

Exchange Surfaces 2

Q:1 Plants exchange substances with the environment.

(a) Use words from the box to complete each sentence.

alveoli	phloem	root hairs	stomata
storage organs	villi	xylem	

(a) (i) Most water enters a plant through _____
(1 mark)

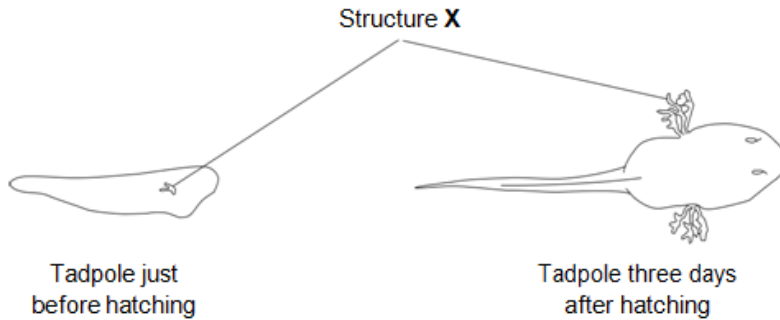
(a) (ii) The water is transported up the stem to the leaves in the _____
(1 mark)

(a) (iii) Carbon dioxide enters leaves through _____
(1 mark)

(a) (iv) A leaf uses the carbon dioxide to produce sugars.

Sugars are transported to _____ through
the _____
(2 marks)

Q:2 The young stages of frogs are called tadpoles. The tadpoles live in fresh water. The drawings show a tadpole just before hatching and three days after hatching. Structure X helps in the exchange of substances between the tadpole and the water.



(a) Name one substance, other than food, that the tadpole needs to exchange with the water in order to grow.

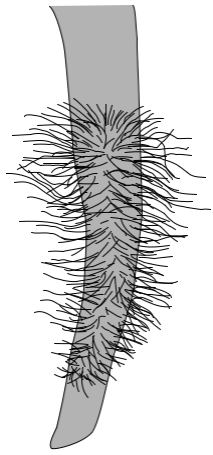
(1 mark)

(b) Suggest how the changes in the tadpole shown in the drawings help it to survive as it grows larger. You should not refer to movement in your answer.

To gain full marks you should refer to structure X.

(4 marks)

Q:3 Figure 3 shows part of a plant root.



The plant root is adapted for absorbing water from the soil. Use information from Figure 3 to explain how this plant root is adapted for absorbing water.

[3 marks]

TOTAL MARKS=13