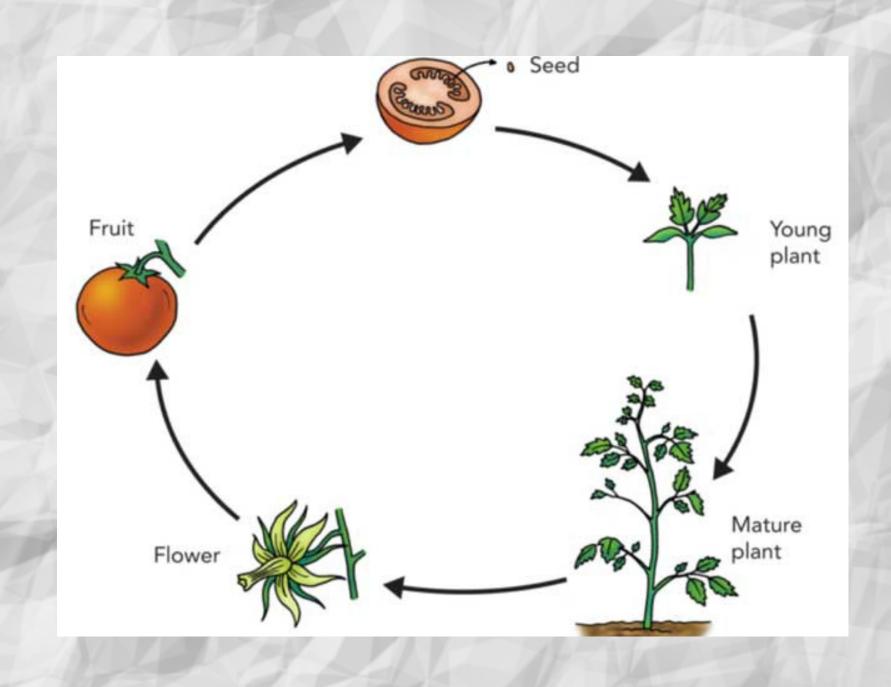
# 



Plants are living things, they grow and reproduce like any other living thing. They follow a cyclic process of starting a new life, growing, and then coming back to the starting stage (reproducing). Plants start their life from seed and grow up to become mature plants.

## stages of life cycle

- Seed
- Germination and Seedling
- Growing to Maturity
  - Flowering,
    - Pollinating, and Seeding
- Seed Dispersion



### SEED

stage 1

Seeds are much like babies of animals. Seeds contain the embryo of the plants with necessary food and an outer coating for protection.



## GERMINATION AND SEEDLING

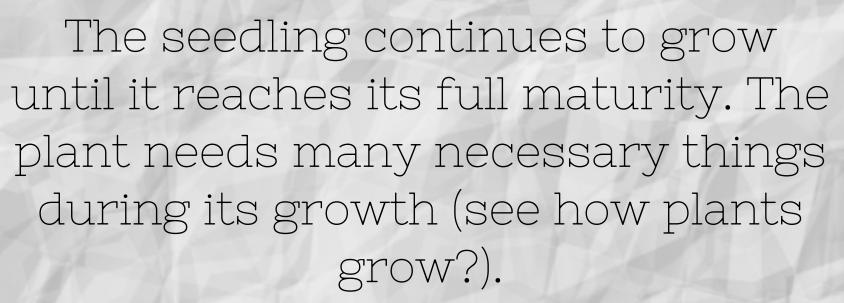
#### stage 2

When the conditions in the soil are just right, the seed germinates. First, it breaks the outer coating and begins growing its first roots and leaves.

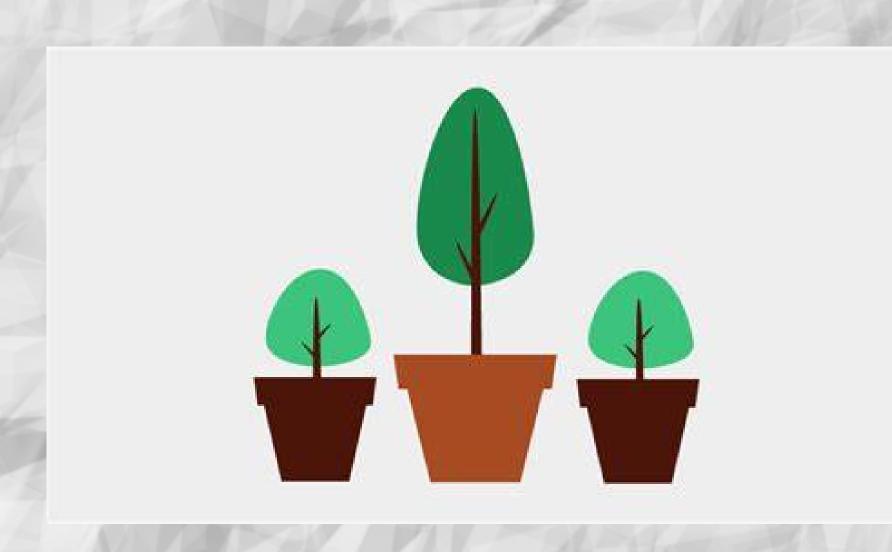
When the first sign of life from a seed appears out of the soil, it is called a seedling. As soon as the roots and leaves appear, they start their work, i.e. roots absorb water and nutrients, and leaves make food by photosynthesis.

## GERMINATION AND SEEDLING

#### stage 3



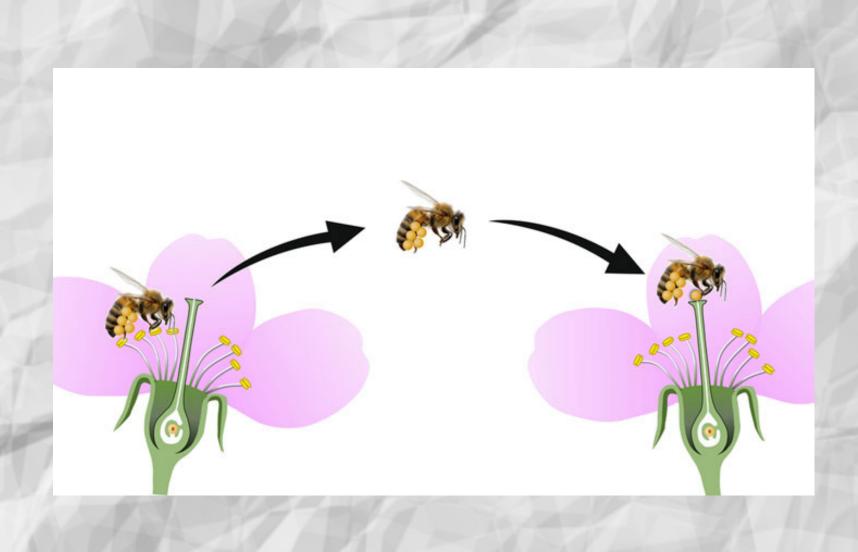
When plants become mature, they have to get stronger roots and an increased number of branches and leaves. At this stage, they are ready to make flowers and new seeds.



## FLOWERING, POLLINATION AND SEEDLING

#### stage 4

A flower contains male and female parts; the male part is called a stamen, and the female part is called a pistil. The pollen is produced in the stamen part and needs to reach the pistil for the production of seeds. The pollen usually reaches to pistils by insects that land on flowers for sucking sweet fluids. When the pollen reaches the pistils, it fertilizes the cells inside it and produces seeds.



After the production of seeds, the plants need a way to disperse these seeds to favorable places where they can germinate and start their life cycle. Most of the time, nature does the job of dispersion for the plants through winds, moving water, and animals. But there are also plants whose seeds are surrounded by fibers that help them to glide in the air upon falling from the plant. During their glide, they reach very far distances and start their life away from their parent plants.

## SEED DISPERSION

stage 5

