



# AREA & PERIMETER

**L.1. To measure the perimeter of simple 2-D shapes (y3) To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres(y4)**

## Definition/Support

**Perimeter** The **perimeter** is the distance all the way around the **outside** of a 2D shape.\*\*

To work out the perimeter, add up the lengths of all the sides.

Useful video:

<https://www.bbc.co.uk/bitesize/topics/zvmxsbk/articles/zsr4k7h>

**Area** To work out the area of a square or rectangle, multiply its height by its width. If the height and width are in cm, the area is shown in  $\text{cm}^2$ . If the height and width are in m, the area is shown in  $\text{m}^2$ .

A square with sides of 5 m has an area of  $25 \text{ m}^2$ , because  $5 \times 5 = 25$ .

Useful video:

<https://www.bbc.co.uk/bitesize/topics/zjbg87h/articles/zwqt6fr>

**Main activities:** Complete the worksheet, finding the perimeter of the different rooms in Prospero's House, record your answers on the separate answer sheet. Remember to show your calculations (your workings out!).

## Challenges:

Once you've completed the worksheets, try and complete both the challenges below.

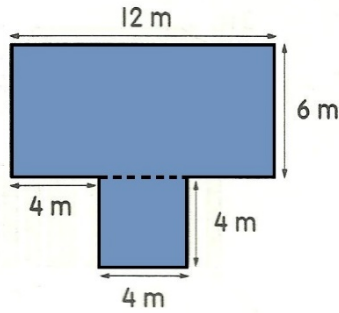
**Prospero's library, where he practices magic, has 5 sides. 4 of the sides are: 2m, 4m, 2.5m and 5m. The perimeter is 16m.**

- What is the missing length?
- What is the area of the shape?

For each room in the house, using the measurements given, find the perimeter and the area.



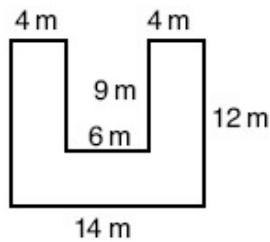
**Bedroom:**



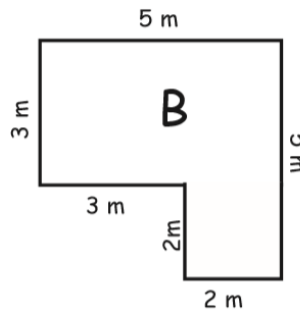
The room is 3m by 4m. Using a ruler draw the room. 1m = 1cm.



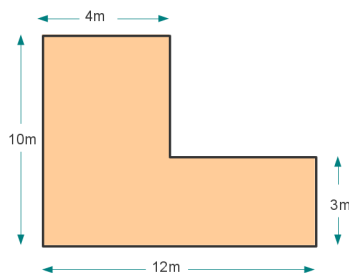
**Entrance way:**



**Swimming Pool:**



**Kitchen**



Show your working out and your final answers on the tables below

**Room**

**Workings out/Calculations**

**AREA**

**1. Bedroom:**

**2. Entrance Way**

**3. Kitchen**

**4. Hallway**

**5. Swimming Pool**

**Room**

**Workings out/Calculations**

**PERIMETER**

1. Bedroom:

2. Entrance Way

3. Kitchen

4. Hallway

5. Swimming Pool