

CAMBRIDGE
INTERNATIONAL EXAMINATIONS

NOVEMBER 2002

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK : 60

SYLLABUS/COMPONENT : 0625/5

**PHYSICS
(PRACTICAL)**



UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

Page 1	Mark Scheme	Syllabus	Paper
	IGCSE Examinations – November 2002	0625	5

1.	x and y both < 40 cm	1
	either to nrst mm	1
	(x + y) 39 – 41 cm	1
	correct unit, either/both	1
	m correct	1
	unit	1
	Diagram good, neat/clear description	2
	(OR adequate	1)
	x and y both sensible (< 40 cm)	1
	(x + y) 39 – 41 cm	1
	m correct	1
	Average m method	1
	unit	1
	2/3 sf	1
	within 5 g of each other	1
		TOTAL 15

2.	0 – 300 s temps present and decreasing	1
	330 – 450 temps present and higher than t = 300 s	1
	evidence of better than 1°C	1
	all to better than 1°C	1
	heats up faster than cools	1
	example drop given with time	1
	example rise given with time	1
	Graph	
	Temp scale at least ½	1
	Labelled	1
	Plot at t = 0 s present	1
	10 more plots	1
	plots – check 2 most off line (-1 each error)	2
	(do not award if < 6 plots)	
	line: shape	1
	thickness	1
		TOTAL 15

3.	V, I ₁ and I ₂ sensible	
	unit for V and I (at least once)	
	at least 1 or 2 dp (both)	
	ratio correct	
	2/3 sf	
	no unit	
	R ₁ and R ₂ correct	1
	Unit either/both	1
	Ratio correct	1
	2/3 sf and no unit	1
	the same	1
	corresponds with results	1
	Circuit	
	Symbols cell & resistor	
	Resistor, variable, voltmeter	
	Resistor fixed (-1 each error)	2
	Voltmeter and variable resistor in correct positions in correct circuit	1

TOTAL 15

4.	u and v present	1
	unit for either/both	1
	u + v = 79 – 81 cm	1
	Evidence of better than 0.5 cm (in u, v, x or y)	1
	H value	
	x and y present	1
	unit for either/both (same as u and v)	1
	h value	1
	correct arith for ratios u/v and y/x	1
	both to 2/3 sf	1
	no units	1
	u/v = y/x within 10%	1
	correct H/h, 2/3 sf, no unit	1
	precaution stated	1
	explained	1

TOTAL 15