Scale Drawing
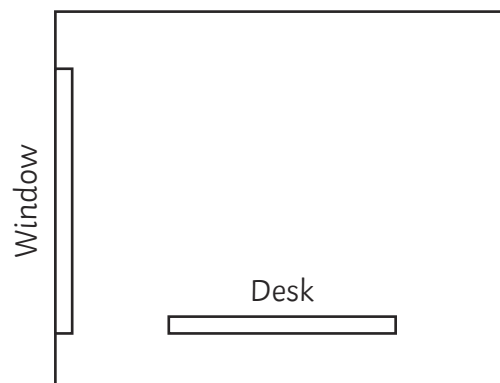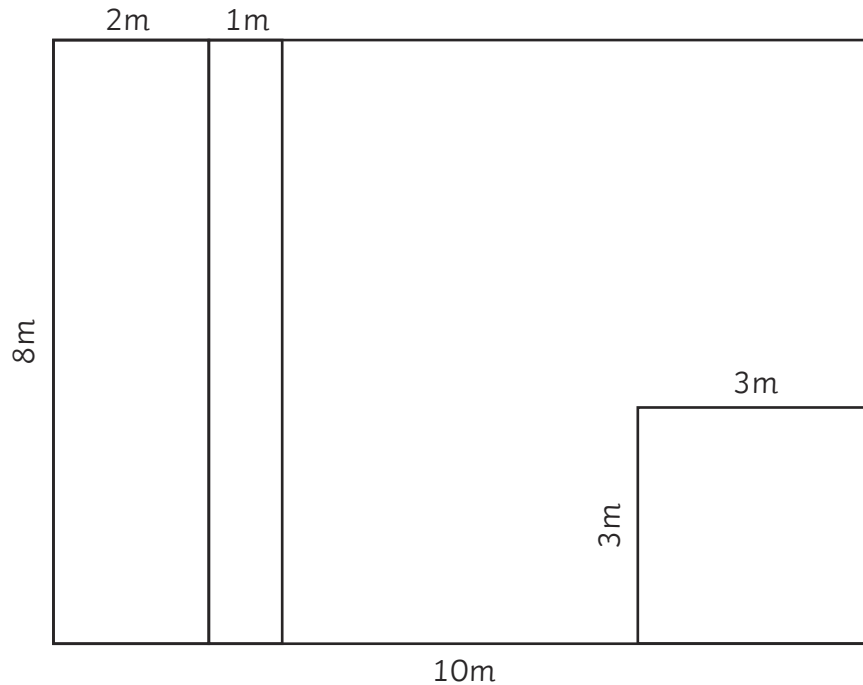
1. On a scale drawing, 1cm represents 2m in real life. Calculate the real life measurement if the drawing is:

   a) 2cm

   b) 7cm

   c) 15cm

   d) 3.5cm

2. On a scale drawing, 1cm represents 2km in real life. Calculate the size of the drawing if the real-life measurement is:

   a) 10km

   b) 180km

   c) 15km

   d) 7.5km

3. Find the missing lengths in the table, specifying the units.

	Scale	Actual Length	Length on Drawing
a)	1cm to 3m	18m	
b)	1cm to 5m		12cm
c)	1cm to 8km	6km	
d)	1cm to 2.5km		4cm

4. Elliot is constructing a scale drawing of his classroom. He has chosen a scale of 1cm to 2m. Measure each line and then calculate the real-life measurements of the classroom.

5. The length of the F-22 Raptor plane is 26m. The length of its scale model is 2cm. Find the scale of the model aeroplane.

6. The diagram shows the measurements of a garden, with areas marked out for patios and decking. Using a scale of 1cm:2m, construct a scale drawing of the garden.

7. Construct a scale drawing of an area of your school. It could be your classroom, the tennis courts or the canteen. Choose a suitable scale and make sure it is displayed on the diagram.

Scale Drawing Answers

1. On a scale drawing, 1cm represents 2m in real life. Calculate the real-life measurement if the drawing is:

   a) 2cm   **2 x 2 = 4m**

   b) 7cm   **7 x 2 = 14m**

   c) 15cm   **15 x 2 = 30m**

   d) 3.5cm   **3.5 x 2 = 7m**

2. On a scale drawing, 1cm represents 2km in real-life. Calculate the size of the drawing if the real life measurement is:

   a) 10km   **10 ÷ 2 = 5cm**

   b) 180km   **180 ÷ 2 = 90cm**

   c) 15km   **15 ÷ 2 = 7.5cm**

   d) 7.5km   **7.5 ÷ 2 = 3.75cm**

3. Find the missing lengths in the table, specifying the units.

	Scale	Actual Length	Length on Drawing
a)	1cm to 3m	18m	**6cm**
b)	1cm to 5m	**60m**	12cm
c)	1cm to 8km	6km	**0.75cm**
d)	1cm to 2.5km	**10km**	4cm

4. Elliot is constructing a scale drawing of his classroom. He has chosen a scale of 1cm to 2m. Measure each line and then calculate the real-life measurements of the classroom.

   Width of classroom: 6cm = 12m

   Length of classroom: 5cm = 10m

   Length of window: 3.5cm = 7m

   Width of desk: 3cm = 6m

Maths

5. The length of the F-22 Raptor plane is 26m. The length of its scale model is 2cm. Find the scale of the model aeroplane.

    1cm to 13m

6. The diagram shows the measurements of a garden, with areas marked out for patios and decking. Using a scale of 1cm:2m, construct a scale drawing of the garden.

    Scale drawing with following measurements:

    8m = 4cm

    2m = 1cm

    1m = 0.5cm

    3m = 1.5cm

    10m = 5cm

Maths