Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic : 2_Motion and Forces

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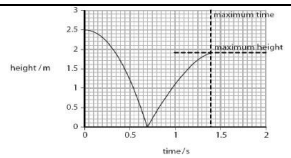
Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Mark Schemes
Q1.

	Answer	Acceptable answers	Mark
(i)	2.5 (m)	Allow answers between (and including) 2.45 & 2.55	**(1)**
(ii)	0.7 (s)	Allow answers between (and including) 0.68 & 0.72	**(1)**
(iii)	 line: same shape as original (1) peak at 1.9 m (1) time taken < 0.7 s (1)	Ignore any part of the graph after the peak	**(3)**
(iv)	An explanation linking: <u>energy</u> lost (1) in collision with ground / air resistance (1)	Inelastic collision worth (2) as sound or heat	**(2)**

Q2.

Question number	Answer	Additional guidance	Mark
(a)(i)	Calculating the mean (1) 18.36 Rounding to 2 s.f. (1) 18 (cm)	award full marks for correct numerical answer without working	**(2)**

Question number	Answer	Additional guidance	Mark
(a)(ii)	Rearrangement (1) $t = \sqrt{\frac{\text{distance}}{500}}$ Substitution and answer (1) time = 0.17 (s)	award full marks for correct numerical answer without working allow answers which round to 0.17, e.g. 0.1673	(2)

Question number	Answer	Additional guidance	Mark
(b)	An explanation that combines identification via a judgement (1 mark) to reach a conclusion via justification/reasoning (1 mark): • 25.5 is an anomalous result (1) • (because) it is much further away from the mean than the other results (1)	ignore 19	(2)

Question number	Answer	Mark
(c)	• Take more readings (1) • Idea that a third student should also measure the reaction time (1)	(2)

Question number	Answer	Additional guidance	Mark
(d)	An answer that combines the following points to provide a logical description of the plan/method/experiment: • using a larger group of students/large population of students (1) • and measure how their reaction time varies with age/height (1)	allow any suitable variable	(2)