

2 A respirometer can be used to investigate how temperature affects the rate of respiration of woodlice.

Woodlice are small invertebrate animals. Fig. 2.1 shows a single woodlouse.

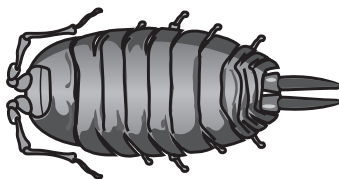


Fig. 2.1

Fig. 2.2 shows a simple respirometer.

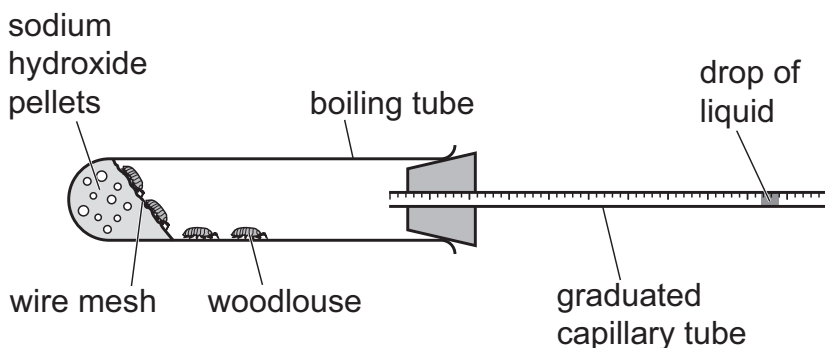


Fig. 2.2

(a) Explain how the experimental set-up in Fig. 2.2 allows the rate of respiration of woodlice to be determined.

..... [4]

(b) A student determined the rate of respiration of woodlice at a temperature of 5 °C and at a temperature of 20 °C.

Predict **and** explain how the rate of respiration of woodlice differs at 5 °C compared to 20 °C.

..... [1]