Getting Easy Marks—P2 Jan2010

Question	Recall	Method	Marks
1(a)(i) ...and give the unit.	Weight is a force, measured in Newtons (N).		1
1(a)(ii) Work = Force x distance		Force calculated in part (i) - ignore value for time given in the question.	2
2(a)(i) What is the *total* dose?		Include all numbers—perhaps tick as added.	1
3(a)(i) Explain why the glass becomes positively charged.	Static charge is (almost) always about transfer of *negatively charged electrons*.		2
3(b)(ii) Why is it important that the paper is heated?		The earlier question mentions toner *melting*.	1
4(a) atoms of same element, different numbers of neutrons.	This is an *isotope*.		1
4(b) new mass and proton no.		Subtract mass and proton number of alpha.	2
4(c) explain diagram	Diagram shows *nuclear fission*, where *neutrons* cause a *chain reaction*.		2
4(d) alternate fuel in *nuclear* reactors?	Plutonium.		1
5(a)(ii) how can we tell A and B have same deceleration?	Acceleration=gradient on a velocity-time graph.	Two graphs have the same gradient.	1
6(a)...and give the unit.	Unit of frequency is the Hertz (Hz).		1
6(b) frequency of UK mains?	Mains electricity in UK: f=50Hz (voltage=230V)		1
7(a) what is electric current?	Flow of charge/electrons		1
7(b) ...and give the unit.	Unit of current is the Ampere/Amp (A)		1