

9

Reproduction in Animals

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ✧ reproduction and modes of reproduction
- ✧ sexual reproduction
- ✧ human reproduction
- ✧ viviparous and oviparous animals
- ✧ development and life cycles of animals
- ✧ asexual reproduction

TEACHING AIDS

Pictures/charts/models/animations on the process of fertilisation; male and female reproductive systems; development of foetus after it is implanted in the uterus; viviparous and oviparous animals; life cycle of frog and butterfly; binary fission in *Amoeba*; budding in *Hydra*.

LESSON PLAN

- ✧ The teacher should start the chapter with Gear Up and ask students the questions given in this section.
- ✧ Now, the teacher should define reproduction and discuss the modes of reproduction.
- ✧ The teacher should explain sexual reproduction, i.e., process of gametogenesis, fertilisation and significance of fertilisation.
- ✧ Now, the teacher should discuss human reproduction by explaining male and female reproductive systems, ovulation, process of fertilisation, development of embryo and parturition.
- ✧ The teacher should define viviparous and oviparous animals.
- ✧ Now, the teacher should describe life cycle of frog with the help of Activity 2 and also discuss life cycle of butterfly.
- ✧ Students should be explained about asexual reproduction in *Amoeba* and *Hydra* by demonstrating Activity 3.
- ✧ The teacher should ask the students to solve Check Points 1, 2 and 3.

- ✧ At last, the teacher will sum up the lesson by going through the points given under the head 'Wrap Up Now'.
- ✧ The teacher will help the students to solve all the questions given in exercises under the head 'Practice Time' and will also discuss the topics given under the head 'Formative Tasks'.

BOOST UP

- ✧ The teacher can assign Activity 1 as home assignment and discuss the result in the class.
- ✧ Students should be encouraged to study the life cycle of butterfly in nature and other animals such as lizard, cockroach, hen, etc.
- ✧ The students should be asked to write one example each of oviparous and viviparous animals.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ reproduction and modes of reproduction.
- ✧ process of sexual reproduction involving gametogenesis, fertilisation, implantation and development of embryo.
- ✧ human reproduction including male and female reproductive systems and development of foetus.
- ✧ viviparous and oviparous animals.
- ✧ life cycle of some animals such as frog and butterfly.
- ✧ asexual reproduction.

EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the understanding of students:

1. What is meant by reproduction?
2. Write the differences between external and internal fertilisation.
3. Define ovulation.
4. Write two examples of viviparous animals.
5. Describe the life cycle of a frog.
6. What are caterpillars?
7. Define budding with example.
8. Mention the differences between asexual and sexual reproduction.