

COURSE: Health	GRADE(S): 5 th Grade
UNIT: Growth and Development	TIMEFRAME: 4 Classes

NATIONAL HEALTH EDUCATION STANDARDS:	
STANDARD 1:	Students will comprehend concepts related to health promotion and disease prevention to enhance health.
STANDARD 7:	Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

STATE STANDARDS:	
10.1. Concepts of Health	
10.1.6.A.	Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes.
10.1.6.B.	Identify and describe the structure and function of the major body systems.
<i>Reading Assessment Anchors:</i>	
R5.A.2 Understand nonfiction appropriate to grade level.	
R5.A.2.1	Identify and interpret the meaning of vocabulary in nonfiction.
R5.A.2.4	Identify and explain main ideas and relevant details.
R5.B.3 Identify and interpret concepts and organization of non-fictional text.	
R5.B.3.2	Distinguish between essential and nonessential information within or between text.

UNIT OBJECTIVES:	CONTENT
Identify changes that occur during adolescence	<ul style="list-style-type: none"> I. Changes occurring in adolescence <ul style="list-style-type: none"> - Physical <ul style="list-style-type: none"> o Growth spurt o Development of glands o Development of reproductive organs - Intellectual <ul style="list-style-type: none"> o Problem solvers o Become abstract thinker - Emotional <ul style="list-style-type: none"> o Mood swings o Care how others feel about you - Spiritual <ul style="list-style-type: none"> o Conscience o Values - Social <ul style="list-style-type: none"> o Independent o Peer relationships with both sexes o Gender Roles and Stereotyping <ul style="list-style-type: none"> ▪ <i>Gender:</i> General term referring to a person's sex. ▪ <i>Gender Role:</i> Society's expectations of behavior based

Identify and describe the function and structure of the reproductive system.

upon a person's gender.

- **Stereotype:** An assumption that everyone within a group or within similar characteristics is the same. A mental image we have of a person or group.

II. Puberty, Growth, and Development To be taught separately to boys and girls.

- *Adolescence:* Period of transition between puberty and adulthood.
- *Puberty:* Period of rapid growth between childhood and adulthood. The pituitary gland which is the size of a pea and located near the base of the brain releases a hormone (FSH) which begins the process of maturation.

o Female Changes

- Growth spurts.
- Hair Growth – pubic and underarm.
- Increased oil and sweat gland, secretions/possible acne/body odor.
- Development of the hour-glass figure – hips widen, waist narrows.
- Breast Development.
- Reproductive Organs increase in size and development.
- Ova matured and released.
- Mood Swings (PMS).
- Get periods.
- Experience romantic feelings.

o Male Changes

- Hair growth – underarm, facial, chest, pubic area (penis and Testicles).
- Production of sperm.
- Wider Shoulders.
- Voice Deepens.
- Increased oil and sweat gland secretions/possible acne/body odor.
- Growth spurts.
- Experience romantic feelings.

o Length of Time It Takes

- Big changes can take 3-4 years on the average.
- Little changes can take as long as 7-8 years.
- Girls usually begin puberty earlier than boys and they end it before as well.
 - Girls - ages 9-16
 - Boys - ages 10-18

III. Reproductive Systems

- Controlled by the pituitary gland
 - o "Master" Endocrine gland
 - o Size of a pea
 - o Located at the base of the brain
 - o Releases hormones, which stimulates the ovaries to mature and release egg cells and testes to produce sperm.

✦ Female Reproductive System

Organs:

- o *Uterus (Womb)* – baby grows and develops here for approximately 9 month's.
- o *Endometrium*: Lining of the uterus.
- o *Fallopian Tubes*: Passageway of eggs from ovaries to uterus.
- o *Ovaries*
 - The female sex gland.
 - Produces estrogen and progesterone.
 - Stores, matures, and releases egg cells.
- o *Vagina*: Birth canal.
- o *Cervix*: Bottom of the uterus.
- o *Labia*: Folds of skin on the external genitalia protects opening of vagina and urethra.
- o *Vulva*: Labia: Outer and inner lips (folds of skin)
- o *Urethral opening*: Opening to urethra (tube through which urine is excreted)
- o *Vaginal opening*: Opening to the vagina

- Menstrual Cycle

- o Regulated by hormones – estrogen and progesterone.
- o Egg cell (ovum) is matured and released from the ovary.
- o Lasts 28-30 days (monthly).
- o Lining (endometrium) of the uterus builds up gradually with blood and tissues.

- Your Menstrual Calendar

- o The menstrual cycle runs from the first day of bleeding of one menstrual period to the first day of bleeding the next cycle.
- o Cycle lengths may vary, especially during the first few years of menstruating – it could take as long as three years before a girl develops a regular pattern.
- o To determine the length of your menstrual cycle on the calendar, count

the number of days from one circled day (first day of your bleeding) to the next.

- Menstruation
 - o Egg cell has been released from ovary and has traveled down the Fallopian tube.
 - o If egg cell is not fertilized - egg disintegrates.
 - o Lining of uterus sheds and leaves the body through the vagina as the menstrual flow.
 - o Usually lasts 3-5 days

- Sanitary Protection: Absorbent material to catch the blood flow.

- Pads collect the blood outside the body.
 - o Contain adhesive strips to hold pad to under-panties.
 - o Come in a variety of shapes, lengths, and degrees of thicknesses:
 - Maxis are the thickest and minis and panty liners are the thinnest.

- Tampons
 - o Soft absorbent wad of cotton placed in the vagina.
 - o Comes in different thicknesses super, regular, lites, slender.
 - o Have cardboard or plastic applicators.
 - o Advantage; you can go swimming with these in.

- Toxic Shock Syndrome (TSS)
 - o Caused by a bacterium
 - o 90% occur in cases of women wearing tampons.
 - o Very, very rare.
 - o Symptoms; high fever, very watery diarrhea, vomiting, sore throat, and perhaps aching muscles.

- How to Avoid TSS
 - o Wash hands each time you insert tampon.
 - o Do not use tampons thicker than you need.
 - o Do not use tampons for the entire time you have your period; use pads at night and on heavy days.
 - o Change tampons often.
 - o Never leave a tampon in for more than 6 hours.
 - If you suspect TSS, remove tampon immediately and call the

doctor.

- Types of Clothes to Wear When You Have Your Period:
 - o Pick something comfortable.
 - o Wear jeans, dark pants, or dark skirt.
 - o Keep a dark sweatshirt at school to wrap around your waist in case you leak through.

✦ Male Reproductive System

- o Function of the Pituitary Gland
- o Master Endocrine Gland
 - Controls all growth in the body.
 - Activates testicles to produce and release testosterone.

- Organs of Reproduction:

- o External - Penis
 - An organ made of spongy tissue and blood vessels.
 - Contains the urethra (tube through which urine passes from the bladder to the outside of the body).
 - Becomes erect for sperm to leave the body.
 - *Circumcision*: Surgical procedure that involves cutting away part or the entire foreskin that covers the tip of the penis.
- o Urethra
 - Encased within the penis.
 - Passageway for urine and sperm to exit the body.

- Testicles (2)

- o Glands that hang behind the penis in a sac of skin.
- o Also known as testes.
- o The male sex gland.
- o Produce sperm and the male hormone, testosterone.
- o Some sperm are stored here.

- Scrotum

- o A skin sac that holds the testes.
- o Acts as a thermostat for the testes and the stored sperm.

- Organs of Reproduction

- o Internal
 - *Epididymides*: A pair of long coiled ducts where sperm go to mature before they are released; these ducts carry sperm to the vas deferens.
 - *Vas Deferens*: Duct from the epididymides leading to the

	<p>seminal vesicles. Sperm cells are stored here.</p> <ul style="list-style-type: none"> ▪ <i>Prostate Gland:</i> Gland which produces a whitish liquid to help form semen. Common cancer site among older males. ▪ <i>Seminal Vesicles:</i> Produces fluid that also helps to comprise semen. Semen stored here. ▪ <i>Sperm:</i> A very small (microscopic). There are about 200,000-300,000 in one ejaculation. They have tails for helping them move (swim) through semen, a head which contains half the chromosomes needed to produce a baby. Sperm cells are not produced until boy reaches puberty and will be produced for the rest of his life. ▪ <i>Nocturnal Emission:</i> A wet dream; when semen is released from the penis, usually while sleeping.
<p>ACTIVITIES:</p> <p>Students will brainstorm the definition of adolescence and puberty.</p> <p>A Graffiti Wall activity will be used for students to list the changes that males and females experience during puberty.</p> <p>During a class discussion, the students will label the parts of the reproduction system on a diagram.</p> <p>The students will complete a teacher generated quiz.</p> <p>Students interview at least 4 female adults about their menstrual experiences. (Accessing Information/Interpersonal Communication)</p> <p>After watching a video, the students will write a journal entry on how they felt about puberty and the changes before and after watching the video. (Interpersonal Communication/Accessing Information)</p> <p>Video – <i>“Meet the New You for Girls/Boys”</i> <i>“Growing up on Broadway”</i> <i>“Kids to Kids, Talking About Growing Up”</i> <i>“Growing Up and Liking It”</i></p> <p><i>Teacher directed differentiated instructional</i></p>	<p>ASSESSMENTS:</p> <p>The students will define adolescence and puberty on a worksheet.</p> <p>On a teacher generated worksheet, the students will list 5 to 8 changes that a male or female experience during puberty.</p> <p>Using a rubric, the teacher will evaluate whether or not the students were able to label the diagram of the reproductive system.</p> <p>Student will correctly answer 7 out of 10 questions on a teacher generated quiz.</p> <p>REMEDIATION:</p> <p>By working with a partner, the student will be able to list changes during puberty and label the diagram correctly.</p> <p>Teacher assistance</p> <p>ENRICHMENT:</p> <p>Students compose a <i>“Changes Journal”</i>, indicating all the changes they have gone through from birth to the present.</p> <p>Students create a handbook (similar to a brochure) for navigating through puberty. This handbook will identify</p>

projects and activities are ongoing and based on student need.

RESOURCES:

Girl Stuff, Margaret Blackstone/Elissa Haden Guest, 2000

My Body, Myself for Girls, Lynda Madaras/Area Madaras, 2000

Kids Health: Growing Up (1995-2006)
Retrieved on July 12, 2006 from:
<http://kidshealth.org/kid/grow/>

Kids Health: All About Puberty (1995-2006)
Retrieved on July 12, 2006 from:
http://kidshealth.org/kid/grow/body_stuff/puberty.html

Health Teacher: The Passage into Puberty (1999-2006). Retrieved on July 12, 2006 from:
<http://www.healthteacher.com/lessons/lessonid/59>

the common characteristics of puberty and suggest ways of dealing with the physical, emotional, and social changes they will be going through.

"The Giving Tree", by Shel Silverstein
Harper Collins