

WJEC Wales Biology GCSE

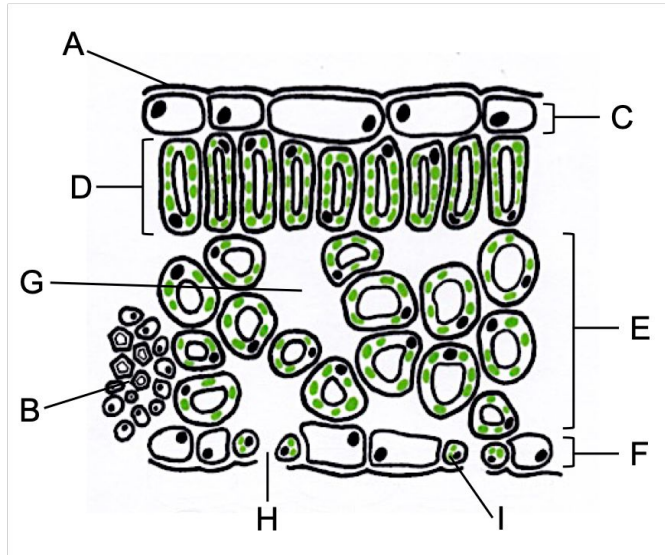
1.5 (e) - Plant Structure

Flashcards

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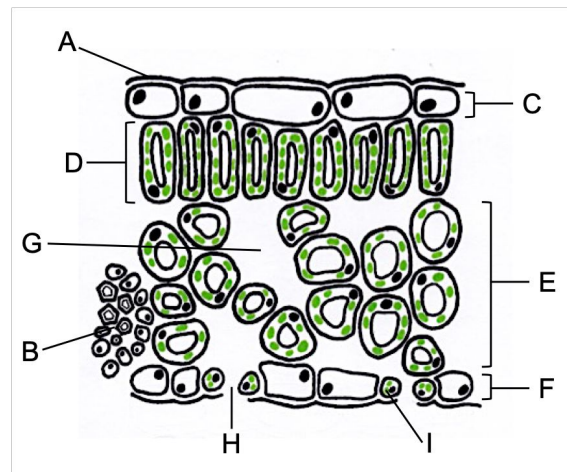


Identify the structures of the leaf labelled in the diagram below



Identify the structures of the leaf labelled in the diagram below

A	waxy cuticle	F	lower epidermis
B	vein	G	air-filled space
C	upper epidermis	H	stoma
D	palisade layer	I	guard cell
E	spongy layer		



How is the waxy cuticle adapted to its function?



How is the waxy cuticle adapted to its function?

- Waterproof to reduce water loss
- Transparent allowing light to reach the palisade layer



How is the palisade layer adapted to its function?



How is the palisade layer adapted to its function?

It receives the most light so contains the greatest concentration of chloroplasts



Describe the structure of the upper epidermis



Describe the structure of the upper epidermis

Transparent allowing light to reach the palisade layer



How is the spongy layer adapted to its function?



How is the spongy layer adapted to its function?

- Contains many air spaces to allow the diffusion of carbon dioxide to chloroplasts in the palisade layer for photosynthesis
- Also contains some chloroplasts



Describe how the lower epidermis is adapted to its function



Describe how the lower epidermis is adapted to its function

Contains many stomata to allow gas exchange



What are stomata?



What are stomata?

These are pores that are found in the lower epidermis of that leaf that allow for gas exchange



What are guard cells?



What are guard cells?

Specialised cells surrounding the stoma that change shape to control the size of the pore



What are the veins?



What are the veins?

- Contain xylem and phloem
- Form a large network to deliver water and remove glucose

