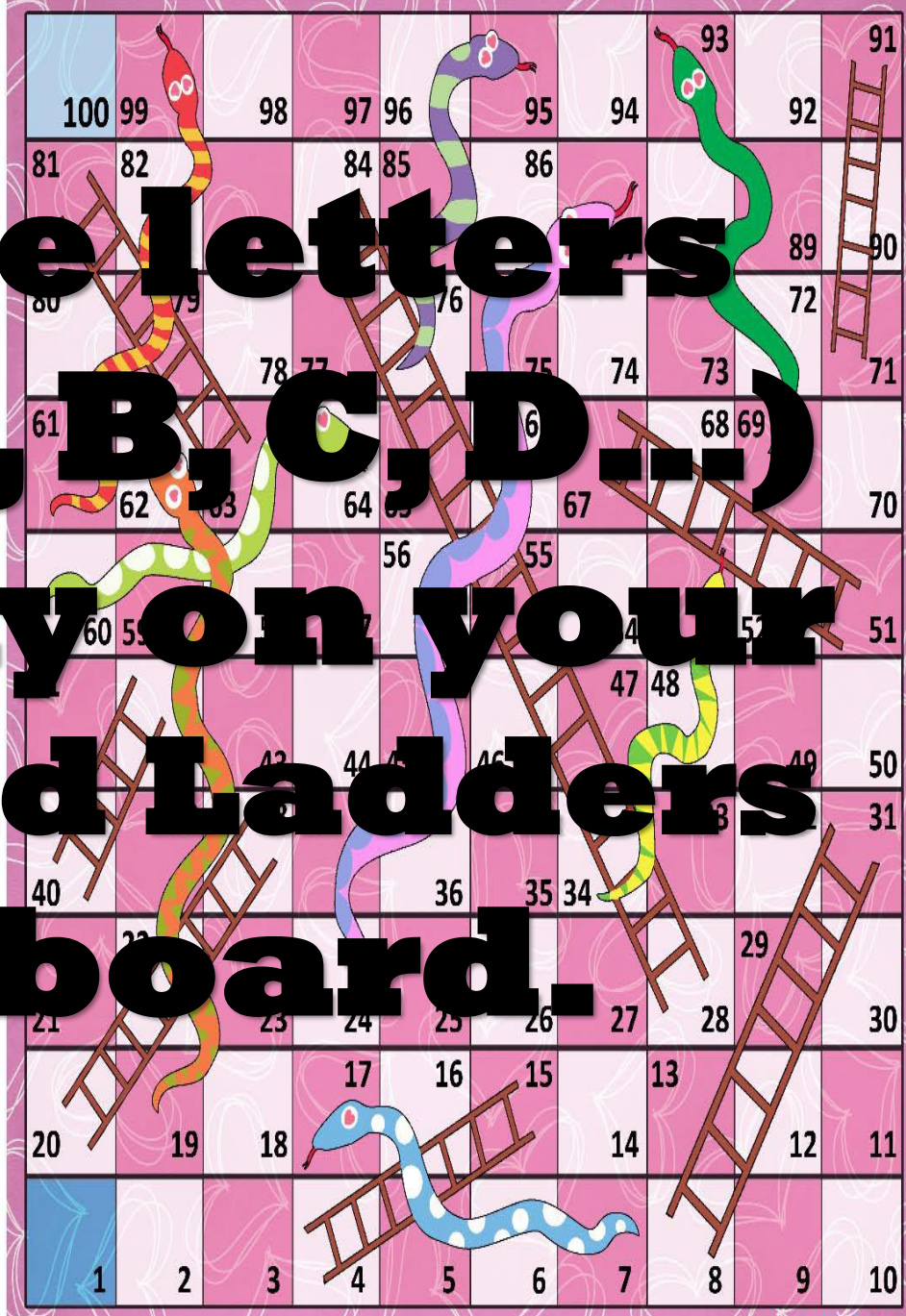
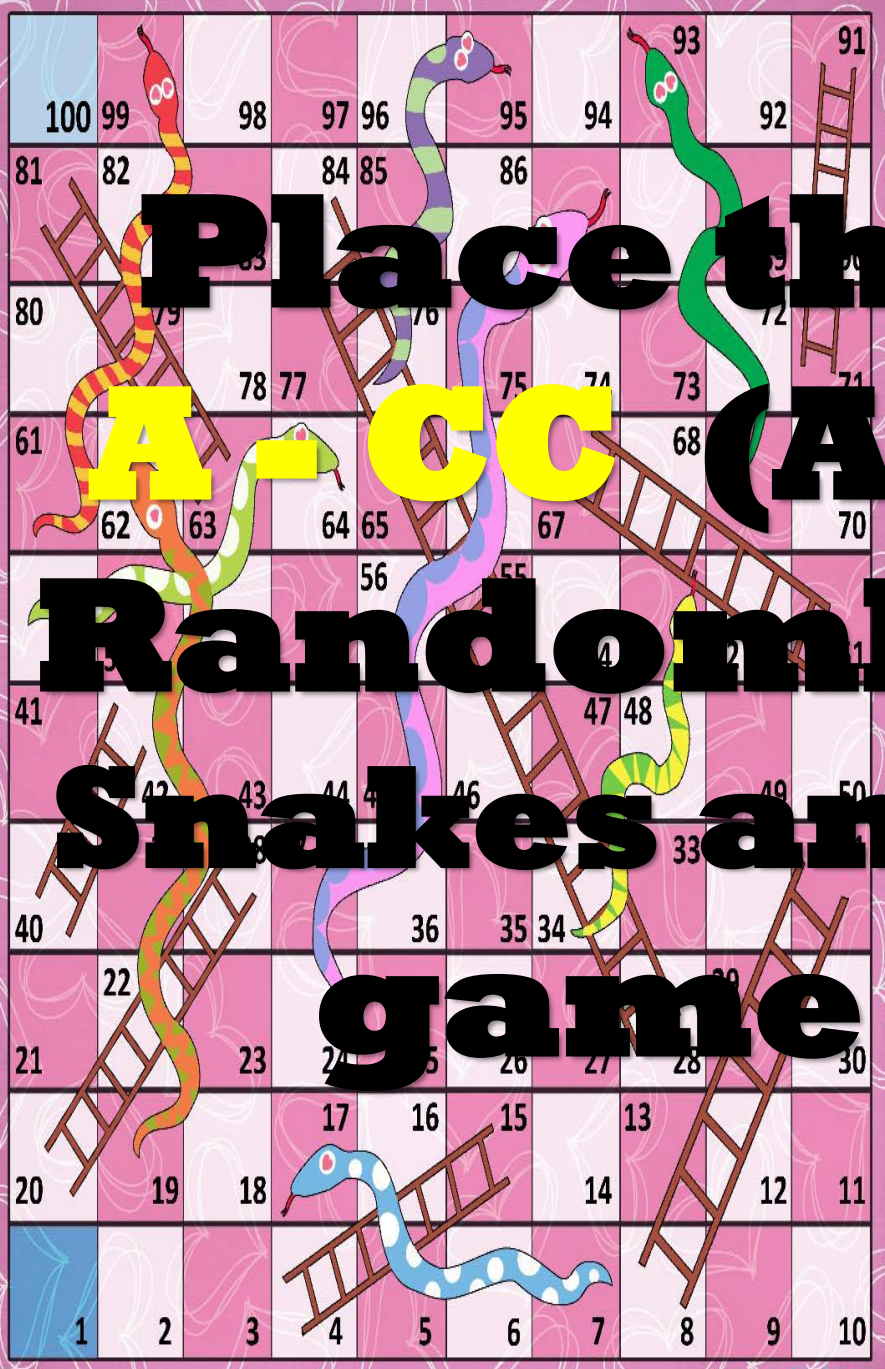


Bell Quiz

#5

Green
section

- Get out your Story/song evaluation! I have a story for you.
 - (Also, you should have your story that you wrote to your child ready to share)



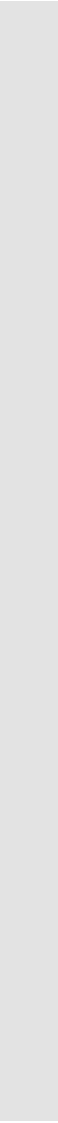
Bell Quiz # 5

Story #7, unit 2 outline

Library passes



Get on
the
magic
school
bus





Male & Female Reproductive System

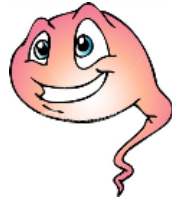


If sometimes you feel a little
useless, offended, or depressed...
Always remember that YOU were
once the fastest and most
victorious little sperm out of
millions!



Meet Seymour Sperm
Your Tour Guide

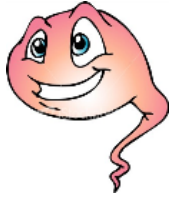
Female

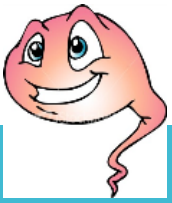


Male

Fimbriae
Mons Pubis
Labia
Urethral opening
Perineum
Vagina
Cervix
Uterus
Endometrium
Fallopian tubes
Ovaries
Vaginal opening
Ovum
Menstruation

- Scrotum
- Testicle
- Sperm
- Epididymis
- Vas Deferens
- Seminal Vesicles
- Prostate Gland
- Cowper Gland
- Ejaculation
- Semen
- Seminal Fluid
- Urethra
- Urinary Bladder
- Penis





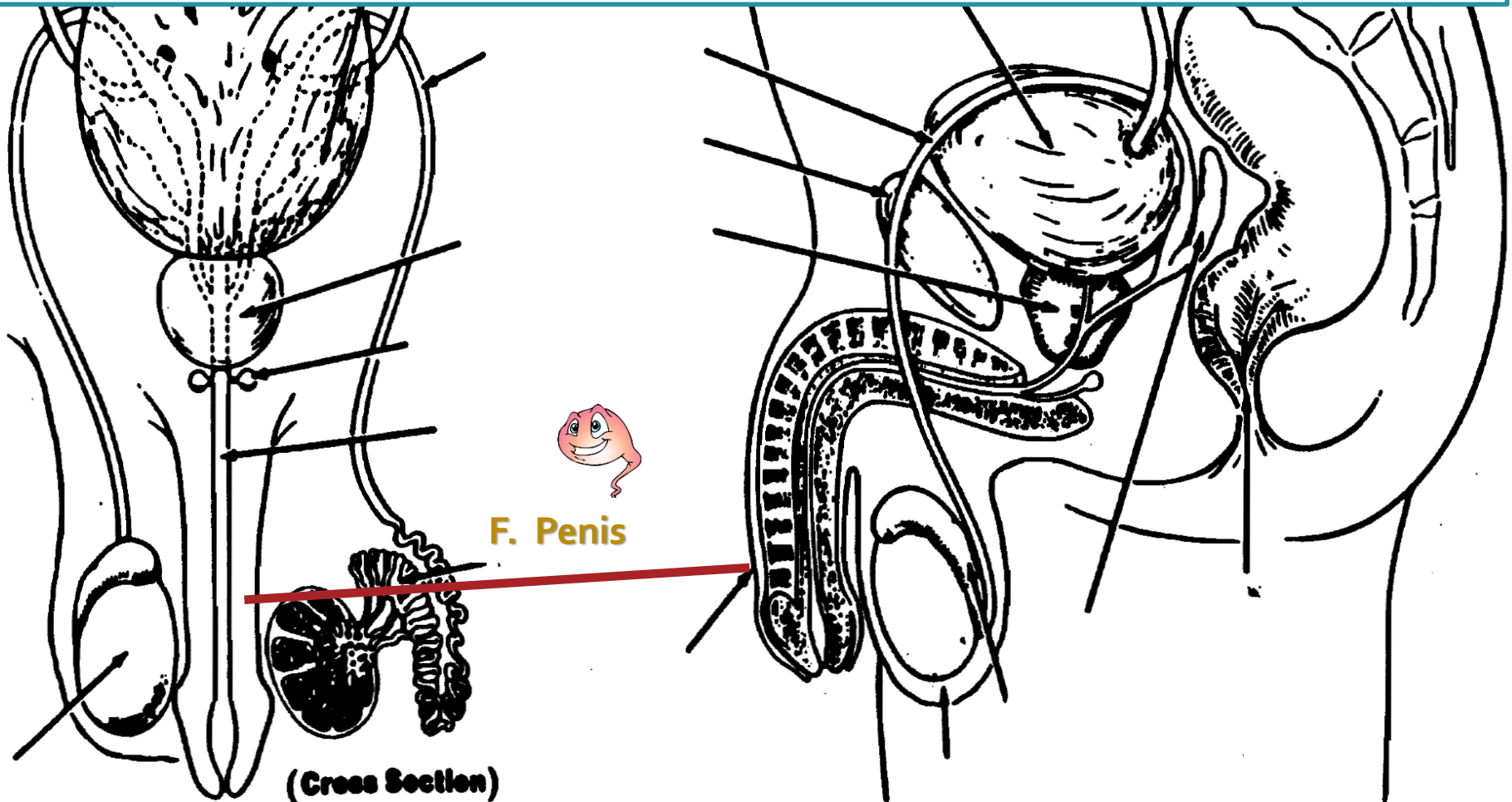
(J) Male sex cell or sperm

- The **sperm** is a microscopic cell produced by the male's testicles and can fertilize the female's ovum.
 - **400 million fit** on a pin head which is enough sperm to re-populate the earth if each sperm fertilized an egg.
 - Sperm can live in the human body for **1-5 days (24-120 hours)**.
 - It is **destroyed by** warm body temperature, acidic environment.
 - Average **swimming speed** of a sperm: 8 inches per hour.



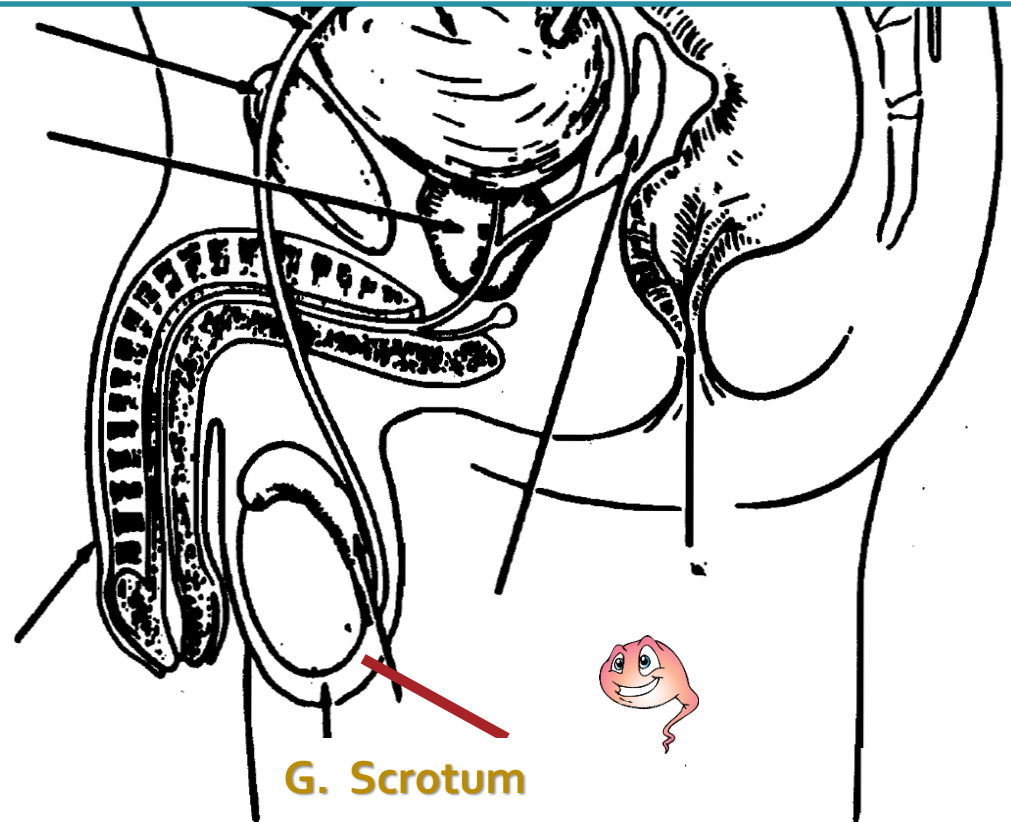
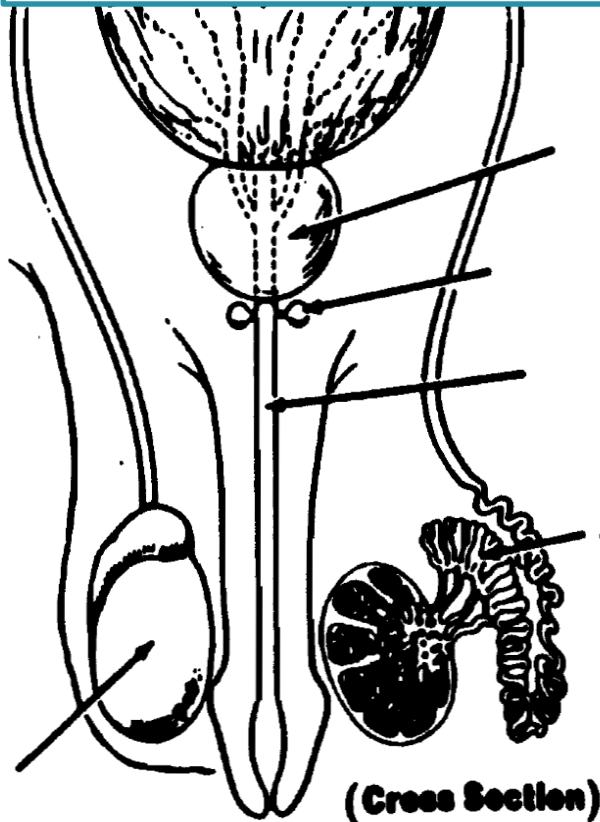
•The **(F) penis** is the male organ which allows the male to pass urine and semen from his body.

•The **purpose** of the penis is to deposit semen in the vagina during sexual intercourse and a passageway for urine.



- The **(G) scrotum** is a muscular sac-like pouch located behind the penis that holds each testes in a separate compartment and helps regulate body temperature for sperm production.

- If the body gets above or below normal **body temperature**, sperm production is reduced. The scrotum changes the testicle's positions to adjust the body heat.



- The **(I) testicles** are the male sex gland that lie in the scrotum and produces both sperm and the male sex hormone testosterone.

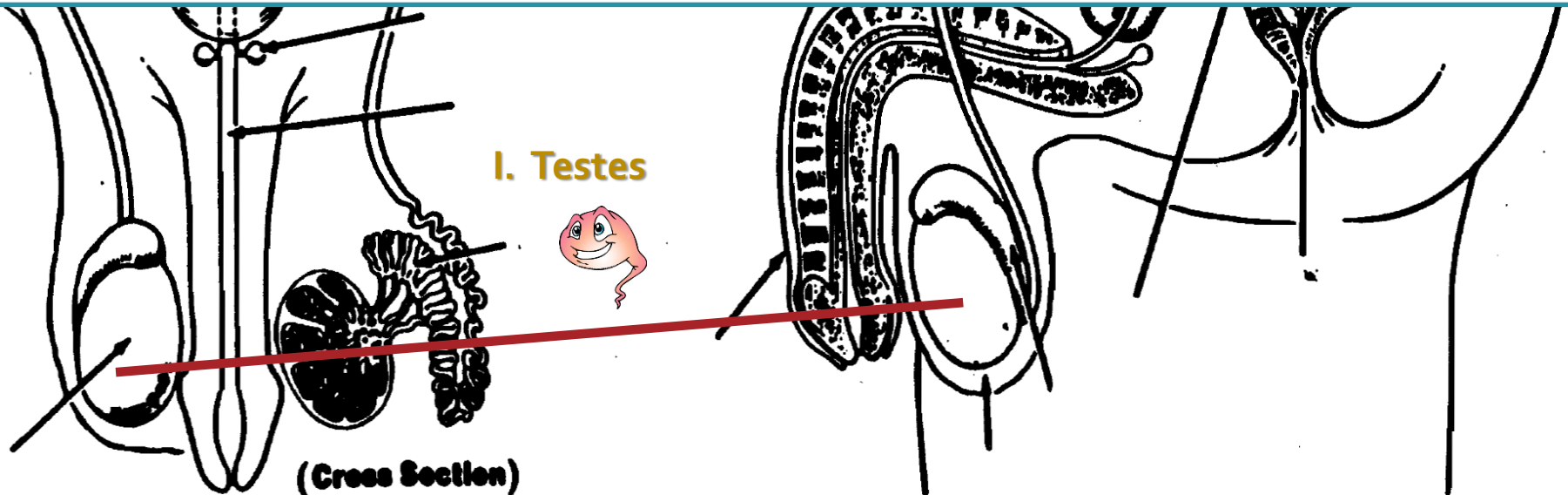
- 1,000 sperm cells **produced a second**, 200 million produced a day, Four to five billion are produced each month.

- Testosterone** is the male reproductive hormone made by the testicles which causes the changes of puberty.

- Testicles descend through the inguinal canal into the scrotum before birth.

- The testicles are outside the body because the male sperm that is manufactured in the testes need cooler-than-body temperature for normal growth and development.

I. Testes

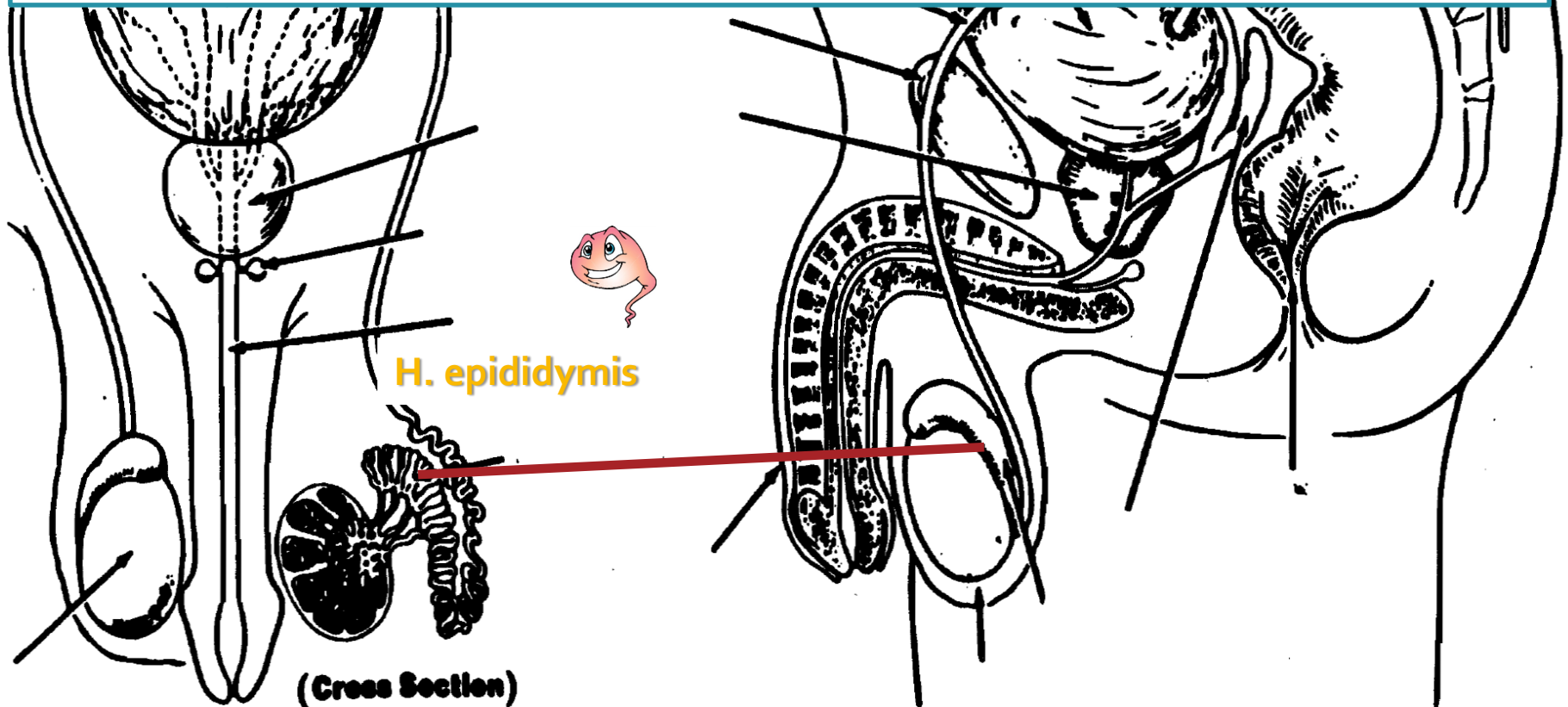


- **(H) Epididymis** is a coiled tube system that forms a mass over the back and upper part of each testes in which sperm mature.

- Sperm take about **36 hours** to ripen to maturity.

- Sperm are stored there for as long as **six weeks**.

- If stretched out in a line, it would measure **1 mile long**.



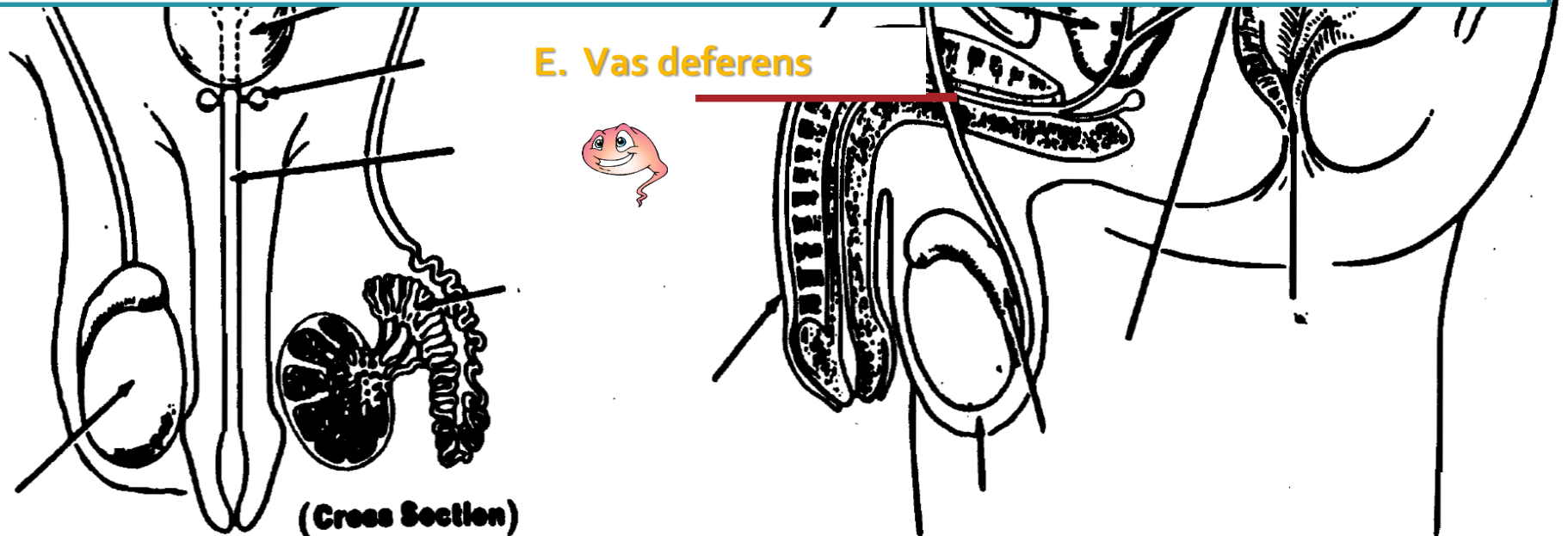
- **(E) Vas deferens** are two long, thin tubes that serve as a passageway for the travel of the sperm and seminal fluid or semen.

- The contraction of the vas deferens along with the action of the cilia help transport the sperm through the vas deferens.

- **(K) Semen** is 1-2 TBL of fluid that includes about 150 million sperm. **(L) Seminal fluid** does not include sperm.

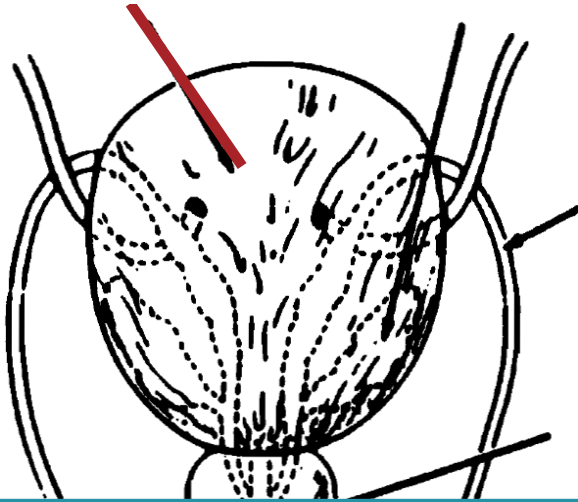
- **Vasectomy**: surgical procedure for sterilization of the male.

- Any sperm not ejaculated are passed in the urine.

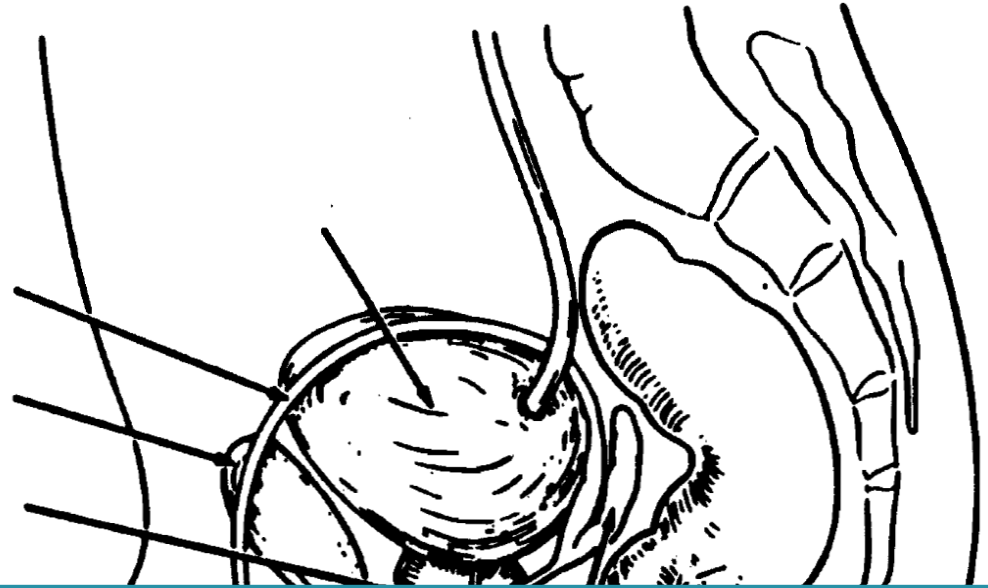


FRONT VIEW

(M) Urinary Bladder



SIDE VIEW



•The **(M) urinary bladder** is the organ that collects **urine** excreted by the kidneys before disposal by urination.

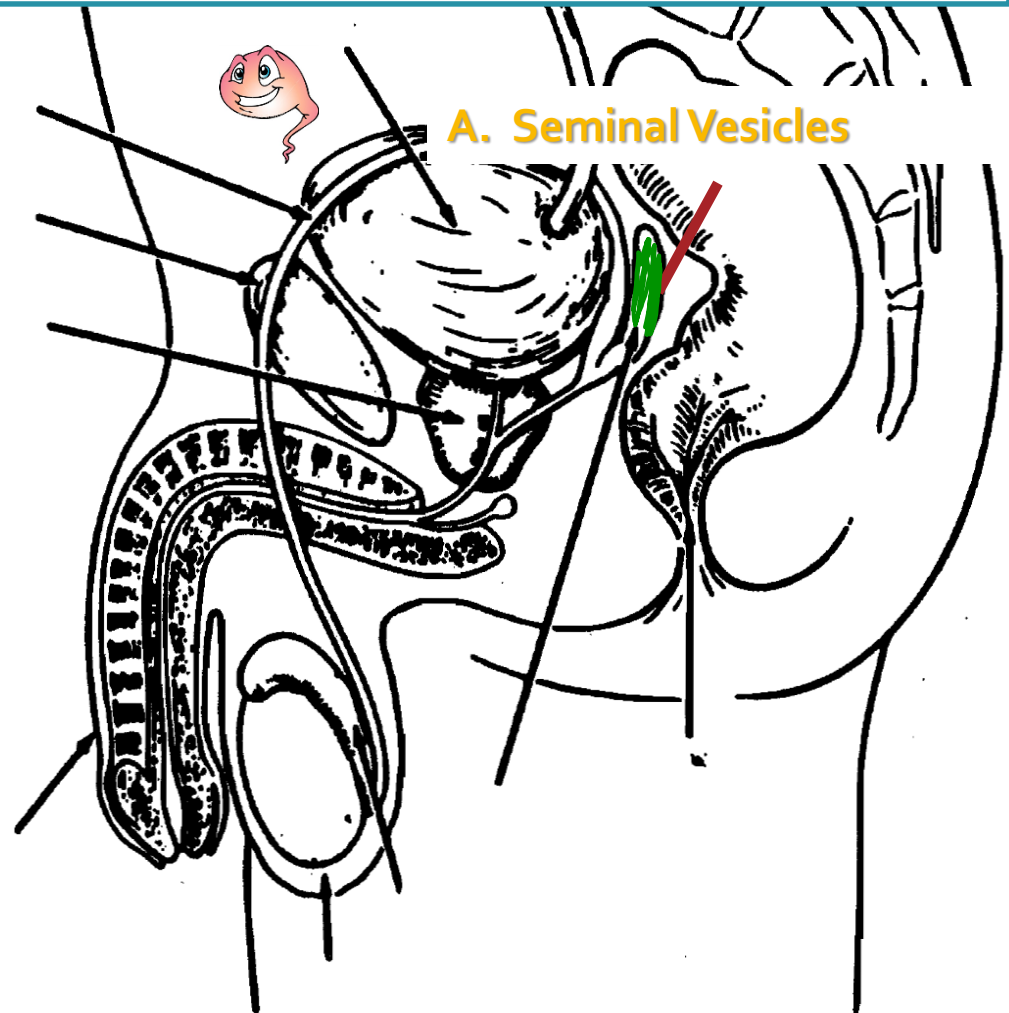
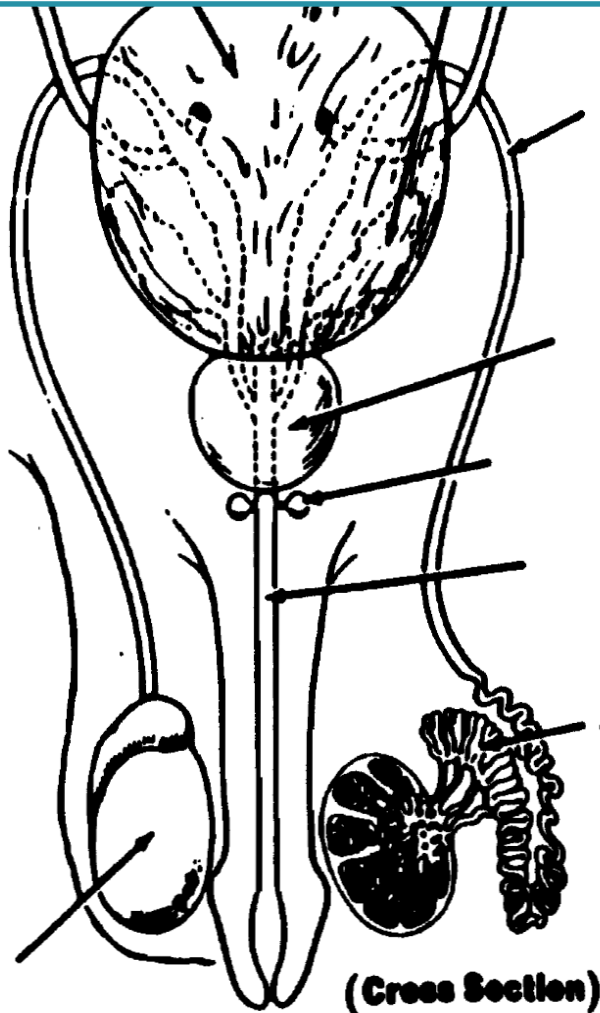
•Urine leaves the bladder through another tube, the urethra. In men, it is longer, passing through the prostate gland and then the penis.



(Cross Section)

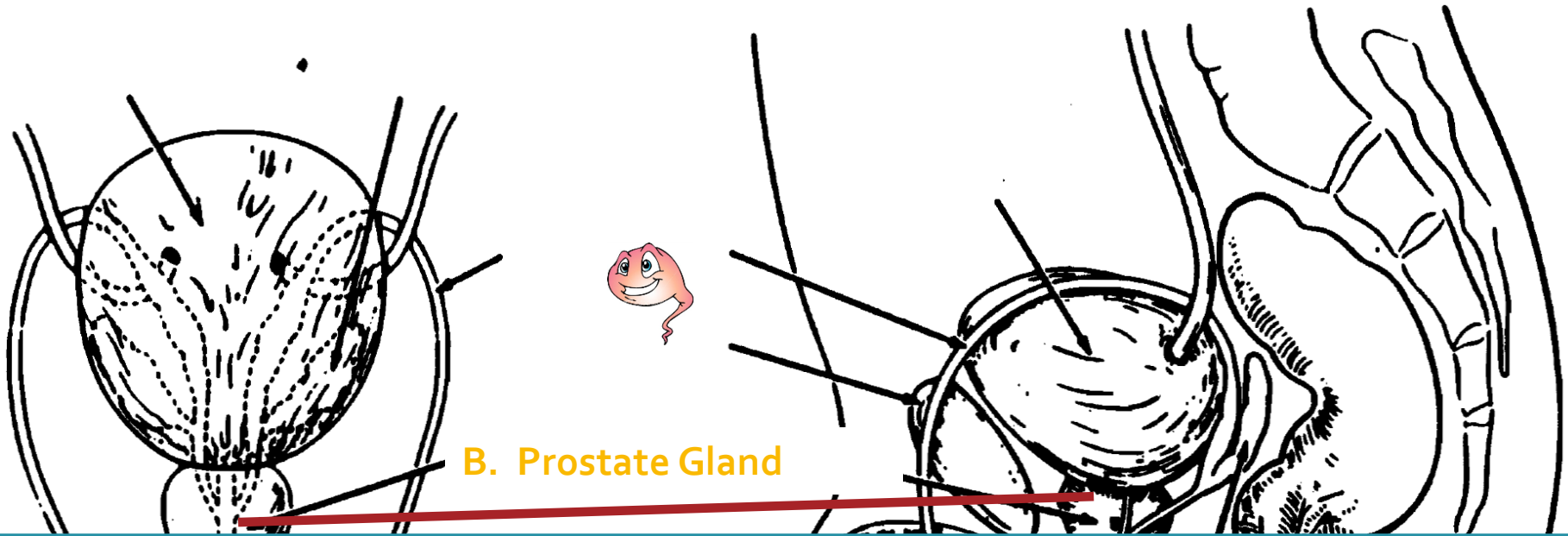
• **(A) Seminal Vesicles** are two small glands that secrete a clear and sticky fluid that nourishes and enables the sperm to have energy and move.

• The sugar in the seminal fluid is what **nourishes the sperm**.



FRONT VIEW

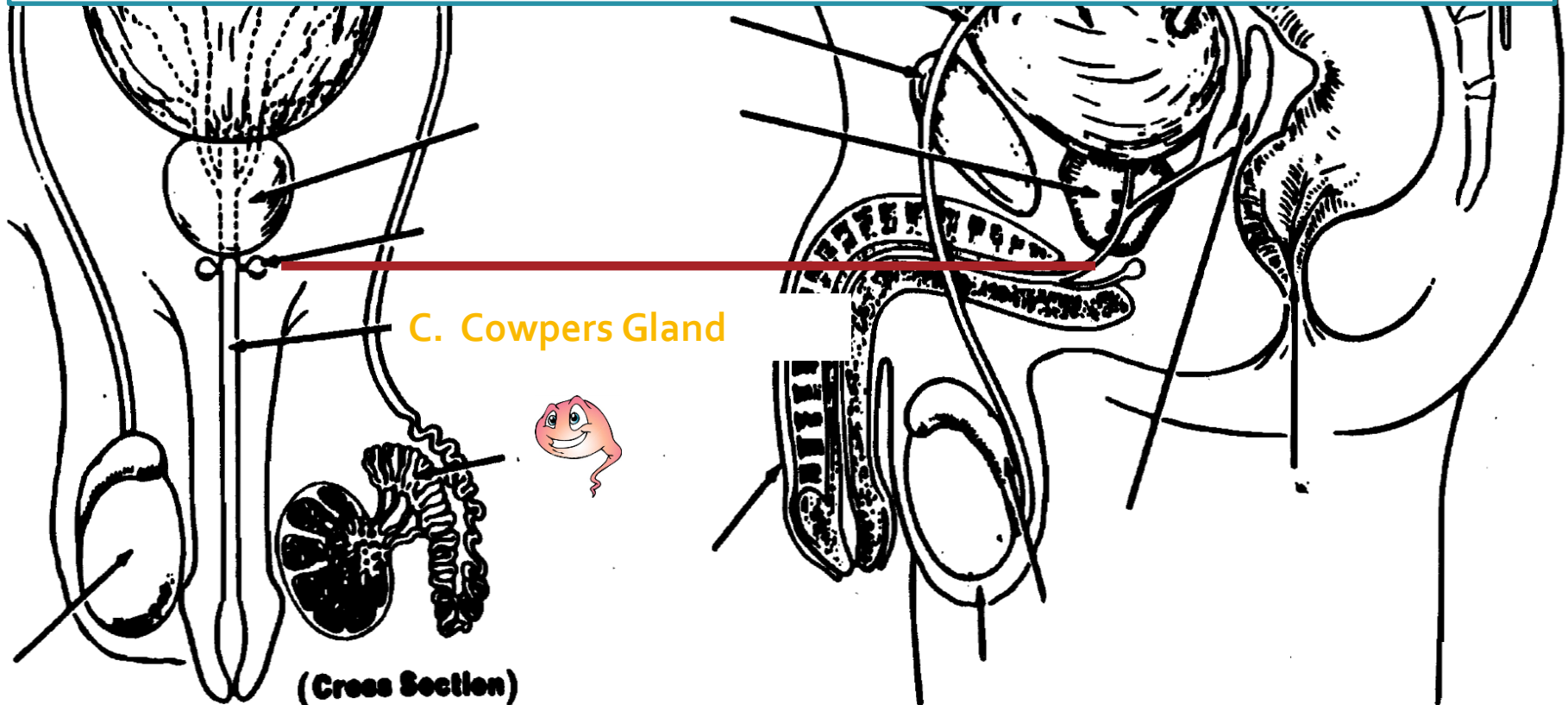
SIDE VIEW



B. Prostate Gland

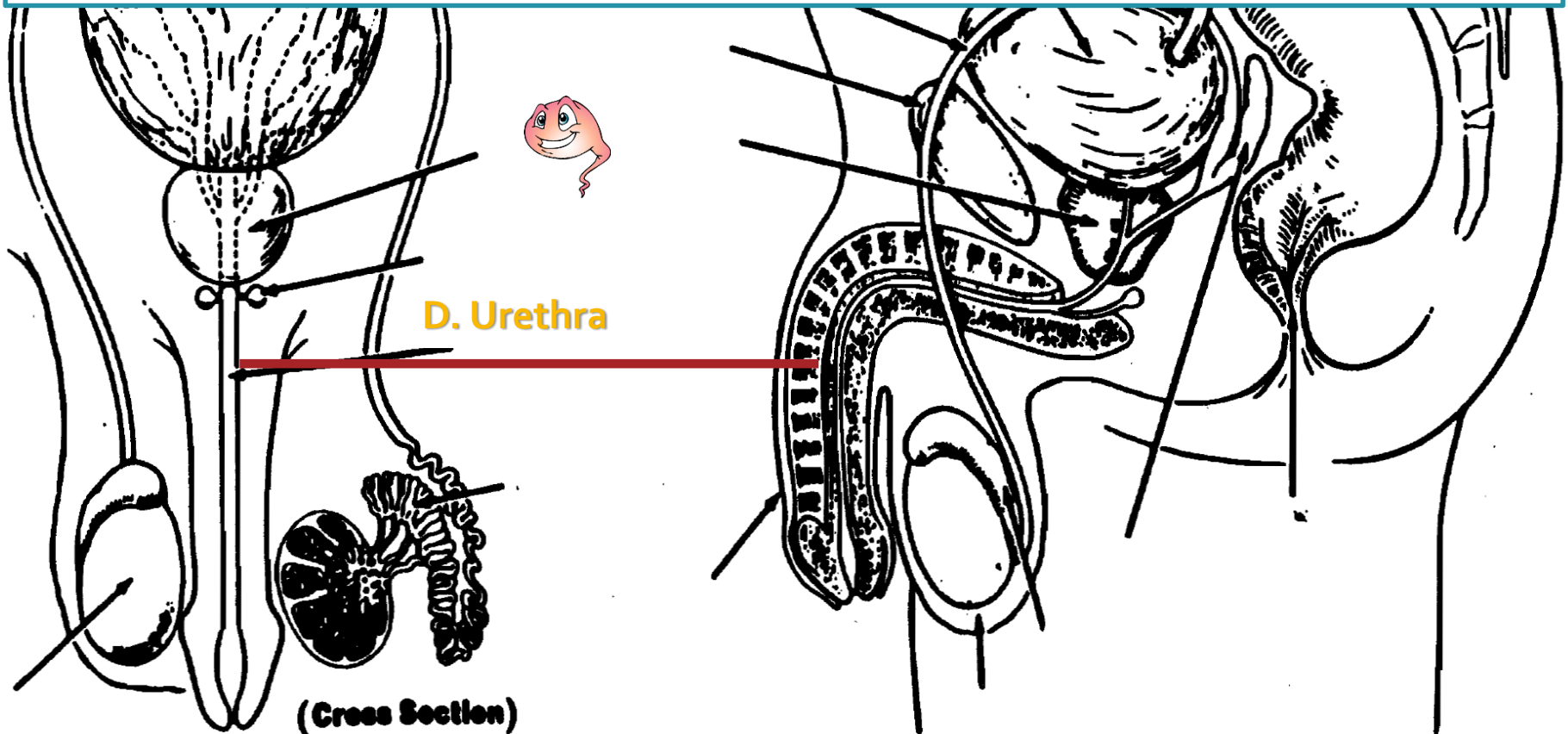
- The **(B) prostate gland** is located at the base of the bladder and surrounding the urethra.
 - It helps make up **most of** the seminal fluid.
 - The gland secretes an **alkaline fluid** that neutralizes the acid found in the male urethra and the female reproductive tract.
 - Without the secretions of the prostate gland, many sperm would die and fertilization of an ovum would be impossible.

- **(C) Cowpers glands** are two small pea-sized glands located beneath the prostate gland on both sides of the base of the penis.
- Produces **alkaline neutralize fluid** protecting it from acid to carry the sperm out of the male's body upon (n) ejaculation.



•The **(D) urethra** is a dual purpose tube that connects with the vas deferens where both semen and urine pass through to leave the penis.

•**Semen and urine never mix.** During urination, one sphincter will relax so that the pressure from the bladder will push urine out from the body. During ejaculation, another sphincter will relax so that semen can flow through the urethra to the outside of the body.



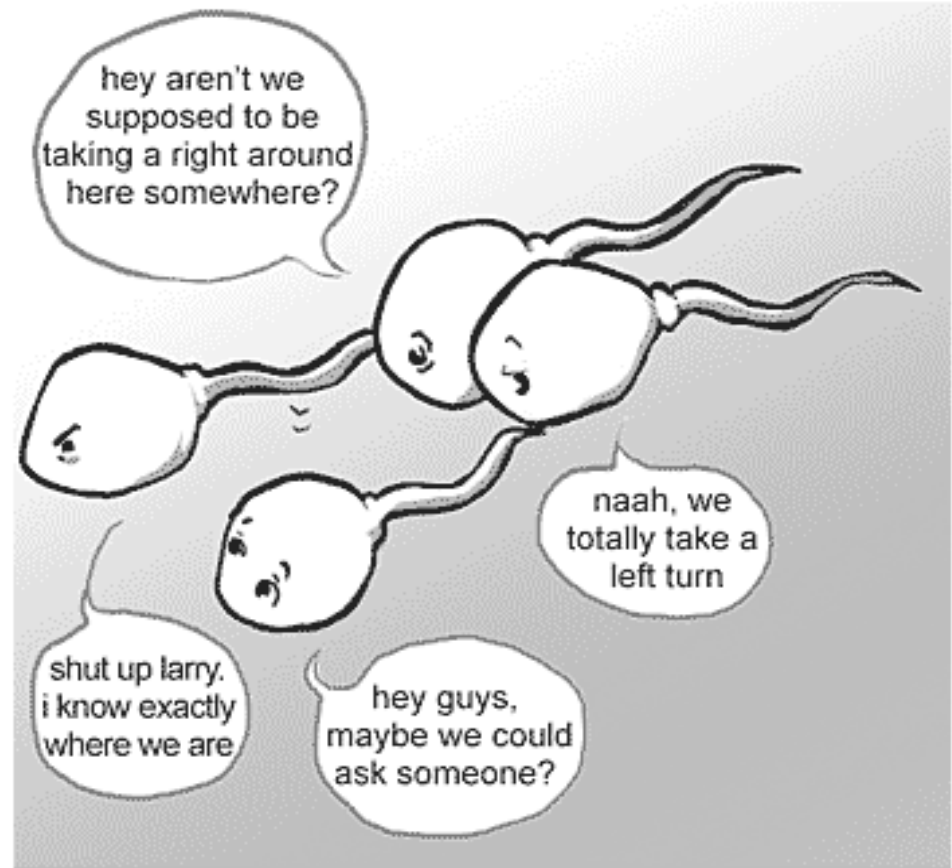
•An **(N) ejaculation** is the passage of sperm from the penis and is a result of a series of muscular contractions.

•About **150 million** sperm are ejaculated; 20 million could be deformed.

•Only **1 in 10 sperm** (1-2 thousand) find the **cervix**

•It takes about 1 hour and 15 minutes to reach the cervix.

•Only **100 to 200** sperm, out of the 150 million, reach the **ovum**.



why it can take over 100 million sperm to fertilize one egg

1. C

2. B

3. A

4. F

5. D

6. I

7. G

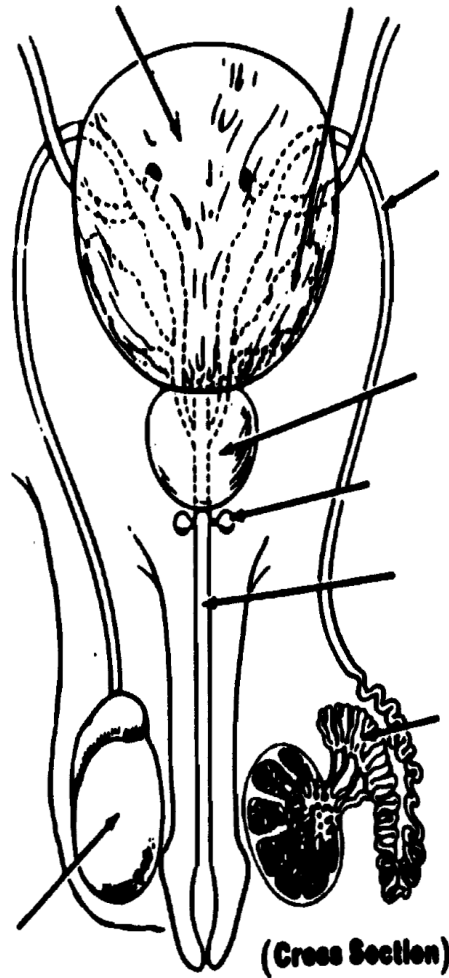
8. E

9. H

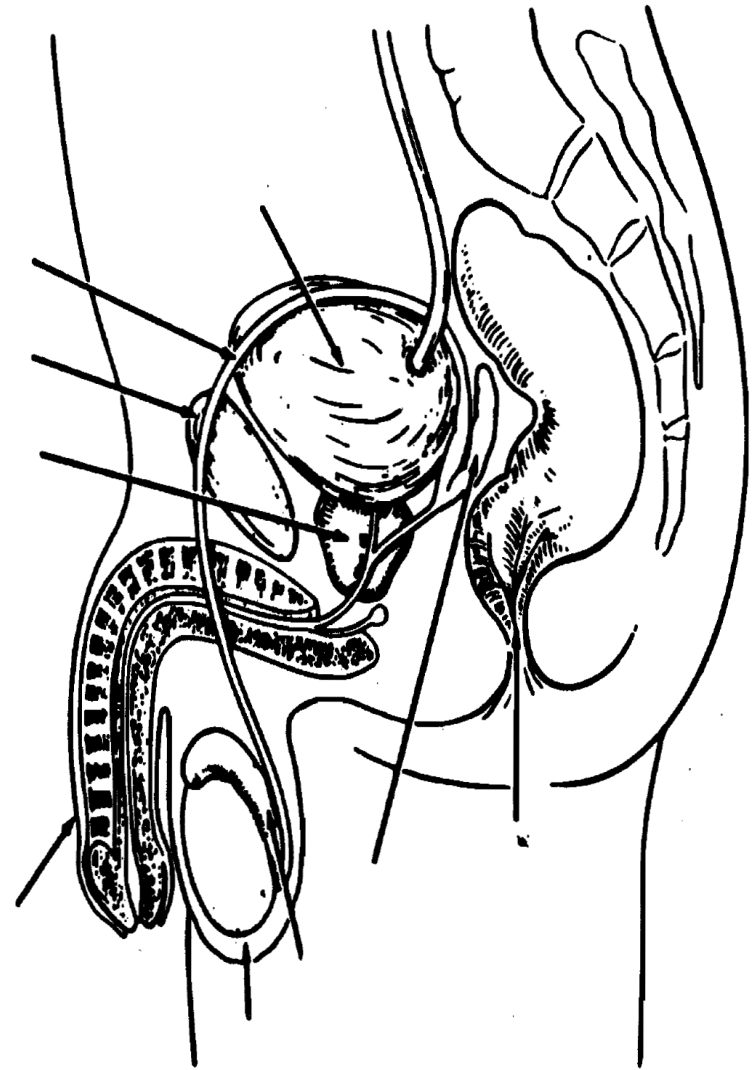
10. J

Extra: k,
L, M, & N

FRONT VIEW

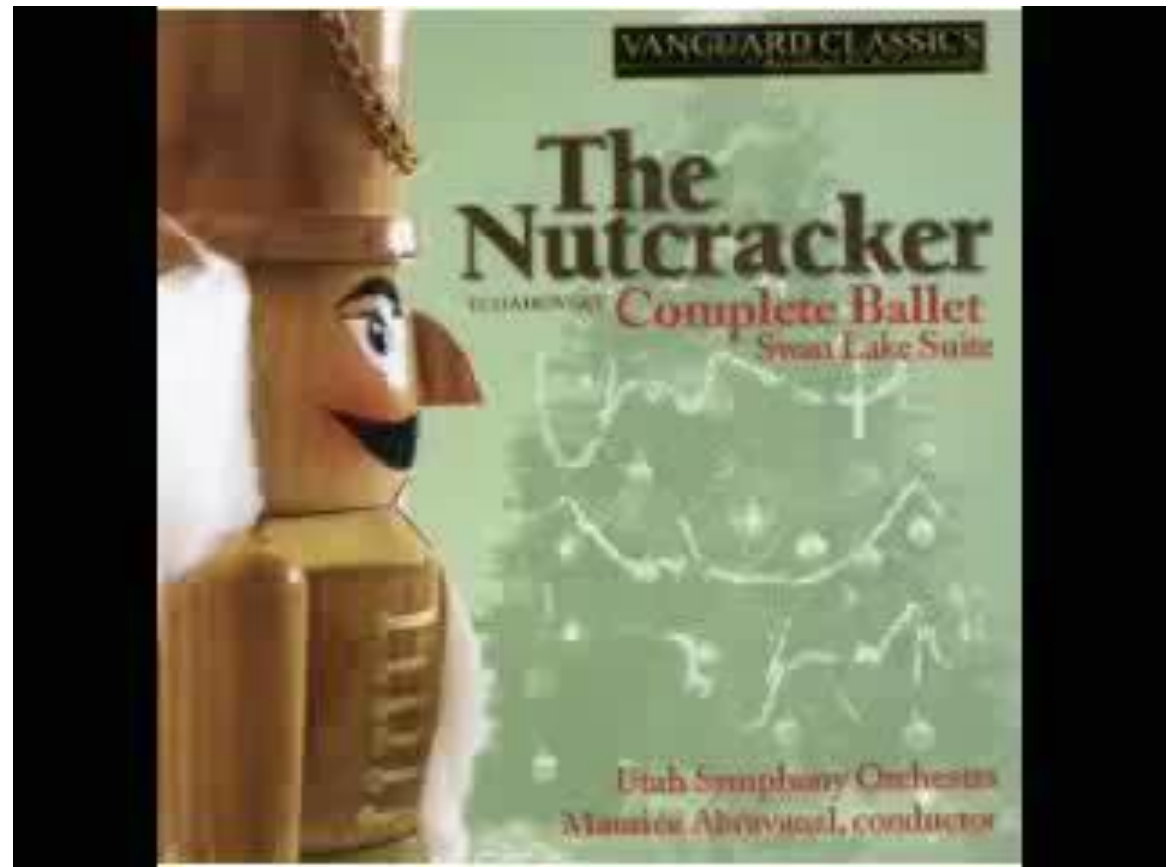


SIDE VIEW



Suga
Fairy





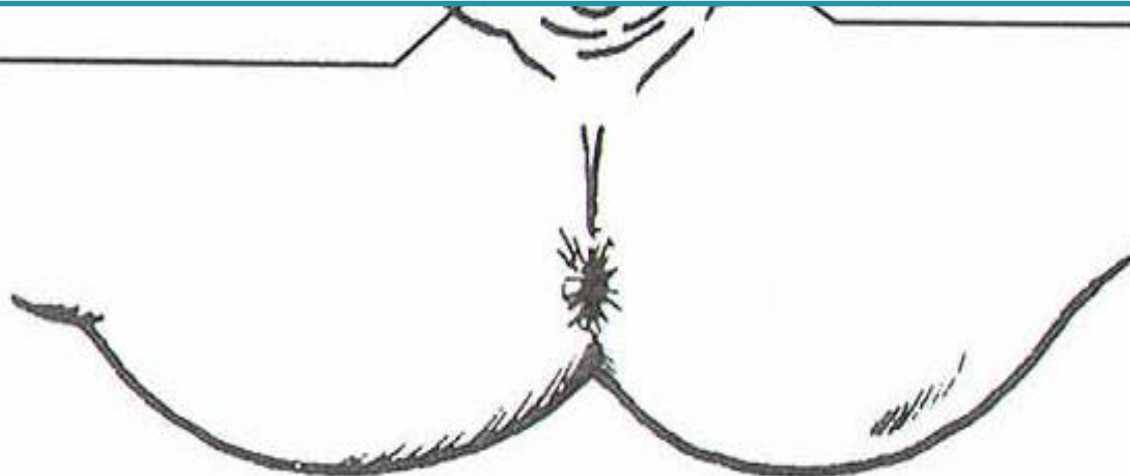


O. Mons Pubis



- **(O) Mons Pubis** is a mound of soft, fatty tissue which covers the pubic bone and **protects** the reproductive organs.

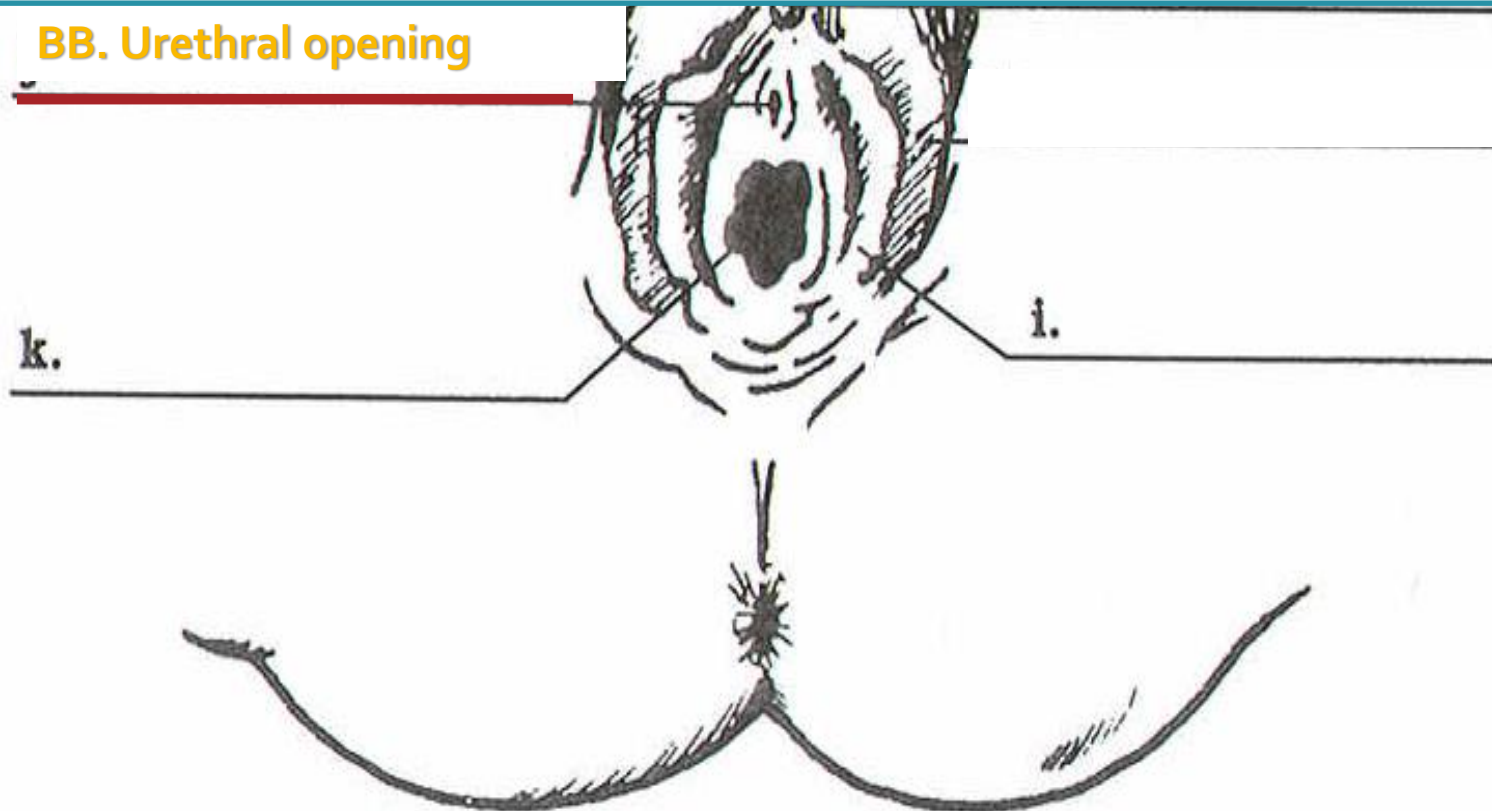
k.



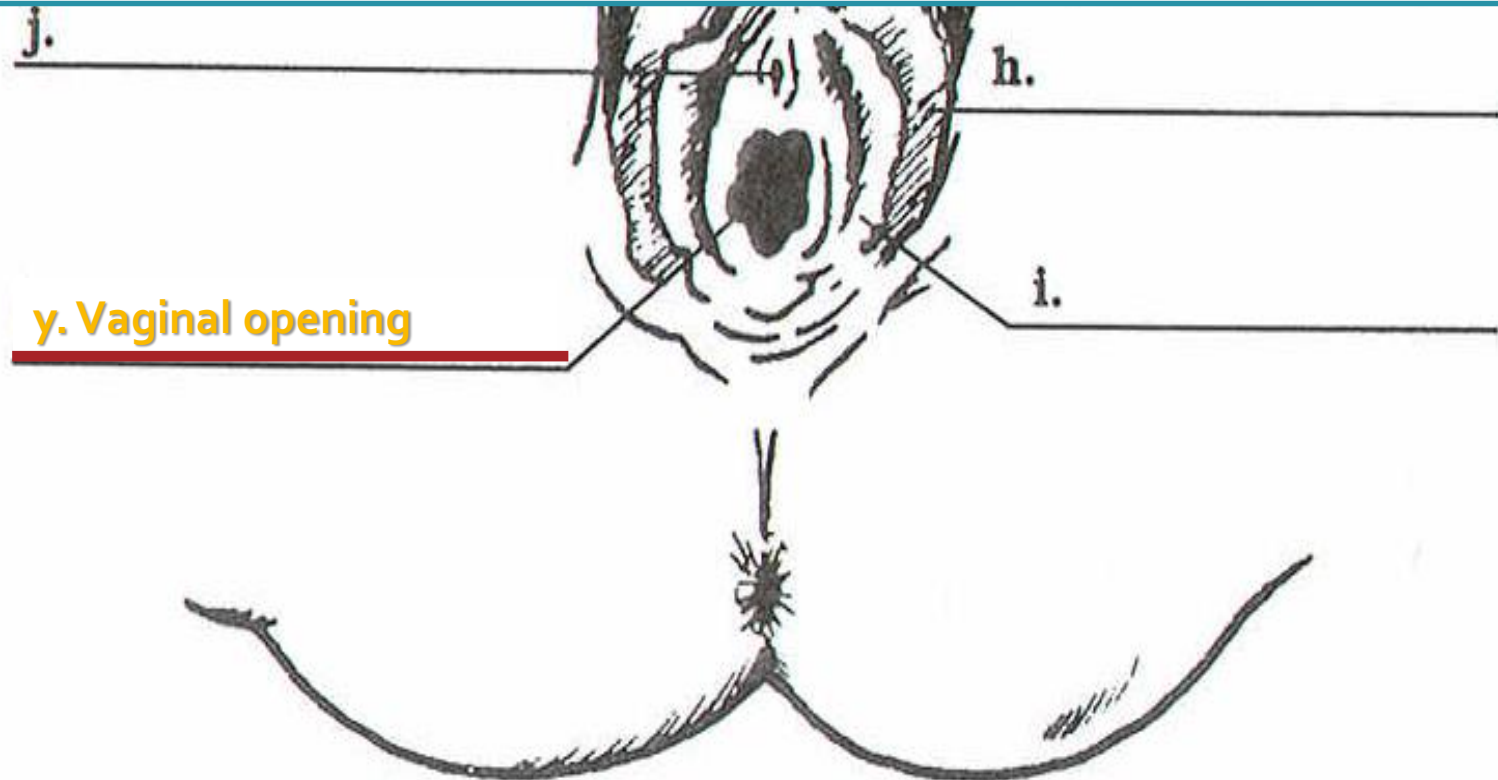
- **(BB) Urethral opening** is an external opening at the bottom of the urethra tube running between the bladder and the outside of a woman's body.

- Where **urine leaves** the body via the **(CC) urethra** which is a short tube that opens just in front of the vagina.

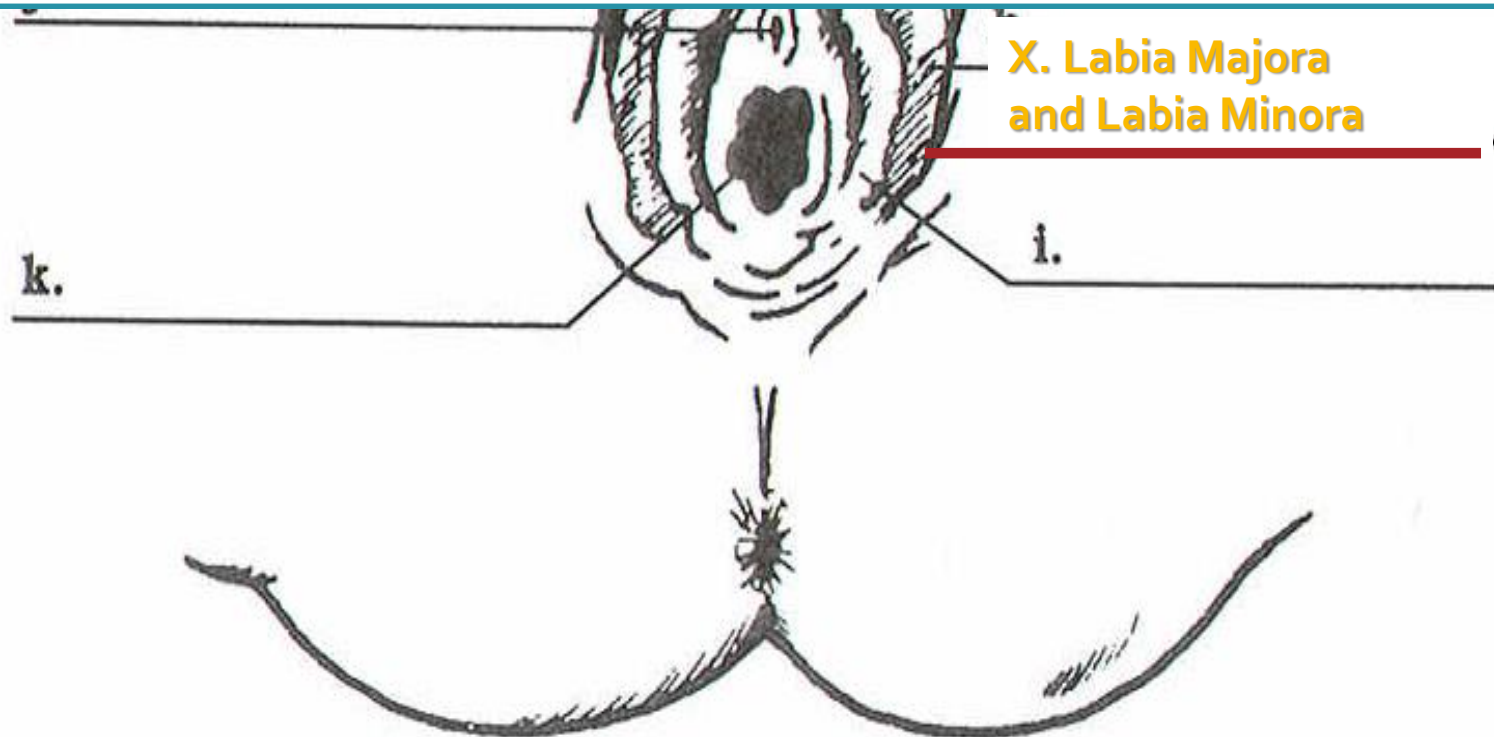
BB. Urethral opening



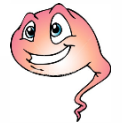
- The **(Y) vaginal opening** is an external opening to the vagina. It leads to the vagina passageway running between the uterus and the vaginal opening.
- Passageway** for menstrual fluid, the birth of a baby, and sperm.



- **(X) Labia** are **protective** folds of tissue running from the mons pubis to below the vaginal opening to cover and guard the vaginal opening from germs.



X. Labia Majora
and Labia Minora



- The **(W) perineum** is the external surface area between the anus and the vulva, labia opening to the vagina.

- Episiotomy** is where the doctor will cut the perineum during delivery to widen the opening for the baby to come out.

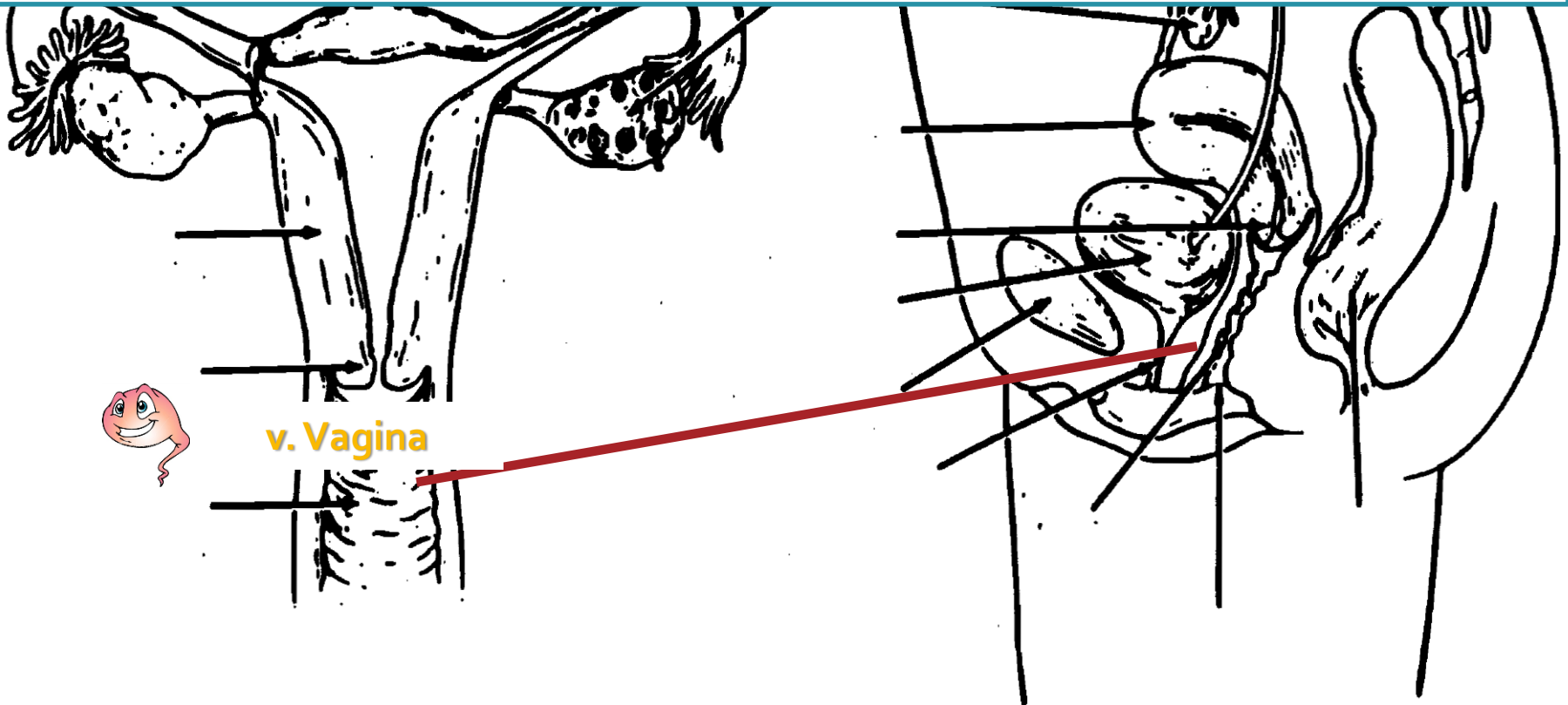


w. Perineum



•The **(V) vagina** (vaginal canal) is the passage through which **menstrual fluid** leaves the body, the passageway for the birth of a **baby**, and the **channel** directing the sperm to the internal reproductive organs.

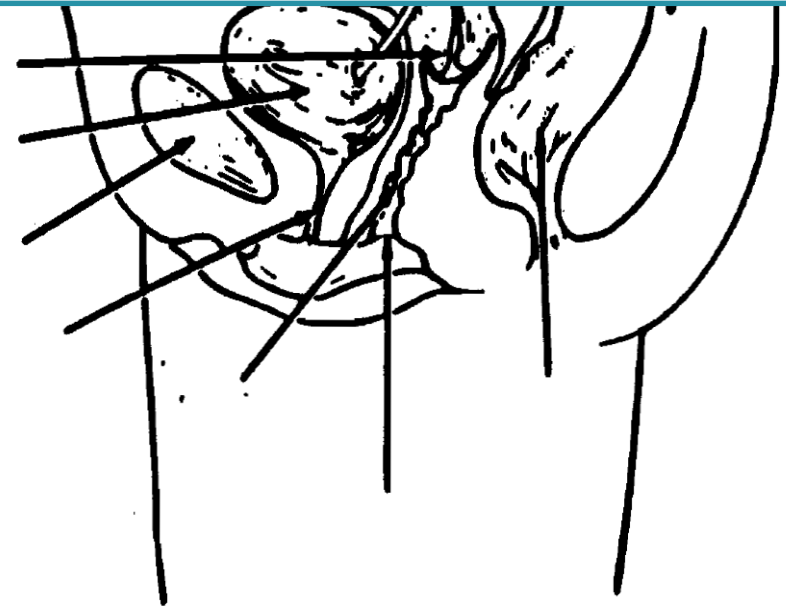
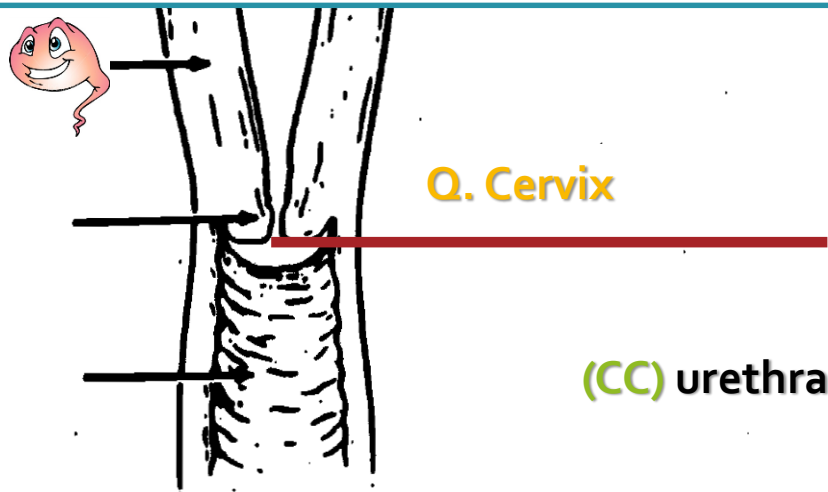
•During birth it is referred to as the **birth canal**.



FRONT VIEW

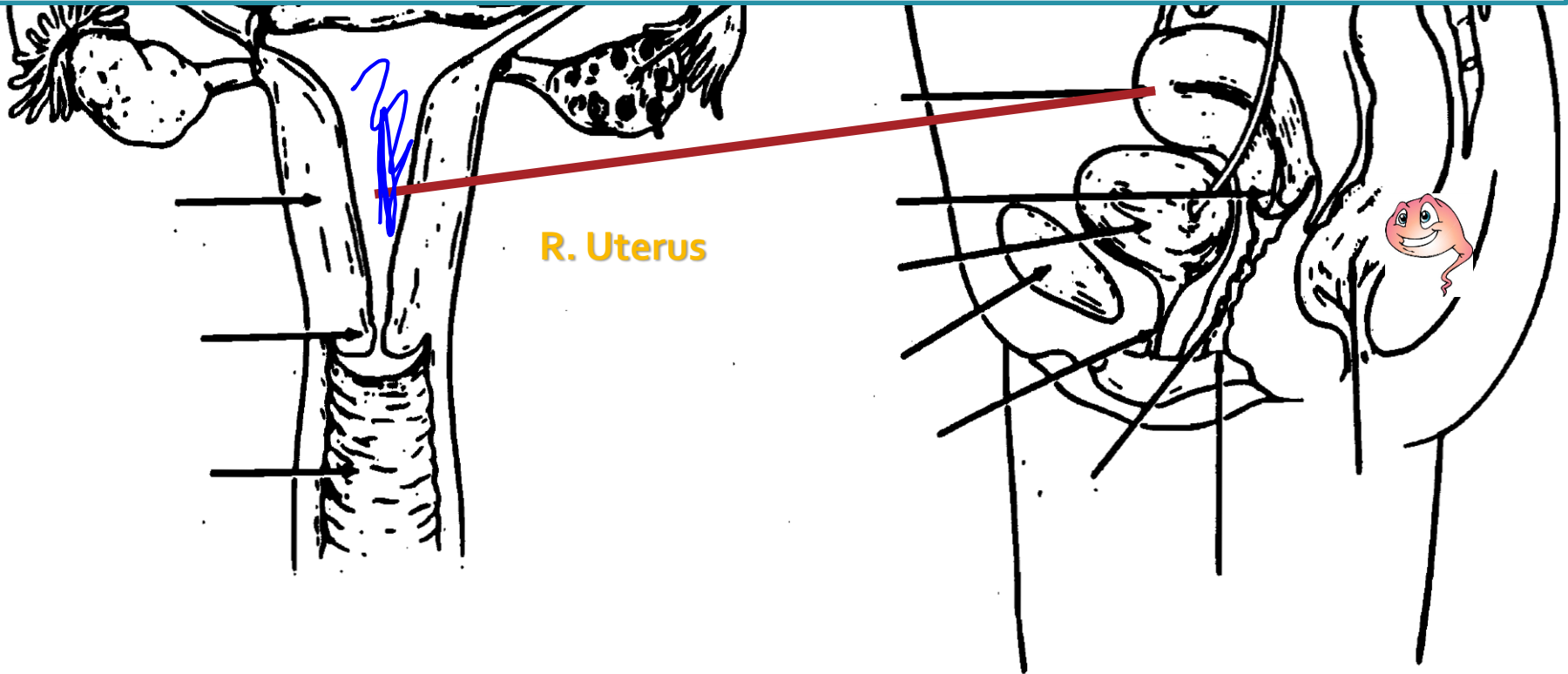
SIDE VIEW

- The **(Q) cervix** is the neck and opening into the uterus. If normal and healthy, it is the strongest muscle in the female body.
- It is normally the size of a **dime** and the thickness of 10 saltine crackers. At birth it is the size of a grapefruit and thins (effacement) out to a single saltine cracker.
- It helps **hold the baby in the womb** and must enlarge (dilate) to allow for birth to occur.

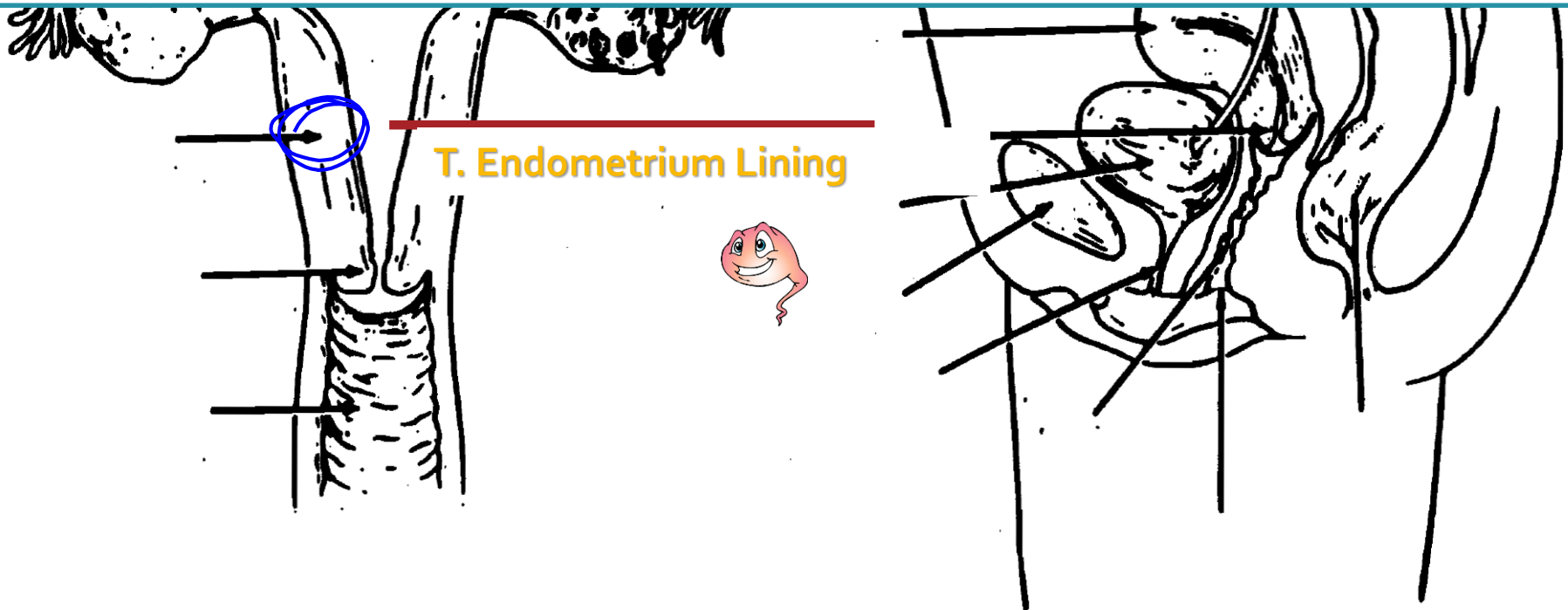


•The **(R) uterus** is a hollow organ where an unfertilized ovum breaks down or a fertilized ovum develops.

- It is shaped somewhat like an **upside-down pear** and about the size of a fist. At birth it stretches to the size of a watermelon.
- It provides protection, nutrients, and **houses** the unborn baby while it develops.
- It is called a **womb** when a baby is present.



- The **(T) endometrium lining** is vascular tissue lining of the uterus.
- It provides a place for **implantation and nutrients** for the fertilized egg.
- On the **7th day** after conception, it implants itself into the endometrium lining and it will be 3-4 weeks before a woman realizes that she missed her period
- If there is not a fertilized egg, it is sloughed off during **(Z) menstruation**.
- It rebuilds itself and **thickens each month** in preparation for a fertilized egg.
- Endometriosis** is when the lining does not completely leave the uterus and becomes built up scar tissue. Could build up into the fallopian tubes. May be a reason for infertility.



FRONT VIEW

SIDE VIEW



• **(S) Fallopian tube** is a narrow passageway transporting the egg/ovum from the ovary to the uterus and sperm cells towards the egg cell. **(AA) Fimbrae** are on the end.

- They are **attached to the uterus** and hover over the ovaries.
- They are about 4" long and 3/16 inch in diameter (the size of a cooked spaghetti noodle).
- The **place where conception occurs**. Usually in the upper third region.
- It is a **3-4 day journey for the egg to get to the uterus**.

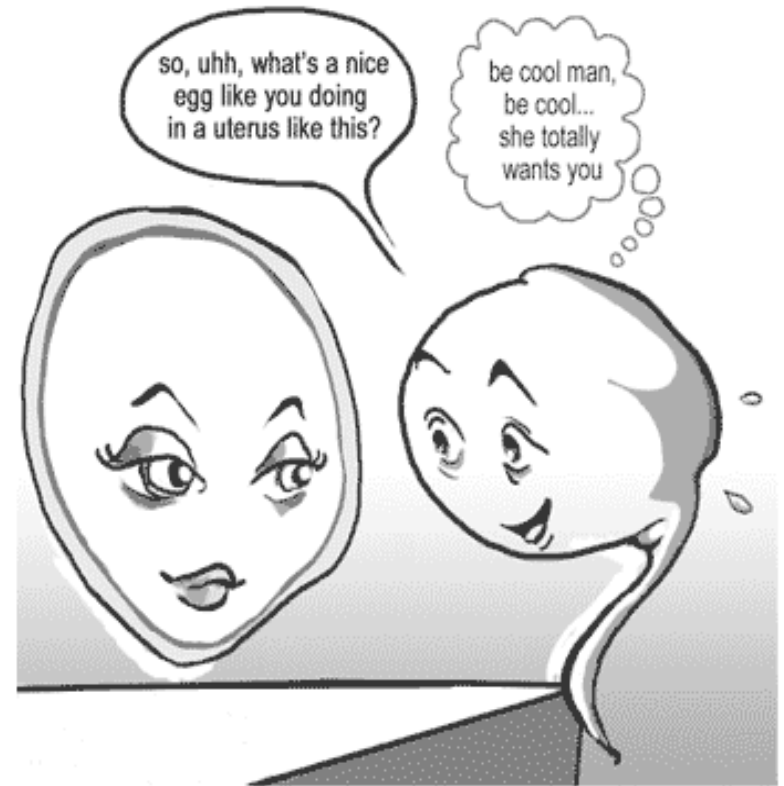
P. Ovum or egg



copyright 2006 baby-gaga.com

•Female sex cell

- The female reproductive cell.
- The **size of a pencil dot** or a grain of sand.
- The female baby is born with all the ova she will ever have (about **200,000** in each ovary).
- About **400-500 ova** mature and are released over a lifetime.
- Lives for **8-12 hours after ovulation**.
- Once it is fertilized it is called a zygote.



why it can take ages to get pregnant

- The **(U) ovaries** are two almond shaped glands which produce, store, and release the female's eggs/ovum/zygote and produces hormones.

- The female **hormones** are progesterone and estrogen.

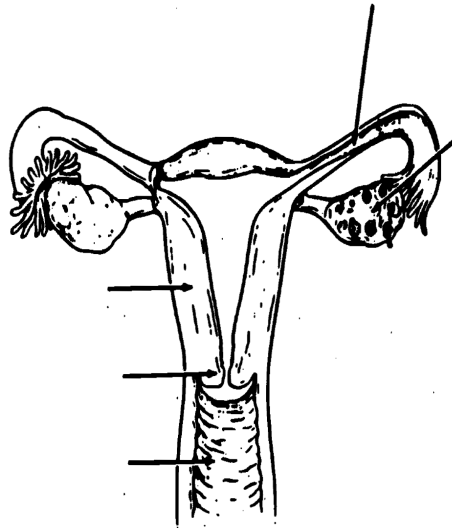
- Progesterone builds up the lining of the uterus called the endometrium (uterine) lining in preparation for the fertilized ovum.

- Estrogen is responsible for the secondary sex characteristics and the sex drive in females. It spurs the onset of puberty and is responsible for ovulation.

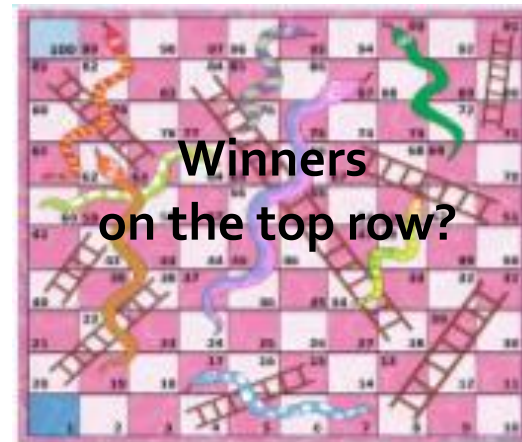
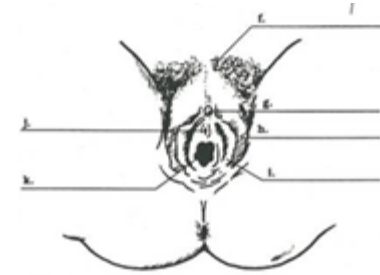
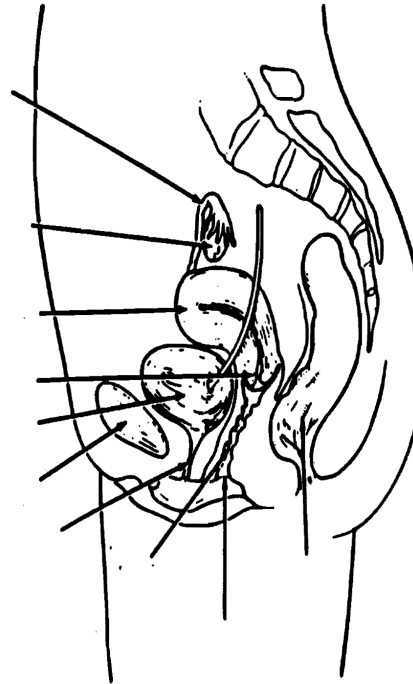


- 1. X
- 2. U
- 3. S
- 4. R
- 5. Q
- 6. Y
- 7. BB
- 8. V
- 9. O
- 10. T
- 11. P
- 12. W
- Extra:
Z, AA, CC

FRONT VIEW



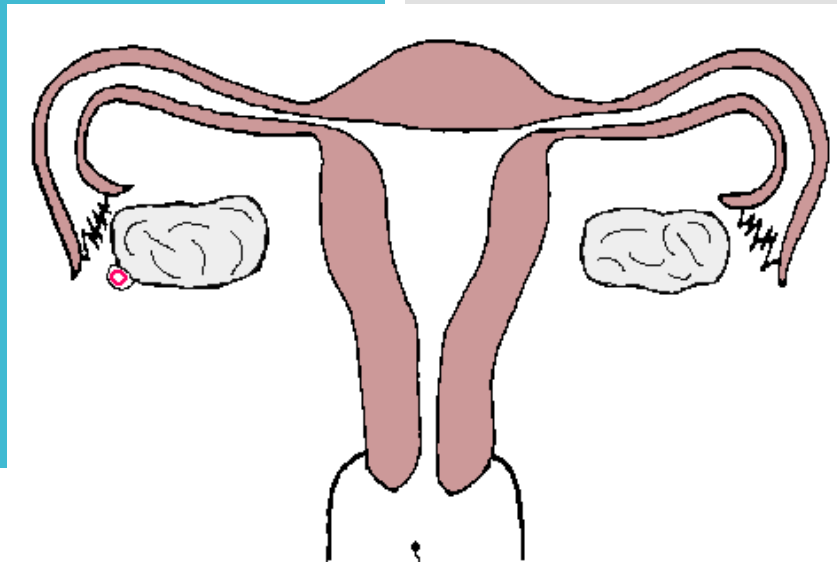
SIDE VIEW



FERTILIZATION/Conception

When the sperm penetrates the surface of the female sex cell, ovum, and enters inside to the **nucleus** .

The **23 chromosomes** from each sex cell combine and begin to multiply to begin to form a new **46 chromosome** human being.



THE MENSTRUAL CYCLE (SE-8)

DURING MENSTRUATION

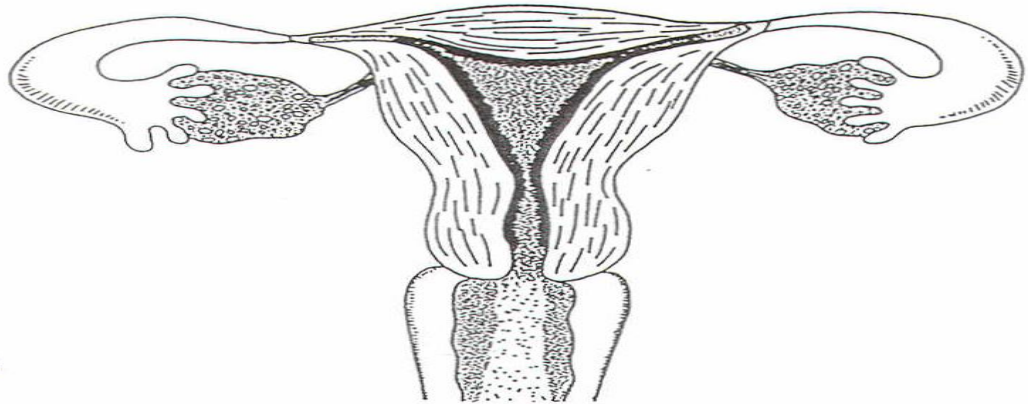
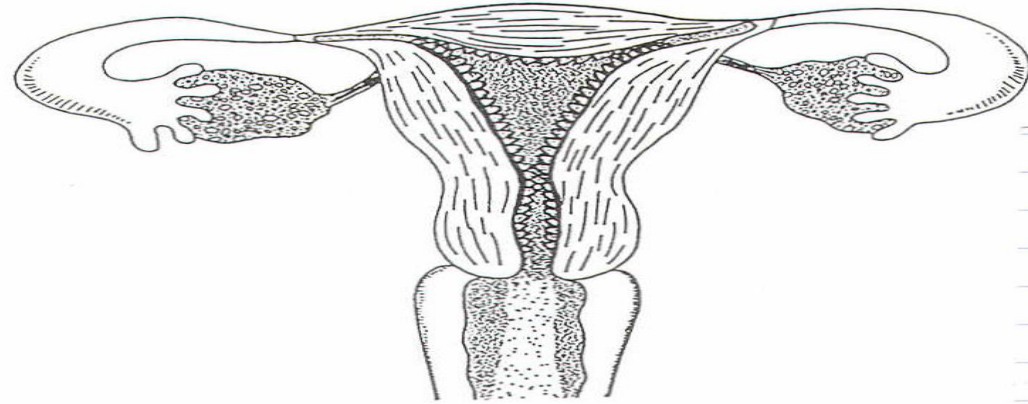
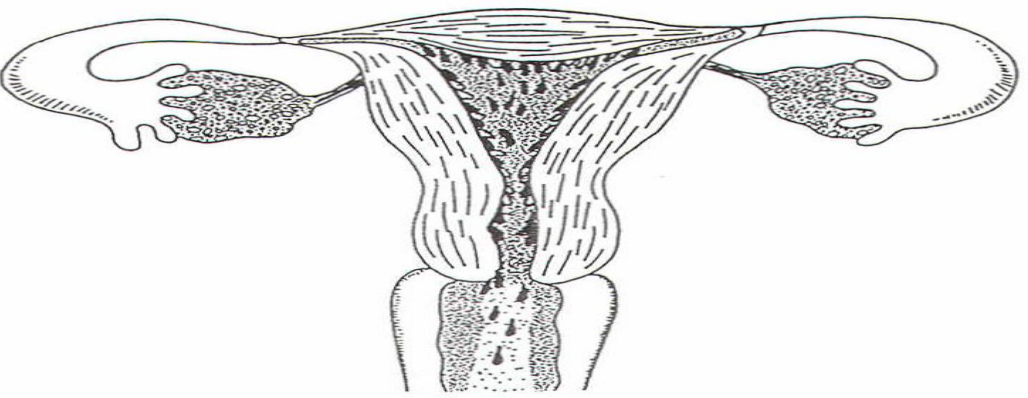
Days 1-5:

AFTER MENSTRUATION:

Days 6-15:

BEFORE MENSTRUATION:

Days 16-28:

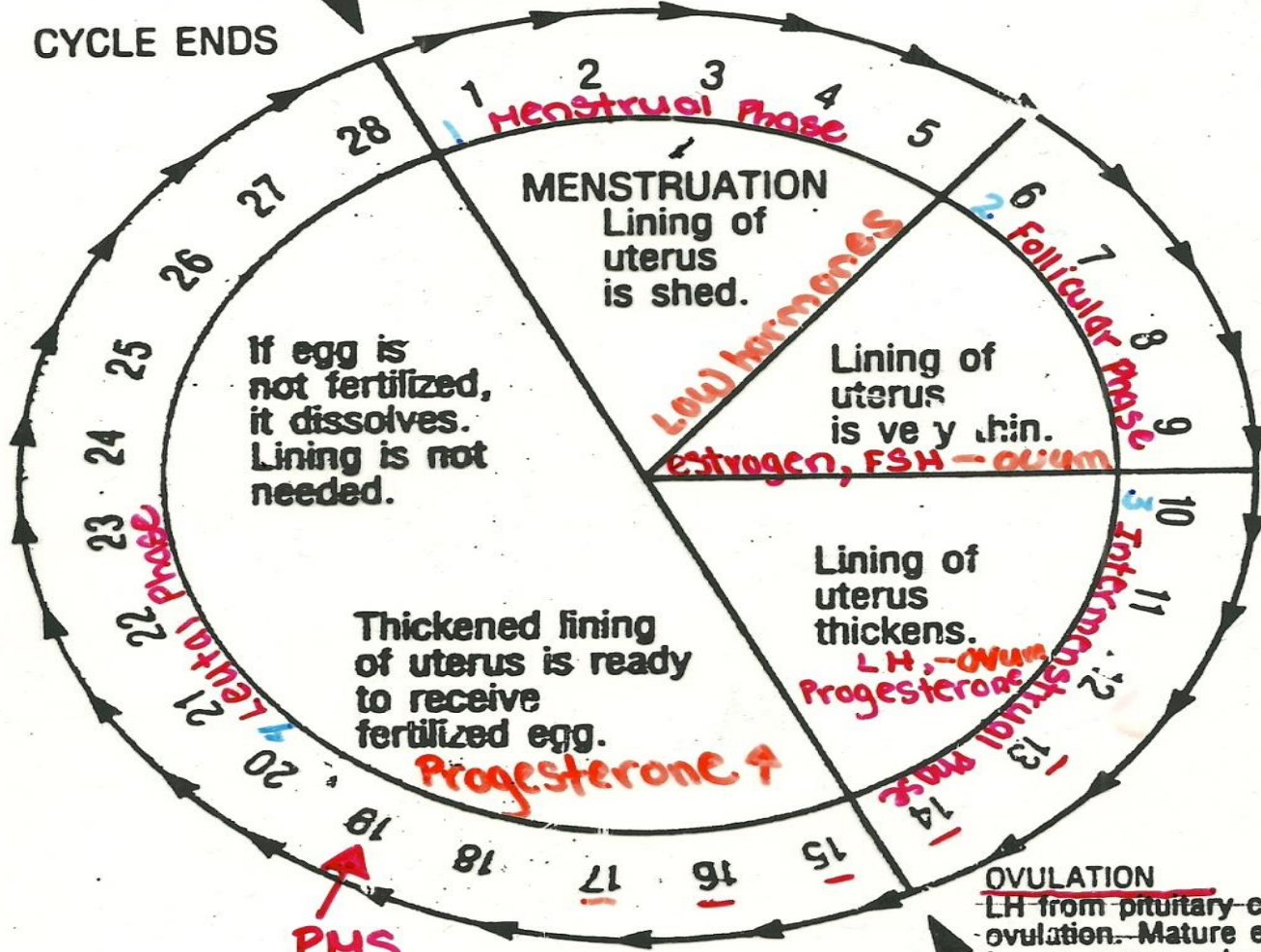


THE FOUR PHASES OF THE MENSTRUAL CYCLE

START HERE at first day of menstruation.

CYCLE BEGINS

CYCLE ENDS

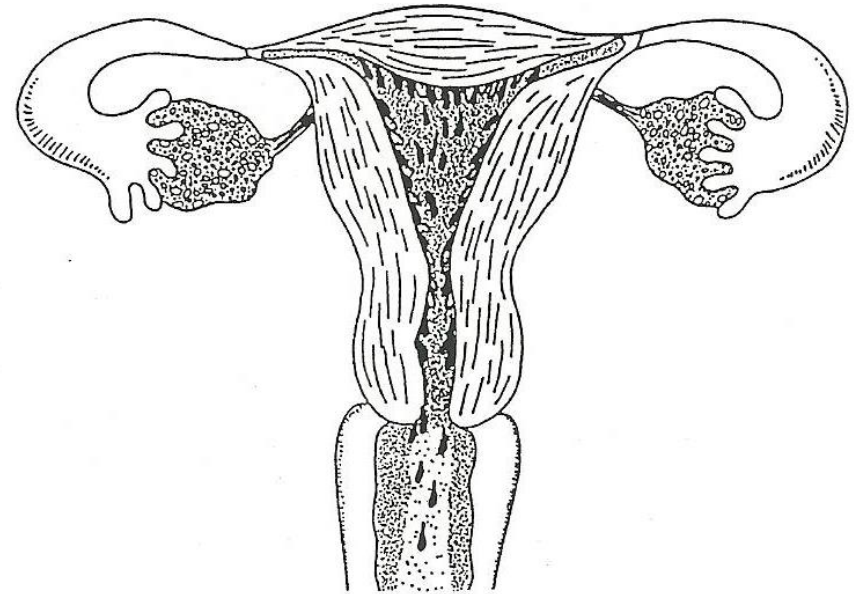


only 4% have 28 day cycles
Menstruation always begins 14 days
after ovulation.
could ovulate during menstruation

Mittelschmerz

During Menstruation Days 1-5

- **Menstruation** occurs and the endometrium lining of the uterus, with a small amount of blood, leaves the body.
- At this time, **another egg is maturing** in the ovary.

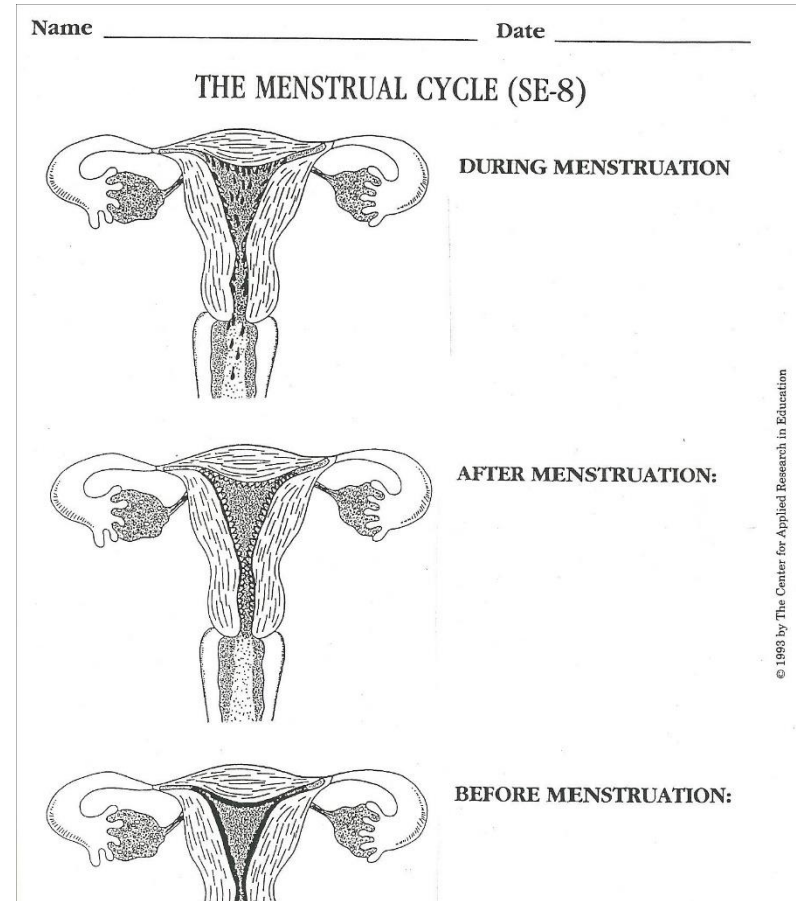


After Menstruation Days 6-15

- The endometrium lining has thinned, the **uterus begins to repairs itself** to prepare for a fertilized egg, and the ovum is maturing.
- 12-16 days before your next period begins, **ovulation** occurs causing the ripened ovum to burst out of the ovary follicle.

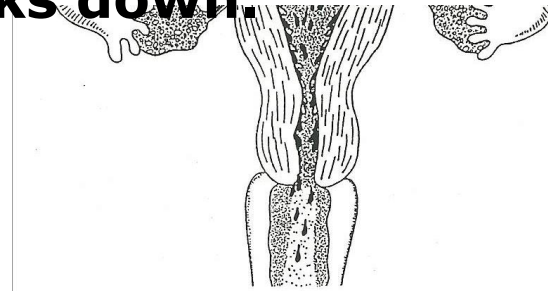
Follicle-stimulating Hormone (FHS): a substance which brings to life a few of the ovum in one of the ovaries.

Luteinizing Hormone (LH): causes the follicle to burst and allows ovum to fall into the opening of the fallopian tube.

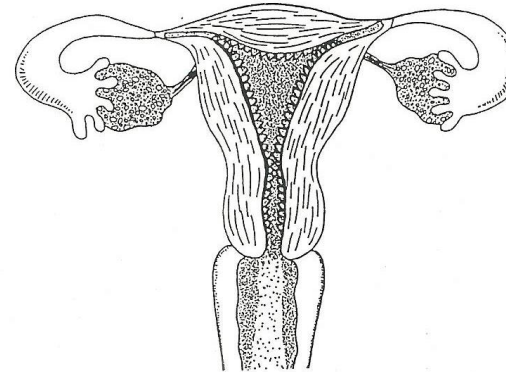


Before Menstruation Days 16-28

- Uterine lining continues to **thicken**.
- If the **egg is fertilized** by the sperm cell, it travels down the fallopian tube and embeds itself into the thickened wall of the uterus (endometrium lining).
- If the egg is **not fertilized**, the blood vessels in the wall of the uterus shrink and break down.
- **PMS** occurs 7-10 days before menstruation begins.
 - Headache, back pain, weight gain, bloating, food cravings, irritability, clumsy, fainting, etc.
 - Mittelschmerz-middle pain
- And the cycle begins again



AFTER MENSTRUATION:



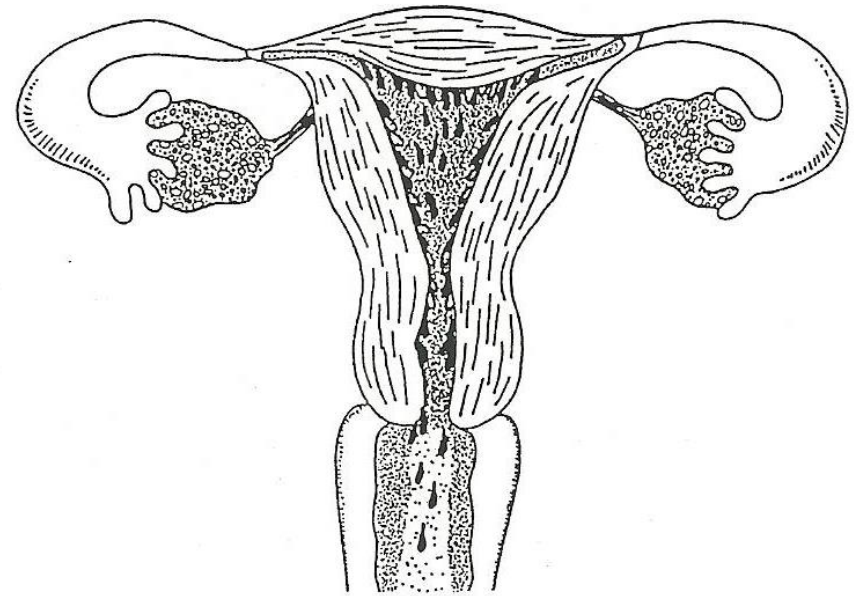
BEFORE MENSTRUATION:



MENSTRUATION BEGINS OVER AGAIN

Days 1-5

- **Menstruation occurs and the lining of the uterus, with a small amount of blood, leaves the body.**
- **At this time, another egg is maturing in the ovary.**



Assignment SEYMOUR and OLIVIA STORY