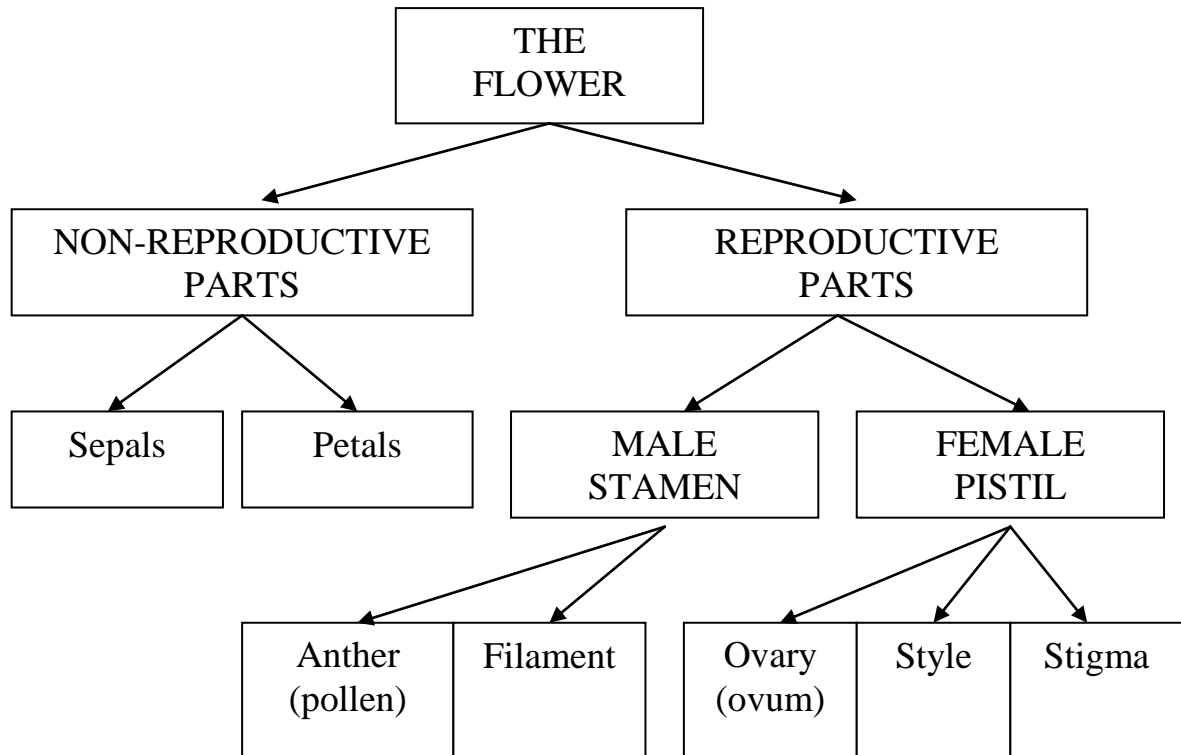


## FLOWERING PLANT REPRODUCTION



### PARTS OF A FLOWER

- ◆ **Flower** – a modified stem with modified \_\_\_\_\_ (**sepals and petals**) and sexual organs (male **stamen** or \_\_\_\_\_ **pistil**)
- ◆ Flowers may contain only \_\_\_\_\_ reproductive organs (**staminate flowers**), or only female reproductive organs (**pistillate flowers**), or \_\_\_\_\_.
- ◆ The development of flowers is often following periods of either \_\_\_\_\_ or short nights. However, some angiosperms flower at any time of the year.

### POLLINATION AND FERTILISATION

- ◆ **Pollination** is the transfer of the male \_\_\_\_\_ grain from the \_\_\_\_\_ to the stigma of the female pistil. Pollination may occur by means of the **wind** or by **animals** such as \_\_\_\_\_.
- ◆ **Self-pollination** – pollination within the \_\_\_\_\_ plant
- ◆ **Cross-pollination** – pollination with another plant
- ◆ **Fertilisation** – Fertilisation occurs after pollination. It is the process when a male pollen grain enzymatically ‘drills’ a pollen tube from the stigma down the style to the \_\_\_\_\_, and then fuses with or fertilises a female \_\_\_\_\_ to form a single-celled zygote

## THE FRUIT

- ◆ **Fruit** – the enlarged fleshy ovule (part of the ovary) which contains the \_\_\_\_\_ that developed from the zygote

## GERMINATION OF THE SEED

- ◆ **Germination** – the growth of the seed into a small plant called a **seedling**
- ◆ **Water** is \_\_\_\_\_ for germination.
- ◆ Some Australian native plants also require short periods of high temperatures resembling \_\_\_\_\_ in order to germinate.
- ◆ Seeds may be **dispersed** or \_\_\_\_\_ by wind (e.g. pine seed), by water (e.g. coconut) or by animals (e.g. bird).

## THE SEEDLING

- ◆ After germination of the seed, the shoot grows upward and the \_\_\_\_\_ grows downward.
- ◆ The first leaf/leaves to grow are called seed-leaves or \_\_\_\_\_.
- ◆ **Monocotyledons** are plants, such as grasses and irises, that have one cotyledon or seed-leaf.
- ◆ **Dicotyledons** are plants, such as roses and carrots, that have \_\_\_\_\_ cotyledons or seed-leaves.