## Radius and Diameter

## Radius $\times 2=$ Diameter

The diameter of a circle is a line that runs through the centre of the circle from one side to the other.

## Diameter $\div 2=$ Radius

The radius of a circle is a line that runs from the centre of the circle to the edge.
$\square$
Do these pictures show the radius of a circle? Explain your answer.

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$\qquad$
$\qquad$
$\qquad$
$\qquad$
2.

Do these pictures show the diameter of a circle? Explain your answer.

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
3.

Does this picture show the diameter of a circle? Explain your answer.

4.

Complete the following sentences.
The $\qquad$ of a circle is a $\qquad$ that runs from the $\qquad$ to the $\qquad$ _.

The $\qquad$ of a circle is a line that runs from one $\qquad$ to the other,
$\qquad$ the centre of the circle.
5.

Look at these two pictures of the radius and diameter of a circle and then complete the following sentences.


The radius is $\qquad$ the length of the diameter. The diameter is $\qquad$ the length of the radius.
6.

Work out the diameter of each circle. Circles are not drawn to scale.

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$\qquad$
7.

Work out the radius of each circle. Circles are not drawn to scale.

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$\qquad$

| 8. | \begin{tabular}{\|l}
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\end{tabular} |
| :--- | :--- |
| Your bicycle wheel has a radius of <br> 30 cm . What is the diameter? | Your pizza has a diameter of 45 cm. <br> What is the radius? |

## Radius and Diameter Answers

1. 

Do these pictures show the radius of a circle? Explain your answer.


Yes because each diagram shows a line running from the centre of the circle to the edge.
2.

Do these pictures show the diameter of a circle? Explain your answer.


Yes because each diagram shows a line running through the centre of the circle from one side to the other.

## 3.

Does this picture show the diameter of a circle? Explain your answer.


## No because the line does not pass through the centre of the circle.

4. 

Complete the following sentences.
The radius of a circle is a line that runs from the centre to the edge.
The diameter of a circle is a line that runs from one side to the other, through the centre of the circle.
5.

Look at these two pictures of the radius and diameter of a circle and then complete the following sentences.


The radius is half the length of the diameter.

The diameter is twice the length of the radius.
6.

Work out the diameter of each circle. Circles are not drawn to scale.


6 cm


22 cm


14 cm


9 cm
7.

Work out the radius of each circle. Circles are not drawn to scale.

10 cm

6.5 cm

16.5 cm

12.1 cm

| 8. |
| :--- |
| Your bicycle wheel has a radius of <br> 30 cm . What is the diameter? <br> 60 cm |


| 9. |
| :--- |
| Your pizza has a diameter of 45 cm. |
| What is the radius? |
| $\mathbf{2 2 . 5} \mathbf{c m}$ |

