Question Number	Answer	Mark
11	Use of $L = 14800\ L_{Sun}$ (1) Use of $I = \frac{L}{4\pi d^2}$ (1) $d = 1.1 \times 10^{23}$ m (1) <u>Example of calculation</u> $L_{candle} = 14\ 800 \times 3.83 \times 10^{26}\ W = 5.67 \times 10^{30}\ W$ $d = \sqrt{\frac{L}{4\pi I}} = \sqrt{\frac{5.67 \times 10^{30} W}{4\pi \times 3.64 \times 10^{-17} W\ m^{-2}}} = 1.11 \times 10^{23}$ m	**3**
	Total for question 11	**3**