Canonbury Home Learning

Year 6 Maths

Developing activity

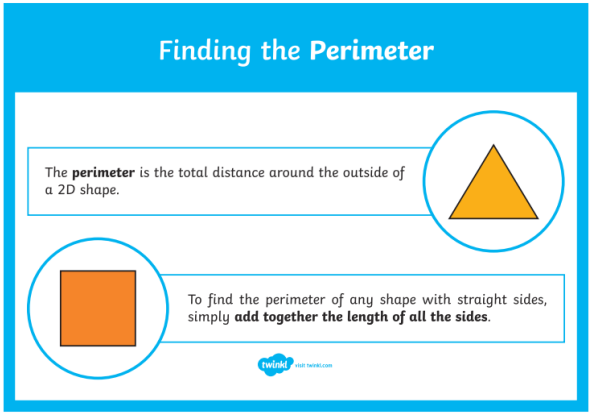
Lesson 2

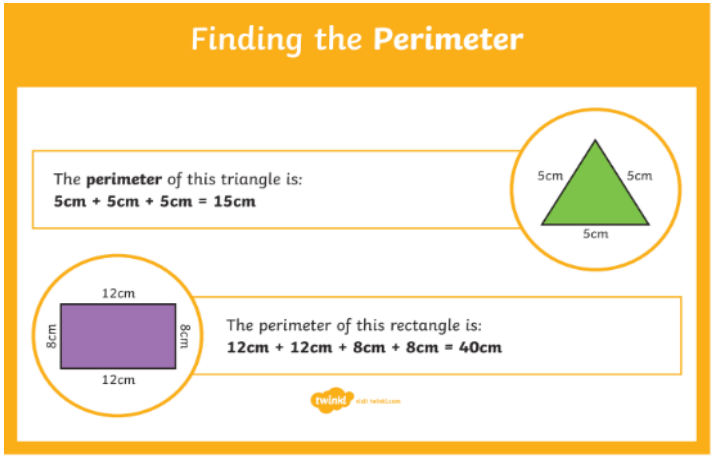
LO: TBAT calculate the perimeter of a shape.

Success Criteria:

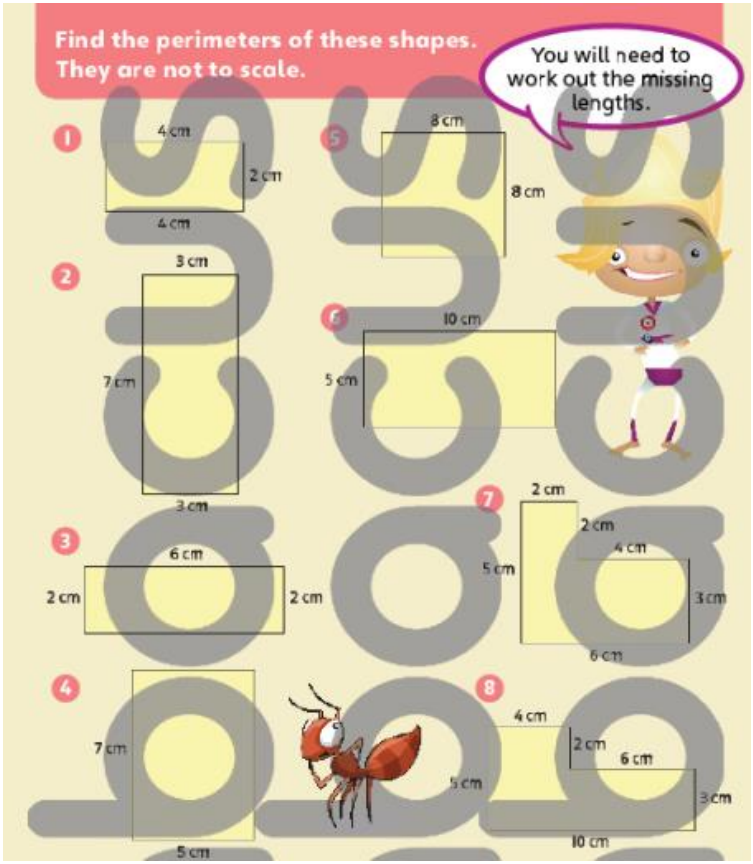
1. **The perimeter is the outside space of a shape.**
2. **Add the lengths and widths together.**
3. **Remember rectangles opposite sides are the same length and squares have lengths and widths that are the same size.**

Model





Now you try…



Canonbury Home Learning

Year 6 Maths

Expected/ Greater depth activity

Lesson 1

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

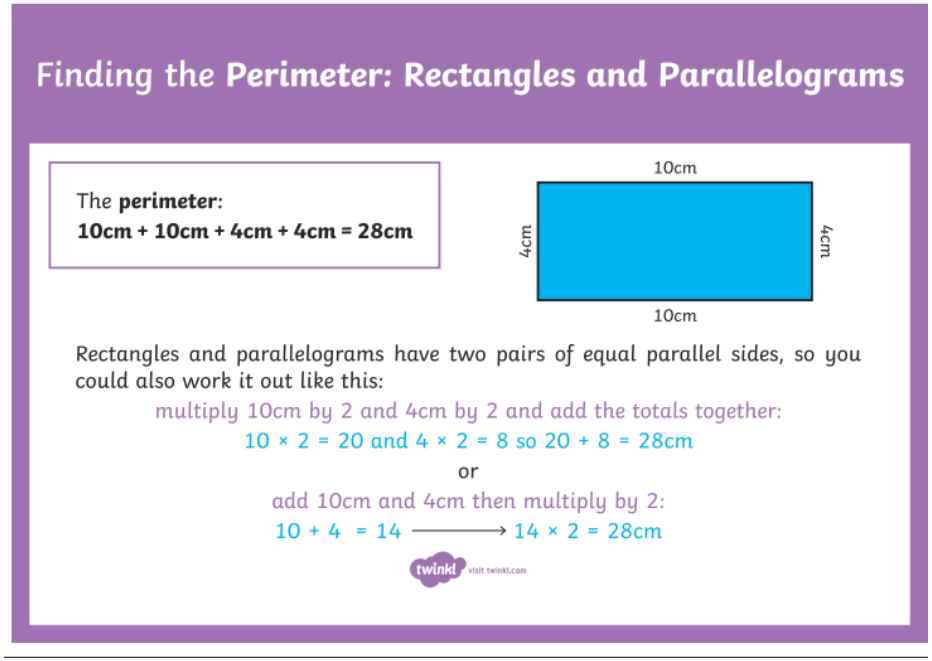
Task:

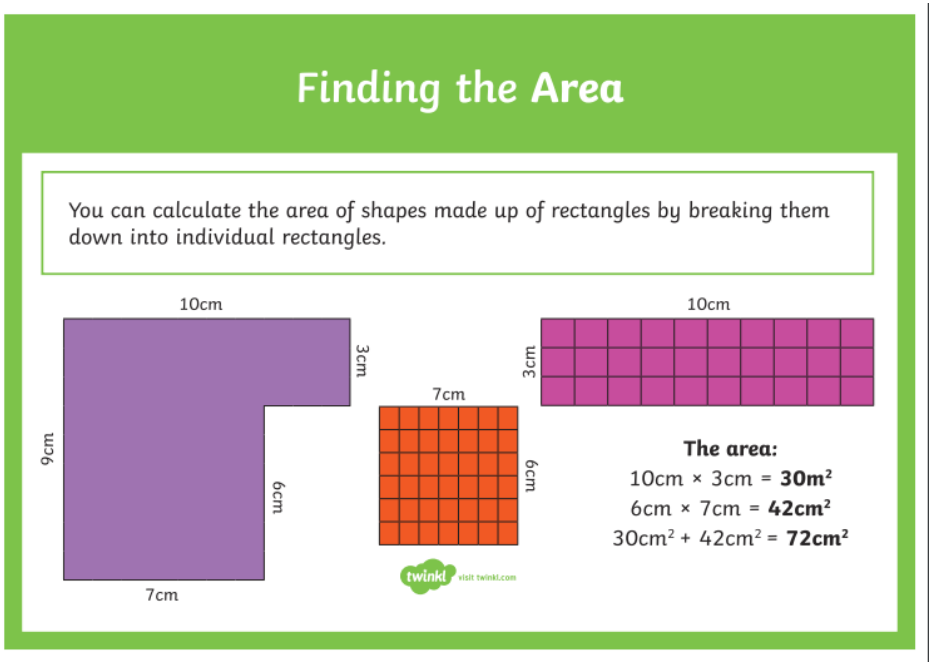
You are going apply your knowledge to solve several problems including area.

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:





Canonbury Home Learning

Year 6 Maths

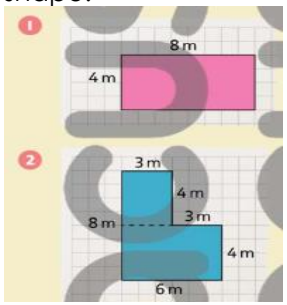
Main activity

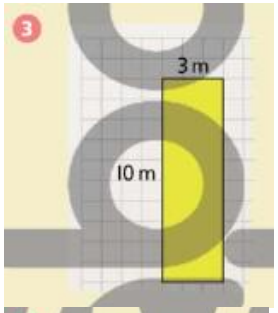
Complete at least 2 columns, more if you can!

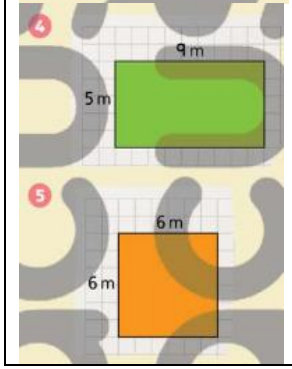
Task 1

Practice

Calculate the area and perimeter of each shape.







Task 2

Arithmetic

8 $6 \times 5 \times 4 =$

9 $2\frac{1}{5} \div 3\frac{2}{5} =$

10 $2468 + 92 + 276 =$

11 $0.47 = \frac{?}{100}$

12 $5494 - 2516$

13 $20.61 \times 10 =$

14 $5\overline{)248} =$

Task 3

Problem Solving

Task 1

These two shapes have the **same** perimeter.

regular hexagon square

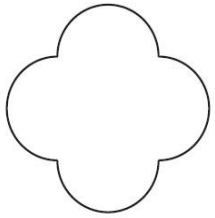
Not actual size

The length of each side of the **hexagon** is **8** centimetres.

Calculate the **area** of the **square**

Task 2

This shape is made out of four identical curves.



Not actual size

The perimeter of the shape is 28 centimetres.

A new shape is made out of curves of the same size.

Task 4

Reasoning

Task 1

True or false?

Two rectangles with the same perimeter can have different areas.

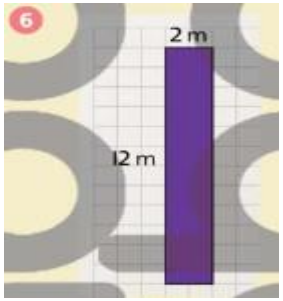
Explain your answer.

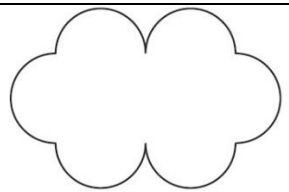
Task 2

A farmer has 60 metres of perimeter fencing.

For every 1 m² he can keep 1 chicken.

How can he arrange his fence so that the enclosed area gives him the greatest area?





What is the perimeter of the new shape?

Task 3

The following quadrilaterals all have a **perimeter of 36 cm**.

Here is a table to show the length of each side.
Complete the table.

One quadrilateral is done for you.

	Side lengths			
square	9 cm	9 cm	9cm	9 cm
rectangle	3 cm			
rhombus	9 cm			
kite	10 cm			

Task 3

Tommy has a 8 cm × 2 cm rectangle. He increases the length and width by 1 cm.

Length	Width	Area
8	2	
9	3	

He repeats with a 4 cm × 6 cm rectangle.

Length	Width	Area
4	6	

What do you notice happens to the areas?

Can you find any other examples that follow this pattern?

Are there any examples that do not follow the pattern?