

Q1.

Question number	Answer	Mark			
	<table border="1"> <tr> <td>[x] B</td> <td>bigger than in water</td> <td>less than water</td> </tr> </table> <p>A is incorrect because the density of steam is less than water.            C is incorrect because the space between the particles increases.            D is incorrect because the space between the particles increases and density of steam is less than water.</p>	[x] B	bigger than in water	less than water	<p><b>(1)</b> <b>AO1</b></p>
[x] B	bigger than in water	less than water			

Q2.

Question number	Answer	Mark
	C	<b>(1)</b>

Q3.

	Answer	Additional guidance	Mark
	<p>an explanation linking:</p> <p>density of solid is greater (than density of liquid) (1)</p> <p>(because) distance between particles in solid is less (than distance between particles in liquid) (1)</p>	<p>solids are denser</p> <p>accept in solids, particles are closer</p> <p>accept in solids, there are <b>more</b> particles per unit volume / particles are <b>more</b> (tightly) packed</p>	<p><b>(2)</b> <b>AO1.1</b></p>

Q4.

Question Number	Answer	Additional guidance	Mark
(iii)	<p>A description that makes reference to any <b>two</b> of the following</p> <p>(density) increases between 0°C and 4°C (1)</p> <p>reaches a maximum at 4°C (1)</p> <p>(density) decreases above 4°C (1)</p>	<p>increases initially / at first / up to 4°C</p> <p>then decreases</p> <p>if no other marks scored then credit reference to large volume means low density (OWTTE) for 1 mark only</p>	(2)