#### Cambridge IGCSE – Mark Scheme PUBLISHED

Question 1	Answer	Marks
1(a)	(volume) decreases	1

### Question 2

2(c)	motions: (only) vibrates (1)	2
	separation: close together / touching (1)	
2(d)(i)	solid has a definite shape / solid has a fixed shape / liquid has no definite shape / liquid takes the shape of its container (1)	2
	solid does not flow (over a surface easily) / liquid flows (easily over a surface) / solid does not spread out (over a surface) / liquid spreads out (over a surface) (1)	

### **Question 3**

3(a)(iii)	arrangement: irregular / no (particular) arrangement (1)	2	
	motion: sliding over each other		

4(c)(iv)	1 mark each for any 3 of:	3
	evaporation (of ammonia)	
	diffusion (molecules)	
	molecules in (constant) movement / molecules	
	collide / hit / molecules travel / molecules move (rapidly)	
	(movement of) molecules is random / in every direction	
	molecules spread out / molecules mix	
	molecules hit / reach litmus paper	
	(molecules spread) from higher concentration to lower concentration / down concentration gradient	

Question	Answer	Marks
5(a)	1 mark each for any two of:	2
	<ul> <li>has a definite volume / fixed volume</li> <li>takes the shape of its container</li> <li>flows over a surface / can be poured over a surface</li> </ul>	
5(b)	A: freezing (1)	2
	B: evaporation / boiling (1)	
Question	Answer	Marks
5(c)	liquid bromine:	4
	arrangement: irregular / no (particular) arrangement (1)	
	motion: sliding / moving (over each other) (1)	
	bromine gas:	
	arrangement: irregular / no (particular) arrangement (1)	
	motion: fast / rapid / move everywhere (1)	
5(d)	volume increases	1

## Question 6

Question	Answer	Marks
6(a)(ii)	volume increases (as temperature increases)	1
6(a)(iv)	arrangement: irregular / random (1)	2
	separation: far apart (1)	

Question	Answer	Marks
7(a)		2
7(b)	separation: liquid: close together / some touching (1)	4
	gas: far apart (1)	
	<i>motion:</i> liquid: sliding over each other / restricted movement (1)	
	gas: moving freely (1)	

Question	Answer	Marks
8(a)(i)	1 melting	1
	2 condensing	1
	3 freezing	1
	4 boiling <b>OR</b> evaporation	1
8(a)(ii)	<ul> <li>Any one from:</li> <li>boiling happens at a specific temperature</li> <li>evaporation happens over a range of temperatures</li> <li>evaporation is a surface process</li> <li>boliing happens throughout the liquid</li> </ul>	1
8(b)	separation: touching	1
	arrangement: regular	1
	motion: vibrate	1