Understanding the Lifecycle of a Plant

By the end of the lesson I will know how to explain the stages of a plant's lifecycle.

Key Vocabulary

Germination: The process by which a seed begins to grow and develop into a new plant.

Photosynthesis: The way plants use sunlight to make their own food using water and carbon dioxide.

Pollination: The transfer of pollen from the male parts of a flower to the female parts, allowing for the creation of seeds.

Dispersal: The way seeds spread from the parent plant to new locations.

Seed: The part of a plant that can grow into a new plant.

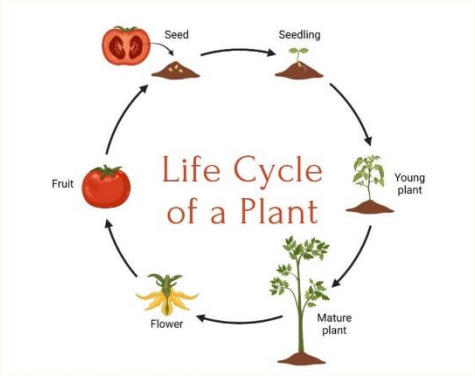
Root: The part of the plant that grows underground and absorbs water and nutrients.

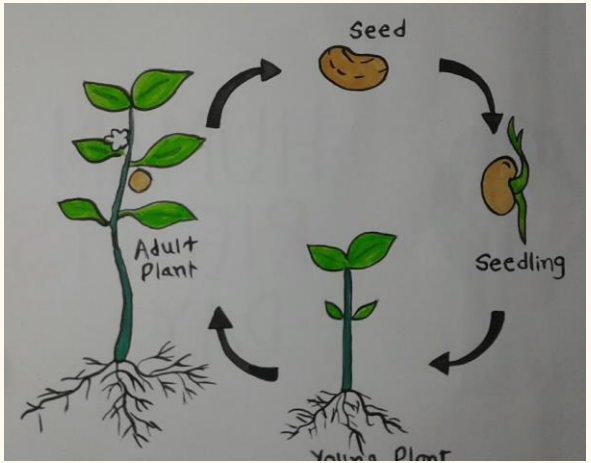
What do we already know?

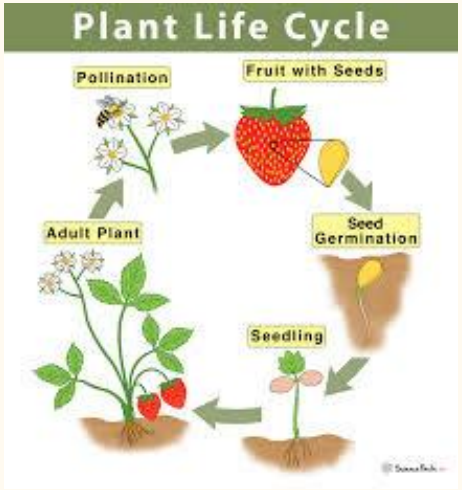
- What do you think a seed needs to grow into a plant?
- Can you name any plants you see in your garden or local area?
- What do you think happens to a plant in different seasons?

What is a Plant Lifecycle?

The plant lifecycle refers to the series of stages a plant goes through from seed to maturity. It includes seed germination, growth, flowering, and seed production. Each stage is important for the survival and continuation of the plant species in nature, providing food and oxygen for many living things.





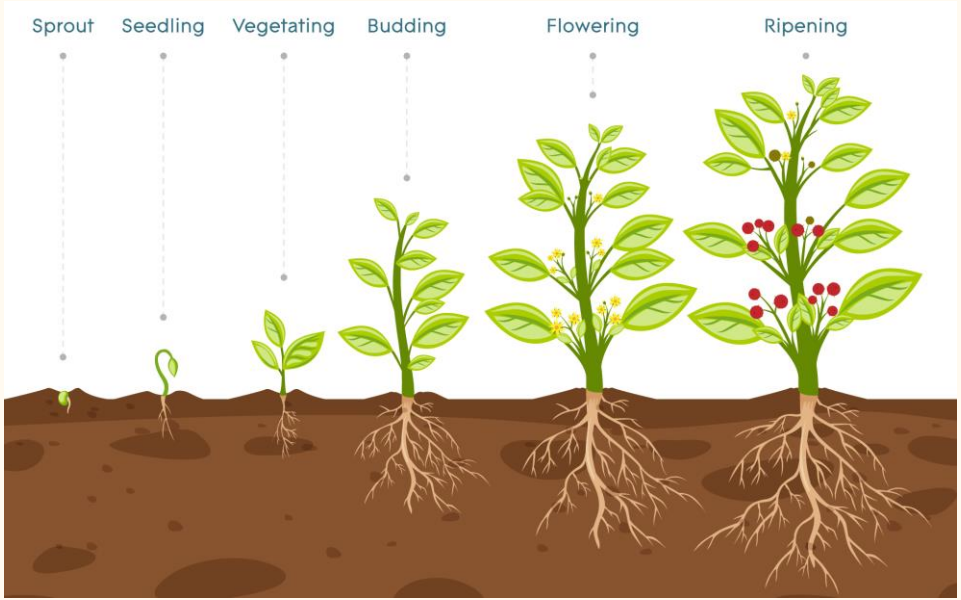


Stage 1: Seed Germination

The lifecycle begins with a seed, which contains the embryo of the plant. When conditions are right, such as moisture and warmth, the seed germinates. The seed absorbs water and swells, breaking open to allow the root and stem to begin growing, starting the journey to becoming a plant.

Stage 2: Growth

After germination, the plant begins to grow. It develops roots that anchor it to the soil and absorb water and nutrients. The stem grows upward, supporting leaves that take in sunlight for photosynthesis. This growth phase is crucial for the plant to develop strong and healthy structures for its next stages.



Stage 3: Flowering

When the plant is mature enough, it enters the flowering stage. Flowers are vital for reproduction; they contain reproductive organs. Pollination occurs when pollen from the male parts reaches the female parts, which can happen through wind or insects. This stage sets the stage for seed formation.

Stage 4: Seed Production

After pollination, flowers turn into fruits that contain seeds. When the seeds are ready, they can be spread to new locations by wind, water, or animals. This stage ensures that new plants can grow, continuing the lifecycle. Seeds will eventually germinate and start the process all over again.

Stage 5: Seed Dispersal

Seed dispersal is the process by which seeds are spread away from the parent plant. This is important to prevent overcrowding and competition. Seeds can be carried by wind, water, or animals. Some seeds even have special adaptations, like wings or hooks, to help them travel further and establish in new areas.