

# Revision Sheet | Lower Secondary Stage of (6-8)

1<sup>st</sup> Semester | 2023-2024

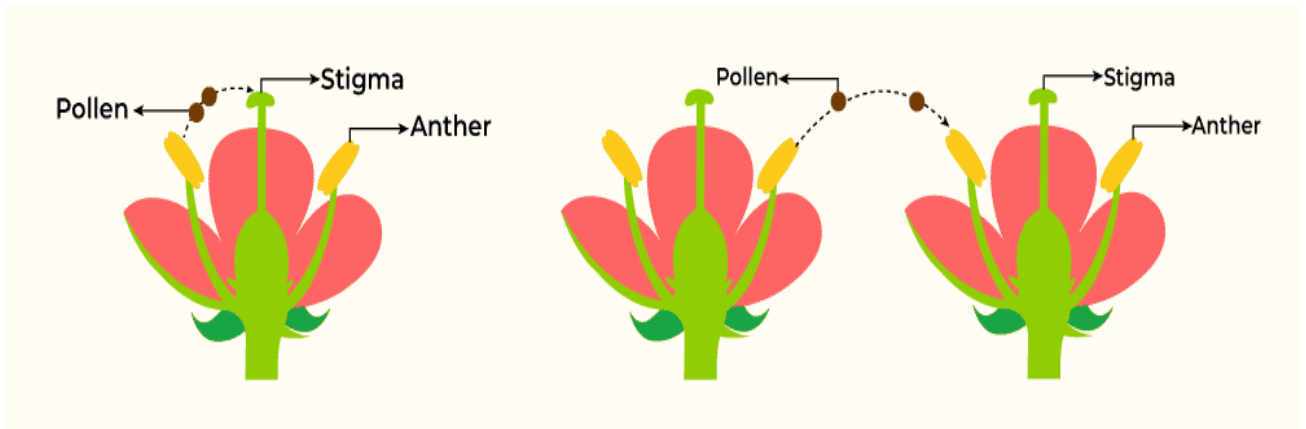
**Subject:** Biology

**Study sheet : Pollination**

Name : .....

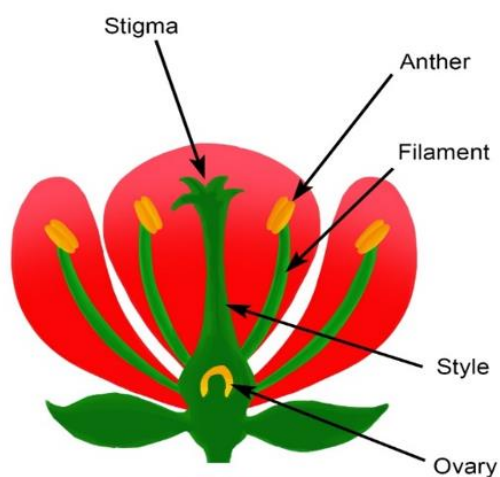
**Objectives:** Compare between self - pollination and cross - pollination .  
Compare between wind pollinated flowers and insect pollinated flowers

## Self pollination and cross pollination

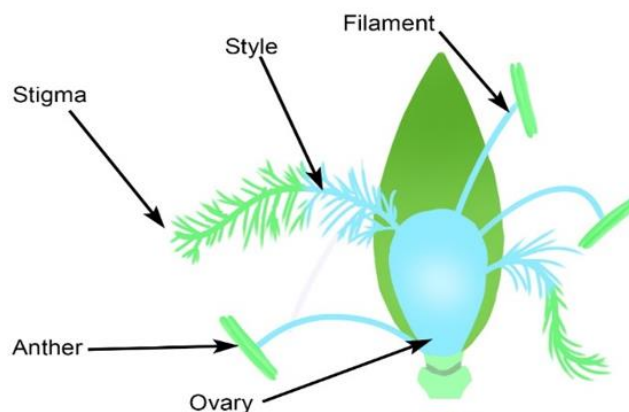


<u>Self pollination</u>	<u>Cross pollination</u>
It is the <b>transfer of pollen grains</b> from anther to stigma of the <u>same flower</u> or <u>another flower born on the same plant</u>	It is the <b>transfer of pollen grains</b> from the anther of one flower to the stigma of <u>another flower born on a different plant of the same species.</u>
It does not require any external agency	An external agency ( <u>wind</u> , water , insects ) is always required
It can occur even when the flower is closed	It only occurs when the flower is open
Does not introduce any variations	Introduce variations

## Insect pollinated flowers and wind pollinated flowers



INSECT POLLINATED FLOWER

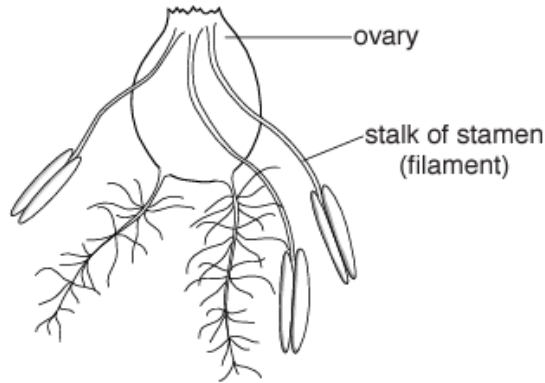


WIND POLLINATED FLOWER

Insect pollination	Wind pollination
Have a scent	No scent
Sticky, spiky pollen	Large amounts of light pollen
Sticky stigma inside flower	Feathery stigmas hang outside the flower
Stamens surrounded by petals	Large stamens hang outside flower
Produce nectar	Don't produce nectar
Petals large & bright	Petals small & dull

## Check your understanding :

The figure below shows a diagram of the reproductive organs of a wind-pollinated flower.



- (a) State **three** ways in which the reproductive structures of this flower are different to those of an insect-pollinated flower.

Write your answers in the table below .

structure	wind-pollinated flower	insect-pollinated flower
pollens	light	sticky and spiky
stamen	large and hang outside	surrounded by petals
stigma	feathery and outside the flower	sticky and inside the flower

- (b) State **three** ways in which an insect-pollinated flower attracts insects.

- 1 .....brightly coloured large petals.....
- 2 .....production of scent / odour;.....
- 3 .....production of nectar;.....

- (c) The pollen grains of wind-pollinated flowers and insect-pollinated flowers are different.

Suggest **one** feature that would help pollen grains be dispersed by wind.

large amount and light pollen

