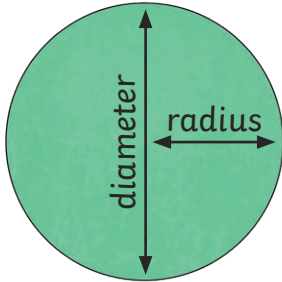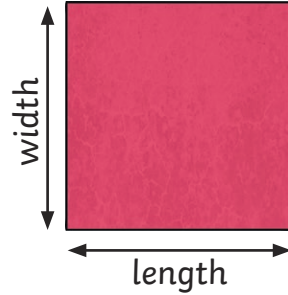# Extra Challenge

I can use simple formulae for calculating the area and perimeter of shapes.

Use the formulae to calculate the dimensions of the pizza boxes and pizzas:

radius × 2 = diameter	length × width = area of square

The area of a square pizza box is 144cm². What will be the diameter of the pizza that fits perfectly inside the box?

What will the radius of the pizza be?

The area of a square pizza box is 400cm². What will be the diameter of the pizza that fits perfectly inside the box?

What will the radius be?

The radius of a pizza is 8cm. What is the diameter of the pizza?

What will be the area of the box that this pizza fits perfectly inside?

The radius of a pizza is 12.5cm. What is the diameter of the pizza?

What will be the area of the box that this pizza fits perfectly inside?

Extra Challenge **Answers**

The area of a square pizza box is 144cm². What will be the diameter of the pizza that fits perfectly inside the box?

12cm × 12cm = 144cm²

Diameter of pizza = 12cm

What will the radius of the pizza be?

12cm ÷ 2 = 6cm

Radius of pizza = 6cm

The area of a square pizza box is 400cm². What will be the diameter of the pizza that fits perfectly inside the box?

20cm × 20cm = 400cm²

Diameter of pizza = 20cm

What will the radius be?

20cm ÷ 2 = 10cm

Radius of pizza = 10cm

The radius of a pizza is 8cm. What is the diameter of the pizza?

8cm × 2 = 16cm

Diameter of pizza = 16cm

What will be the area of the box that this pizza fits perfectly inside?

16cm × 16cm = 256cm²

Area of pizza box = 256cm²

The radius of a pizza is 12.5cm. What is the diameter of the pizza?

12.5cm × 2 = 25cm

Diameter of pizza = 25cm

What will be the area of the box that this pizza fits perfectly inside?

25cm × 25cm = 625cm²

Area of pizza box = 625cm²

twinkl *planit*

visit twinkl.com

Maths I Y6 I Algebra I Use Simple Formulae I Lesson 2 of 4: Shape Formulae

twinkl
Quality Standard
Approved