

Study Guide: Animal and Plant Life Cycles

Introduction Life cycles show how living things grow, change, and reproduce. All plants and animals have life cycles, but they can be different from one another.

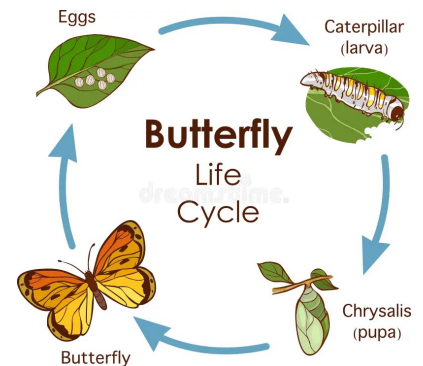
Animal Life Cycles

Animals go through different stages in their life cycle. Some animals look very similar to their parents when they are born, while others go through big changes before they become adults.

1. The Four Stages of an Insect's Life Cycle (Complete Metamorphosis)

Many insects, like butterflies and beetles, go through four stages:

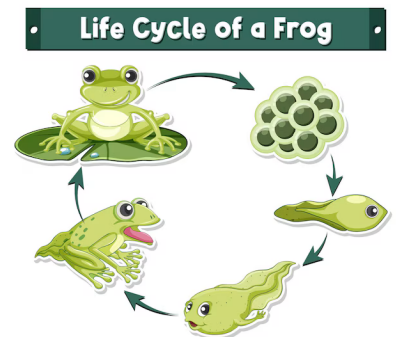
- **Egg** – The insect starts as an egg.
- **Larva** – The larva hatches from the egg and looks very different from the adult. (Example: A caterpillar is a butterfly larva.)
- **Pupa** – The insect is inside a cocoon or chrysalis. It changes into an adult inside.
- **Adult** – The insect comes out as an adult, ready to reproduce and start the cycle again.



2. Amphibians' Life Cycle

Amphibians, such as frogs, go through these stages:

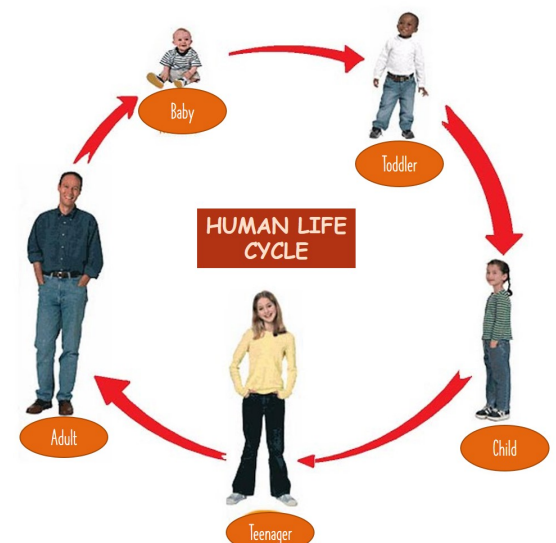
- **Egg** – Frog eggs are laid in water.
- **Tadpole** – A tadpole hatches from the egg, looks like a fish, and breathes through gills.
- **Froglet** – The tadpole grows legs, loses its tail, and starts to breathe air.
- **Adult Frog** – The frog becomes fully grown and can lay eggs to start the cycle again.



3. Mammals' Life Cycle

Mammals, including humans, have a simple life cycle:

- **Baby** – Mammals are born live (not from eggs) and need their parents for food and protection.
- **Young** – They grow and learn how to survive.
- **Adult** – They become fully grown and can reproduce.



Plant Life Cycles

Plants also have life cycles. They start as seeds and grow into mature plants that can produce new seeds.

1. Life Cycle of a Flowering Plant

Most plants follow these stages:

- **Seed** – The plant begins as a seed. Seeds contain everything a new plant needs to grow.
- **Germination** – When the seed gets water, air, and sunlight, it starts to grow roots and a small stem.
- **Seedling** – The plant grows leaves and gets taller.
- **Adult Plant** – The plant is fully grown and can produce flowers.
- **Flower and Pollination** – Flowers help make new seeds when insects (like bees) spread pollen from one flower to another.
- **Fruit and Seed Dispersal** – The plant produces fruits with seeds inside. Animals, wind, or water spread the seeds to new places to start the cycle again.



Key Vocabulary

- **Life cycle** – The stages a living thing goes through from birth to reproduction.
- **Metamorphosis** – A big change in body shape as an animal grows.
- **Germination** – When a seed starts to grow into a plant.
- **Pupa** – A stage in an insect's life when it changes from a larva to an adult.
- **Pollination** – The movement of pollen from one flower to another to make seeds.