

ANIMAL SYSTEMS- REPRODUCTION

The **reproductive system** consists of various organs that work together to produce new individuals. It functions not to keep the organism alive, but rather to maintain the species.

- **Asexual reproduction**-involves only one parent, produces offspring that are genetically identical to the parent (examples: fragmentation and budding)
- **Sexual reproduction**- relies on two parents, produces offspring that are genetically different from the parents and from each other, involves union of gametes (sperm + egg= zygote in a process known as fertilization).

In humans:

- **Males**- testes produce sperm and testosterone (a hormone) that helps regulate sperm production and male characteristics
- **Females**- ovaries produce eggs and estrogen and progesterone (hormones) that regulate the release of eggs and female characteristics. After being released from the ovary, an egg enters the Fallopian tube and travels to the uterus. If it is fertilized, it will stay in the uterus and develop over a month period. If the egg is not fertilized, it will be released outside the body (during menstruation).

PRACTICE

1. Why are the ovaries and testes considered to be a part of both the reproductive and endocrine systems?
2. Some organisms, such as bacteria, can reproduce by splitting into two new cells. This form of reproduction is called binary fission. Is binary fission an example of asexual or sexual reproduction? Explain your answer.
3. Which is true of asexual reproduction?
 - a. It requires the production of sperm and eggs
 - b. Offspring are the same as a single parent
 - c. It occurs when an egg is released from the ovary
 - d. It is more complicated than sexual reproduction
4. Which term is associated with sexual reproduction
 - a. Fragmentation
 - b. Budding
 - c. Fertilization
 - d. Single parent
5. Which of the following would not be associated with any part of the reproductive system?
 - a. Thermoregulation
 - b. Gametes
 - c. Meiosis
 - d. Chromosomes