Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic : Motion And Forces

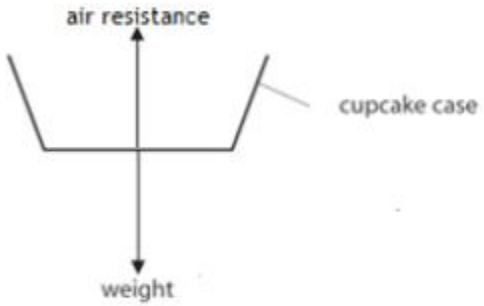
Name of the Student:_____
Max. Marks : 16 Marks **Time : 16 Minutes**

Mark Schemes

Q1.

Question number	Answer	Additional guidance	Mark
(i)	A description to include any 4 from: measure height (1) measure time of fall (1) use (average) speed=distance ÷ time (1) repeat with different number of cupcake cases in the stack/more cupcake cases (1) repeat **and** average time (of fall for each stack of cupcake cases) (1) plot a graph (speed of fall against number of cupcake cases dropped) (1)	 allow 'keep same height' allow in this context hold against (fixed point on) metre rule allow 'time it' accept cupcakes for cupcake cases	(4) AO1

Question Number	Answer	Additional guidance	Mark
(ii)	substitution (1) (W=)0.005 x 10 evaluation (1) 0.05 (N)	 5×10^{-2} (N) do not allow power of ten error award full marks for the correct answer with no working give full credit for use of g=9.8 or 9.81 N/kg	(2) AO2

Question number	Answer	Additional guidance	Mark
(iii)	 air resistance arrow (1)	judge by eye any vertical upward arrow outside or inside the cupcake case ignore length of arrow arrow need not touch cupcake holder ignore label on arrow	(1) AO2

Question number	Answer	Additional guidance	Mark
(iv)	zero / there is none / 0 / it has no acceleration	ignore 'constant' ignore units	(1) AO2

Q2.

Question number	Answer	Additional guidance	Mark
	substitution (1) (a=) $\frac{12-2(.0)}{4(.0)}$ evaluation (1) 2.5 (m/s^2)	award full marks for correct answer without working.	**(2)** **AO2**

Q3.

Question number	Answer	Additional guidance	Mark
	substitution (1) (average speed =) $\frac{1200}{80}$ evaluation (1) 15 (m/s)	 award full marks for the correct answer without working	**(2)**

Q4.

Question number	Answer	Additional guidance	Mark
	substitution (1) (change in velocity=) 3 x 7 evaluation (1) 21 (m/s)	 award full marks for the correct answer with no working	**(2)** **AO2**

Q5.

Question Number	Answer	Additional guidance	Mark
	substitution (1) $\frac{80(^2) (- 0^2)}{2 \times 4}$ evaluation (1) 800 (m)	allow 1 mark for seeing $\frac{80}{8}$ ignore any minus signs award full marks for the correct answer without working	**(2)**