2. An archer fires an arrow at a target which is 60 m away.

(a) Complete the following sentence.

When he releases the string of the bow, the bow loses ....

energy and the arrow gains .... energy. (2)

(b) The arrow takes 0.5 seconds to reach the target. Calculate the average speed of the arrow.

....

....

.... (3)

(c) What happens to the energy of the arrow when the archer hits the target?

....

.... (2)

3. Venus is a planet. It has a rocky surface which is very hot. Convection currents circulate in its atmosphere.

(a) (i) Explain how a planet differs from a star.

....

.... (2)

(ii) Explain how a planet differs from a moon.

....

.... (1)