w

question	answer	marks	notes
1. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.			
a	1.365 kilograms	1	
b	34.5 litres	1	
c	3.25 litres	1	
d	954 grams	1	
e	3.575 kilometres	1	
2. Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.			
a		6	Award one mark for each pair correctly matched.

1750m — 1.54m
175cm — 1.75km
1564m — 0.7m
154cm — 1.75m
70cm — 0.7km
700m — 1.564km

question	answer	marks	notes
b		5	Award one mark for each box correctly completed.

Millimetres	Centimetres
15 mm	1.5cm
20 mm	**2 cm**
752 mm	75.2cm
460 mm	**46 cm**
861 mm	86.1 cm

c		4	Award one mark for each pair correctly matched.

	Mass in grams (for example 500g)	Mass in kilograms (for example 0.5kg)
banana	**1650g**	**1.65kg**
chicken	**2050g**	**2.05kg**
rabbit	**3500g**	**3.5kg**
broccoli	**700g**	**0.7kg**

d		3	

	millilitres	litres
i.	**2900ml**	**2.9litres**
ii.	1450 ml	1.45 litres
iii.	100 ml	0.1 litre

question	answer		marks	notes
e	How many minutes are in two and a half hours?	150 minutes	5	Award one mark for each correct answer.
	How many minutes is 75 seconds?	1¼ minutes (accept 1.25)		
	180 minutes is equivalent to how many hours?	3 hours		
	How many minutes is equivalent to three quarters of an hour?	45 minutes		
	How many seconds are in 5 minutes?	300 seconds		

3. Convert between miles and kilometres.

question	answer		marks	notes
a	Distance in miles	Distance in kilometres	5	
	1 mile	1.6 km		
	2 miles	3.2 km		
	3 miles	4.8km		
	5 miles	8 km		
	10 miles	16 km		
	20 miles	32 km		
b	The distance from London to Leicester is approximately 100 miles. What is this distance in kilometres, to the nearest whole number?	**160 km**	3	Award one mark for each correct answer.
	The distance from Edinburgh to Glasgow is approximately 80 kilometres. What is this distance in miles, to the nearest whole number?	**50 miles**		
	The distance from Cardiff to Liverpool is approximately 200 miles. What is this distance in kilometres, to the nearest whole number?	**320 km**		

4. Recognise that shapes with the same areas can have different perimeters and vice versa.

question	answer	marks	notes
a	Which two shapes have the same area? **a** and **d** Which two shapes have the same perimeter? **d** and **f**	2	Award one mark for each pair of shapes correctly identified.
b	Two different rectangles have been drawn, each with an area of 8cm²	1	Do not award a mark for the same rectangles in different orientations.
c	Two different rectangles have been drawn, each with a perimeter of 18cm.	1	

5. Recognise when it is possible to use formulae for area and volume of shapes.

question	answer	marks	notes
a	a + b x 2 ab x 0.5 a + b + c ab x 2 a - b	1	

question	answer	marks	notes
b	2(ab)+2(ac)+2(bc) *(circled)* 6(ab) 4(ab) + 2(bc) ab + ac + bc (ab) + 4(bc)	1	
c	Calculate the **surface area**. Accept one of the following: **6a²** or **6(a x a)²** Calculate the **volume**. Accept one of the following: **a³** or **a x a x a**	2	Award one mark for each correct answer.

6. Calculate the area of parallelograms and triangles.

question	answer	marks	notes
a	33cm² 66cm² *(circled)* 60cm² 22cm² 17cm²	1	
b	9 x 4 or 4 x 9 = 36 cm²	2	Award two marks for a correct answer. If the answer is incorrect, award one mark for a correct calculation which involves multiplying height by length.
c	7 x 5 = 35 35 ÷ 2 = 17.5cm²	2	Award two marks for a correct answer. If the answer is incorrect, award one mark for evidence of a correct calculation which involves multiplying height by length, then halving the answer.
d	7 x 10 = 70 70 ÷ 2 = 35cm²	2	

7. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³].

question	answer	marks	notes
a	30cm³ 100cm³ 300cm³ 1000cm³ *(circled)* 3000cm³	1	
b	10 x 6 x 4 = 240cm³	2	Award two marks for a correct answer. If the answer is incorrect, award two marks for evidence of a correct calculation.

question	answer	marks	notes
c	✓ cube 2m, 2m, 2m (ticked) cube 3cm, 3cm, 3cm cube 10mm, 10mm, 10mm	1	
d	90m³ 10m³ (800m³) 100m³ 900cm³	1	
e		4	Award one mark for each symbol correctly used.

	< > or =	
cube 4cm, 4cm, 4cm	**=**	box 2cm, 4cm, 8cm
box 3m, 3m, 11m	**>**	box 2m, 4m, 9m
cube 6cm, 6cm, 6cm	**<**	cube 2m, 2m, 2m
cube 1km, 1km, 1km	**>**	cube 5m, 5m, 5m

		Total 60	