

# Worksheet

## Reproduction in Animals

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Give two examples of the following.

Question 1:

- Viviparous animals dogs and cats
- Insects with 3-stage life cycles grasshoppers, crickets
- Moulting animals snakes, spiders
- Aquatic oviparous animals Fishes and frogs
- Insects with 4-stage life cycles Beetle, butterfly

Tips:

- Viviparous animals give birth to living young that have been nourished in close contact with their mothers' bodies.
- The three stages are egg, nymph, adult. When the young hatches they look similar to the adults except they are smaller, and don't have wings.
- When something molts (moults) it just means the organism has grown too big for its current state.
- Oviparous animals are animals that lay their eggs, with little or no other embryonic development within the mother.
- The four stages are eggs, larvae, pupa, and adult stage

MCQ

Question 2: \_\_\_\_\_ is the process in which the young one breaks open the egg shell to come out.

- (a) Metamorphosis
- (b) Hatching
- (c) Moulting
- (d) Incubation

Answer :

**Correct Answer is Option B.**

Incubation is the process by which certain oviparous (egg-laying) animals hatch their eggs; it also refers to the development of the embryo within the egg under favorable environmental conditions.

**Question 3: Which of the following is not a part of a bird's egg?**

- (a) Pupa
- (b) Shell
- (c) Yolk
- (d) Albumen

**Answer :**

**Correct Answer is Option A.**

In the centre of the egg is a yellow portion called the yolk. At its top is the developing baby called the embryo. The yolk also contains food for the embryo. Surrounding the yolk is a white portion called the albumen.

**Question 4: This organism does not incubate its eggs.**

- (a) Butterfly
- (b) Parrot
- (c) Pigeon
- (d) Hen

**Answer :**

**Correct Answer is Option A.**

Female butterflies lay many eggs during their short life to insure that even a small number of these eggs will survive

**Question 5: Which of these defines a mammal?**

- (a) It gives birth to babies and feeds them with its own milk.
- (b) It gives birth to babies and brings food to feed it.
- (c) It lays eggs and looks after them and the babies after they hatch.
- (d) It lays eggs but does not look after them or the babies after they hatch.

**Answer :**

**Correct Answer is Option A.**

Mammal, any member of the group of vertebrate animals in which the young are nourished with milk from special mammary glands of the mother. In addition to these characteristic milk glands, mammals are distinguished by several other unique features.

**Question 6: \_\_\_\_\_ lays adhesive eggs.**

- (a) Snake
- (b) Frog

- (c) Cat
- (d) Lizard

**Answer :**

**Correct Answer is Option b.**

An egg which adheres on contact to substrate material or other eggs, adhesiveness of entire egg capsule may or may not persist after attachment.

**Fill in the blanks**

**Question 7:**

- The period of time for which a living organism lives is called **Life span**.
- The animals which lay eggs are called **Oviparous** animals.
- The **Tail** in a tadpole vanishes when it grows into an adult frog.
- The animals which give birth to their young ones are called **Viviparous** animals.
- Yolk** provides nutrition to the embryo inside an egg.

**Tips:**

- Lifespan is defined as the maximum number of years that a living organism can live, while life expectancy is the average total number of years that a human achieves.
- Ovoviviparous animals lay eggs and develop the eggs inside the mother's body. The eggs are hatched inside the mother.
- A tadpole develops into an adult frog by the process of metamorphosis.
- Viviparous animals give birth to living young that have been nourished in close contact with their mothers' bodies.
- Yolk provides nutrition to the embryo inside an egg.

**True & False**

**Question 8:**

- The egg shell of a hen is totally waterproof and air proof. **(True)**
- Mammals leave their young ones on their own as soon as they are born. **(False)**
- Jelly-like covering protects the eggs of a frog. **(True)**
- Birds, snakes and turtles lay hard-shelled eggs. **(False)**
- Butterfly and frogs show metamorphosis. **(True)**

### **Tips:**

- The egg shell of a hen is totally waterproof and air proof.
- Mammal, any member of the group of vertebrate animals in which the young are nourished with milk from special mammary glands of the mother. In addition to these characteristic milk glands, mammals are distinguished by several other unique features.
- In frogs, the vitellin membrane and an adhesive jelly coating, also known as tertiary egg membrane, surround the eggs. When passing from the oviduct, it is added to the egg. This jelly enables the egg to be easily trained. The capable sperm readily fertilizes the egg as it has the location of the jelly receptor.
- Amniotes—the group that includes birds, mammals, and reptiles—produce eggs with an inner membrane or “amnion” that helps to prevent the embryo from drying out. Some amniotes, such as many turtles, lizards, and snakes, lay soft-shelled eggs, whereas others, such as birds, lay eggs with hard, heavily calcified shells.
- Many insects go through four stages of metamorphosis: egg, larva, pupa, and adult. An insect hatches from an egg into a wormlike larva.

### **Match the following**

#### **Question 9:**

- |               |                 |
|---------------|-----------------|
| (a) Hen       | (a) Tadpole     |
| (b) Frog      | (b) Nymph       |
| (c) Butterfly | (c) Chicken     |
| (d) Cockroach | (d) Fries       |
| (e) Fish      | (e) Caterpillar |

#### **Answer :**

- (a) Hen - Chicken
- (b) Frog - Tadpole
- (c) Butterfly - Caterpillar
- (d) Cockroach - Nymph
- (e) Fish - Fries

### **Answer the following questions in brief.**

#### **Question 10: How do insects take care of their eggs?**

**Answer :** Nearly all insects reproduce by laying eggs. Insect eggs are deposited by adult insects in a safe location. This location can be anywhere - woods, leaves,

dirt, water, even bodies of human being and other animals. The eggs are usually sticky, so they can hang on to the surface without falling off.

**Question 11: What is metamorphosis?**

**Answer :** The process of transformation from a tadpole to a frog is known as metamorphosis.

**Question 12: How do birds protect their young ones?**

**Answer :** Birds build nests to protect their eggs from bad weather and predators. At Least, one of the parent takes care of the young ones even after hatching until the birds are ready to fly.

**Question 13: How does air cell form inside an egg?**

**Answer :** As the egg cools, the liquid contents contract more than the shell and the inner shell membrane separates from the outer shell membrane to form the air cell.

**Question 14: What is incubation?**

**Answer :** Adult birds sit on the eggs for a few days to keep them warm till they hatch. This is called Incubation.

**Answer the following questions in detail.**

**Question 15: What is the difference between a tadpole and an adult frog?**

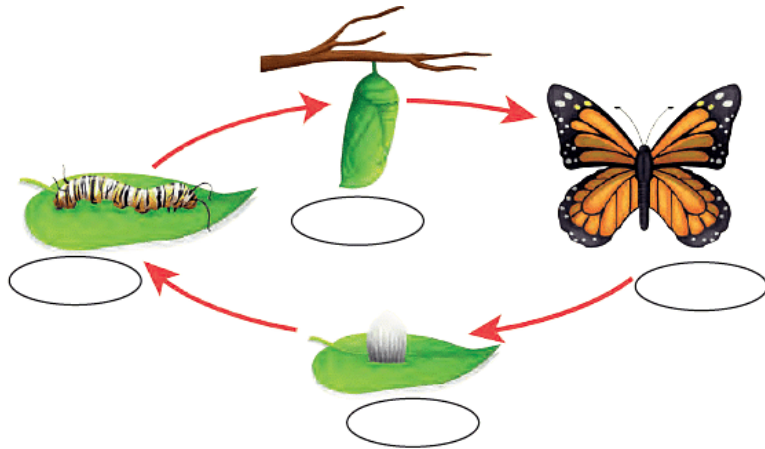
**Answer :** While tadpoles lack limbs and possess long tails, adult frogs on the other hand have two hind limbs and two fore limbs. The hind limbs are exceptionally powerful and this, together with their webbed feet helps them to jump great distances and swim.

**Question 16: Differentiate between viviparous and oviparous animals. Give examples.**

**Answer : Viviparous Animal:** The animals which give birth to their young ones are called Viviparous animals. Eg, deer, lion and cow. The young babies of these animals feed on their mothers milk till they learn to eat other food. Such animals are called mammals.

**Oviparous Animal:** The animals which give birth to their young through eggs are called oviparous animals. Eg, fishes and frogs. When these eggs are hatched young ones comes out of these eggs.

Question 17: Label the different stages in the life cycle of a butterfly.



Answer :

