

GCSE Biology B (Twenty First Century Science)
J257/03 Breadth in Biology (Higher)

Question Set 2

1. A student is carrying out a field investigation to determine the population of woodlice in the school's wildlife garden.

(a) Describe a method the student could use to determine the population size of woodlice.

Capture a sample of woodlice from an area and mark them.
Then release the individuals.
Then capture a second sample and count number of marked individuals.

Then use \longrightarrow
$$\text{pop-ulation size} = \frac{\text{Number marked in 1}^{\text{st}} \text{ sample} \times \text{Number recaptured}}{\text{Number recaptured that are marked}}$$
 [4]

(b) Woodlice are often found under logs and bark where it is damp. Suggest why woodlice prefer damp places.

Because here they lose less water by osmosis. [2]

Total Marks for Question Set 2: 6

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