

LESSON 1 of 2

CONTENT AREA: Human Growth and Development

GRADE LEVEL: Grade 6 Boys

Key Concepts

This lesson will address human growth, adolescent physiological and emotional changes, and the human reproductive system. Students will understand their own physical, emotional, and mental development, especially in reference to gender specific anatomy and changes in puberty using appropriate vocabulary.

Pennsylvania Health State Standards

10.1.6

A. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes.

- Education
- Socioeconomic
- B. Identify and describe the structure and function of the major body systems.
 - Endocrine
 - Reproductive
- C. Analyze nutritional concepts that impact health.
 - Healthful food selection
- D. Identify health problems that can occur throughout life and describe ways to prevent them.
 - Diseases (e.g., cancer, diabetes, STD/HIV/AIDS, cardiovascular disease)
 - Preventions (i.e. do not smoke, maintain proper weight, eat a balanced diet, practice sexual abstinence, be physically active)

Objectives

The students will be able to:

- discuss male and female reproductive systems
- become more independent in caring for our bodies
- understand the emotional, social, and physical aspects of human reproduction

- use decision making skills while role playing (Teachers-If interested, scenarios are located in Course of Study.)
- share this information with our families

Time Requirements

One 60-minute session.

Materials & Preparation

Parent letter sent to parents prior to instruction

Student packet (one for each student)

Teacher packet

Presentation station

PowerPoint presentation on Intranet

Teaching Steps

- 1. Introduce the topic of human growth and development and the expectations during this instruction.
 - a. Use proper terminology. (Do not use slang.)
 - b. Participate seriously.
 - c. Share today's information with your parents. (Do not share this information with younger students...it's not their time.)
 - d. Human growth and development can be a difficult topic for some students. We need to show respect for our differing comfort levels.
- 2. Review all of the different signs of puberty and adolescence and the importance of hygiene as a growing adult.
 - a. Hormone increase
 - b. Enlargement of penis and testicles
 - c. Pubic hair
 - d. Hair under arms, on face and legs
 - e. Voice change
 - f. Body shape and size
 - g. Oily skin and sweat production
 - h. Acne
 - i. Sperm production and nocturnal emissions
 - j. Independence from parents
 - k. Peer influence and acceptance becomes important
 - I. Peer relationships
- 3. Overview of the Male Reproductive system and diagram.
 - a. Epididymis: Tube at the back of each testicle that carries sperm to the vas deferens (sperm duct)
 - b. Foreskin: This fold of skin covers the end of the penis. Not all boys have a foreskin because some cultures, it is removed (an operation called circumcision) when a baby

- boy is only a few days or weeks old. Uncircumcised boys and men pull the foreskin back and wash under it as part of daily hygiene.
- c. Penis: Male sex organ; also used to urinate.
- d. Prostate Gland: Gland next to the bottom of the bladder; it forms a fluid that combines with sperm and a fluid from the seminal vesicles to make sperm.
- e. Scrotum: Sac of skin that holds the testicles, just underneath the penis.
- f. Semen: Male reproductive cells.
- g. Seminal vesicles: Two glands on either side of the bladder that secrete seminal fluid.
- h. Sperm: Male reproductive cells.
- i. Testicles: Also called the testes; two oval-shaped organs that are contained in the scrotum. They produce the male hormone testosterone and sperm.
- j. Urethra: Tue that carries urine and semen out of the body, but not at the same time.
- k. Vas Deferens: Tubes in which sperm is combined with other fluids from the prostate gland and seminal vesicles to make sperm.
- 4. Discuss the five different male stages of development. (refer to Image on PowerPoint)
 - a. Stage 1: Up to ages 9-13
 - b. Stage 2: May begin ages 9-15
 - c. Stage 3: May begin in ages 11-16
 - d. Stage 4: May begin in ages 12-17
 - e. Stage 5: May begin in ages 14-18
- 5. Students will learn the different anatomy parts of the female reproductive system and their function.
 - a. Uterus: Pear-shaped female reproductive organ in which the fetus grows and develops; also called the womb.
 - b. Fallopian Tubes: Either of a pair of tubes that transport the egg cells from the ovary to the uterus.
 - c. Ovary: One of the female sex organs that produce egg cells and hormones.
 - d. Cervix: The lower opening of the uterus where it connects to the vagina.
 - e. Vagina: Passageway leading from the uterus to the outside of the body in a female.
- 6. Discuss the five different female stages of development. (refer to Image on PowerPoint)
 - a. Stage 1: Up to ages 8-12
 - b. Stage 2: May begin ages 8-14
 - c. Stage 3: May begin in ages 9-15
 - d. Stage 4: May begin in ages 10-16
 - e. Stage 5: May begin in ages 12-19
- 7. After going over each stage of development, students will watch the movie, "Growing Up for Boys" and "Growing Up for Girls" (chapter 2 only)
 - a. Refer to the Z:Drive to access videos
 - b. Z:drive->Elementary Health-> Human Growth and Development-> 6th Grade Boys
- 8. Assign the Puberty Quiz in the packet and require a parent signature for next class.

Closure:

You bodies are constantly changing and growing. Knowing and understanding the changes that are occurring are important for you to understand. Next class we will learn about fertilization and fetal development.

Essential Question:

Why does puberty occur?



LESSON 2 of 2

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Materials & Preparation

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Teacher packet

Presentation station

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Teaching Steps

- 9. Review the expectations of this curriculum.
 - a. Use proper terminology. (Do not use slang.)
 - b. Participate seriously.
 - c. Share today's information with your parents. (Do not share this information with younger students...it's not their time.)
 - d. Human growth and development can be a difficult topic for some students. We need to show respect for our differing comfort levels.
- 10. Students will learn about fertilization
 - a. Discuss vocabulary terms as listed in glossary
 - b. Fertilization occurs when sexual intercourse allows the sperm to travel to the ovum.
- 11. Fetal Development
 - a. Each picture is hyperlinked... click on picture for larger view
 - b. Discuss vocabulary terms as listed in glossary
 - i. First Trimester:
 - ii. Second Trimester
 - iii. Third Trimester

c. Students will complete the "Vocabulary Quiz" in their packet. Afterwards, as a class, teacher will guide students through with the correct answers.

Closure:

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Essential Question:

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