

Multiple Choice Answers

Q10: D

Q11: C

Multiple Choice Answers

Q10: D

Multiple Choice Answers

Q12: C

3(a)	M1 2H ₂ O M2 state symbols (aq) and (l)
3(b)	neutralisation
3(c)	$0.0100 \times 1000 \div 40 = 0.25(0)$
3(d)	burette
3(e)	M1 mol H ₂ SO ₄ needed = $0.0100 \div 2 = 0.005(00)$ M2 vol of H ₂ SO ₄ needed = $0.005(00) \div 0.200 \times 1000 = 25 \text{ (cm}^3\text{)}$
3(f)	M1 yellow M2 orange
3(g)	repeat steps 1 and 3 without indicator
3(h)(i)	M1 (a solution containing the) maximum concentration of a solute dissolved in the solvent M2 at a specified temperature
3(h)(ii)	solubility decreases as temperature decreases
3(h)(iii)	none

3(a)	$\rightarrow \text{BaSO}_4(\text{s}) + 2\text{NaCl}(\text{aq})$ M1 2NaCl (only) M2 (s) and (aq)
3(b)	M1 $M_r \text{BaCl}_2 = 208$ M2 $208 \times 0.1 = 20.8$
3(c)	$0.100 \div 1.25 (\times 1000) = 80 \text{ (cm}^3\text{)}$
3(d)	white
3(e)	residue
3(f)	M1 rinsing the residue (with water) M2 (mass was greater) because (dry) residue contains solid sodium chloride / NaCl adds to the mass (of residue)
3(g)	precipitation
3(h)	M1 named soluble barium salt other than barium chloride e.g. (barium) nitrate M2 named soluble sulfate salt other than sodium sulphate e.g. potassium (sulfate) / ammonium (sulfate) M3 named insoluble barium salt other than barium sulfate e.g. (barium) carbonate

Multiple Choice Answers

Q9: A

Q20: B

Multiple Choice Answers

Q9: A

Multiple Choice Answers

Q12: C