



- The diameter of the circle is 21cm. Therefore, the radius can be calculated using the formula d ÷ 2 = r

  21cm ÷ 2 = 10.5cm

Question 2

The bicycle travelled from the swings to the slide turning its wheels 10 times. The circumference of the bicycle wheels is 97cm. Calculate the distance from the swings to the slide.

- The circumference of the wheel is 97cm and the wheels turned ten full revolutions. Therefore, the distance can be calculated using the formula:

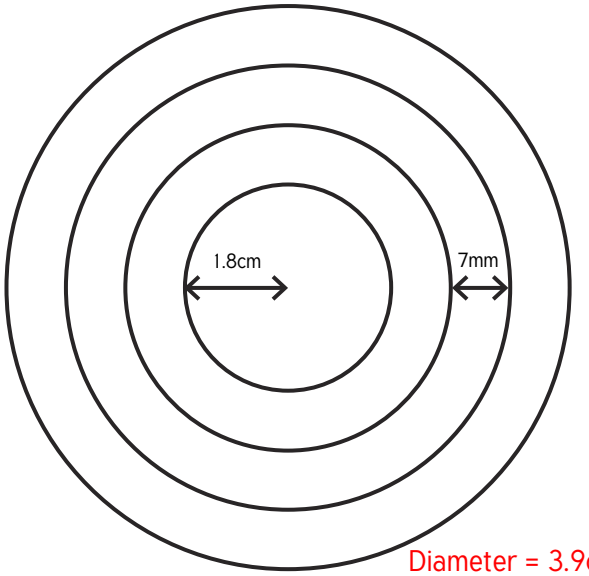
  circumference x revolutions = distance

  97cm x 10 = 970cm

  9.7m

Question 3

Here are 4 concentric circles. The radius of the smallest circle is 1.8cm. The gap between the rest of the circles is always 7mm. Calculate the diameter of the largest circle.



- The distance from the middle of the diagram to the edge of the largest circle is:

  1.8cm + (7mm x 3)

  1.8cm + 2.1cm = 3.9cm or 39mm