

Fertilization and Development

Section Review

Reviewing Terms

On the line provided, write the letter of the term from the list that matches each description. Each choice can be used once, more than once, or not at all.

- | | |
|---|---------------------------------|
| _____ 1. solid ball of cells that forms in a newly formed zygote after a series of cell divisions | a. fertilization |
| _____ 2. process in which the three primary germ layers of the embryo are formed | b. zygote |
| _____ 3. name for the embryo at the end of its first eight weeks of development | c. morula |
| _____ 4. hormone that stimulates the production of milk in a new mother | d. implantation |
| _____ 5. fertilized egg | e. embryo |
| _____ 6. chemical signal that keeps the corpus luteum alive and active | f. human chorionic gonadotropin |
| _____ 7. organ formed shortly after gastrulation through which an embryo breathes, receives nourishment, and disposes of waste products | g. gastrulation |
| _____ 8. secretion in a mother's initial breast milk that contains a mixture of special antibodies produced by her immune system | h. placenta |
| _____ 9. fertilized egg that has begun cell division | i. umbilical cord |
| _____ 10. pituitary hormone that stimulates the series of contractions known as labor | j. fetus |
| _____ 11. chemical substance produced by the cells of the zygote that signals the body to preserve the uterine wall | k. oxytocin |
| _____ 12. substance that helps to protect a baby from infection for many weeks after birth | l. prolactin |
| _____ 13. fusion of a sperm with an ovum | m. colostrum |
| _____ 14. structure that connects the embryo to the placenta | |
| _____ 15. HCG | |
| _____ 16. process in which the blastocyst attaches itself to the uterine wall and begins to grow inward | |

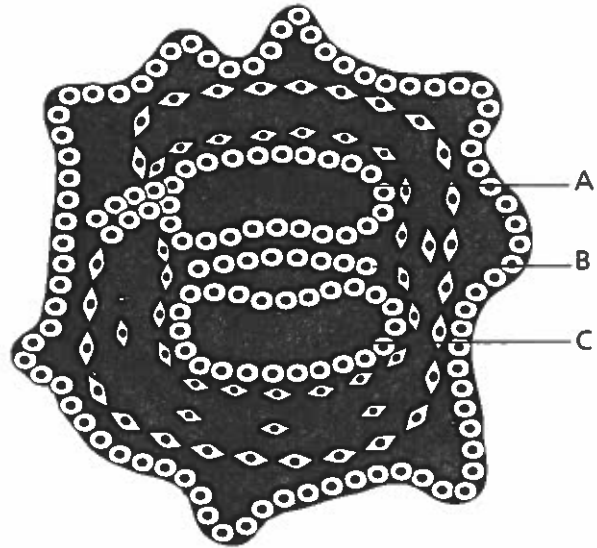
Reviewing Concepts

Complete each statement by underlining the correct word or phrase in the parentheses.

17. As soon as a sperm cell makes direct contact with the (egg cell membrane, egg's outer protective layer), the two cells fuse.

Fertilization and Development
Section Review (continued)

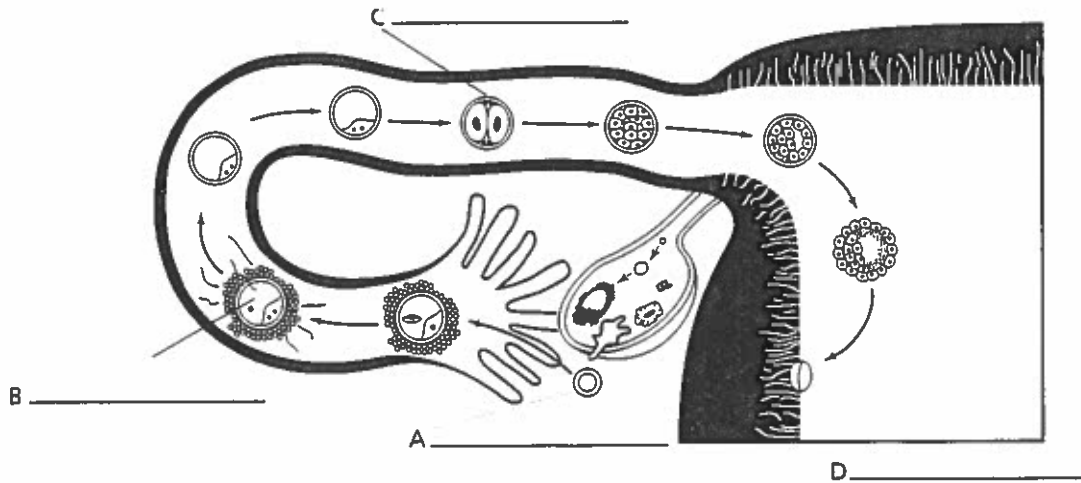
18. Human development begins once a (fetus, zygote) has been formed.
19. Three to four days after ovulation, the (blastocyst, morula) attaches itself to the wall of the uterus.
20. The process taking place in the diagram is known as (gastrulation, implantation).
21. The embryo's ectoderm is labeled (A, C) in the diagram.
22. The (respiratory, circulatory) system will be formed from the layer of cells labeled B in the diagram.
23. The blood supplies of the mother and embryo (do not, do) mix directly.
24. It (is not, is) possible to identify the sex of a fetus.
25. Childbirth takes place in humans about (six, nine) months after fertilization.
26. The milk that mammals such as humans produce for their offspring (is a complete food, lacks essential vitamins and nutrients).



Reviewing Skills

Answer each of the following in the space provided. Use complete sentences as appropriate.

27. Put the events that occur during the first days of human development in order by labeling the processes shown in the diagram below. (Sequencing)



28. Why do you suppose an egg cell changes after fertilization to prevent other sperm cells from entering? (Drawing conclusions)
