

















Code: KS4_07_11

Answer questions related to compost and decomposition in gardens

Task 1: A gardener investigates if turning over the waste in a compost heap makes the waste decay more quickly. The gardener:

- makes two separate heaps of garden waste, heap A and heap B
- turns over the material in heap A every 2 weeks
- does not turn over the material in heap B
- estimates the amount of decay in the two heaps after 6 months.

The diagram shows the two heaps of garden waste at the beginning of the investigation:



(A) Suggest two factors, other than time, the gardener should control to make t investigation fair.	ne
1	
2	
(B) Name one type of living thing that causes decay.	













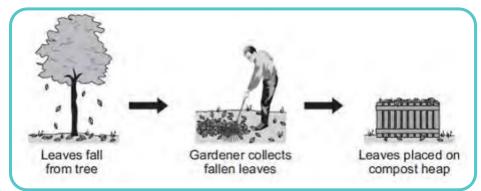
Task 1 continued:

(C) The gardener's results are shown in the table.

Compost heap	Estimated amount of decay
Α	A lot
В	Very little

- (i) Why does turning over the material in heap A make the material decay faster?
- (ii) The gardener puts decayed material around his plants to help them grow. Suggest why the plants in a woodland grow well each year without material from compost heaps being added.

Task 2: Gardeners often collect fallen leaves in autumn and place them on compost heaps in the garden.



- (A) Over the next year the leaves decay. Which living things cause decay?
- (B) The leaves decay more quickly in summer than in winter. Give one reason why.
- (C) The compost heap has holes in its sides to let gases enter. Which gas is needed for decay? Tick one box.
 - □ Carbon dioxide
 - □ Nitrogen
 - □ Oxygen