Question number		Answer	Notes	Marks
5 (a)		idea that 15% of **total** energy; is transferred **usefully**;	allow reverse argument e.g. 85% of total energy is wasted	2
(b)		correct efficiency read from graph; substitution into efficiency formula; rearrangement; evaluation; e.g. 90% or 0.9 seen in working 0.9 = 6.0 / total energy input total energy input = useful energy / efficiency (total energy input =) 6.7 (kJ)	 allow ecf from incorrect efficiency allow working in J or kJ allow any correctly rounded value for 4 marks allow 6.6 or 6.6 recurring (kJ) for 3 marks	4
(c)	(i)	uranium or plutonium;	allow specifically named fuel e.g. uranium-235, plutonium-239 condone incorrect isotope number	1
	(ii)	neutron; unstable; daughter; neutrons; kinetic;		5

Total for Question 5 = 12 marks