

Mark schemes

Q1.

- (a) displacement 1
- (b) (percentage =)
 $\frac{63.5}{159.5} \times 100$ 1
 = 39.81191 (%) 1
 = 39.8 %
allow an answer correctly rounded to 3 significant figures from an incorrect calculation which uses both the values in the question 1
- (c) volume of copper sulfate solution 1
- (d) 0.8(0) g 1
- (e) (maximum temperature change) = 47 – 22 (°C) 1
 = 25 (°C)
allow correct use of incorrectly determined value(s) from the graph 1
- (f) (conversion 25 cm³ =) 0.025 dm³ 1
 (concentration =) $\frac{6.75}{0.025}$ (g/dm³)
allow correct use of an incorrectly determined or unconverted volume 1
 = 270 (g/dm³) 1
- (g) line of best fit using the first five points
max 1 mark if the lines do not intersect 1
 line of best fit using the last four points 1
- (h) energy is **taken in from** the surroundings so the reaction is **endothermic** 1