Y6 Maths H/W

Name _____

1 A rectangle is drawn on a centimetre grid.
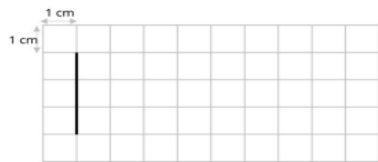
1 cm
1 cm
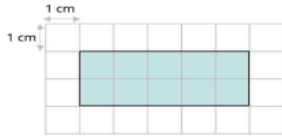
What is the area of the rectangle?

_____ cm²   ○ 1 mark

What is the perimeter of the rectangle?

_____ cm   ○ 1 mark

**2** The perimeter of a rectangle is 18 cm.
One of the sides is shown.

1 cm
1 cm

Complete the rectangle.   ○ 2 marks

3 Circle the shapes that have an area of 100 cm².

1 m
1 cm

10 cm
10 cm

11 cm
9 cm

25 cm
4 cm

4 Work out the area of each triangle.
Remember to write the units with your answer.

6 cm
6 cm

3 mm
5 mm

_____   _____

Percentage of an amount – multi-step

Rose Maths

1 a) Use the bar model to find 10% of 500

?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
500
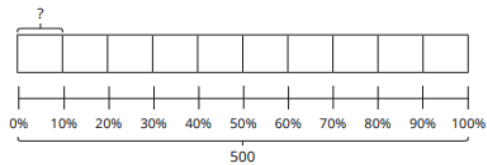
10% of 500 = ☐

b) Use your answer to part a) to help you complete the calculations.

20% of 500 = ☐   70% of 500 = ☐

90% of 500 = ☐   60% of 500 = ☐

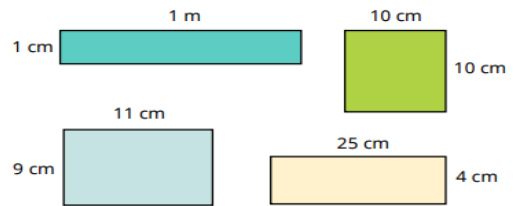30% of 500 = ☐   100% of 500 = ☐

2 Dora is finding percentages.

To find 5%, I can find 10% and then halve it.
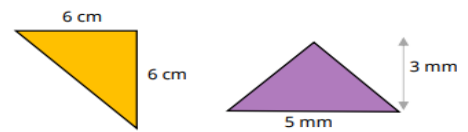
Explain why Dora is correct.

3 Work out the percentages of the amounts.

a) 5% of 40 = ☐   d) 5% of 2,000 = ☐

b) 5% of 400 = ☐   e) 5% of 6,000 = ☐

c) 5% of 4,000 = ☐   f) 5% of 2,700 = ☐

What do you notice about your answers?

4 Dexter and Alex are asked to find 75% of 340
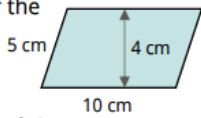a) Use Dexter's method to find 75% of 340

I will find 25% and multiply it by 3

☐

b) Use Alex's method to find 75% of 340

I will find 10% and multiply it by 7, then find 5% and add them together.

☐

Are there any other methods you could use?

5 Max says that the area of the parallelogram is 50 cm².

5 cm, 4 cm, 10 cm

What mistake has Max made?

What is the correct area of the parallelogram?

_____ cm²

6
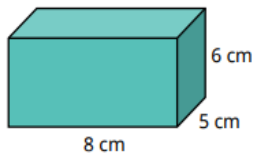
Rectangles that have the same area have the same perimeter.

Is Teddy correct? Explain your answer.

7 What is the volume of the cuboid?

6 cm, 5 cm, 8 cm

_____ cm³

8 Here is a plan of Mr Rose's garden.
Mr Rose wants to build a fence around his garden.
What is the length of fence needed?

1 m, 1 m

_____

9 Calculate the missing lengths.

40 cm, 12 cm, ___ cm, 20 cm, 10 cm, 25 cm, ___ cm

What is the area of the shape?

_____

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5 Here are some percentages.

| 20% | 90% | 60% | 15% | 55% | 40% |

Talk to a partner about different methods for finding these percentages of an amount.

6 Calculate the percentages.

a) 20% of 1,000 = ☐   d) 15% of 1,000 = ☐

20% of 550 = ☐   15% of 300 = ☐

20% of 40 = ☐   15% of 30 = ☐

b) 90% of 1,000 = ☐   e) 55% of 1,000 = ☐
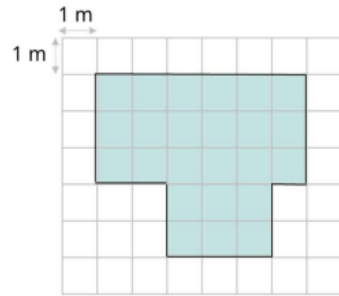
90% of 4,230 = ☐   55% of 4,400 = ☐

90% of 90 = ☐   55% of 8 = ☐
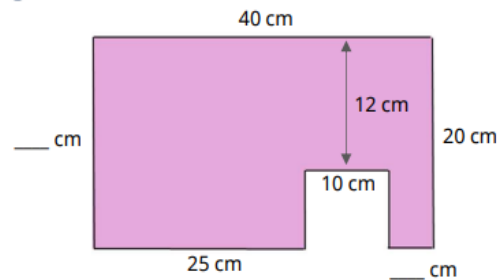
c) 60% of 1,000 = ☐   f) 40% of 1,000 = ☐

60% of 400 = ☐   40% of 400 = ☐

60% of 98 = ☐   40% of 98 = ☐

7 Ron is calculating these percentages.

10% of 20   20% of 10

20% is double 10%, and 10 is half of 20, so I know these will both have the same answer.

Do you agree with Ron? _____
Explain your answer.

8 Here are two sets of percentage calculations.

20% of 40 = ☐   25% of 60 = ☐
40% of 20 = ☐   60% of 25 = ☐

a) Complete the calculations.

What do you notice about the answers?

b) Write two more sets of similar calculations and work out the answers.

_____
_____

What do you notice?
Does this always happen?
Talk about it with a partner.