

Dalkeith High School
N5 Biology
The need for Transport (Task 1)

1. a) Why is water an important resource for plants?

_____ 1

b) Name the vessels which transport water throughout the plant.

_____ 1

c) As well as water, what other substances are transported in this vessel?

_____ 1

2. An experiment was carried out to investigate the rate of water loss in a cherry laurel tree.

The average rate of water loss was measured every 10 days for 70 days. The results are shown in the table below.

<i>Time (days)</i>	<i>Average rate of water loss (cm³ per hour per kg of tree)</i>
0	5.0
10	4.7
20	4.6
30	3.2
40	2.4
50	3.8
60	2.3
70	2.0

a) Calculate the percentage decrease in rate of water loss between day 0 and day 70.

_____ % 1

b) Express, as the simplest whole number ratio, the rates of water loss from day 20 and day 60.

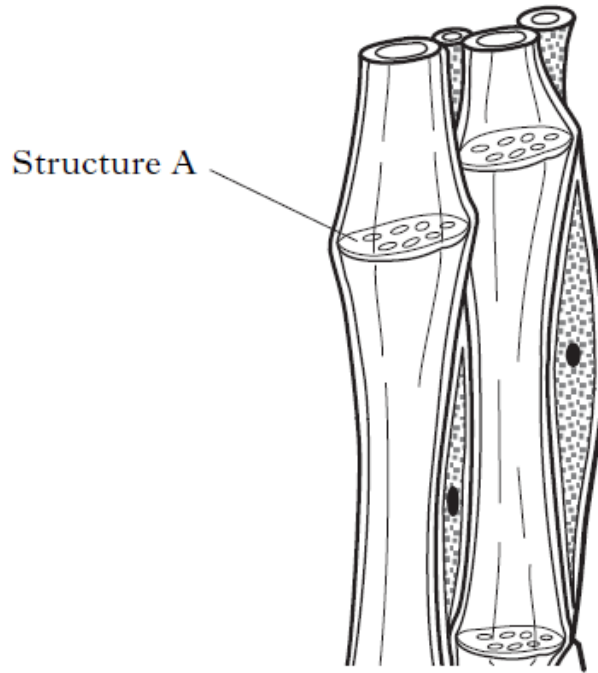
_____ : _____ 1

c) During which 10 day period was there the greatest decrease in rate of water loss? Tick the correct box.

Day 20-40 Day 30-40 Day 40-50 Day 50-60

1

3. The diagram below shows a plant transport tissue.



a) Name the plant transport tissue shown in the diagram and state the substance it transports.

Tissue _____

Substance transported _____

1

b) Name the pores found on the leaves of plants.

1

c) What is the function of these pores?

1

d) Name the cells which control the opening and closing of the pores.

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