237	$W = \Delta E_K$ $W = \dfrac{1}{2}m\Delta v^2$ $W = \dfrac{1}{2}94 \times 11.1^2$ $W = 5.79 \times 10^3$ J	 1 1
238	$\Delta v = \sqrt{\dfrac{2\Delta E_K}{m}} = \sqrt{\dfrac{2W}{m}} = \sqrt{\dfrac{2mas}{m}}$ $\Delta v = \sqrt{\dfrac{2(0.145 \times 265 \times 3.50)}{0.145}}$ $\Delta v = \sqrt{2(265 \times 3.50)}$ $\Delta v = 43.1$ m s^{-1}	 1 1
239	$W = \Delta E_K$ $W = \dfrac{1}{2}m\Delta v^2$ $W = \dfrac{1}{2}(65 + 6.8) \times 15^2$ $W = 8.1 \times 10^3$ J	 1 1
240	$s = \dfrac{W}{F} = \dfrac{m\Delta v^2}{2F}$ $s = \dfrac{1800 \times 28.0^2}{2 \times 67 \times 10^3}$ $s = 10.5$ m	 1 1
241	$F = \dfrac{W}{s} = \dfrac{m\Delta v^2}{2s}$ $F = \dfrac{72 \times 11^2}{2 \times 190}$ $F = 23$ N	 1 1
242	$F = \dfrac{W}{s} = \dfrac{mg\Delta h}{s}$ $F = \dfrac{(4.8 \times 9.8 \times 2.2)}{3.5 \times 10^{-2}}$ $F = 3.0 \times 10^3$ $a = \dfrac{F}{m}$ $a = \dfrac{3.0 \times 10^3}{4.8}$ $a = 616$ m s^{-2}	 1 1 1 1
243	$E_K = \dfrac{1}{2}mv^2$ $E_K = \dfrac{1}{2}(6.8 \times 10^{15}) \times (12 \times 10^3)^2$ $E_K = 4.9 \times 10^{23}$ J	 1 1
244	$v = \sqrt{\dfrac{2E_K}{m}}$ $v = \sqrt{\dfrac{2 \times 2.2 \times 10^9}{3.0 \times 10^3}}$ $v = 1.2 \times 10^3$ m s^{-1}	 1 1