

ANATOMY & PHYSIOLOGY

Lesson 6

LEARNER OUTCOME¹ W-5.3:

Identify the basic components of the human reproductive system, and describe the basic functions of the various components; e.g., fertilization, conception.



MATERIALS:

1. HANDOUT: [Story: The Very Important Journey](#)
2. HANDOUT: [Step by Step Conception “Y” Activity](#)
3. ANSWER KEY: [Step by Step Conception “Y” Activity](#)
4. SLIDE: [Fertilization](#)
5. SLIDE: [Implantation](#)
6. SLIDE: [Sperm Production](#)



INTRODUCTION:

This lesson brings together the anatomy and physiology from previous lessons to explain in detail the process of fertilization and conception.



APPROACHES/STRATEGIES:

NOTES:

A. Ground Rules

Ensure ground rules are established before beginning this lesson. For classes that have already established ground rules, quickly reviewing them can promote a successful lesson.

B. Conception/ Fertilization Story

This story explains how sperm production, ovulation and conception are related. It walks through the stages of fertilization and implantation, and provides a detailed explanation of how each step fits into the process

1. Distribute the handout *The Very Important Journey* to students.
2. Have students follow along with their handouts

(5 min)

(15 min)



You may want to show or hand out the diagrams of sperm production, implantation, and fertilization as you read the story to illustrate where the journey is taking place.

C. Class Discussion

These questions allow students to review their knowledge of the process of conception: fertilization and implantation.

1. What is the process called when the ovum is released from the ovary?
 - This process is called ovulation, and it starts in females during puberty.
2. What happens during the process called ejaculation?
 - This is when sperm cells mixed with semen, are released out the end of the penis.
 - This can happen during sexual intercourse, masturbation, or sometimes when a boy is sleeping which is called a wet dream
3. When the sperm cells find the ovum in the fallopian tube all the cells try to break through the outer layers of the ovum cell. What is it called when one successfully breaks through and attaches to the ovum?
 - This is called fertilization, one of the two processes before conception is complete.
4. What is it called when the sperm and ovum cell which have joined together, travel into the uterus and attach to the uterine lining?
 - This is called implantation.
 - This process completes the whole process of conception
5. Who can you ask if you still have questions about sexuality?
 - Parent
 - Trusted Adult
 - Teacher or Guidance counselor
 - Doctor or Nurse

D. Step by Step Conception

Students demonstrate knowledge of the components of the human reproductive system and the process of conception.

1. Use the following Step by Step Conception handout and cards to place the steps of ovulation, sperm production and conception in order.
2. Cut out each individual step, and shuffle them.
3. Hand out steps and the “Y”. Have students place each step in order along the “Y”
4. Use Answer Key to Ensure all steps are in the correct order.

(15 min)

(15 min)



If you would like to do this activity as a larger group, you can make your own “Y” on Newsprint, and enlarge the cards.



QUESTION BOX:

(10 min)

If time permits, address student questions.



SELF REFLECTION:

- During the lesson, were:
- Ground rules being followed?
 - Good practices established regarding group work and discussion?

What will you change for future classes with this group?

What will you change for future use of this lesson?



STUDENT ASSESSMENT:

During the lesson, did students:

- Knowledge:**
- Describe the conception process?
 - Identify steps of fertilization and implantation using appropriate terminology?
- Skills:**
- Participate in class discussion and exemplify listening and appropriate speaking skills?
 - Identify support people?
- Attitudes:**
- Accept that during maturation male and female reproductive systems mature to be able to reproduce (conception).
 - Accept that ovulation and sperm production could result in producing a pregnancy?

¹Alberta Education. (2002). *Health and Life Skills: Kindergarten to Grade 9*, p.7.