

Life Cycle

A. Choose the correct answer:

1. What is the first stage in the life cycle of a butterfly?

- a) Larva
- b) Egg
- c) Pupa
- d) Adult

2. Which process is responsible for the growth of a baby into an adult?

- a) Respiration
- b) Photosynthesis
- c) Metamorphosis
- d) Development

3. Which of the following animals undergoes metamorphosis during its life cycle?

- a) Dog
- b) Frog
- c) Elephant
- d) Snake

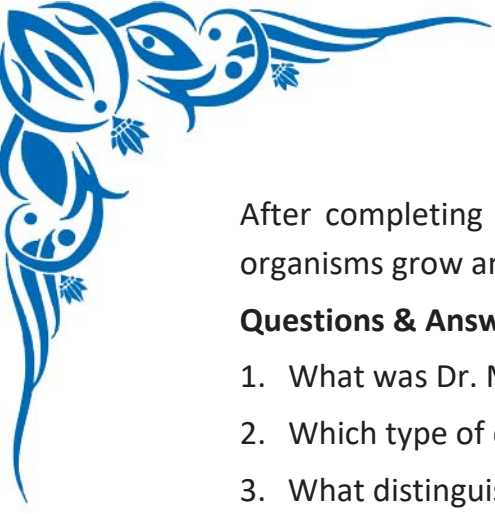
B. Fill in the Blanks:

1. The process by which a caterpillar turns into a butterfly is called _____.
2. Humans go through different _____ stages from birth to old age.
3. In the plant life cycle, seeds grow into plants through a process called _____.

C. Case Study:

A scientist, Dr. Mehta, conducted research on the life cycle of different animals. He observed the development of three organisms:

- **Organism A** was born from an egg, hatched into a larva, then became a pupa before turning into an adult.
- **Organism B** gave birth to live young, which grew gradually into adults without major structural changes.
- **Organism C** started as an egg, turned into a tadpole, and later developed legs and lungs before becoming an adult.



After completing his study, Dr. Mehta noted significant differences in the way organisms grow and change throughout their lives.

Questions & Answers:

1. What was Dr. Mehta trying to study in his research?
2. Which type of organism follows the process of metamorphosis?
3. What distinguishes Organism B's life cycle from the other two?
4. How do different life cycles help organisms adapt to their environment?

D. Short Answer Questions:

1. What are the different stages in the life cycle of a butterfly?
2. Why do some animals undergo metamorphosis while others do not?
3. How does the life cycle of a plant differ from that of an animal?

E. Long Answer Questions:

1. Explain the stages of the human life cycle and the changes that occur at each stage.
2. Describe the life cycle of a frog and compare it with the life cycle of a butterfly.
3. Discuss the importance of understanding life cycles in nature and how they help in biodiversity conservation.