

Q1. (a) Write down a sensible **metric** unit that can be used to measure

(i) the height of a tree,

.....

(ii) the weight of a person.

.....

(2)

(b) Change 2 centimetres to millimetres.

..... millimetres

(1)

(Total 3 marks)

Q2. Jemilla goes swimming.

She swims 64 lengths of a swimming pool.

Each length is 25 m long.

(a) Work out how far Jemilla swims.

Give your answer in kilometres.

..... kilometres

(3)

The swimming pool is 25 m long by 10 m wide by 2.5 m deep.

(b) How many litres of water does it contain?

..... l

(3)

(Total 6 marks)

Q3.



The picture shows a man standing next to a flagpole.
The man is of normal height.
The man and the flagpole are drawn to the same scale.

(a) Write down an estimate for the height, in metres, of the man.

..... m

(1)

(b) Work out an estimate for the height, in metres, of the flagpole.

..... m

(2)

(Total 3 marks)

Q4. (a) Complete the table by writing a sensible **metric** unit for each measurement.
The first one has been done for you.

The length of the river Nile	6700.....kilometres.....
The height of the world's tallest tree	110.....
The weight of a chicken's egg	70.....
The amount of petrol in a full petrol tank of a car	40.....

(3)

(b) Change 4 metres to centimetres.

..... cm

(1)

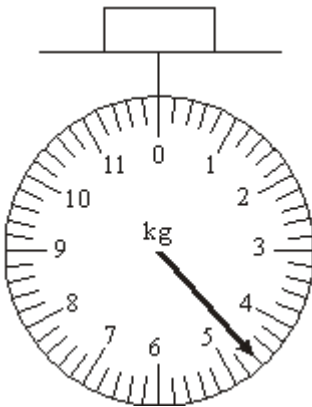
(c) Change 1500 grams to kilograms.

..... kg

(1)

(Total 5 marks)

Q5.



(a) Write down the weight in kg shown on this scale.

..... kg

(1)

(b) (i) How many pounds are there in 1 kg?

..... pounds

(1)

The weight of a baby is 5 kg.

(ii) Change 5 kg to pounds.

..... pounds

(1)
(Total 3 marks)

Q6. (a) Write down a sensible **metric** unit for measuring

(i) the distance from London to Paris,

.....

(ii) the amount of water in a swimming pool.

.....

(2)

(b) (i) Change 5 centimetres to millimetres.

..... mm

(ii) Change 4000 grams to kilograms.

..... kg

(2)
(Total 4 marks)

M1.

	Working	Answer	Mark	Additional Guidance
(a)(i)		metre	2 1	B1 for metre or m
(ii)		kilogram		B1 for kilogram or kg or Newton or N
(b)	2×10	20		B1 for 20 cao
Total for Question: 3 marks				

M2.

	Working	Answer	Mark	Additional Guidance
(a)	$64 \times 75\text{m} = 4800\text{m}$ $4800 \div 1000$	4.8 km	3	M1 for 64×75 M1 for " 64×75 " $\div 1000$ A1 cao
(b)	$\text{Vol} = 25 \times 10 \times 2.5 = 625\text{m}^3$ 625×1000	625 000	3	M1 for attempt at finding the volume M1 for attempt to find the number of l in 1m^3 or $1\text{m}^3 = 1000\text{l}$ A1 cao
Total for Question: 6 marks				

M3.

	Working	Answer	Mark	Additional Guidance
(a)		1.5-2.0	1	B1 for height 1.5-2.0 inclusive
(b)	Height \times 4	6-8	2	M1 for $\times 4$ or "height" $\times 4$ A1 6-8 inclusive OR ft (a) $\times 4$
Total for Question: 3 marks				

M4.

	Working	Answer	Mark	Additional Guidance
(a)		metres (m) grams (g) litres (l)	3	B3 all correct, accept abbreviations (B1 for each one correct)
(b)	4×100	400	1	B1 for 400 cao
(c)	$1500 \div 1000$	1.5	1	B1 for 1.5 cao
Total for Question: 5 marks				

M5.

	Answer	Mark	Additional Guidance
(a)	4.6	1	B1 cao
(b)(i)	$2 \rightarrow 2.4$	2	B1 for $2 \rightarrow 2.4$

(ii)	10 → 12	B1 for 10 → 12 or $5 \times$ '(i)' ft
Total for Question: 3 marks		

M6.

	Answer	Mark	Additional Guidance
(a)(i)	Kilometres	2	B1 (accept km)
(ii)	Litres		B1 for litres, (accept kilolitres, m ³ or appropriate abbreviations)
(b)(i)	50	2	B1 cao
(ii)	4		B1 cao
Total for Question: 4 marks			

E1. This question was not well understood and very few candidates obtained full marks. The most successful part was part (c) with almost all candidates giving 20mm. Very few candidates were able to give metric measures for height and weight though the majority of candidates gained 1 mark for either metres or kilograms.

E3. This was a good discriminator. Candidates were expected to make a reasonable estimate of the normal height of a man in metres; a wide tolerance of 1.5 to 2.0 metres was accepted. The flagpole was exactly 4 times as high as the man in the diagram.

In part (a) it was disappointing to find totally unreasonable estimates being given, some quite absurd heights. In part (b) candidates were not careful enough to measure the scaling factor, and a significant number used 3 or 5 as the scale. Those who gave an incorrect estimate in part (a) but used this in part (b) were given some credit.

E4. More than three quarters of the candidates gained at least two marks in part (a) and few failed to give at least one correct metric unit. The most common incorrect answers were 'feet' for the height of the tree, 'kg' for the weight of an egg and 'gallons' for the amount of petrol. In part (b) almost 70% of candidates were able to change 4 metres to centimetres but only half that number could change 1500 grams to kilograms in part (c) where 15 and 150 were the most common incorrect answers.

E5. There was a 68% success rate in part (a) with 4.3 being a very common incorrect answer.

In part (b) it was clear that very few candidates knew that there were 2.2 lbs (or even 2 lbs) in a kg. The most popular response was '10' although '100' and '1000' were also commonly seen. This resulted in babies weighing 50, 500 or even 5000 lbs ... quite an

accomplishment even in this age of obesity! Hardly any candidates scored both marks and around 70% scored 1 mark, generally for multiplying their answer to (b)(i) by 5.

- E6.** Though most candidates could identify a unit of length or volume in part (a) of this question, imperial units were often seen. Most candidates gained at least one mark in each of parts (a) and (b). Only 40% of candidates could carry out successfully both the conversions in part (b), with a further 40% getting one correct, usually (b)(i).