



LESSON: Menstruation and Sperm Production

CONTENT AREA: Family Health and Sexuality

GRADE LEVEL: Middle School

Synopsis

Students work in small groups to order the sequence of cards about the menstrual cycle and sperm production. Groups then develop pamphlets for other adolescents about the two topics.

About this Lesson

Key Concepts

Growth and development

Teacher Tip: When teaching sensitive subjects such as reproductive health, it is essential to follow state and district guidelines for notification of parents and to provide opportunities for community members to preview materials.

NHES Alignments

Common Core: English Language Arts (ELA) Alignments

- ▶ Language: Vocabulary Acquisition and Use
- ▶ Reading: Key Ideas and Details

National Science Standards Alignments

- ▶ Personal and Social Perspectives: As a result of activities in grades 5–8, all students should develop understanding of: personal health, populations, resources, and environments, natural hazards, risks and benefits, and science and technology.

- ▶ Life Science: As a result of activities in grades 5–8, all students should develop an understanding of structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.

Objectives

Students will describe the menstrual cycle and sperm production.
Students will explain internal physiological influences on reproductive processes.

Skill Emphasis

- ▶ Analyzing Internal and External Influences

Preparation

Time Requirements

Two 45-minute sessions

Materials & Preparation

Make transparencies:

The Menstrual Cycle

The Production of Sperm

Copy student pages (one for each student):

How Much Do You Know?

Copy teacher page:

Order Me Around

Use the Order Me Around teacher page to make one set of cards for each small group of students.

Have art supplies to make pamphlets.

Background Information

Reproduction: Menstruation and Sperm Production

Teaching Steps

Assess students knowledge.

Divide class into small, same-sex groups. Have students work with their groups to complete the pretest about the menstrual cycle and sperm production. Review the correct answers. (All answers are TRUE.)

Student Page: How Much Do You Know

Discuss the menstrual cycle.

Visual Aid: The Menstrual Cycle

Display the visual_aids as you discuss the menstrual cycle.

DISCUSSION POINTS

- ▶ Menstruation begins between ages nine and sixteen.
- ▶ Menstrual cycles vary between twenty-one and forty days.

- ▶ Hormones control the menstrual cycle.
- ▶ Mature eggs are released during the menstrual cycle.

Discuss sperm production.

Visual Aid: The Production of Sperm

Display the visual_aids as you discuss sperm production.

DISCUSSION POINTS

- ▶ Sperm is produced in each testicle
- ▶ Sperm is mixed with seminal fluid and is called semen.
- ▶ Semen leaves the body during ejaculation.

Students review the menstrual cycle and sperm production.

Teacher Page: Order Me Around

Have students return to their small groups. Give each group a set of cards about the menstrual cycle and sperm production. Ask students to put the cards into the correct order.

DISCUSSION POINTS

- ▶ Physical changes
- ▶ Sources for information
- ▶ Female and male anatomy

Reflect, summarize, and discuss.

Student Page: [How Much Do You Know?](#)

Ask groups to report on how they ordered the cards. Let the class provide feedback. Review answers to the questions on the student page.

DISCUSSION POINTS

- ▶ Menstruation and ejaculation are signs of puberty.
- ▶ Menstruation cycles allow females to reproduce.
- ▶ Ejaculation allows males to reproduce.

Assessment

Have students work in groups to develop pamphlets for adolescents on menstruation and sperm production. Pamphlets must include the following elements:

Accurate information about the menstrual cycle

Accurate information about the production of sperm

Art, border, graphics or other methods to enhance the appearance of the pamphlet

Assessment Criteria

CONCEPTS

Student work demonstrates accurate information about

- ▶ The male and female reproductive functions
- ▶ Menstruation

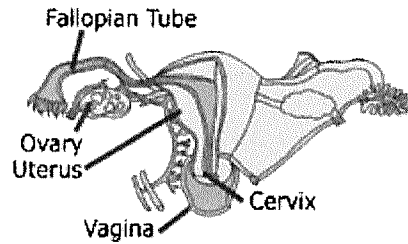
ANALYZING INTERNAL AND EXTERNAL INFLUENCES

Student work demonstrates proficiency by explaining:

- ▶ Internal physiological influences on physical development, including hormones, emotional changes and reproductive functions

[Need Help?](#)

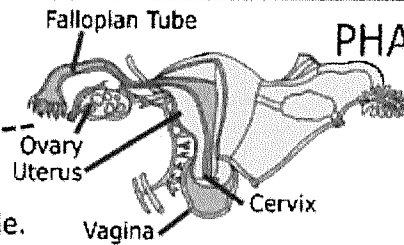
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PHASE ONE: MENSTRUATION (Days 1-5)

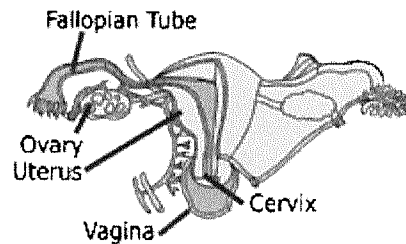
Lining of the uterus is discharged through the vagina.
This is known as menstruation.

Egg ripens inside the ovary then is released into the fallopian tube. This is known as ovulation and usually occurs day 14 of the cycle.



PHASE TWO: PROLIFERATIVE (Days 6-14)

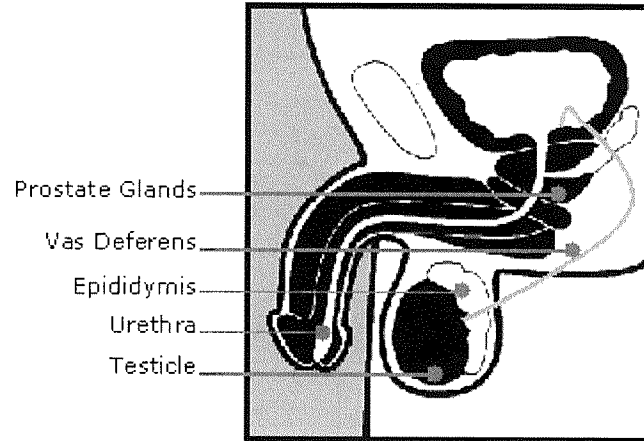
Endometrium thickens to prepare a place to receive the fertilized egg.



PHASE THREE: PROLIFERATIVE (Days 15-28)

Endometrium thickens if egg is fertilized. It breaks down if egg is not fertilized.

Name: _____



Name: _____



How Much Do You Know?

Directions: Answer the following questions. Skip any questions you can't answer.

- | | | |
|------|-------|--|
| True | False | 1. Sperm are produced in the testicle. |
| True | False | 2. "Wet dreams" are common for boys during puberty. |
| True | False | 3. Mature sperm are stored in the vas deferens. |
| True | False | 4. Sperm leave the body through the urethra. |
| True | False | 5. Semen contains seminal fluid and sperm. |
| True | False | 6. Menstrual fluid contains the lining of the uterus. |
| True | False | 7. Eggs mature before they leave the ovary. |
| True | False | 8. Menstruation is caused by changes in hormones. |
| True | False | 9. The length of menstrual cycles may change during puberty. |
| True | False | 10. Menstruation usually lasts between three and seven days. |

Name: _____



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- | | | |
|------|-------|--|
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| True | False | 7. Eggs mature before they leave the ovary. |
| True | False | 8. Menstruation is caused by changes in hormones. |
| True | False | 9. The length of menstrual cycles may change during puberty. |
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Name: _____



Directions: Make a set of cards for each small group of students. Give each group a set of shuffled cards. Have them correctly sequence the male structures and the phases of the menstrual cycle.

Male Structures

| | |
|------------|--------------|
| Testicle | Vas Deferens |
| Epididymis | Urethra |

Menstrual Cycle

| | |
|-------------------------------------|-----------------------|
| Menstruation | An egg matures |
| A new lining forms in the uterus | Ovulation |
| | The egg disintegrates |