

01. 0620_m22_ms_62 Q: 2

Question	Answer	Marks
(a)	all initial temperatures correct (21.0, 21.0, 21.0, 21.5, 21.5, 21.5)	1
	all final temperatures correct (25.5, 27.5, 30.0, 32.5, 34.0, 39.5)	2
	all temperature changes in calculated correctly (4.5, 6.5, 9.0, 11.0, 12.5, 18.0)	1
	all temperature readings and calculated temperature changes are show to 1 dp	1
(b)	y-axis scale is linear and points extend over halfway up scale	1
	all points plotted correctly	2
	best fit straight line	1
	line extended to (0,0)	1
Question	Answer	Marks
(c)	correct working shown on graph	1
	correct reading from their working shown on graph	1
(d)	9 °C / halved	1
	double the volume of water (to be heated)	1
(e)	change: use a polystyrene cup / insulation / lid	1
	explanation: reduce / less heat lost	1
	change: use a burette (for the water)	1
	explanation: (more) accurate (than a measuring cylinder)	1