

Question number	Answer	Accept	Reject	Marks
8	<p>An explanation including any five of these ideas (in any order):</p> <p>MP1 alpha particles have less penetrating power /less range ;</p> <p>MP2 alphas have more charge;</p> <p>MP3 alphas cause more ionization;</p> <p>MP4 alphas are bigger / have more mass;</p> <p>MP5 (slowing) force on alpha particles is larger;</p> <p>MP6 (kinetic) energy of alpha lost quickly causing ionization;</p> <p>MP7 (larger) alpha particles are more likely to collide with atoms;</p>	<p>Accept reverse arguments, e.g. beta particles have more penetrating power etc</p> <p>Ignore comparisons of energy/ velocity/ momentum</p>		5

Total 5 marks