

Units of Measurement

PS Problem-solving questions

Challenge 1

1 Write the units under the correct headings. One has been done for you.

centimetres litres minutes metres grams
 kilometres seconds millilitres hours kilograms

Length	Volume/ Capacity	Weight	Time
<i>millimetres</i>			


4 marks

2 Convert these measures.

- a) 10 cm = _____ mm b) 3 kg = _____ g
 c) 500 cm = _____ m d) 120 seconds = _____ mins


4 marks

PS 3 I pour 250 ml squash into my jug. How much more do I need to pour in to fill it up to the 1 litre mark?

_____ ml


1 mark

Marks...../9

Challenge 2

1 Complete the blank squares in the grid.

mm	cm	m	km
		255	
36			
			4.78
	123		


6 marks

2 Put a circle around the correct answer.

A mug of tea holds approximately 25 ml 2.5 l 250 ml 2.5 ml


1 mark

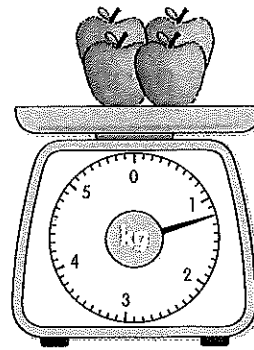
Units of Measurement

PS 3 Jared runs 367 m. How much further does he need to run to reach 1 km?

_____ m

PS 4 Maya puts four apples on the scales shown. How much does one apple weigh?

_____ g



1 mark

1 mark

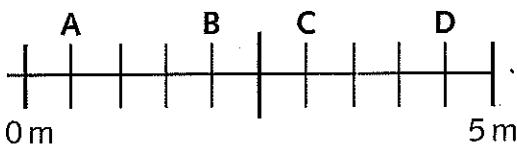
Marks..... /9

Challenge 3

PS 1 A school nurse measures the children's height. Vic is $1\frac{1}{2}$ m tall and Bob is 1.3 m tall.

How much taller is Vic than Bob in cm? _____ cm

2 Match the letters on the scale to the measurements below.



2 m _____

$4\frac{1}{2}$ m _____

0.5 m _____

300 cm _____

3 Circle the metric measurements to the nearest imperial equivalent. The first one has been done for you.

a) 1 pint 50 ml 500 ml 5 l

b) 5 miles 8 m 80 km 8 km

c) 4 inches 1 cm 100 cm 10 cm

1 mark

4 marks

2 marks

Marks..... /7

Total marks /25

How am I doing?

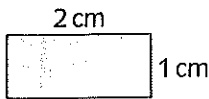


Perimeter and Area

PS Problem-solving question

Challenge 1

1 Work out the perimeter of this rectangle.

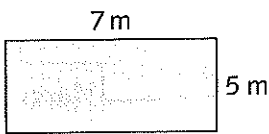


$P = \underline{\hspace{2cm}} \text{ cm}$



1 mark

2 Calculate the perimeter of this shape.

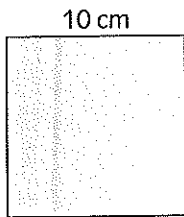


$P = \underline{\hspace{2cm}} \text{ m}$



1 mark

3 What is the area of the square?



$A = \underline{\hspace{2cm}} \text{ cm}^2$

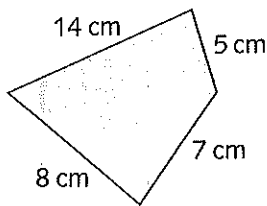


1 mark

Marks..... /3

Challenge 2

1 Calculate the perimeter of the shape.

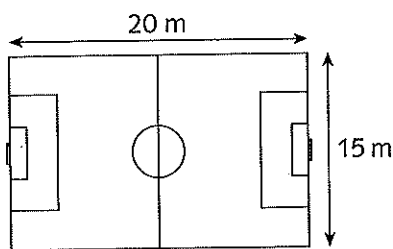


$P = \underline{\hspace{2cm}} \text{ cm}$



1 mark

2 What is the area of the football pitch?



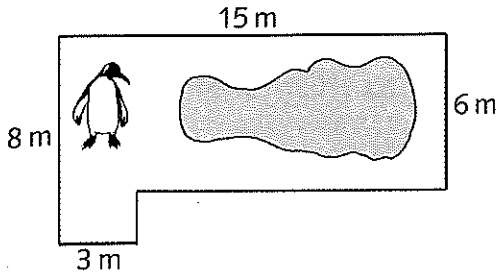
$A = \underline{\hspace{2cm}} \text{ m}^2$



1 mark

Perimeter and Area

What is the perimeter of the penguin enclosure?



P = _____ m

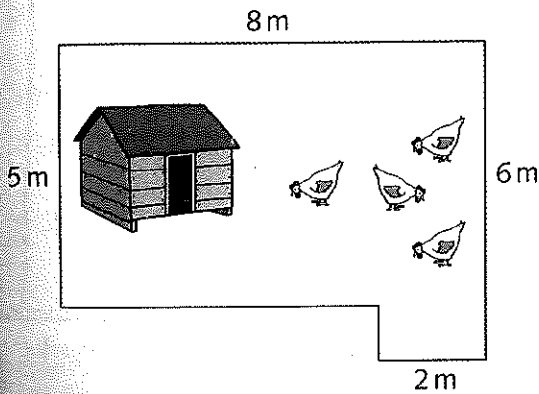


1 mark

Marks..... /3

Challenge 3

This is Farmer Smith's hen enclosure.



a) How much fencing does Farmer Smith need to buy to go around his hen enclosure?

b) What is the area of the enclosure?

The area of a rectangle is 35 cm^2 .
What could the lengths of the sides be in cm?

_____ cm and _____ cm



1 mark



1 mark



2 marks

Marks..... /4

Marks /10

How am I doing?

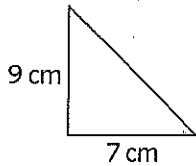


Area, Volume and Money

PS Problem-solving questions

Challenge 1

1 Calculate the area of this triangle.



$A = \underline{\hspace{2cm}} \text{ cm}^2$



1 mark

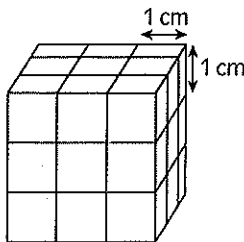
2 Order these amounts from smallest to biggest.





1 mark

3 Calculate the volume of this cube.



$V = \underline{\hspace{2cm}} \text{ cm}^3$

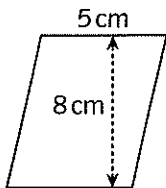


1 mark

Marks..... /3

Challenge 2

1 What is the area of this parallelogram?

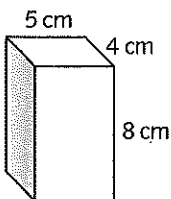


$A = \underline{\hspace{2cm}} \text{ cm}^2$



1 mark

2 What is the volume of this shape?



$V = \underline{\hspace{2cm}} \text{ cm}^3$



1 mark

PS 3 Using only coins of these values, how can you make 37p using the least number of coins?



1 mark

Marks..... /3

Area, Volume and Money

Challenge 3

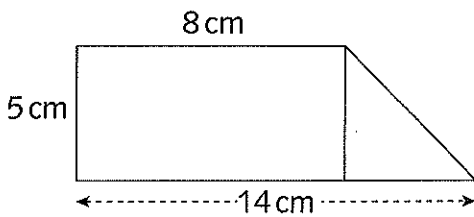
PS 1 A cube has a volume of 27 cm^3 .
What are the lengths of its sides?

_____ cm



1 mark

2 What is the area of this shape?



A = _____ cm^2



1 mark

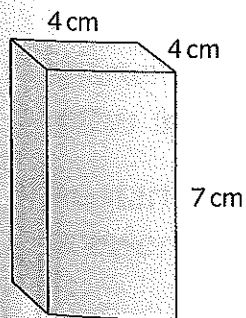
PS 3 Ben has some money. If he rounds it to the nearest 10p and then multiplies it by 10, he has £4.00.

How much money could he have had to start with?



1 mark

PS 4 How much water in cm^3 can this container hold?



_____ cm^3



1 mark

Marks..... /4

Total marks /10

How am I doing?



Time

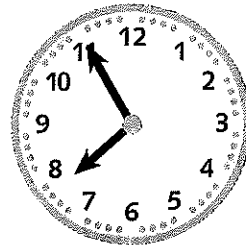
PS Problem-solving questions

Challenge 1

- 1 Complete the blanks.
 - a) A clock face shows _____ hours. There are _____ hours in one day.
 - b) Each hour is _____ minutes long. Two minutes equals _____ seconds.
 - c) There are usually _____ days in a year. June has _____ days.

6 marks

- PS** 2 Jonny leaves home at the time shown here every morning. He gets to school 25 minutes later. What time does he get to school?



1 mark

- PS** 3 Lena puts a cake in the oven at 4.50 p.m. It bakes for $1\frac{1}{2}$ hours. What time does Lena take her cake out of the oven?

1 mark

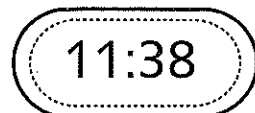
Marks..... /8

Challenge 2

- PS** 1 Emily completes a puzzle in $2\frac{1}{2}$ minutes. Olivia takes 15 seconds longer. How long did Olivia take in seconds? _____
- PS** 2 Freddie goes to karate every Monday night. If 1 September is a Monday, how many times does he go to karate in September?

1 mark

- PS** 3 Both clocks show morning times. What is the time difference between the two clocks in hours and minutes?



1 mark

2 marks

Marks..... /4

Challenge 3

1 Look at the train timetable below.

Crewe	08:10	10:20	11:15	–	15:05
Wilmslow	08:55	10:48	–	13:40	15:55
Manchester	09:33	–	12:20	14:10	16:15

a) Annie is meeting a friend in Manchester for lunch at 12:00 noon.

What train will she need to catch at Crewe? _____



1 mark

b) How long does it take the first train to travel from Crewe to Manchester?



1 mark

c) Bill gets to Wilmslow station at 11:00. How many minutes was he late for the train that just left?



1 mark

d) Jenny arrives at Crewe station at 10:50. How long will she have to wait for the next train?



1 mark

Natasha came back from a fortnight's holiday on 4 March. What date did she go away if it was a leap year?



1 mark

Brian starts his homework and works for $1\frac{1}{2}$ hours. He then has a quarter of an hour break before completing his homework for another 50 minutes.

If he started work after his tea at 6.25 p.m., when did he finish his homework?



1 mark

Marks..... /6

marks /18

How am I doing?

