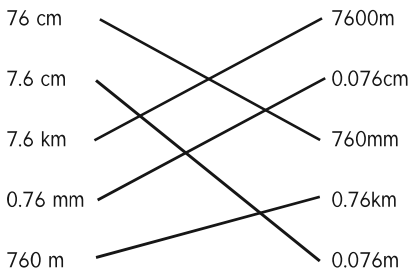
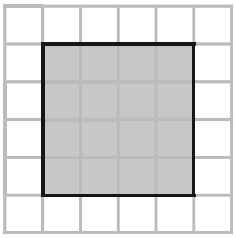
Answer Sheet: Maths Assessment Year 6 Term 3:
Measurement

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td colspan="4">1. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</td></tr>
<tr><td>a</td><td>3.976 litres</td><td>1</td><td></td></tr>
<tr><td>b</td><td>1.92kg</td><td>1</td><td></td></tr>
<tr><td>c</td><td>2.625 km</td><td>1</td><td></td></tr>
<tr><td>d</td><td>1.278kg</td><td>2</td><td>2 marks for the correct answer. 1 mark for an incorrect answer with only 1 mistake in calculating.</td></tr>
<tr><td colspan="4">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.</td></tr>
<tr><td>a</td><td> 
</td><td>5</td><td>1 mark for each correct answer.</td></tr>
<tr><td>b</td><td>
<table>
<tr><td>Millimetres</td><td>Centimetres</td><td>Metres</td></tr>
<tr><td>75 mm</td><td>7.5 cm</td><td>0.075 m</td></tr>
<tr><td>5.8 mm</td><td>0.58 cm</td><td>0.0058 m</td></tr>
<tr><td>400 mm</td><td>40 cm</td><td>0.4 m</td></tr>
</table>
</td><td>6</td><td>Award one mark for each box correctly completed.</td></tr>
<tr><td>c</td><td>
<table>
<tr><td></td><td>Mass in grams</td><td>Mass in kilograms</td></tr>
<tr><td>Bananas</td><td>700 g</td><td>0.7 kg</td></tr>
<tr><td>Cauliflower</td><td>3800 g</td><td>3.8 kg</td></tr>
<tr><td>Chicken</td><td>4750 g</td><td>4.75 kg</td></tr>
<tr><td>Rabbit</td><td>1100 g</td><td>1.1 kg</td></tr>
</table>
</td><td>4</td><td></td></tr>
<tr><td>d</td><td>
<table>
<tr><td></td><td>Millilitres</td><td>Litres</td></tr>
<tr><td>i</td><td>1900 ml</td><td>1.9 l</td></tr>
<tr><td>ii</td><td>750 ml</td><td>0.75 l</td></tr>
<tr><td>iii</td><td>2400 ml</td><td>2.4 l</td></tr>
</table>
</td><td>3</td><td></td></tr>
</table>

<table>
<tr><th>question</th><th>answer</th><th>marks</th><th>notes</th></tr>
<tr><td>e</td><td>
<table>
<tr><td>How many minutes are in two and a quarter hours?</td><td>135 minutes</td></tr>
<tr><td>How many minutes is 210 seconds?</td><td>3 ½ or 3.5 minutes</td></tr>
<tr><td>300 minutes is equivalent to how many hours?</td><td>5 hours</td></tr>
<tr><td>How many minutes is equivalent to three quarters of an hour?</td><td>45 minutes</td></tr>
<tr><td>How many seconds are in 7 minutes?</td><td>420 seconds</td></tr>
</table>
</td><td>5</td><td></td></tr>
<tr><td colspan="4">3. Convert between miles and kilometres.</td></tr>
<tr><td>a</td><td>
<table>
<tr><td>Distance in miles</td><td>Distance in kilometres</td></tr>
<tr><td>2 miles</td><td>3km</td></tr>
<tr><td>5 miles</td><td>8 km</td></tr>
<tr><td>20 miles</td><td>32 km</td></tr>
<tr><td>40 miles</td><td>64 km</td></tr>
<tr><td>100 miles</td><td>160 km</td></tr>
</table>
</td><td>5</td><td></td></tr>
<tr><td>b</td><td>
<table>
<tr><td>Journey</td><td>Journey in miles</td><td>Journey in kilometres</td></tr>
<tr><td>London to Moscow</td><td>1500 miles</td><td>2400 km</td></tr>
<tr><td>Delhi to Johannesburg</td><td>5000 miles</td><td>8000 km</td></tr>
<tr><td>Los Angeles to Rio de Janeiro</td><td>6300 miles</td><td>10 080 km</td></tr>
</table>
</td><td>3</td><td></td></tr>
<tr><td colspan="4">4. Recognise that shapes with the same areas can have different perimeters and vice versa.</td></tr>
<tr><td>a</td><td>same area: a, c, f
same perimeter: b, c, d</td><td>2</td><td></td></tr>
<tr><td>b</td><td>  </td><td>1</td><td></td></tr>
<tr><td>c</td><td>Any rectangle with a perimeter of 16cm, e.g. 1 cm x 7cm</td><td>1</td><td>A 4cm x 4cm square is correct. Also allow 6cm x 2cm in a different orientation to the one given.</td></tr>
</table>

question	answer	marks	notes
5. Recognise when it is possible to use formulae for area and volume of shapes.			
a	½ x bh or $\frac{bh}{2}$	2	
b	Volume ——— abc Surface area ——— 2(ab + ac + bc)	1	
c	3cm	1	
6. Calculate the area of parallelograms and triangles.			
a	52cm^2	1	
b	any parallelogram with area 55cm^2 e.g. base 11cm, height 5cm or base 22cm, height 2.5cm	2	
c	136 cm^2	2	
d	17.5 cm^2	2	
7. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].			
a	A = 3000 cm^3 , B = 3360 cm^3 **B has the greater volume**	2	
b	122 500 m^3	3	3 marks for a correct answer. 2 marks for correctly multiplying 80 x 60 x 35 = 168 000 m3. 1 mark for an incorrect answer, but a calculation of 70 x 50 x 35 was attempted.
c	5 mm	1	
d	1000 mm^3	2	2 marks for a correct answer, 1 mark for attempting to calculate the volume of 1 cm^3 in mm^3.
e	Volume of A = Volume of B	1	Note the volumes do not have to be calculated to find the answer.
		Total 60	