

Leaf Structure

Biology – IGCSE

Section 2 - Structure and functions in living organisms

(e) Nutrition

Name: _____

Date: _____

Grade 9 _____

Activity 1- Drag and Drop each of the following Structure of the leaf in the box matching its description.

Palisade mesophyll

Stomata

Lower epidermis

Spongy mesophyll

Guard cell

Wax cuticle

Upper epidermis

Structure	Description
	Protective layer on top of the leaf, prevents water from evaporating.
	Thin and transparent to allow light to enter palisade mesophyll layer underneath it.
	Column shaped cells tightly packed with chloroplasts to absorb more light maximizing photosynthesis
	Contains internal air spaces that increase the surface area to volume ratio for the diffusion of gases (mainly carbon dioxide).
	Contains guard cells and stomata
	Absorbs and loses water to open and close the stomata to allow carbon dioxide to diffuse in, oxygen to diffuse out.
	Where gas exchange takes place; opens during the day, closes during the night. Evaporation of water also takes place from here. In most plants, found in much greater concentration on the underside of the leaf to reduce water loss.