

Reproduction and Development

While some animals have the capability to reproduce asexually, most animals reproduce sexually. Just like plants, animals also produce female and male gametes. In animals, male gametes are called sperm and are produced in the testes. Female gametes are produced in the ovaries.

Some animals that are simpler have both sperm-making and egg-making organs in their bodies. For example, earthworms have both of these organs in their bodies. While this is the case for some animals, most animals make male and female gametes separately. Most animals have separate male and female creatures that make these gametes.

There are different types of fertilization. If sperm and an egg are joined outside of the parents' bodies, the process is called external fertilization. If sperm and an egg are joined inside of the female's body, the process is called internal fertilization.

Spawning is a form of external fertilization that is seen with fish. During spawning, male and female fish come close to one another in the water. The female releases her eggs, and the male releases his sperm. Both are released into the water. The sperm then swim through the water to the eggs, and the eggs are fertilized.

Birds and many mammals reproduce using internal fertilization. Humans and horses are just two examples of mammals that reproduce using this method. With internal fertilization, the female releases an egg from her ovary. This egg then goes down a tube that leads from the ovary. When mating, sperm is released by the male into the female. The sperm goes down a tube to find the egg and fertilize it.

If sperm does not join to the egg, the egg remains unfertilized and leaves the female's body. Other eggs follow this same process and travel down the tube into the ovary. One of these eggs may then be fertilized.

Once an egg is fertilized, it is called a zygote. Depending on the animal, it can take days or weeks before the zygote becomes an embryo. An embryo is a developing organism. Most mammals' embryo development takes place in the mother's body. This development takes place in an organ called the uterus.

The zygote attaches itself to the wall of the uterus. While in the uterus, the embryo gets its nutrition from the mother. An embryo is called a fetus in the later stages of development. Once a fetus is developed enough to live on its own, it is born.

Different animals have different amounts of development time. For example, a horse takes eleven months to form inside its mother, while a sheep only takes five months to develop.

**Stages of Embryo:
Egg – Zygote – Embryo – Fetus - Newborn**

Reproduction and Development Questions

Multiple Choice:

1. These animals have both sperm-making and egg-making organs in their bodies:

- a. horses
- b. birds
- c. earthworms
- d. sheep

2. In animals, male gametes are called:

- a. ovaries
- b. sperm
- c. eggs
- d. testes

3. Once an egg is fertilized, it is called a:

- a. zygote
- b. gamete
- c. uterus
- d. egg

4. List the Five Stages of Embryo:

True or False:

___ 5. Spawning is a form of internal fertilization that is seen with fish.

___ 6. An embryo is an unfertilized egg.

___ 7. Female gametes are produced in the ovaries.

Reproduction and Development Answers

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