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 cm². If the height and width are in m, the area is shown in m².
A square with sides of 5 m has an area of 25 m², because 5 × 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.
1. Draw the living room, which is triangular in shape. Each side measures 8m. Use a ruler, 1m = 1cm.
   Prospero’s library, where he practises his magic has an area of 12m². It could be square or rectangular. Draw all of the possibilities…
Bedroom:
Calculate the perimeter

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

Entrance way:
Calculate the perimeter

Swimming Pool:
Calculate the perimeter

- The pool is rectangular. The length is 19m and the width is 23m.

Kitchen:
Calculate the perimeter

Hallway

- The hallway is 13m long but only 2m wide. What is the area and the perimeter?
<table>
<thead>
<tr>
<th>Room</th>
<th>Workings out/Calculations</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>1. Bedroom:</td>
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<td>2. Entrance Way</td>
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<td>3. Kitchen</td>
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<td>4. Bathroom</td>
<td>Use a ruler to draw the bathroom with the correct dimensions</td>
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<td>5. Swimming Pool</td>
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<td>6. Hallway</td>
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