

# ANATOMY & PHYSIOLOGY

## Lesson 1

5  
GRADE

### LEARNER OUTCOME<sup>1</sup> 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:

HANDOUT: Anatomy and Physiology Crossword Puzzle



#### INTRODUCTION:

It is important to understand the male and female anatomy in order to understand the changes that occur during puberty. This lesson provides students with a review of the puberty changes they examined in grade 4, and encourages them to begin to study the basic components of the male and female reproductive system.



#### APPROACHES/STRATEGIES:

#### NOTES:

(10-15 min)

##### A. Introduction to Human Sexuality

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.

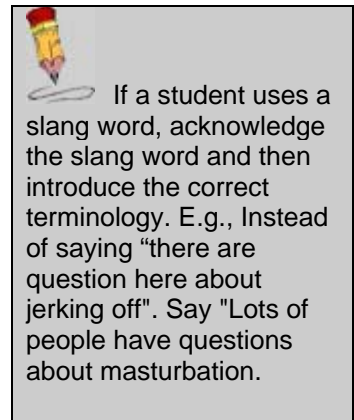
##### B. “Language of Sex” Introduction<sup>2</sup>

*Students become familiarized with appropriate terms for reproductive anatomy and become more comfortable using such terminology within the classroom setting.*

1. Ask students to think of the real words for body parts that aren't related to sexuality (elbow, etc.). Ask them to raise their hands and share these words. Write each word on the board under the heading “Other Body Parts.”

(15 min)

2. Ask students to think of the real words for body parts related to sexuality. Acknowledge that there are slang words, but that for this activity we are trying to begin to learn the correct terms. Ask them to raise their hands and share these words. Write each word on the board under the heading "Sexual Body Parts."
3. Debrief using the following questions:
  - How did it feel to say/hear the words on the first list (other body parts)?
    - Comfortable
    - Easy
  - How did it feel to say/hear the words on the second list (sexual body parts)?
    - Embarrassed
    - Uncomfortable
    - Private
    - Afraid someone will laugh
  - Why do we sometimes use slang for body parts related to sexuality?
    - To hide embarrassment
  - What are the benefits of using "scientific" words (real words)?
    - It is important to be able to understand what is happening to your body and to be able to ask questions if confused or worried.
    - Scientific words are easier to understand because they have an official definition.



**(15-35 min)**

### **C. Puberty Changes Review**

*Students demonstrate a basic understanding of the puberty changes experienced by males and females. This is a review of grade 4 Human Sexuality.*

1. Write the following questions on separate pages of newsprint and post them on the wall or write them on the board, one at the top of each section:
  - What is puberty?
  - How old are boys when puberty begins?
  - How old are girls when puberty begins?
  - What happens ONLY to a boy during puberty?
  - What happens ONLY to a girl during puberty?
  - What happens to both boys and girls during puberty?

2. Have students walk around the room writing remarks under each title. If they are struggling, encourage them to think about what they learned in grade four Human Sexuality.
3. Debrief by reviewing each question and ensuring the answers are complete and correct.

### **What is puberty?**

- Puberty is the period of growing and changing from a child to an adult.

### **How old are boys when puberty begins?**

- For boys, puberty can start anytime between the ages of 10 and 18.
- Each person is different, and will start and go through puberty on his or her body's own rate.

### **How old are girls when puberty begins?**

- For girls, puberty can start anytime between the ages of 8 and 16.
- Each person is different, and will start and go through puberty on his or her body's own rate.

### **What happens ONLY to a boy during puberty?**

Examples of male puberty changes can include:

- Shoulders widen
- Hair grows on face
- Start producing sperm
- Penis and testicles grow bigger
- May experience wet dreams
- Erections can happen
- Ejaculation can happen

### **What happens ONLY to a girl during puberty?**

Examples of female puberty changes can include:

- Hips widen
- Start releasing ovum (eggs)
- Start menstruation (periods)
- Start producing vaginal discharge

### **What happens to both boys and girls during puberty?**

Examples of puberty changes that may happen to both boys and girls can include:

- Grow taller
- Skin gets oily
- Acne
- Voice changes
- Hair grows on underarms and genitals (pubic hair)
- Sweat glands develop



Teachers may consider showing a video that discusses puberty in a general way. Some examples of available videos are found by linking to [Suggested Elementary Videos](#) in Videos and Kits, Resources on the teacher index page. Once the video is complete, have students add remarks under each title if there is information missing.



Students may have different views concerning nocturnal emissions (wet dreams). It is important to be sensitive to these views, but to reassure students that "wet dreams" are a normal occurrence during puberty.


- Breasts develop (Breast development is related to an increase in the estrogen hormone. Males normally produce some estrogen in the adrenal glands and testes. Nearly one in two boys experiences temporary enlargement of the breasts during puberty.)
- Mood swings
- Start having sexual thoughts
- Start having sexual feelings
- Can become interested in having a boyfriend or girlfriend
- Friendship becomes more important
- Sometimes feel lonely and confused
- Stronger feelings of wanting to be liked and to “fit in”
- Want more independence
- Thinking about the future
- Concerned about looks (appearance)

#### D. Anatomy and Physiology Crossword Puzzle

*Students begin to build a support network to help them cope with puberty while they begin to learn the basic components of the human reproductive system.*

1. Distribute the handout Anatomy and Physiology Crossword Puzzle for students to complete as a homework assignment. Explain that the goal is to finish as much of the puzzle as possible.
2. Explain that students can complete this interview with a parent or guardian. Have the parent or guardian sign the top of the assignment to indicate that the student received help.
3. Dedicate time to debrief this activity during the next lesson.

**(5 min today, 30 min homework, 5-10 min next class)**



This exercise (crossword puzzle) could be done at the end of Lessons 2, 3 or 4 as a review.



#### QUESTION BOX:


**(10 min)**

Introduce the question box. You could have students fill out questions every lesson, or have students begin to think about questions that they might ask next lesson.



#### TAKE IT HOME:

Students will complete the handout: Anatomy and Physiology Crossword Puzzle.



Keep in mind that all students do not live in a “traditional” family nor do they have equal opportunities for open discussion within their “family.” Although it is best for students to complete this assignment with a supportive parent or guardian, it may not be possible. Be sensitive to the needs of your students.



## 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 changes that happen during puberty?
  - Become familiarized with appropriate terms for reproductive anatomy?
- Skills:**
- Exemplify appropriate listening and speaking skills during class discussion?
- Attitudes:**
- Develop comfort using terms for sexual anatomy within the classroom setting?

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<sup>1</sup>Alberta Learning. (2002). Health and Life Skills: Kindergarten to Grade 9, p.7.

<sup>2</sup>Adapted from: Dodds, J. (1978). Human sexuality: A curriculum for teen-parent-teacher guide.