Answers

1. **D** – I don't agree with Marlon.

A – The perimeter of the shape is not 80cm.

B – He has miscalculated when scaling up. Using the grid, the perimeter of the shape is 22cm. With a ratio of 1:4cm this means that the actual perimeter is 88cm, not 80cm.

2. **D** – There is more than one possibility.

A – There are four possible regular shapes with a perimeter of 24cm.

B – Regular shapes mean that every side length is equal so it could be a 24 sided shape with 1cm sides, a dodecagon with 2cm sides, an octagon with 3cm sides or a hexagon with 4cm sides.

3. Each side length of the larger square is 5cm. Therefore the smaller squares which fit inside must have a side length of 2.5cm. Using this information children should calculate the perimeter: 5 + 2.5 + 2.5 + 2.5 + 2.5 + 2.5 + 2.5 + 2.5 + 2.5 + 5 + 5 + 5 + 5 = 45

4. The smaller rectangles have a width of 24cm and a length of 48cm so have a perimeter of 144cm.