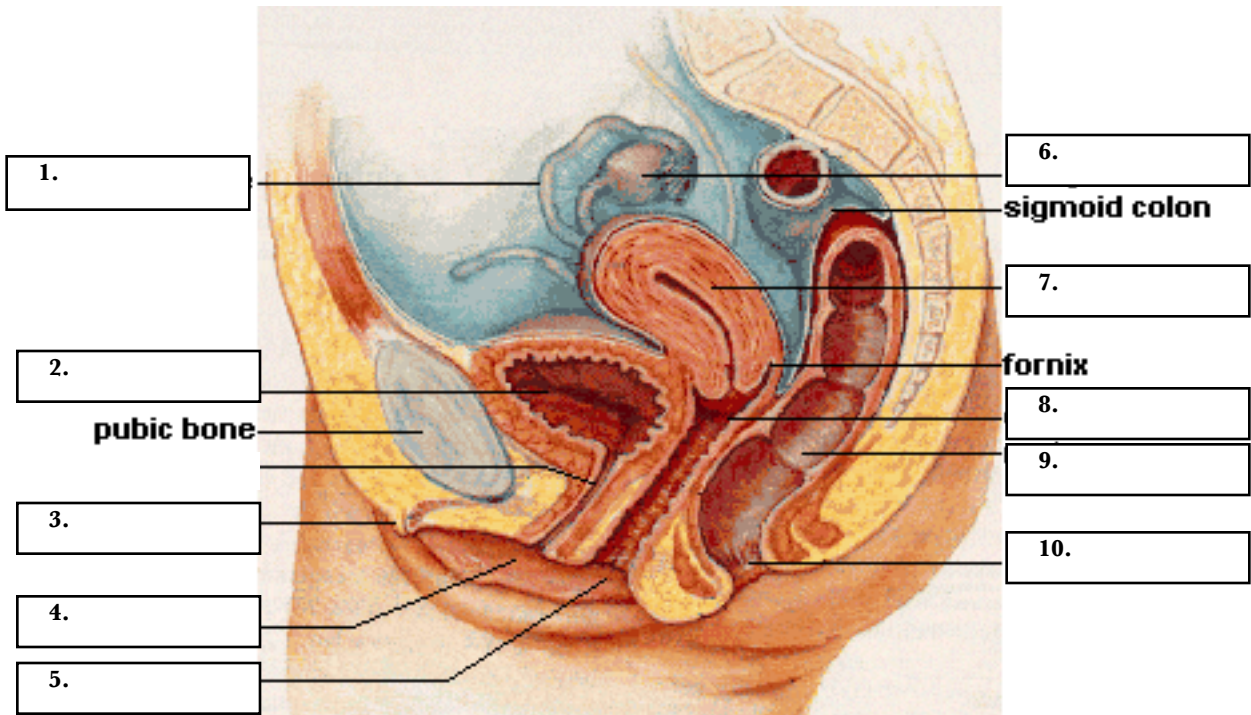


Female Reproductive System

Obj. 4.3: Explain the anatomy & physiology of the female reproductive system.

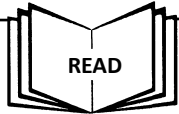


Label the diagram with the structures of the female reproductive system. If you don't know any, leave them blank. If you think you might know some, take some guesses!



Take notes to accurately record the 10 structures of the female reproductive system shown above.

Part	Description
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



Read the following short excerpt from kidshealth.org:

All living things reproduce. Reproduction — the process by which organisms make more organisms like themselves — is one of the things that set living things apart from nonliving matter. But even though the reproductive system is essential to keeping a species alive, unlike other body systems, it's not essential to keeping an individual alive.

In the human reproductive process, two kinds of **sex cells**, or **gametes** (pronounced: **gah-meetz**), are involved. The male gamete, or **sperm**, and the female gamete, the **egg** or **ovum**, meet in the female's reproductive system to create a new individual. Both the male and female reproductive systems are essential for reproduction. The female needs a male to fertilize her egg, even though it is she who carries offspring through pregnancy and childbirth.

Humans, like other organisms, pass certain characteristics of themselves to the next generation through their **genes**, the special carriers of human traits. The genes that parents pass along to their children are what make children similar to others in their family, but they are also what make each child unique. These genes come from the father's sperm and the mother's egg, which are produced by the male and female reproductive systems.

Most species have two sexes: male and female. Each sex has its own unique reproductive system. They are different in shape and structure, but both are specifically designed to produce, nourish, and transport either the egg or sperm.

Unlike the male, the human female has a reproductive system located entirely in the pelvis (that's the lowest part of the abdomen). The external part of the female reproductive organs is called the **vulva**, which means covering. Located between the legs, the vulva covers the opening to the **vagina** and other reproductive organs located inside the body. A female's internal reproductive organs are the vagina, uterus, fallopian tubes, and ovaries.



Post-reading questions:

1. What is the function of the human reproductive systems?
2. What are the major differences between the female and male reproductive system?
3. What questions do you have about the female reproductive system? (List at least one below).



1. FUNCTIONS: What are the 3 main functions of the female reproductive system?

- 1.
- 2.
- 3.

2. SEX CELLS: What are the female sex cells and how are they protected and nurtured?

ovum:

ovaries:

uterus:

3. PUBERTY: What are some changes females undergo during puberty?

Phases of the Menstrual Cycle

The uterine lining, the ovum (or egg) and hormone levels are all changing and cycling throughout the entire monthly process. There are essentially four phases of the menstrual cycle: menstruation, the follicular phase, ovulation and the luteal phase.

1. **Menstruation.** The uterine lining and blood sheds, signaling the beginning of the menstrual cycle. Also known as having a period. This phase varies in length from woman to woman, usually lasting 4-7 days, contributing to the differences in menstrual cycle length.
2. **The Follicular Phase.** During this time, the ovaries are being stimulated to produce a mature egg. Additionally, the uterine lining is growing, preparing for possible egg implantation if pregnancy would occur. The length of this phase also varies.
3. **Ovulation.** The ovaries release a mature egg after a surge of hormones that triggers the event.
4. **The Luteal Phase.** This phase lasts a consistent length of time, an average of 14 days with a day or two variation. During this time, the uterine lining continues to grow, preparing for embryo implantation (baby). If pregnancy doesn't occur, the cycle begins again with menstruation.



What might happen if the egg is fertilized (meets a sperm)? How would this interrupt the menstrual cycle? How might twins be formed? What may cause this?



Describe how the female reproductive system accomplishes its function of providing a nourishing environment for a growing egg. Use at least 4 new reproductive system terms in your description.



At the time of ovulation there is a small rise in body temperature. Some women feel mild pain in the abdomen around the time of ovulation, lasting from a few minutes to a couple of hours; it is probably caused by irritation of the abdominal wall due to blood and fluid escaping from the ruptured follicle. The mature ovum is transported from the ovaries to the fallopian tubes, where it either becomes fertilized by sperm and will attach to the lining in the uterus to become a zygote, or it will remain unfertilized and will be flushed from a woman's system during her period. During menstruation, pain or cramps might be caused by contractions in the uterus that push the lining through the vagina. Changes in the cervical mucus also occur about the time of ovulation.

On a separate sheet of paper, answer the following:

1. During approximately which days of the cycle might a woman have her menses (bleeding)?
2. At approximately what day (#) during the cycle is there a surge (big increase) in LH?
3. According to Figure 1, on what approximate day (#) does ovulation occur?
7. Describe what is happening on Day 14 of the menstrual cycle.
8. At what range of days is the lining of the uterus the thickest?
9. When do the follicular phase and luteal phase take place, respectively?
10. Describe the journey of an unfertilized ovum.

Figure 1: Changes of hormone concentrations in the blood during a 28-day menstrual cycle.

