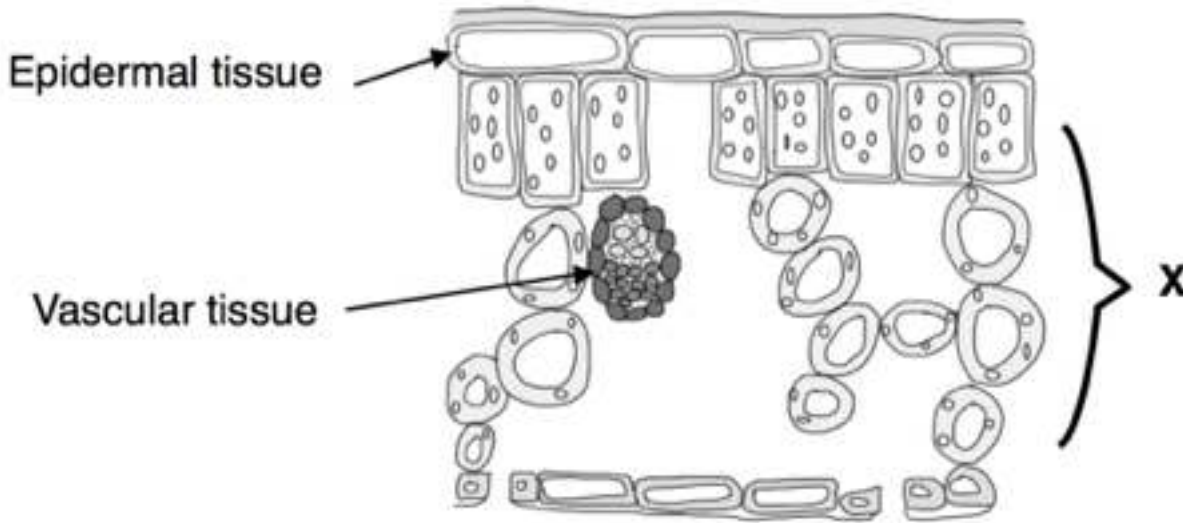


0 1

The diagram below shows a section through a leaf.



0 1 . 1

Describe the function of the named tissues in the leaf

Epidermal tissue

Covers the leaf/plant [1]

[1 mark]

Vascular tissue

Transports substances/water/mineral ions/sugars around the plant or leaf [1]

[1 mark]

**TOP TIP :** Tissues are aggregations or collections or groups of similar cells; organs are aggregations of tissues performing specific physiological functions. Organs are organised into organ systems, which work together to form organisms.

0 1 . 2

Suggest why there are spaces between the cells of the tissue labelled X

[2 marks]

to allow diffusion [1]  
of carbon dioxide into the leaf or oxygen/water vapour out of the leaf [1]  
to allow water to evaporate from cells [1]

0 1 . 3

Explain how the palisade tissue layer is adapted to carry out photosynthesis

[2 marks]

cuboid/rectangular shape allows more cells to pack close together at the top of the leaf [1]  
lots of chloroplasts/chlorophyll [1]  
to trap more (sun)light energy [1]

0 1 . 4

State **one** purpose of the stomata

[1 mark]

allow carbon dioxide in/oxygen or water vapour out/control water loss/gas exchange [1]