Human Growth and Development

5th Grade Male

Click here for teacher notes
Ground Rules

• Use proper terminology. (Do not use slang.)
• Participate seriously.
• Share today’s information with your parents. (Do not share this information with younger students...it’s not their time.)
• Human growth and development can be a difficult topic for some students. We need to show respect for our differing comfort levels.
Objectives

We will:

• identify and discuss physical, emotional changes, and mental development occurring in males and females during puberty.
• discuss male and female reproductive systems using appropriate vocabulary.
• discuss and consistently practice the principles of hygiene and self-care.
• discuss with parents and teachers appropriate social and behavioral patterns.
• share all materials from the Human Growth and Development program with their families.
Signs of Puberty and Adolescence

- Hormone increase
- *Enlargement of penis and testicles*
- Pubic hair
- *Hair under arms, on face and legs*
- Voice change
- *Body shape and size*
- Oily skin and sweat production
- Acne
- Sperm production and nocturnal emissions
- *Independence from parents*
- Peer influence and acceptance becomes important
- *Peer relationships*
Male Anatomy
Epididymis

Next to each testicle, the epididymis is a light-colored tube where sperm is stored. From here, sperm are transported to the vas deferens.
The penis is made of two parts: the shaft (the main part) and the glans (the tip, sometimes called the head). The penis delivers sperm through the urethra.
Prostate Gland

This walnut-sized gland surrounds a portion of the urethra and produces some of the fluid in semen.
The scrotum (also called the scrotal sac) hangs under the penis and contains the testicles and epididymis.
Located at the base of the bladder, the two seminal vesicles secrete a thick fluid that nourishes the sperm.
The two testicles (or testes) produce sperm and the male sex hormone testosterone.
The urethra is the tube that carries semen and urine out of the penis.
This thin muscular tube transports the sperm from the epididymis to the urethra.
Male stages of development:

**Stage One:**
Up to ages 9 to 13
- Childhood stage; no visible signs of pubertal development

**Stage Two:**
May begin ages 9 to 15
- Testicles and scrotum grow larger
- Fine, straight hair starts growing at the base of the penis

**Stage Three:**
May begin ages 11 to 16
- Testicles and scrotum continue to grow
- Penis grows larger
- Pubic hair becomes darker, thicker, and curlier
- Vocal cords increase in size, causing voice to deepen
- Height and weight may start to increase noticeably

**Stage Four:**
May begin ages 12 to 17
- Growth spurt continues
- Shoulders begin to broaden and physique becomes more muscular
- Penis grows in width as well as length
- Pubic hair coarsens and takes on a triangular shape
- Underarm hair appears
- Traces of hair may appear on upper lip and chin
- Testicles start to produce sperm; ejaculation occurs for the first time

**Stage Five:**
May begin ages 14 to 18
- Adult stage; overall look is that of a young man
- Genitals and pubic hair have an adult appearance
- Growth spurt slows down
- Facial hair growth becomes heavier
- Body hair growth, especially on the chest, may continue into the 20s
Let’s watch a video!

Always Changing - About Puberty and Stuff
Homework

1. *Puberty Quiz* worksheet
2. Parent Signature
3. Free Samples
This marks the end of the first day.
Welcome Back!
Day two begins here.

“Well, here we go again. ... Did anyone here not eat his or her homework on the way to school?”

Let’s look at the homework assignment.
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UNIT II
Vocabulary Quiz - Male Puberty

Match the words at the top with their descriptions below.

A. Puberty  
B. Sperm cells  
C. Erektion  
D. Testosterone  
E. Scrotum  
F. Nocturnal emission  
G. Hypothalamus  
H. Epididymis  
I. Ejaculation  
J. Genitals  
K. Semen  
L. Testicles  
M. Prostate gland  
N. Penis

1. **F**  
   Ejaculating semen while asleep or almost asleep. It is also called a “wet dream.”

2. **N**  
   The principal external male reproductive organ.

3. **J**  
   The external organs of the reproductive system.

4. **A**  
   The period during which boys and girls experience the physical changes of growing up.

5. **H**  
   A storage chamber, attached to each testicle, where sperm cells are nourished and mature.

6. **M**  
   The spurtling out of semen from the penis.

7. **B**  
   A gland that surrounds the male urethra. It contributes a milky fluid that makes up the largest part of the semen.

8. **D**  
   The tiny cells in a male, shaped like tadpoles, that contain half the genetic material necessary to create a baby.

9. **K**  
   The main male hormone which must be released in order for puberty to begin in boys.

10. **G**  
    The sticky white fluid that helps transport sperm through the urethra and out the tip of the penis during ejaculation.

11. **E**  
    The area of the brain in both boys and girls that is responsible for sending the message to the pituitary gland to start production of the hormones necessary for puberty to begin.

12. **C**  
    The sac of loose skin that hangs under a male’s penis and contains the testicles.

13. **L**  
    The enlarging and hardening of the penis.

14. **ECL**  
    Two oval-shaped glands contained in the scrotum that make sperm.
Female Anatomy

- Fallopian Tubes
- Eggs
- Ovary
- Uterus
- Endometrium
- Cervix
- Vagina

Position inside body
The cervix is the lower part of the uterus that opens into the vagina.
Fallopian tubes go from the uterus to the ovaries. During ovulation, an ovary releases an egg into the fallopian tube next to it.
There are two ovaries, one on either side of the uterus. Ovaries make eggs and hormones like estrogen and progesterone. These hormones help girls develop, and make it possible for a woman to have a baby.

The ovaries release an egg as part of a woman's cycle. When an egg is released, it's called ovulation. Each egg is tiny – about one-tenth the size of a poppy seed.
The uterus is where a fetus, or baby, grows. It is a hollow, pear-shaped organ with a muscular wall.
The vagina is a tube that connects the uterus to the outside of the body. The entrance to the vagina is on the outside of the body. It's called the vaginal opening.
Menstruation

This video explains what happens during the menstrual cycle - and why.

Click image for video to play
Questions and Answers

*Using your name,* feel free to write questions on index cards.

*Remember:* Questions are important, and they need to be directly related to both days of instruction.