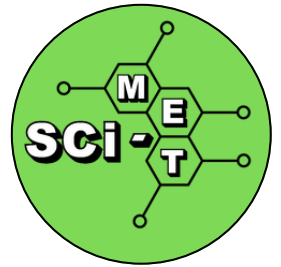


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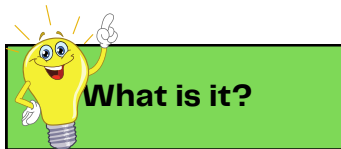
Quarter 2: Stages in the Life Cycle of Animals



Stages in the Life Cycle of Animals

Have you ever wondered how different **organisms** can change their appearance over time? As **living things** grow, they go through various stages in their life. During each stage, their bodies change. These changes can happen slowly or quickly, depending on the type of organisms. But no matter how fast or slow, these changes are normal events as to how all living things grow and develop throughout their life cycle.

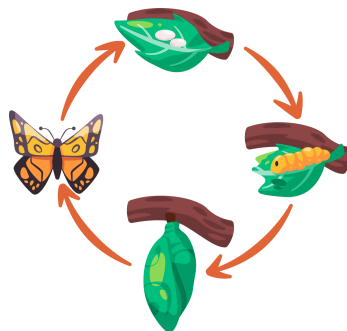
A **life cycle** is a series of changes a living thing goes through as it grows from an early stage, like an egg, to an adult, until it dies. Understanding the life cycle helps us appreciate the journey of growth and development that all organisms experience.



Metamorphosis is a process that some **animals**, like **insects**, go through as they grow and change after they are born or hatched. It describes how insects develop, grow, and change form (usually but not always), accompanied by changes in **habitat** or behavior. There are two types of metamorphosis: complete and incomplete metamorphosis.

A. Complete Metamorphosis

Complete metamorphosis is when an insect goes through four different stages as it grows: **egg**, **larva**, **pupa**, and **adult**.

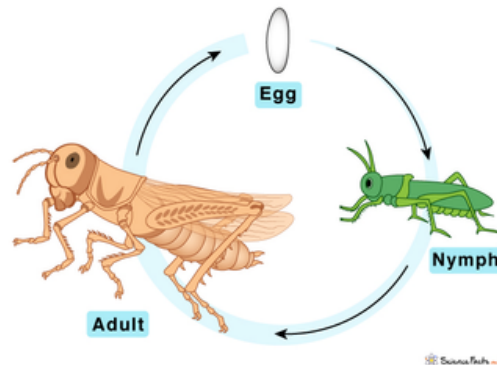


Life Cycle of a Butterfly

1. **Egg**– it is the first stage of the life cycle of insects that goes through complete metamorphosis, in which a female insect lays eggs.
2. **Larva**– when the egg hatches, a larva comes out. It usually looks like a worm and spends most of its time eating to grow bigger. A caterpillar is an example of a larva.
3. **Pupa**– after the larva grows, it forms a pupa. The larvae make a **cocoon** by wrapping themselves in a protective. The insect is resting and transitioning into its adult form at this stage.
4. **Adult**– the pupa transforms into an adult insect, like a **butterfly**, which is fully grown and can lay eggs to start the cycle again.

B. Incomplete Metamorphosis

Incomplete metamorphosis is when some insects grow through three stages: egg, nymph, and adult. Some of the insects that go through incomplete metamorphosis are **grasshoppers** and **cockroaches**.

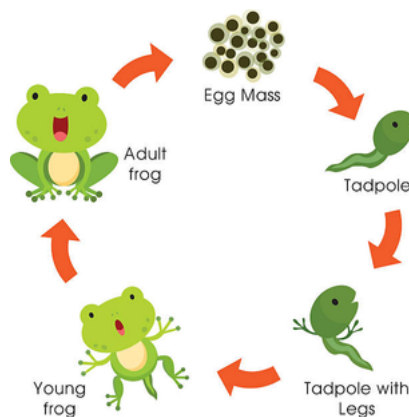


Grasshopper Life Cycle

1. **Egg**– the life of the insect begins as a tiny egg, which is often laid in a safe place.
2. **Nymph**– When the egg hatches, a nymph comes out. The nymph looks like a smaller version of the adult insect but usually doesn't have **wings** yet. It starts eating and growing
3. **Adult**– After growing bigger, the nymph molts several times, shedding its **skin**. Eventually, it becomes an adult insect, which has fully developed wings and is ready to lay eggs, starting the cycle again.

C. The Frog's Life Cycle

The life cycle of a frog consists of four main stages: egg, tadpole, froglet, and adult frog.

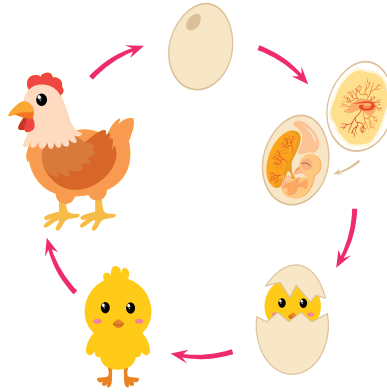


Frog Life Cycle (Graphic-Bee, 2014)

1. **Egg**– A mother frog lays a bunch of eggs in the water, covered with a jelly-like substance called an **egg mass**. The male frog then releases sperm onto the eggs, and they become fertilized.
2. **Tadpole**– After a few days, the eggs hatch into tadpoles. Tadpoles are small, fish-like creatures that live in water. They have gills to breathe underwater and a long tail to help them swim.
3. **Froglet**– As the tadpole grows, it undergoes changes. It starts to grow legs, and its tail gets shorter. This stage is called the froglet. Froglets can swim and begin to breathe air.
4. **Adult Frog**– Eventually, the froglet loses its **tail** and becomes a fully grown adult frog. Adult frogs can live both in **water** and on **land**. They are ready to mate and lay eggs, starting the life cycle all over again.

D. Life Cycle of Chickens

The life cycle of a chicken has four main stages: egg, embryo, chick, and adult chicken.



1. **Egg**– the life cycle starts when a hen lays an egg. Before this happens, a rooster mates with the hen, and his sperm fertilizes the egg inside her. The egg is then laid and has a hard shell to protect it. The egg needs to stay warm, so the hen sits on it.
2. **Embryo**– Inside the egg, a tiny embryo begins to grow. It gets food from the **yolk** in the egg. As the days go by, the embryo grows into a chick, forming its body parts like wings, legs, and a beak. This process takes about 21 days.
3. **Chick**– After 21 days, the chick is ready to hatch. It uses a special part of its **beak** called an egg tooth to break through the shell. Once the chick hatches, it is small, fluffy, and needs warmth. It will grow and start to lose its baby **feathers**, becoming stronger over time.
4. **Adult Chicken** – As the chick grows, it turns into an adult chicken. If it's a male, it will become a **rooster**, which is larger and crows. If it's female, it will become a **hen**, which can lay eggs. Roosters and hens continue the life cycle by producing more eggs, and the process starts again.

E. The Stages in the Human Life Cycle

The human life cycle is how people grow and change from the moment they are born until they become adults and older. This cycle includes many different changes in how we look, feel, and interact with others as we grow up.



1. **Birth**– This is when a baby is born and begins life outside the mother's womb.
2. **Infancy**– From birth to around 2 years old. Babies grow quickly, learn to crawl, walk, and start talking.
3. **Childhood**– From about 2 to 12 years old. Children grow, learn many new skills like reading and writing, and become more independent.
4. **Adolescence**– From around 13 to 18 years old. During this stage, the body goes through puberty, and emotional and mental maturity develop.
5. **Adulthood**– After adolescence, the person becomes fully grown, capable of living independently, working, and possibly starting a family.

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