5 Fig. 5.1 is a diagram of a plant root hair cell.

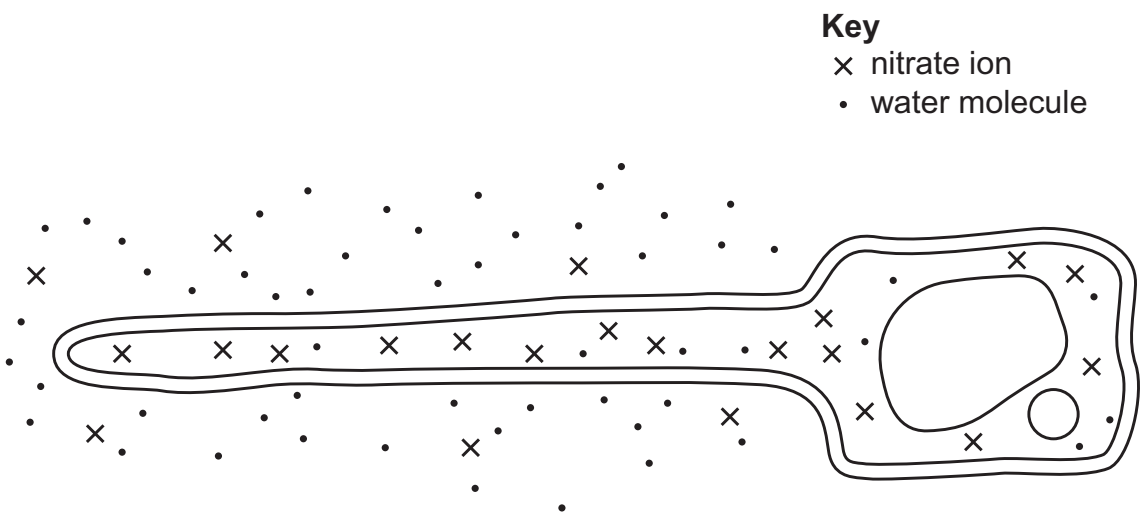

Fig. 5.1

(a) (i) Using the information in Fig. 5.1, explain how nitrate ions are transported into the root hair cell.

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..... [4]

(ii) State **two** ways that nitrogen fixation occurs.

1 .....

2 .....
[1]

(b) State the name of the process that moves water molecules into root hair cells.

..... [1]

(c) Describe differences **and** similarities between the structure of a plant root hair cell and a bacterial cell.

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..... [5]

[Total: 11]