Question number	Answer	Notes	Marks
5 (a)	Any FIVE from: MP1. measure current and voltage to work out power; MP2. use ammeter and voltmeter; MP3. measure temperature increase AND time taken; MP4. find total energy (E = Pt or E = VIt); MP5. measure mass of substance; MP6. use a balance; MP7. rearrange to give c = E / m Δθ; MP8. plot a temperature-time graph; MP9. use gradient (so c = P/(m × gradient));	accept 'known power' accept 'power meter' or 'joulemeter' accept idea of 'known voltage' accept measure initial and final temperature for temp increase accept idea of waiting for highest temperature after power switched off accept 'use a stopwatch' for time taken	5
(b) (i)	34 (°C);		1
(ii)	any TWO from: MP1. bonds between particles are weakened or broken; MP2. particles go from regular to irregularly packed/EQ; MP3. particles go from vibrating (about a fixed position) to sliding past each other / EQ;	allow particles get (slightly) further apart /EQ ignore references to KE	2
(iii)	reference to different temperature changes in the same time; different specific heat capacities/EQ;	accept recognition that the states are different condone incorrect SHC comparisons between phases	2

Total for Question 5: 10 marks