

A. Intro to Life Cycles

INTRO: DISCOVERING LIFE CYCLES

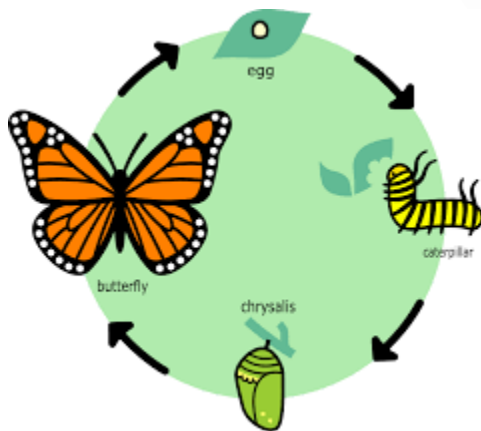
Have you ever wondered how living things grow and change? Well, it's all part of something called a life cycle. A life cycle is a series of stages that a living thing goes through from the time it is born until it becomes an adult. Let's explore the amazing world of life cycles!

Plants have a unique life cycle. It starts with a tiny seed. When the seed gets the right amount of water, warmth, and sunlight, it begins to sprout. A tiny plant called a seedling emerges from the soil. As the seedling grows, it develops leaves and stems. Eventually, it becomes an adult plant that can produce flowers and fruits. These flowers and fruits contain seeds, starting the cycle all over again!



Just like plants, animals also go through life cycles. Take the butterfly, for example. A butterfly begins as an egg, which hatches into a caterpillar. The caterpillar eats and grows, shedding its skin several times. Then, it forms a hard shell around itself called a chrysalis. Inside the chrysalis, the caterpillar undergoes a remarkable transformation called metamorphosis.

Finally, a beautiful butterfly emerges from the chrysalis and is ready to explore the world.



So why are life cycles important? Well, in the world's environments, there are **habitats** which build into large **ecosystems**. Without Life Cycles, there would be no plants or animals in the world. Without these organisms, habitats or ecosystems would exist! Life Cycles is the process of growth and development, which allows us to have Forest Deserts, Oceans, and more!

1. What is a life cycle?
 - A) A series of stages that living things go through
 - B) A special cycle that happens only at night
 - C) A type of bicycle used by animals
 - D) A game played by plants and animals

2. Which of the following is an example of a plant life cycle?
 - A) Egg, caterpillar, chrysalis, butterfly
 - B) Seed, seedling, adult plant, flower
 - C) Pup, tadpole, adult frog

- D) Cub, cub, adult lion
3. What is the final stage of a butterfly's life cycle?
- A) Egg
 - B) Caterpillar
 - C) Chrysalis
 - D) Adult butterfly
4. Why are life cycles important for habitats and ecosystems?
- A) They help maintain the balance of nature
 - B) They make plants and animals invisible
 - C) They create new habitats and ecosystems
 - D) They change the weather in different regions
5. What is one way life cycles contribute to biodiversity?
- A) By making all living things look the same
 - B) By ensuring that plants and animals reproduce
 - C) By preventing the growth of new species
 - D) By reducing the number of habitats and ecosystems
6. What is the process called when a caterpillar changes into a butterfly?
- A) Photosynthesis
 - B) Germination
 - C) Metamorphosis
 - D) Fertilization
7. Which of the following is not a stage in the plant life cycle?
- A) Seedling
 - B) Adult plant
 - C) Flower
 - D) Pupa
8. How do life cycles help living things adapt to their environments?
- A) By allowing them to change their shape
 - B) By providing energy for growth and survival
 - C) By helping them find new habitats
 - D) By making them immune to changes in their surroundings

ANSWERS & EXPLANATIONS:

1. A) A series of stages that living things go through
 - A life cycle is a sequence of stages that a living thing experiences from birth to adulthood.
2. B) Seed, seedling, adult plant, flower
 - The given sequence represents the life cycle of a plant, starting from a seed and ending with the production of flowers.
3. D) Adult butterfly
 - The adult butterfly is the final stage of a butterfly's life cycle after it emerges from the chrysalis.
4. A) They help maintain the balance of nature
 - Life cycles play a crucial role in preserving the balance and harmony of habitats and ecosystems.
5. B) By ensuring that plants and animals reproduce
 - Life cycles contribute to biodiversity by enabling the reproduction of different species, leading to a variety of plants and animals.
6. C) Metamorphosis
 - The process of a caterpillar transforming into a butterfly is known as metamorphosis.
7. D) Pupa
 - The pupa is a stage in the butterfly life cycle, not in the plant life cycle.
8. B) By providing energy for growth and survival
 - Life cycles allow living things to develop traits and characteristics that help them survive and thrive in their specific environments, ensuring their adaptation.