

Essential Standard	Clarifying Objective
6.ICR.3 Understand the changes that occur during puberty and adolescence.	6.ICR.3.2 Summarize the relationship between conception and the menstrual cycle.

Materials Needed:

Three index cards for each student (pink, blue, and any other color)
Appendix 1 – Male and Female Body Parts and Functions; envelopes with body parts and functions cut apart and mixed up
Access to www.siecus.org, click on Sex Ed Library (for lesson plan on reproductive anatomy) or Appendix 1b – definitions of Male and Female Body Parts and Functions PowerPoint on Ovulation, Menstruation, and Conception
Appendix 2 – copies of Myths about Conception and Pregnancy for every four students
Appendix 3a, b, and c – signs created from Sequencing the O-M Cycle
Appendix 4 – teacher key for Sequencing the O-M Cycle
Appendix 5 – copies of Calculating the O-M Cycle
Appendix 6 – teacher key for Calculating the O-M Cycle

Statement of Objectives:

In fifth grade, you probably had a lesson on reproductive anatomy and learned the function of those body parts. You may have also talked about these topics with your parents. Today we will study the ovulation-menstruation cycle. By the end of the lesson, you will understand the relationship between the O-M cycle and conception.

Review:

Option 1

Provide each student with three index cards or strips of construction paper. Tell them the pink stands for female, the blue stands for male, and the other color stands for both male and female. Explain they are to hold up the correct color for reproductive anatomy and functions.

Randomly call out body parts from Appendix 1 and check that students correctly identify the part or function as belonging to males, females or both. Correct misconceptions.

Option 2

Copy multiple copies of Appendix 1, Male and Female Body Parts, Functions, and Health Practices. Cut items apart and place in envelopes (enough for pairs of students to work together). Keep one copy uncut as your key. Instruct students to place the headings at the top of their desks then arrange the items under MALE – BOTH – FEMALE.

Go over the correct responses and be certain students can pronounce terms correctly. Terms often mispronounced include menstruation, prostate, clitoris, and urethra. Explain this was a review for the lesson on menstruation and conception. Be ready to answer questions about the function of these body parts by studying lesson plans on

reproductive anatomy (www.siecus.org, click on SexEd Library). Clarify some in the BOTH column may have somewhat different functions in males and females. For example, the urethra in the female carries only urine to the outside of the body. In males, the urethra carries both semen and urine to the outside of the body (never at the same time).

Focus:

Show Slide number 1 from PowerPoint which shows conception. Explain that human life begins from tiny organisms. The ovum is the size of a grain of salt. The sperm are too small to be seen without a microscope. Millions are released during ejaculation and a few hundred travel to the fallopian tubes (part of the female reproductive system). Only one will enter the ovum; all others dissolve and leave the female body.

Teacher Input:

Cut apart Myths about Conception and Pregnancy (Appendix 2). Distribute to students in small groups and ask them to say why each statement is false. Explain there are many “mis-conceptions” about conception.

Use the PowerPoint presentation on the O-M cycle, slides 2 - 17. Make certain students understand the final slide, that it is very difficult for adult women to predict when they are likely to (and NOT to) get pregnant. It is even more difficult for a girl who is still developing to predict when she is most likely to conceive.

Guided Practice:

Create colorful signs from Sequencing the O-M Cycle (Appendix 3a, b, and c). Distribute them to six students and ask them to post them in the proper sequence on the board in the front of the room. Ask remaining students if the sequence is correct. Use teacher key (Appendix 4) to check responses. Clear up any misconceptions.

Independent Practice:

Have students recall why there is no “safe” time of the O-M cycle (during which pregnancy can be prevented by simply avoiding sexual intercourse). *Factors which influence the timing of conception include: how regular a female’s cycle is, how long sperm live after sexual intercourse, how long the ovum is viable (able to be fertilized). Young females find it especially difficult to predict when they will ovulate because their reproductive organs are still developing.*

Create copies of Counting the Days (Appendix 5) for each student. Assign the date of March 7 as day one of a young woman’s cycle. Explain, *Because the first day of menstrual flow is the most obvious day of the O-M cycle, it is recognized as day one. We will assume this female has a regular 28-day cycle. In this activity, we will count forward 28 days, beginning with March 7. The first day of the next cycle is therefore, April 4. Place an M on March 7 and April 4. If we count backwards from April 3, the most likely date for ovulation to have occurred is March 21. Have students place an “O” on March 21.*

Instruct students to continue counting the most likely dates for menstruation and ovulation to occur during the months on the calendar. Double check the responses with the teacher key (Appendix 6).

Re-emphasize the concept that avoiding pregnancy by counting days within the O-M cycle is very hard to do. *Adult women who have much more regular cycles have difficulty preventing pregnancy through counting the days. It is much harder for younger females whose cycles are less reliable.*

Closure:

Today we studied the relationship between the menstrual cycle and conception. We learned how difficult it is for young women to accurately predict when they are likely to ovulate. We learned it is very difficult to prevent a pregnancy using the calendar method.

Male and Female Body Parts and Functions

Male	Both	Female
Penis	Mucous membrane	Uterus or Womb
Testicles	Urethra	Menarche
Foreskin	Puberty	Endometrium
Vas deferens	Genitals	Clitoris
Scrotum	Pubic hair	Ovaries
Prostate gland	Lymph nodes	Vagina
Nocturnal emissions		Vulva
Circumcision		Fallopian tubes
Cowper's gland		Pap smear
Semen		Fimbriae
Seminal vesicles		Hymen
Epididymis		Cervix



MYTHS ABOUT CONCEPTION AND PREGNANCY

A female cannot get pregnant if it is her first sexual experience.

Most females can notice when they are ovulating.

A female cannot get pregnant if she has sexual intercourse standing up.

A female cannot get pregnant if she has not experienced menstruation.

A female cannot get pregnant during her period.

All are false statements!

While ovum is maturing, the uterine lining thickens to prepare for fertilized ovum.

The ovary releases the ovum.

Ovum travels through the fallopian tube.

If ovum does not meet sperm, it dissolves.

About two weeks later, lining of uterus comes out through vagina.

Another ovum starts to ripen or develop in one of the ovaries and process begins again.

Teacher Key: Sequencing the O-M Cycle

- 1. While ovum is maturing, the uterine lining thickens to prepare for fertilized ovum.**
- 2. The ovary releases the ovum.**
- 3. Ovum travels through the fallopian tube.**
- 4. If ovum does not meet sperm, it dissolves.**
- 5. About two weeks later, the lining of the uterus (menstrual blood) comes out through the vagina.**
- 6. Another ovum starts to ripen and mature in one of the ovaries and process begins again.**

Calculating the Ovulation-Menstruation Cycle

March

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



April

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30



May

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

June is in top right corner. 

June

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		



July

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						



August

	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Calculating the Ovulation-Menstruation Cycle

Teacher Key

March

		1	2	3	4	5
6	7-M	8	9	10	11	12
13	14	15	16	17	18	19
20	21:O	22	23	24	25	26
27	28	29	30	31		



April

					1	2
3	4-M	5	6	7	8	9
10	11	12	13	14	15	16
17	18:O	19	20	21	22	23
24	25	26	27	28	29	30



May

1	2-M	3	4	5	6	7
8	9	10	11	12	13	14
15	16:O	17	18	19	20	21
22	23	24	25	26	27	28
29	30-M	31				

June

			1	2	3	4
5	6	7	8	9	10	11
12	13:O	14	15	16	17	18
19	20	21	22	23	24	25
26	27-M	28	29	30		



July

					1	2
3	4	5	6	7	8	9
10	11:O	12	13	14	15	16
17	18	19	20	21	22	23
24	25-M	26	27	28	29	30
31						



August

	1	2	3	4	5	6
7	8:O	9	10	11	12	13
14	15	16	17	18	19	20
21	22-M	23	24	25	26	27
28	29	30	31			

June is in top right corner.