

Canonbury Home Learning

Year 6 Maths

Developing activity

Lesson 1

LO: TBAT calculate the area of a shape.

Success Criteria:

- | |
|---|
| 1. Count the squares in the shape to give you the area. |
| 2. Multiply the length and width together to find the area. |
| 3. Remember area is measured in cm^2 . |

Model

Try the busy things quiz <https://www.busythings.co.uk/play/>

Now you try...

Calculating perimeters - Level 2

Calculate the perimeter of these shapes.

Use the 'Clues' button if you need help.

20cm	21m	4cm	8cm	7cm	5cm
11m	20m	2cm	2m	3m	4cm
25cm	16cm	4cm	8m	2m	2m
21cm	24cm	3m	3m	2m	4cm

4cm 2m 2m
8cm 4cm 2m
7cm 8m 5cm
5cm 2m 7cm
5cm 2cm 2m
3m 2m 5cm
2m 4cm 4cm
4cm 4cm 2m
4cm 2m 4cm

Calculate the area and perimeter of each shape.

1 2 3 4

Area is the number of squares inside a shape.

Perimeter is the distance around the sides of the shape.

Finding the Area

The area:
 $10\text{cm} \times 3\text{cm} = 30\text{cm}^2$

The area:
 $7\text{cm} \times 6\text{cm} = 42\text{cm}^2$

Calculate the area and perimeter of each shape.

5 6 7

6 cm 5 cm 7 cm 6 cm 8 cm 3 cm

Think about what the factors of 12 are!

Canonbury Home Learning

Year 6 Maths

Expected/ Greater depth activity

Lesson 1

LO: TBAT solve problems including finding the area of a shape.

Task:

You are going apply your knowledge to solve several problems including area.

Success Criteria:

1. Identify the measurements given.
2. Convert any measurements if needed.
3. Find the area of the shape area = length x width.
4. For some questions you may have to compare between 2 measurements using one of the 4 operations (+, -, x or ÷)

Recap:

Finding the Area

You can calculate the area of shapes made up of rectangles by breaking them down into individual rectangles.

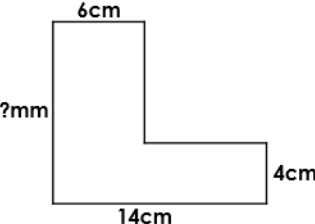
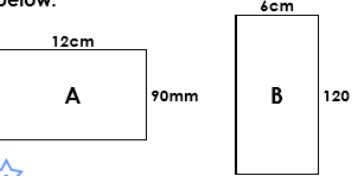
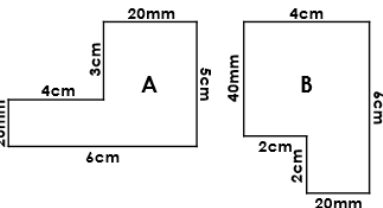
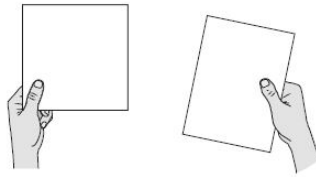
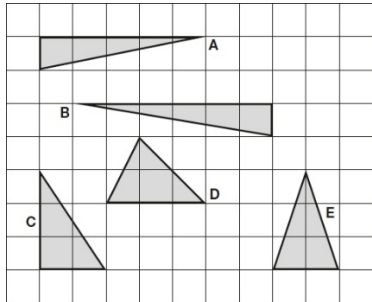
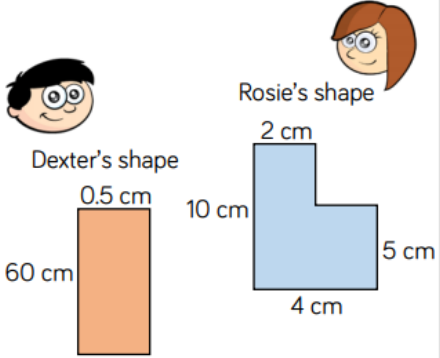
The area:
 $10\text{cm} \times 3\text{cm} = 30\text{m}^2$
 $6\text{cm} \times 7\text{cm} = 42\text{cm}^2$
 $30\text{cm}^2 + 42\text{cm}^2 = 72\text{cm}^2$

twinkl visit twinkl.com

Year 6 Maths

Main activity

Complete at least 2 columns, more if you can!

Task 1	Task 2	Task 3	Task 4
<p>Practice</p> <p>5a. The area of this shape is 92cm^2. Work out the missing length.</p>  <p>6a. Solve the word problem below.</p> <p>A garden measures 15ft by 24ft. What is the area of the garden?</p> <p>Use the formula $a = w \times l$ to write your answer.</p> <p>7a. Using the correct formulae, calculate the area and the perimeter of the shape below.</p>  <p>8a. Which shape has an area and a perimeter that equal the same number?</p> 	<p>Arithmetic</p> <p>1 $894 - 1 =$</p> <hr/> <p>2 $27 \times 0 =$</p> <hr/> <p>3 $25 \times 1 =$</p> <hr/> <p>4 $469 - 100 =$</p> <hr/> <p>5 $56 \div 8 =$</p> <hr/> <p>6 $\frac{1}{6}$ of $24 =$</p> <hr/> <p>7 $53\ 689 + 8014 =$</p>	<p>Problem Solving</p> <p>Task 1</p>  <p>A square tile measures 20 cm by 20 cm. A rectangular tile is 3 cm longer and 2 cm narrower than the square tile. What is the difference in area between the two tiles?</p> <p>Task 2</p> <p>Here are five triangles on a square grid.</p>  <p>Four of the triangles have the same area.</p> <p>Which triangle has a different area?</p>	<p>Reasoning</p> <p>Task 1</p> <p>Rosie and Dexter are drawing shapes with an area of 30cm^2</p>  <p>Who is correct? Explain your reasoning.</p> <p>Task 2</p> <p>Three children are given the same rectilinear shape to draw.</p> <p>Amir says, "The smallest length is 2 cm." Alex says, "The area is less than 30cm^2." Annie says, "The perimeter is 22 cm."</p> <p>What could the shape be? How many possibilities can you find?</p>

Task 3

The area of a rugby pitch is 6,108 square metres.

A football pitch measures 112 metres long and 82 metres wide.

How much larger is the area of the football pitch than the area of the rugby pitch?

Task 3

Always, Sometimes, Never?

If the area of a rectangle is odd then all of the lengths are odd.