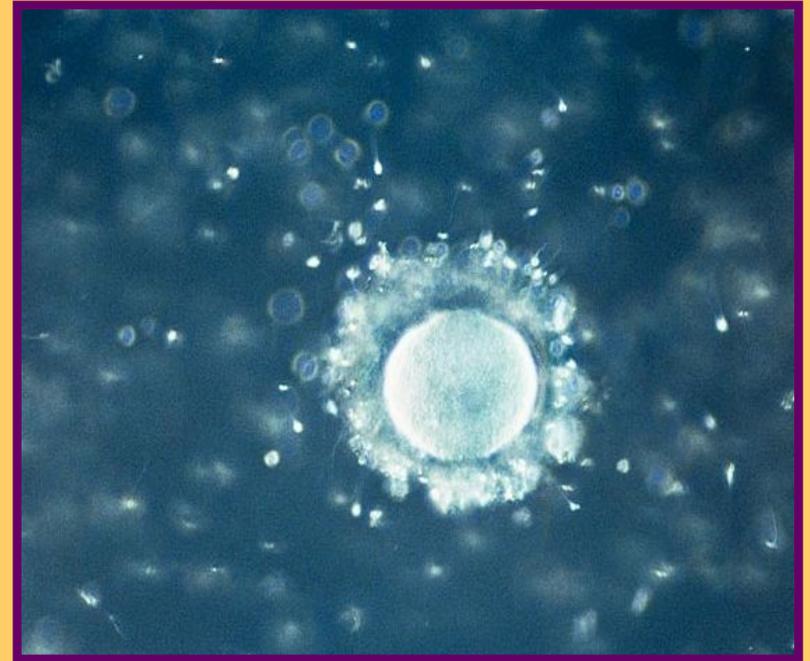
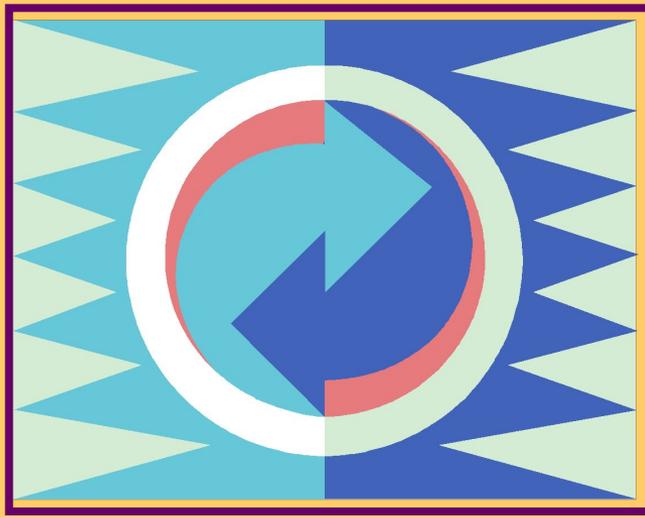


6.ICR.3.2 - Summarize the relationship between conception and the menstrual cycle.

Conception

- The ovum is the size of a grain of salt.
- 40 – 150 million sperm are released
- Only one will fertilize the ovum.





The Cycle of Life

**Ovulation, Menstruation,
and Conception**

The O-M Cycle

- Many individuals only talk about the menstruation cycle.
- We'll talk about these events as parts of one cycle.
- Menstruation is a more obvious event, but ovulation is a more important event (the capacity to create a human life).

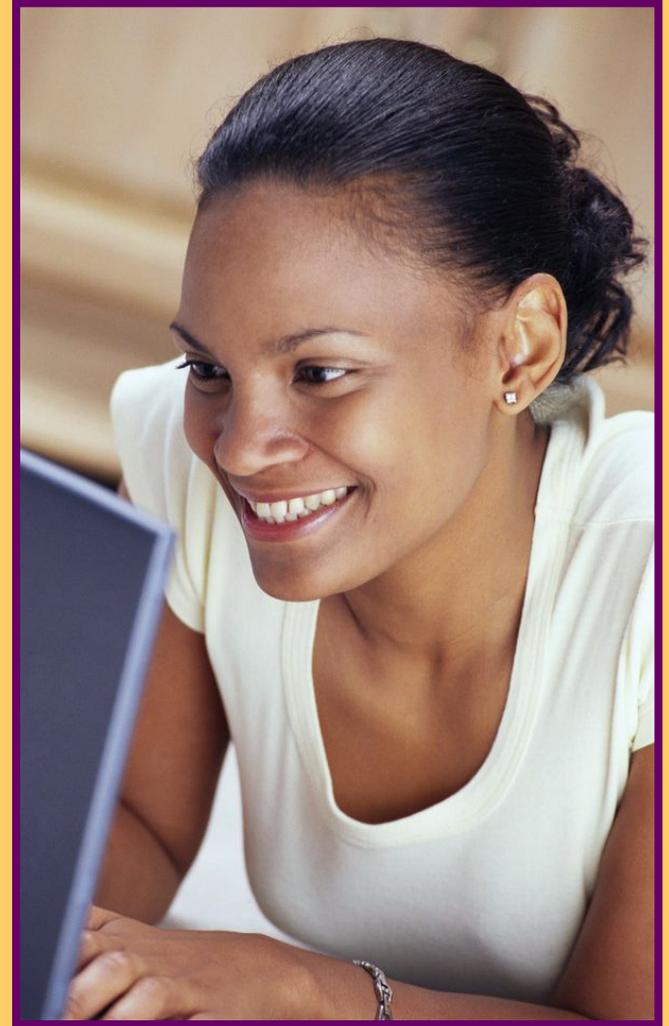
Pronunciations!

These terms are often mispronounced.

- **Ovulation:** ahv-yoo-LAY-shun
- **Menstruation:** men-stroo-A-shun
- **Conception:** ken-sep-shen

Menarche

- A female's first menstruation is called menarche.
- She will have had earlier pubertal developments such as pubic hair and the beginning of breast development.
- Menarche usually occurs between the ages of 11 - 15.



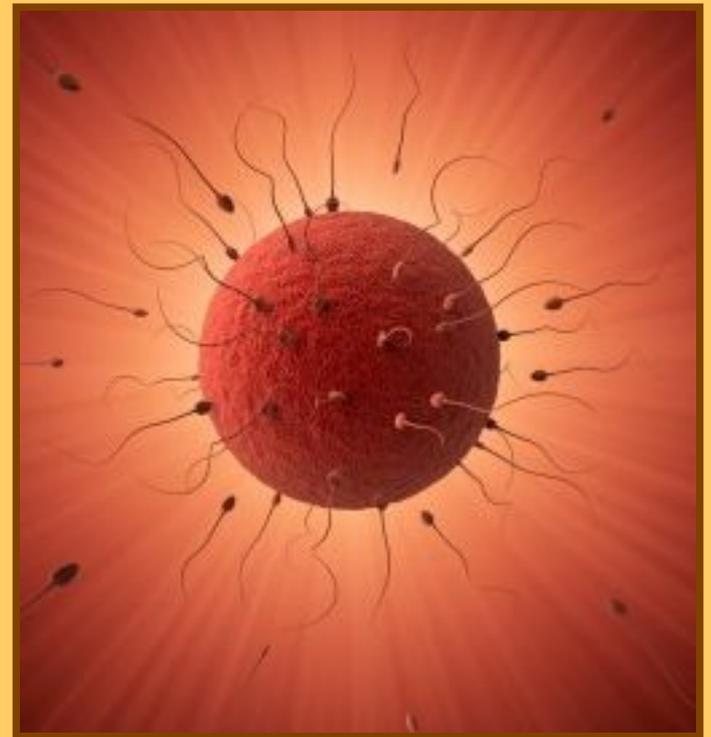
Ovulation and Conception



Ovulation occurs when an ovum (usually just one per cycle) ripens and is released from the ovary. It is guided by the fimbriae into the fallopian tube. If the woman has sexual intercourse, the ovum may meet and join with a sperm cell from the man. This is called conception or fertilization.

Conception

- During sexual intercourse, millions of sperm are released
- Only a few hundred make it to the ovum
- Only one sperm will penetrate the ovum.

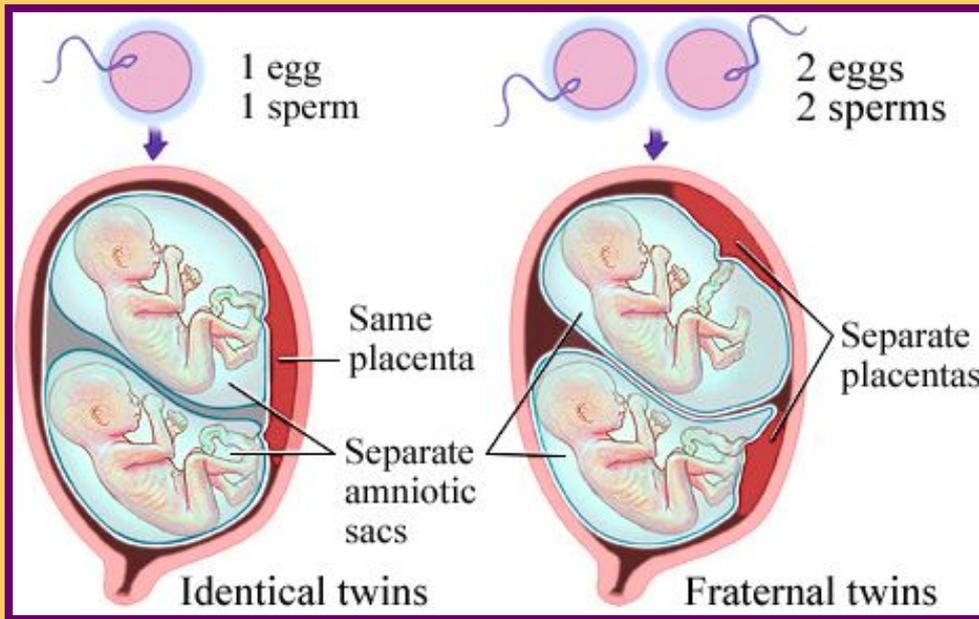


What Happens If Conception Does Occur?

If conception does occur, the fertilized ovum (now called a zygote) travels into the uterus and implants in the wall of the uterus. The zygote develops into a baby to be born approximately nine months later.

How Do Twins Happen?

- With identical twins, one sperm fertilizes one ovum; the zygote splits into two.
- With fraternal twins, two ova are released and fertilized by two different sperm and zygotes share the womb during pregnancy.



Two Types of Twins

Identical Twins



- Share same DNA; always two girls or two boys

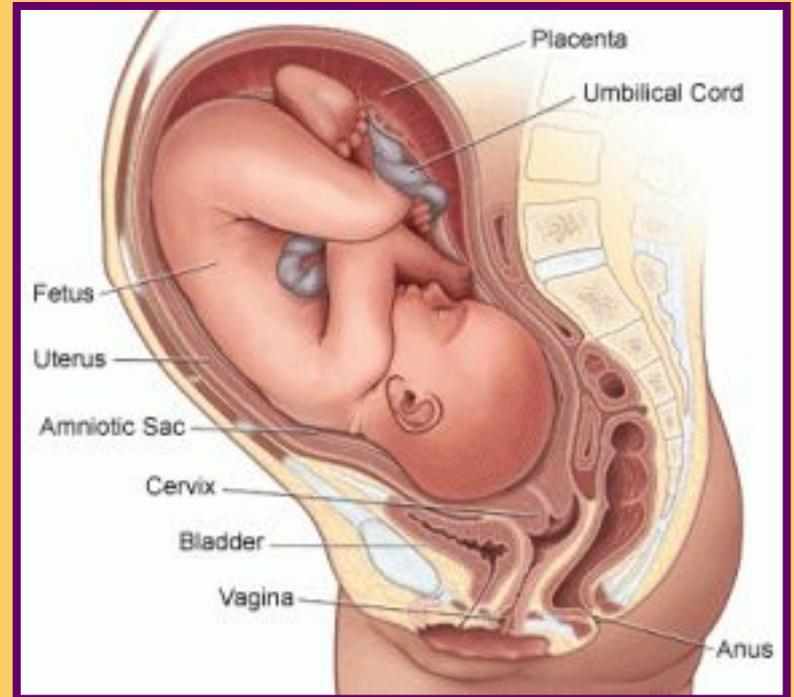
Fraternal Twins



- No more alike than any two siblings; can be a boy and girl

Pregnancy

- The zygote develops into a fetus then develops into the baby.
- Pregnancy takes about 40 weeks.
- Mother needs to eat nutritious food, gain the proper amount of weight, avoid alcohol, tobacco, and drugs, and visit the doctor regularly.



What Happens When Conception Does Not Occur?

If the ovum is not fertilized, it will travel from the uterus with menstrual flow or bleeding during the next menstruation.

What is the fluid which leaves the body during menstruation?

In preparation for the possibility of pregnancy, the endometrium (or lining of the uterus) begins to get thicker. If conception does not occur, the lining thins out and leaves the body. The sloughing off of the endometrium (or menstrual blood) is a normal process for girls and women during their reproductive years.

Sequence of the O-M Cycle

- Menstrual flow begins and lasts about 3-7 days.
- Lining of the uterus begins to get thicker.
- Ovum is released from one of the ovaries.
- Ovum travels down the fallopian tube to uterus; if not fertilized, it dies and passes from body.
- Lining of uterus thickens again.
- Menstrual flow begins again.

O-M Cycle: What is Average? What is Normal?

- Length of O-M cycle: 28 or 29 days (may be 20 to 35 days)
- Ovulation usually occurs 14 days PRIOR to menstruation (may occur earlier, later, or not at all); rarely occurs during menstruation, but it is possible
- Length of menstruation: 5 days (may be 3 to 7 days)

Other Factors Related to Conception

- Sperm from males can live an average length of time: 3 days (or shorter: 1 1/2, or longer: 7 days).
- Ovum may be viable for several days.
- Because a female cannot accurately predict when she will ovulate and a male does not know how long his sperm will live, . . .

A couple cannot predict for certain if pregnancy will or will not happen at any given time based on the calendar alone.

