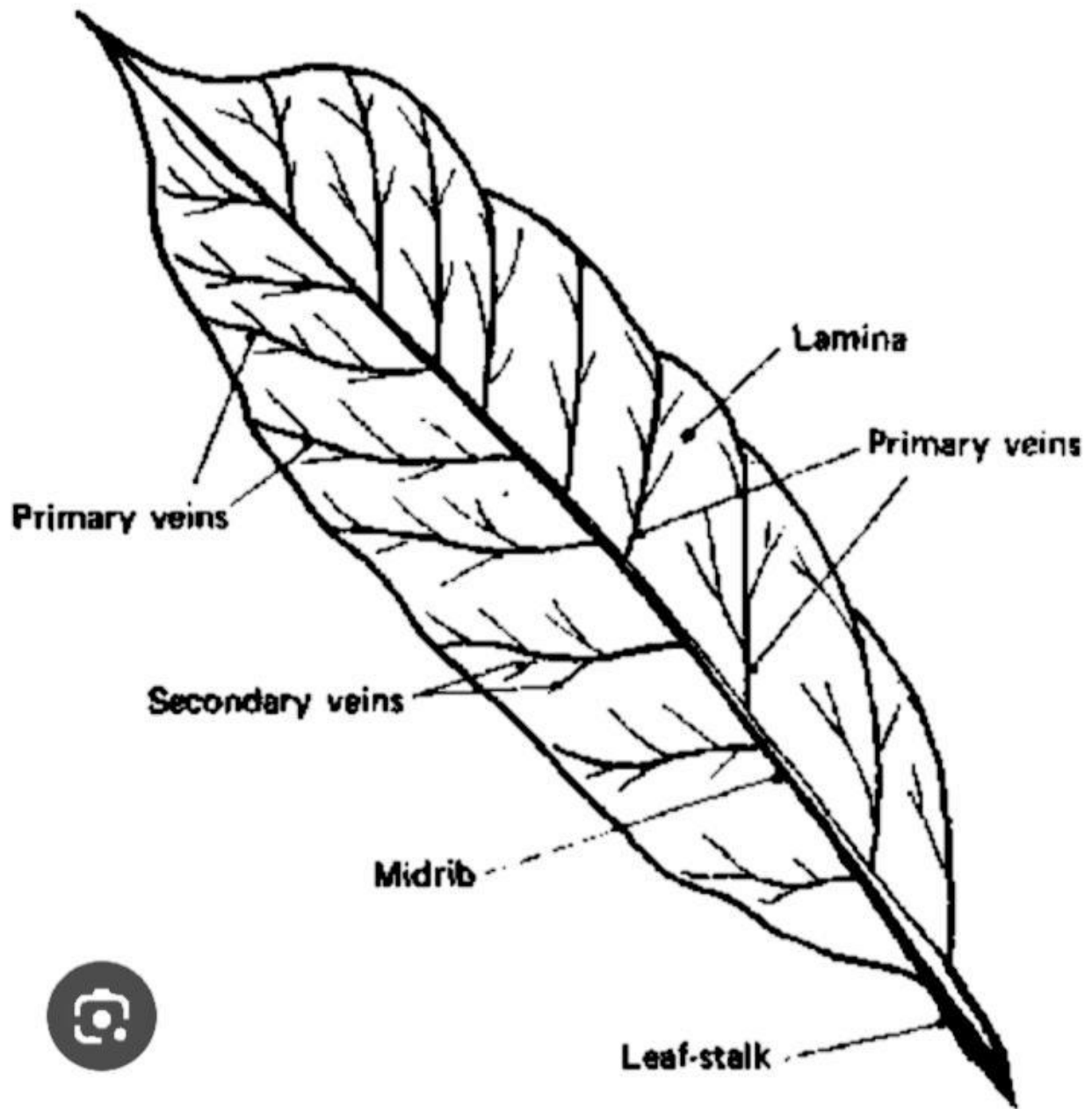


P.6 SCIENCE EXTRA 9

THE STRUCTURE OF A LEAF



FUNCTIONS OF EACH PART OF A LEAF

Leaf blade/lamina

- **For photosynthesis**
- **It helps in making of starch**
- **For respiration**
- **It is where transpiration mainly takes place.**
- **It is where the breathing organs (stomata) are found**

• **Apex**

- **It is the sharpest tip of the leaf**
- **It provides protection to the leaf**

Stomata

- **For breathing**
- **Allow out water during transpiration**
- **Let in carbon dioxide by diffusion during day time and oxygen during night time.**

Veins

- **They transport water and mineral salts in the leaf.**
- **They transport food from the leaf blade to the main vein (midrib)**

Leaf stalk (petiole)

- **It holds a leaf**
- **It transports water from the stem to the leaf**
- **It transports food from the leaf to the stem**

Leaf base

- **It attaches the leaf to the stem**
- **Leaf blade (lamina)**
- **It is where photosynthesis occurs**

FUNCTIONS OF LEAVES TO PLANTS

- **They make food for the plant (carry out photosynthesis)**
- **They plants in breathing**
- **They carry out transpiration**

- **Some leaves store food for the plant e.g cabbage and onion**

FUNCTIONS OF LEAVES TO PEOPLE

- **Some leaves are eaten as food**
- **They are sold for income**
- **They are used as herbal medicine**
- **They are used as animal feeds**
- **Dry leaves can be used as mulches**
- **Some leaves can be used for plant propagation e.g Bryophyllum**
- **They are used for thatching houses**
- **For decoration**
- **Tea leaves can be used on beverages**

TYPES OF LEAVES

- **Simple leaves**
- **Compound leaves**

SIMPLE LEAVES

- **These are leaves with one leaf blade and leaf stalk**
- **They have one leaflet on the stalk**
- **They have one leaf stalk**
- **They have one margin**
- **Their leaf blade (lamina) is undivided or not completely divided**

Examples of simple leaves

- **Simple entire e.g mango, avocado and jack fruit**
- **Simple serrated e.g black jack**
- **Simple divided entire**
- **Simple lobed**
- **Simple palmate e.g paw paw and castor oil**

Note :

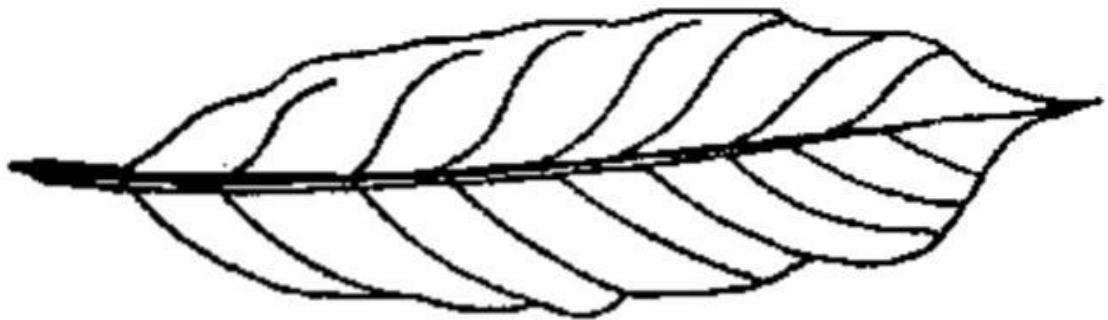
- **Monocotyledons leaf (simple lanceolate leaf) e.g maize, sorghum, millet, elephant grass, rice and reeds**

Diagrams of simple leaves

Simple palmate



simple lobed leaf



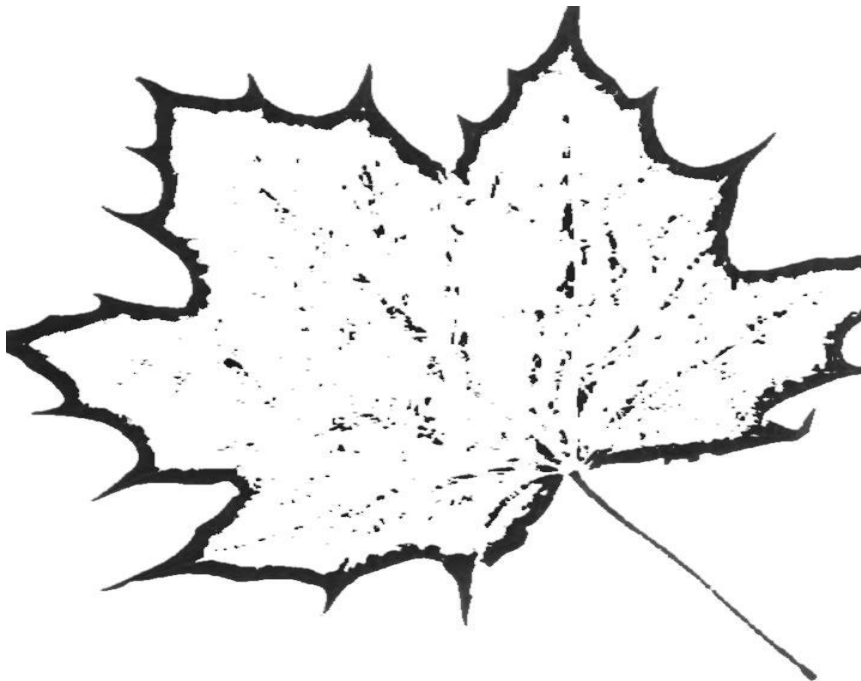
simple serrated leaf



Simple entire leaf



Simple divided leaf



Activity

- a) Name the two types of leaves.**
- b) Which type of leaf do banana plants have?**
- c) How is the rachis(leaf stalk) useful to a small leaflet**
- d) How do plants breathe?**
- e) Name the breathing structures for a plant**
- f) State any one use of leaves to a plant.**
- g) How are leaves useful to man?**
- h) Identity any two examples of plants whose leaves are eaten**
- i) How useful is the green pigment found on plant leaves to plants ?**
- j) Mention any one item made out of plant leaves.**