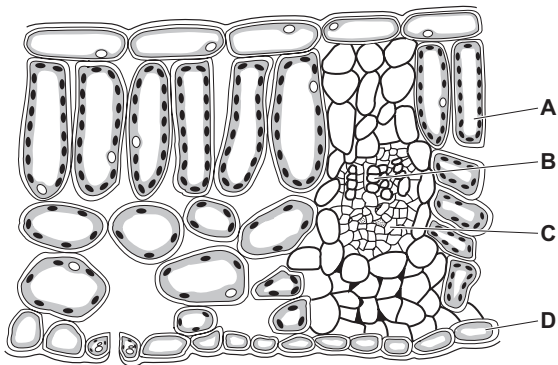


- 12 What is a structural feature of xylem vessels?
- A contain many mitochondria
 - B made up of cells joined end to end
 - C presence of cross walls
 - D thin walls

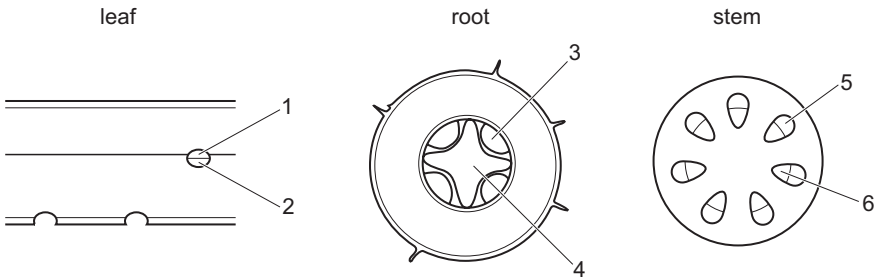
- 9 The diagram shows part of a cross-section of a leaf.
- Which part is the xylem?



- 14 Which row shows the features of xylem vessels?

	vessel walls	mitochondria present
A	thick	yes
B	thick	no
C	thin	yes
D	thin	no

- 13 The diagrams show cross-sections of a leaf, a root and a stem.



NOT TO SCALE

In which row do the numbers represent the xylem in the leaf, the root and the stem?

	leaf	root	stem
A	1	3	5
B	1	4	6
C	2	3	5
D	2	4	6

5 (a) Fig. 5.1 shows a cross-section of a leaf.

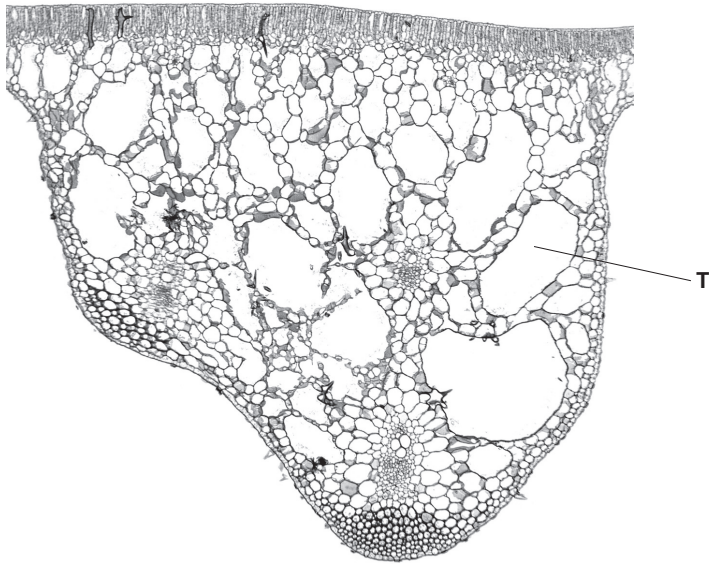


Fig. 5.1

(i) On Fig. 5.1, draw a circle around **one** vascular bundle. [1]

(ii) On Fig. 5.1, draw a label line and the letter **X** to identify the palisade mesophyll tissue. [1]

(iii) State the name of the cell structure in palisade mesophyll cells where photosynthesis occurs.

..... [1]

(iv) Describe the functions of the tissues in a vascular bundle in a leaf.

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(b) The leaf shown in Fig. 5.1 is from an aquatic plant adapted to live in water. The leaves float on the surface of the water.

(i) State the term used to describe plants that are adapted to live in water.

..... [1]

(ii) Identify feature **T** shown in Fig. 5.1 **and** explain how this feature adapts the leaf to float on the surface of the water.

feature **T**

explanation

..... [2]

(iii) Explain **one** other adaptation of this group of aquatic plants.

.....
.....
..... [2]

[Total: 12]