Name _____ Class _____ Period _____

24–3 What are the Stages in the Menstrual Cycle?

The human female reproductive system has several different roles to perform. It produces a new egg each month for fertilization. It must prepare the lining of the uterus for a new embryo if fertilization of an egg does occur. This is accomplished by a thickening of the uterus lining.

It must shed the egg and thickened uterus lining if fertilization does not occur. All of these events occur in a cyclic pattern each month in a sexually mature female.

INTERPRETATION

OBJECTIVES

In this exercise, you will:

a. review the organs that form the human female reproductive system.
b. prepare a calendar that shows the changes occurring during the human menstrual cycle if no fertilization occurs.
c. prepare a calendar that shows the changes occurring during the human menstrual cycle if fertilization occurs.

KEYWORDS

Define the following keywords:

fertilization _____

menstrual cycle _____

ovary _____

oviduct _____

uterus _____

MATERIALS

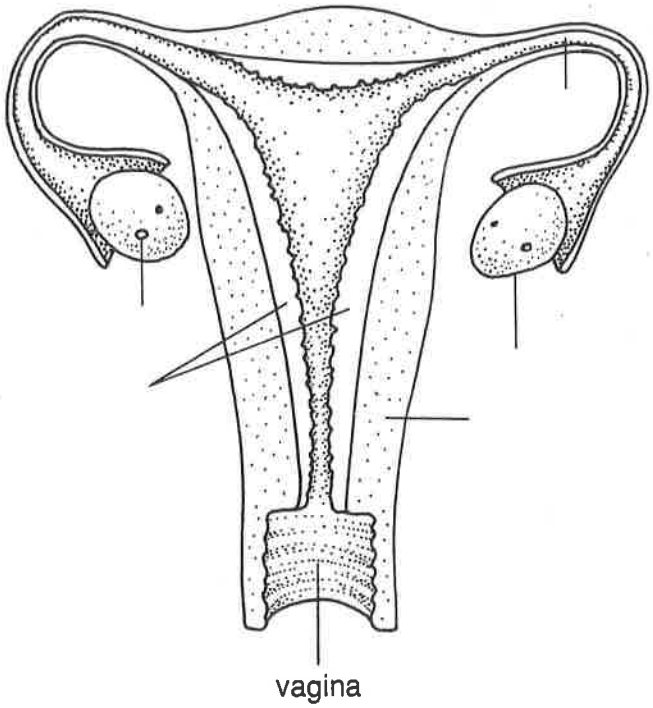
scissors
tape

PROCEDURE

Part A. Review of the Female Reproductive System

1. Use the following parts and their description for help in properly labeling Figure 1. NOTE: The diagram is 1/3 natural size.
   a. ovary—two are present, round in shape
   b. egg—small cells present within ovary
   c. uterus—large muscle, V-shaped, largest part of reproductive system
   d. oviduct—thin tube connecting each ovary to uterus
   e. uterus lining—inner wall or lining of uterus

FIGURE 1.



Part B. Changes in the Menstrual Cycle; No Fertilization of Egg

1. Obtain a copy of Figure 2 from your teacher.
2. Use scissors to cut out the square diagrams in Figure 2. These diagrams show the different stages that occur during the menstrual cycle if fertilization does not occur.
3. Look over the calendar marked Figure 3. It describes a series of events that take place in the female reproductive system if fertilization does not take place.
4. Match the diagrams that you cut out with the events being described in the calendar.
5. When all diagrams have been properly matched, tape them onto the calendar in their proper location to the right of the brackets describing the events.

Part C. Changes in the Menstrual Cycle; Fertilized Does Occur

1. Obtain a copy of Figure 4 from your teacher.
2. Use scissors to cut out the square diagrams in Figure 4. These diagrams show the different stages that occur during the menstrual cycle if fertilization does occur.
3. Look over the calendar marked Figure 5. It describes a series of events that take place in the female reproductive system if fertilization does take place.
4. Match the diagrams that you cut out with the events being described in the calendar.
5. When all diagrams have been properly matched, tape them onto the calendar in their proper location to the right of the brackets describing the events.

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FIGURE 2. No fertilization of egg

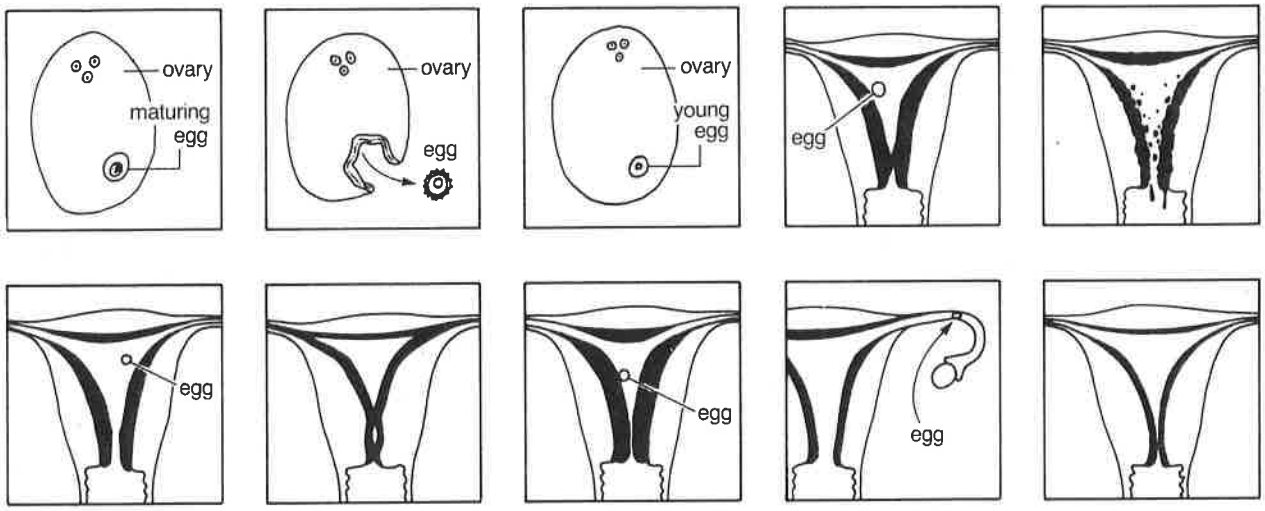
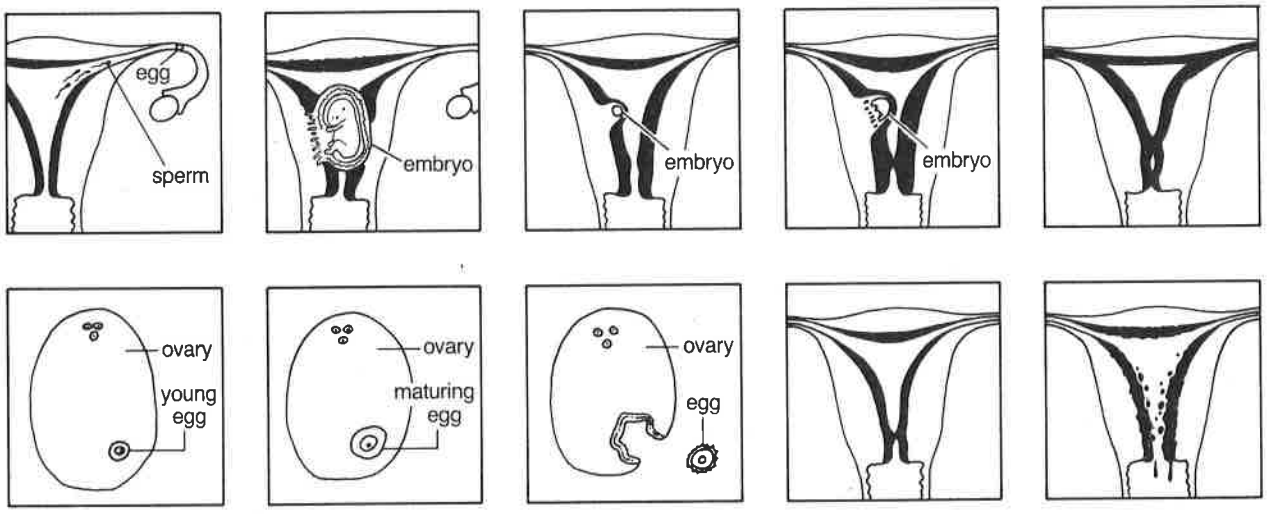


FIGURE 4. Fertilization of egg



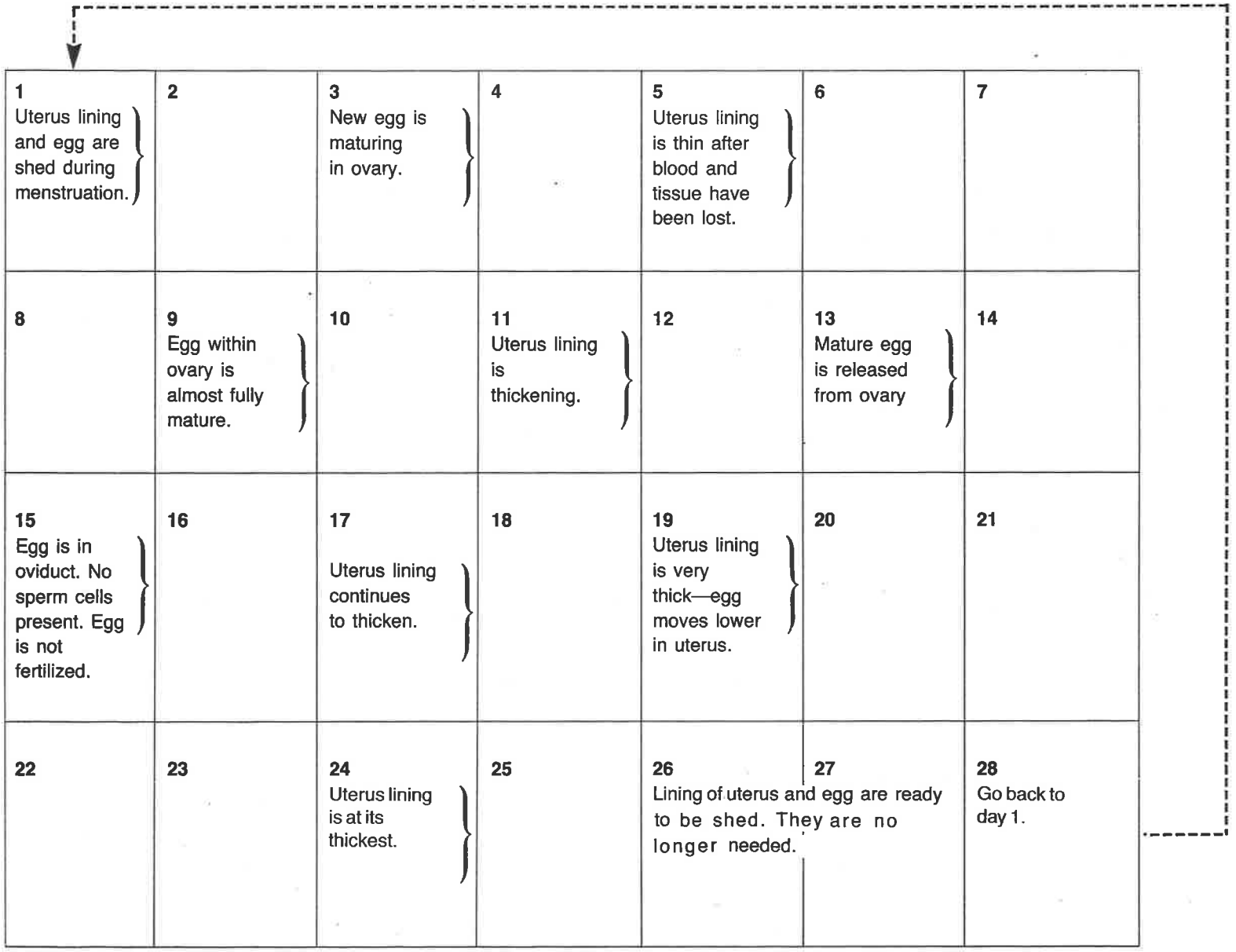


FIGURE 3. Day by day changes in the menstrual cycle—no fertilization of egg

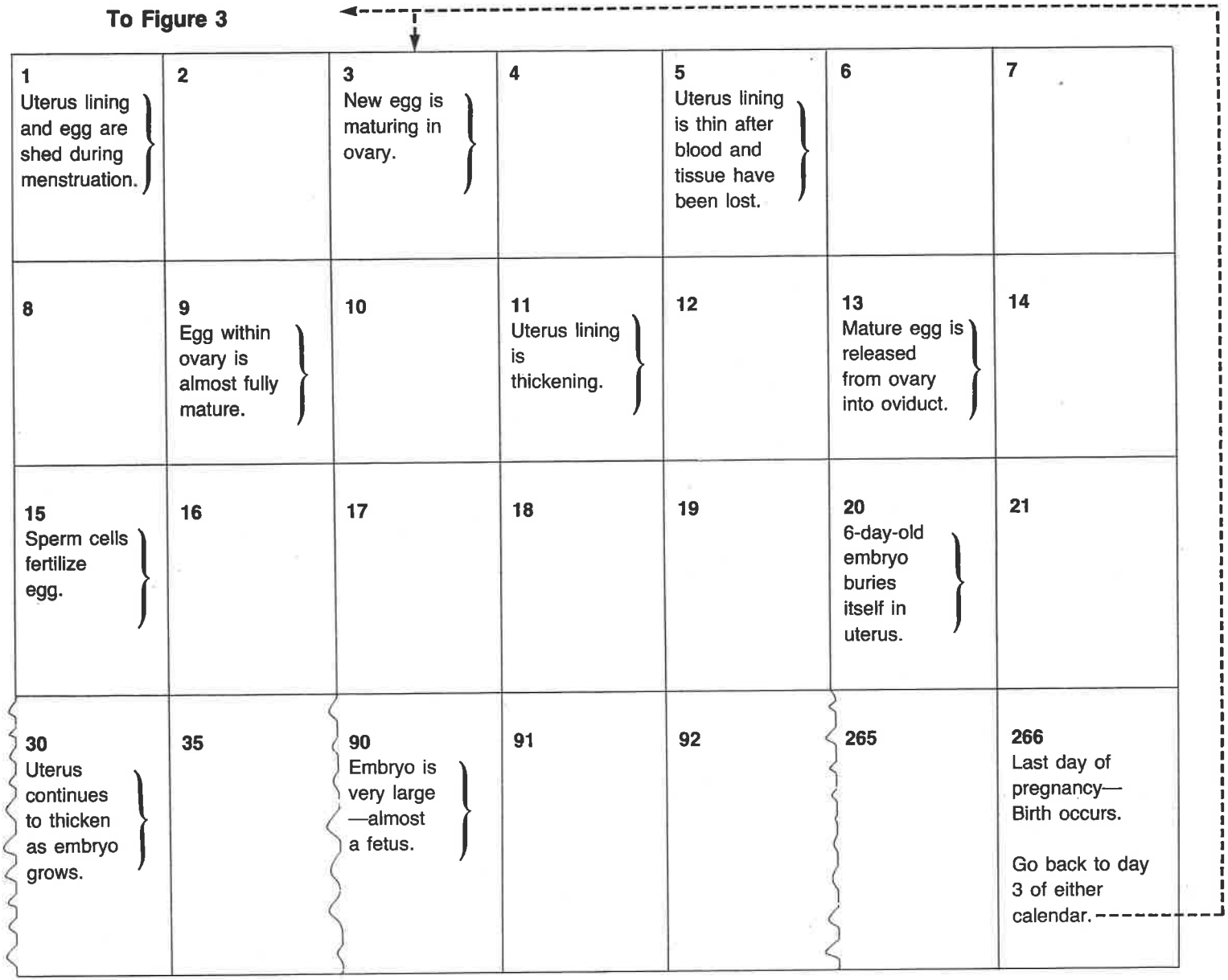


FIGURE 5. Day by day changes in the menstrual cycle—fertilization of egg

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QUESTIONS

1. Describe the role or function of the following:

   a. ovary_____

   b. uterus lining_____

   _____

   c. uterus muscle_____

   _____

   d. oviduct_____

2. An average menstrual cycle with no fertilization takes how many days?

   _____

3. Describe the changes that take place during the menstrual cycle from day 1–4 to the following:

   a. unfertilized egg_____

   b. uterus lining_____

   c. egg in ovary_____

4. Describe the changes that take place during the menstrual cycle from day 5–13 to the following:

   a. uterus lining_____

   b. egg in ovary_____

5. Describe what happens to the egg during the menstrual cycle on day 14.

   _____

6. Describe the changes that take place to an egg

   a. from day 15–28 if no fertilization occurs._____

   b. from day 15–21 if fertilization does occur._____

   _____

   c. from day 21–266 if fertilization does occur._____

   _____

7. Explain why the female

   a. needs a thick uterus lining if fertilization does occur._____

   _____

   b. no longer needs a thick lining if fertilization does not occur._____

   _____