CHAPTER 8

Reproduction in Animals

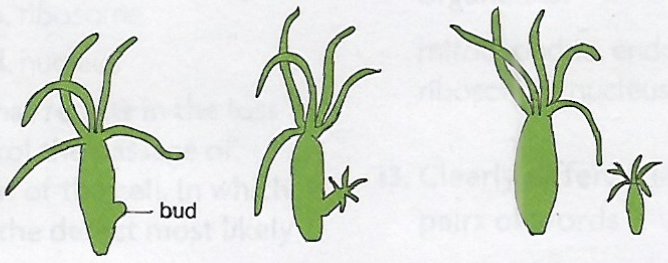
Reproduction is the process by which living organisms make more of their own kind. It is a characteristic that distinguishes living things from non-living things. You have already learnt that sexual reproduction in plants take place through flowers. After fertilisation they produce seeds which grow into new plants.

Asexual Reproduction in Animals

You already know that simple unicellular organisms like bacteria multiply **asexually** by binary fission and yeasts multiply by budding. Unicellular animals like *Amoeba* also multiply by binary fission. Just like bacteria, *Amoeba* divides into two daughter *Amoebae*. The nucleus of the *Amoeba* divides first into two nuclei. This is followed by the division of the cytoplasm.

▲ binary fission in *Amoeba*

On the other hand, simple aquatic animals, like *Hydra* which are found attached to aquatic plants, reproduce by budding. The bud first appears as a little bump on the side of the animal. The bump increases in size and develops a mouth and arm-like tentacles. Then the bud detaches to form a new organism.



▲ binary fission in *Hydra*

The types of reproduction described here are called **asexual reproduction. This type of reproduction requires only one parent and does not need special cells.**

Exercise 1

i. Give one example of an organism which multiples by binary fission and one which multiplies by budding.

ii. A bacterium divides every 20 minutes, so that as the end of 20 minutes there are 2 bacteria, as the and of 40 minutes these are 4 bacteria and so on. How many bacteria will there be after 24 hours?

In multicellular organisms, the body is more complex. There is division of labour which leads to better functioning of the whole organism. The body is organised into tissues, organs, and systems. The system responsible for reproduction in multicellular animals is the **reproductive system.** It produces **sex cells** or **gametes.** They are produced in the sex organs. Some animals like earthworms and leeches produce both male and female gametes. Such animals are called **bisexual** or **hermaphrodites.** Most animals are **unisexual**; they produce only one type of gametes.