

Multiple Choice Answers

Q7: A

Multiple Choice Answers

Q9: C

3(a)(i)	M1 positive ions / cations(1) M2 sea of electrons / mobile electrons / delocalised electrons(1) M3 attraction between positive ions and electrons(1)
3(a)(ii)	electrons move / electrons mobile / electrons flow
3(b)(i)	harder or stronger
3(b)(ii)	zinc
3(c)(i)	Any two from:- - solid disappears / solid dissolves - fizzing / bubbling / effervescence - blue solution
3(c)(ii)	all the sulfuric acid had reacted
3(c)(iii)	copper(II) carbonate
3(c)(iv)	copper(II) oxide / copper(II) hydroxide
3(c)(v)	saturated (solution)
3(c)(vi)	M1 more particles per unit volume M2 more collisions per unit time / increased collision frequency
3(c)(vii)	hydrated

3(a)(i)	metallic (bonding)
3(a)(ii)	M1 positive ions M2 electrons
3(a)(iii)	electrons
3(b)(i)	a mixture of a metal with other elements
3(b)(ii)	copper
3(c)(i)	M1 solid stops dissolving / disappearing M2 no more bubbles / fizzing / effervescence on addition of solid
3(c)(ii)	aqueous zinc sulfate

3(c)(iii)	zinc oxide OR zinc hydroxide
3(c)(iv)	M1 (a solution containing the) maximum concentration of a solute dissolved in the solvent M2 at a specified temperature
3(c)(v)	M1 (large pieces have) smaller surface area M2 frequency of collisions between (zinc carbonate and acid) particles decreases
3(c)(vi)	(crystals that are) chemically combined with water

Multiple Choice Answers

Q8: D