

question	answer	marks	notes															
<b>1. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</b>																		
a	2.31l	1																
b	4.256kg	1																
c	2.46km	1																
d	2.2kg	2	2 marks for the correct answer. 1 mark for an incorrect answer with only 1 mistake in calculating.															
<b>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.</b>																		
a	True True True False False	5	1 mark for each correct answer.															
b	<table border="1"> <thead> <tr> <th>Millimetres</th> <th>Centimetres</th> <th>Metres</th> </tr> </thead> <tbody> <tr> <td>56mm</td> <td><b>5.6cm</b></td> <td><b>0.056m</b></td> </tr> <tr> <td><b>1035mm</b></td> <td><b>103.5cm</b></td> <td>1.035m</td> </tr> <tr> <td><b>490mm</b></td> <td>49cm</td> <td><b>0.49m</b></td> </tr> </tbody> </table>	Millimetres	Centimetres	Metres	56mm	<b>5.6cm</b>	<b>0.056m</b>	<b>1035mm</b>	<b>103.5cm</b>	1.035m	<b>490mm</b>	49cm	<b>0.49m</b>	6	Award one mark for each box correctly completed.			
Millimetres	Centimetres	Metres																
56mm	<b>5.6cm</b>	<b>0.056m</b>																
<b>1035mm</b>	<b>103.5cm</b>	1.035m																
<b>490mm</b>	49cm	<b>0.49m</b>																
c	<table border="1"> <thead> <tr> <th></th> <th>Mass in grams</th> <th>Mass in kilograms</th> </tr> </thead> <tbody> <tr> <td>Bananas</td> <td><b>1100g</b></td> <td><b>1.1kg</b></td> </tr> <tr> <td>Chicken</td> <td><b>2700g</b></td> <td><b>2.7kg</b></td> </tr> <tr> <td>Rabbit</td> <td><b>4250g</b></td> <td><b>4.25kg</b></td> </tr> <tr> <td>Cauliflower</td> <td><b>650g</b></td> <td><b>0.65kg</b></td> </tr> </tbody> </table>		Mass in grams	Mass in kilograms	Bananas	<b>1100g</b>	<b>1.1kg</b>	Chicken	<b>2700g</b>	<b>2.7kg</b>	Rabbit	<b>4250g</b>	<b>4.25kg</b>	Cauliflower	<b>650g</b>	<b>0.65kg</b>	4	Award one mark for each pair correctly matched.
	Mass in grams	Mass in kilograms																
Bananas	<b>1100g</b>	<b>1.1kg</b>																
Chicken	<b>2700g</b>	<b>2.7kg</b>																
Rabbit	<b>4250g</b>	<b>4.25kg</b>																
Cauliflower	<b>650g</b>	<b>0.65kg</b>																
d	<table border="1"> <thead> <tr> <th></th> <th>Millilitres</th> <th>Litres</th> </tr> </thead> <tbody> <tr> <td>i</td> <td><b>600ml</b></td> <td><b>0.6l</b></td> </tr> <tr> <td>ii</td> <td><b>1300ml</b></td> <td><b>1.3l</b></td> </tr> <tr> <td>iii</td> <td><b>2750ml</b></td> <td><b>2.75l</b></td> </tr> </tbody> </table>		Millilitres	Litres	i	<b>600ml</b>	<b>0.6l</b>	ii	<b>1300ml</b>	<b>1.3l</b>	iii	<b>2750ml</b>	<b>2.75l</b>	3				
	Millilitres	Litres																
i	<b>600ml</b>	<b>0.6l</b>																
ii	<b>1300ml</b>	<b>1.3l</b>																
iii	<b>2750ml</b>	<b>2.75l</b>																
e	<table border="1"> <tbody> <tr> <td>How many minutes are in three and a half hours?</td> <td>210 minutes</td> </tr> <tr> <td>How many minutes is 105 seconds?</td> <td><math>1\frac{3}{4}</math> or 1.75 minutes</td> </tr> <tr> <td>120 minutes is equivalent to how many hours?</td> <td>2 hours</td> </tr> <tr> <td>How many minutes is equivalent to a quarter of an hour?</td> <td>15 minutes</td> </tr> <tr> <td>How many seconds are in 4 minutes?</td> <td>240 seconds</td> </tr> </tbody> </table>	How many minutes are in three and a half hours?	210 minutes	How many minutes is 105 seconds?	$1\frac{3}{4}$ or 1.75 minutes	120 minutes is equivalent to how many hours?	2 hours	How many minutes is equivalent to a quarter of an hour?	15 minutes	How many seconds are in 4 minutes?	240 seconds	5						
How many minutes are in three and a half hours?	210 minutes																	
How many minutes is 105 seconds?	$1\frac{3}{4}$ or 1.75 minutes																	
120 minutes is equivalent to how many hours?	2 hours																	
How many minutes is equivalent to a quarter of an hour?	15 minutes																	
How many seconds are in 4 minutes?	240 seconds																	

question	answer	marks	notes	
<b>3. Convert between miles and kilometres.</b>				
a	Distance in miles	Distance in kilometres	5	
	5 miles	<b>8km</b>		
	<b>15 miles</b>	24km		
	20 miles	<b>32km</b>		
	35 miles	<b>56km</b>		
	<b>50 miles</b>	80km		
b	Journey	Journey in miles	Journey in kilometres	3
	Paris to Madrid	800 miles	<b>1280km</b>	
	Madrid to Berlin	1450 miles	<b>2320km</b>	
	Rome to Paris	<b>650 miles</b>	1040km	
<b>4. Recognise that shapes with the same areas can have different perimeters and vice versa.</b>				
a	same area: <b>a, c, e</b> same perimeter: <b>a, b, f</b>	2		
b	Any rectangle with an area of 10cm <sup>2</sup> , e.g. 10 x 1,	1	Allow the 2cm x 5cm rectangle in a different orientation.	
c	Square of 4cm x 4cm	1		
<b>5. Recognise when it is possible to use formulae for area and volume of shapes.</b>				
a	$\frac{1}{2} \times bh$ and $\frac{bh}{2}$	2	1 mark for each. 1 mark deducted for each incorrect answer.	
b i)	abc	1		
b ii)	2ab + 2ac + 2bc or 2(ab + ac + bc)	1		
<b>6. Calculate the area of parallelograms and triangles.</b>				
a	66cm <sup>2</sup>	1		
b	any parallelogram with area 40cm <sup>2</sup> e.g. base 8cm, height 5cm or base 10cm, height 4cm	2		
c	132cm <sup>2</sup>	2		
d	20cm <sup>2</sup>	2		

question	answer	marks	notes
<b>7.</b> Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units [for example, mm <sup>3</sup> and km <sup>3</sup> ].			
a	£8 as volume = 9600cm <sup>3</sup>	2	2 marks for a correct answer. 1 mark for correctly calculating the volume as 9 600 cm <sup>3</sup>
b	Pool A has the smallest volume <b>A = 192m<sup>3</sup></b> , B = 210m <sup>3</sup> , C = 216m <sup>3</sup>	3	2 marks for a correct answer. 2 marks for an incorrect answer, but evidence that 2 of the pools' volume was calculated correctly. 1 mark for calculating the volume of 1 of the pools.
c i)	4 mm	1	
c ii)	smaller	1	
d	A B D C	2	2 marks for correct answer. 1 mark if only 1 in the incorrect place (e.g. ACBD, BACD etc.)  Note the volumes do not have to be calculated to find the answer.
		Total 60	