Plants and Photosynthesis Lesson 5- Structure of the Leaf

Biology - Key Stage 3

Miss White



Look at this leaf, or one of your own, and think about what features it has in order to help it catch as much sunlight as possible

Jot down your ideas in this box





Independent Task

1. What is the name of the cells which surround the stomata?

2. In which cells does photosynthesis take place?

3. Why does a leaf have a waxy cuticle?

4. Which gas diffuses into the leaf for photosynthesis?



Match up task

Upper epidermis

Chloroplasts
Spongy cells

Waxy cuticle
Stomata

Palisade Cells

Guard cells

Organelle which is the site of photosynthesis

Waterproofs the leaf

Covering of the leaf, often waxy

Packed with chloroplasts

Allows for diffusion of gases through the leaf

Open and close the stomata

Openings on the underside of the leaf



Task 1- Describe two adaptations of a leaf



Task 2- Explain how each adaptation helps the leaf carry out **photosynthesis**

Here's an example to help:

Adaptation: Plants have flat leaves

Explanation: This helps them absorb more sunlight for photosynthesis

