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## Ch - Life Process, Activity / Experiment No. - 1

To prepare a temporary mount of a leaf peel  
to show its Stomata.

Requirements : Any dicot leaf, microscope, glass slide, distilled water, Glycerine, cover slip, dropper and Fore-caps.

Theory : Leaf has small openings either on upper epidermis or lower epidermis.

- \* In some plants stomata are present on both the surfaces (Upper and Lower)

Procedure : Steps involved : —

1. Take a dicot leaf.
2. Tear leaf from its lower surface so that a thin peel can be obtained.
3. Mount the leaf peel in water.
4. After keeping in water leaf peel is mounted over glass slide by using Glycerine.
5. Covering the leaf peel with cover slip.
6. Observing the peel under light microscope.

Observation : Oblong/oval small pores are visible in between two kidney shaped guard cell. These pores are the Stomata.

### Precautions :

1. Select turgid (stretched) leaf only.
2. Carefully remove the peel from lower epidermis only.
3. Avoid excessive use of Glycerine.
4. Do not breath over the peel.

- \* Stomata in Monocot leaves are dumbell shaped.
- \* Stomata in Dicot leaves are Kidney shaped.
- \* Stomata open in Light and close in darkness.
- \* Stomata in plants are for following functions:-
  - (I) Gaseous exchange.
  - (II) Transpiration.
  - (III) Involved in Photosynthesis.