Level I - Lesson 8: Know Your Body

Synopsis:
This computer session will allow students to learn more about the human reproductive system and the changes their body will go through during puberty.

Objectives: Students will be able to:
- Describe changes in male and female anatomy and physiology during puberty
- Identify the parts of the male and female reproductive systems and understand the function of each of these parts
- Define sex and understand the physical consequences of having sex (pregnancy, HIV, other STIs)
- Describe menstruation and sperm production and identify their relationship to reproduction

Activities:
I. Introduction to the Day (3 min)
II. Computer Activities (40 min)
  1. Body Moves: Body Development Animation
  2. Body Moves: Reproductive Anatomy
  3. Body Moves: Menstruation
  4. On-The-Air: The Expert’s Corner
  5. On-The-Air: Reproduction
III. Wrap-Up (2 min)
Optional Level I – Lesson 8 Quiz

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Preparation:

Review all computer activities prior to the lesson

Teacher Aid: Reproductive Anatomy
Activity I: Introduction to the Day  

A. Welcome students as they come in. Sit each student at a computer and tell students not to touch their mouse or keyboard until they are instructed to do so.

B. Explain to students that today they will be using the computers to learn about the reproductive system, puberty, and the definition of sex.

C. Ask students who the most important person in their game is. Take a few responses.

D. Emphasize that they are the most important person in their game and that’s why it is important for them to know how their body works so they can make decisions, especially regarding sex, that will keep their bodies healthy and their game real.

E. Tell students to begin today’s computer lesson now.

F. Remind students to raise their hand if they have a question.
Activity II: Computer Activities (35 min)

NOTE: Monitor time closely. Please remember you will need 8 -10 minutes at the end of class to review questions from the computer activities and complete the wrap up.

1. **Body Moves: Body Development Animation**
   
   *Description*: Using a lighthearted animation, students see the changes that occur in the male and female body during puberty. This animation also focuses on the emotional changes experienced during puberty. Animated scenes also demonstrate the development of a girl’s body from age eight through puberty and an eight-year-old boy’s body through puberty. Animated scenes are separate for male and female body development.

2. **Body Moves: Reproductive Anatomy**
   
   *Description*: An interactive animation allows the student to match up a part of the reproductive system with the correct name. When the correct name is identified, reinforcement is given along with an explanation of the function of that reproductive part. If the wrong name is selected, remediation is offered along with redirection to the correct reproductive part. The student performs this activity for both the male and female reproductive systems. *(See Teacher Aid on Reproductive Anatomy.)*

3. **Body Moves: Menstruation**
   
   *Description*: Students see an animation that explains how different parts of the female reproductive system work together for menstruation to occur. Students also have the opportunity to read an online fact sheet that answers some common questions about menstruation.
4. On-The-Air: The Expert’s Corner

*Description:* Students watch a video in which an expert hosts a candid discussion about sex and reproduction. The expert provides a definition of sex, including vaginal, oral, and anal sex, and explains the consequences of having sex. In this lesson, the focus is on the physical consequences of having sex – pregnancy, HIV, and other STIs. In this activity, the expert talks about STIs, and the student has access to online fact sheets regarding STIs if interested.

5. On-The-Air: Reproduction

*Description:* The expert continues the discussion about another consequence of having sex – becoming pregnant. At this point, the student watches an animation of what happens in the female body (menstruation) and in the male body (production of sperm) for reproduction to occur.

6. Arcade: Activity Review

*Description:* Students are able to access the Arcade to review previous lesson activities only after they have completed all the activities for the day.
Activity III: Wrap-Up

(2 min)

A. Ask the students to end computer activities.

B. Ask students if they have any additional comments they want to make about the activities they did today. Respond as necessary.

C. Ask students why they think it’s important for them to understand how their bodies work. Take a few responses.

D. Tell students that you hope the activities they did in today’s class helped them not only understand how their bodies work but also understand some of the consequences (pregnancy, HIV, other STIs) they can experience if they make unhealthy choices regarding sex.

E. Remind students that they are the most important person in their game and that’s why in the next class they will begin to think about reasons why teens their age choose to wait until they are older to have sex.

F. Thank the students for their participation and let them know you look forward to seeing them next time.

Optional: Administer Level I – Lesson 8 Quiz (located in the Appendix)
The interactive animation in the reproductive anatomy computer activity allows the student to match eight parts of the female reproductive system with the correct name:

- **Breasts.** Breasts, also known as mammary glands, play a part in reproduction because they make milk for the baby. A breast has somewhere between 12 to 20 milk glands, which connect to milk ducts. The milk ducts then lead to the nipple. About 80 percent of breast tissue is made of fat that protects the milk glands.

- **Cervix.** The cervix connects the vagina and the uterus.
Teacher Aid to Reproductive Anatomy continued

- **Fallopian Tubes.** The Fallopian tubes are small straw-like tubes. One end connects to the uterus. The other end has fringelike tentacles (fimbriae) that float next to the ovaries. When an egg, or ovum, is released from one of the ovaries, the fimbriae sweep the ovum into the Fallopian tube where it travels to the uterus. Conception, or the fertilization of the egg, occurs in the Fallopian tube.

- **Genitals and Reproductive Anatomy.** Genitals is a general word that refers to the reproductive and surrounding organs.

- **Ovaries.** Females are born with 2 ovaries, one on each side of the uterus. They are small walnut-sized organs that store egg cells. During puberty the ovaries will begin releasing one egg cell every month, signaling the beginning of the menstrual cycle. The egg cell travels through the Fallopian tubes where fertilization can occur.

- **Uterus.** The uterus is a strong muscular organ where a fetus grows until it is ready to be born. The uterus is about the size of a pear and can expand large enough for a 9-month-old baby to live in. After a baby is born, the uterus returns to its original size. When the woman is pregnant the baby is nourished by the blood and tissue built up in the uterus. If the woman’s egg is not fertilized, the blood and tissue from the uterine wall are shed, causing her to menstruate.

- **Vagina.** The vagina is a muscular organ that has stretchy walls that allow it to expand and recover to its original shape. The vagina is where a penis goes during sex, and it provides a passageway for a baby to come through during childbirth. During menstruation, the vagina provides a way for the blood to pass though from the uterus to the vaginal opening.

- **Vaginal opening.** This is the hole between a girl’s legs that leads to the vagina.
Further, in the computer lesson, when the Learn More button is selected, eight additional female reproductive system parts are provided:

- **Anus.** An opening where feces (or food waste) leaves the body. It is not part of the woman’s reproductive organs.
- **Bladder.** The bladder is a hollow organ that stores urine until there is an appropriate time to urinate. During urination urine is expelled by the bladder muscles, through the urethra.
- **Clitoris.** The clitoris is a small pea-sized mound at the top of the vulva where the labia come together. It is responsible for many of the sexual feelings a woman has.
- **Hymen.** The hymen is a thin piece of skin that covers the vaginal opening. The hymen can tear during certain kinds of exercise, by using tampons, or as a result of having sex for the first time.
- Labia Majora. Girls have two pairs of labia. The labia majora are the outer lips that have hair and cover the inner lips or the minora.

- Labia Minora. Girls have two pairs of labia. The labia minora are the inner lips that are smaller and don’t have hair.

- Urethra. A small opening where urine (pee) leaves the body. It is not part of the woman’s sex organs, but it is covered by the vulva and is between the clitoris and the vaginal opening.

- Vulva. The vulva is the whole area of soft skin between a female's legs that covers the labia, clitoris, the opening to the urethra, and the opening to the vagina.
Teacher Aid to Reproductive Anatomy continued

The interactive animation in the reproductive anatomy computer activity allows the student to match eight parts of the **male reproductive system** with the correct name:

- **Epididymis.** A tiny, coiled tube connected to each testicle that stores sperm as they mature.

- **Genitals and Reproductive Anatomy.** Genitals is a general word that refers to the reproductive and surrounding organs.

- **Penis.** The penis is the male sex organ that hangs down between a boy's legs. The penis may be circumcised, where the foreskin of the penis is removed, or uncircumcised, where the foreskin of the penis is left intact. Although circumcision affects the look of the penis, it does not affect its function. Urine passes through the penis during urination or “peeing.” The penis usually soft and spongy, but, during
an erection, it becomes hard. During sexual intercourse, ejaculation, where semen passes through the penis, may occur.

- **Scrotum.** The scrotum is a soft, loose wrinkly sac of skin that has two compartments. Each compartment holds one testicle. The skin of the scrotum is darker in color than the rest of a man’s skin. When the penis is soft it rests on top of the scrotum.

- **Seminal vesicles.** The two seminal vesicles are located under the bladder and make fluids that feed sperm to give them energy.

- **Sperm.** Sperm is constantly made in the testes from puberty to the end of a man’s life. Sperm are the male’s reproductive cells and look like tiny tadpoles. They are only visible through a microscope. If a sperm comes together with an egg from the female fertilization or conception occurs, which can lead to pregnancy.

- **Testicles.** The testicles, or testes, are where males begin to produce sperm during puberty. Before puberty, the testes are about the size of a grape. During puberty, the testes grow to the size of a large walnut. Typically before and after puberty, one testicle hangs lower than the other one.

- **Vas deferens.** The two vas deferens are long thin tubes that sperm travel through to get from the testicles to the end of the penis.
Teacher Aide to Reproductive Anatomy continued

- **Prostate.** The prostate gland makes fluid that gives sperm an additional energy boost.

- **Cowper’s gland.** The Cowper’s gland is attached to the urethra; it releases a sticky fluid that cleans out the urethra. This fluid is called pre-ejaculate because it comes out the end of the urethra before ejaculation.

- **Urethra.** A long tube inside the penis that urine (pee) passes through during urination and semen passes through during sex.

- **Semen.** Semen is the combined milky white fluid that squirts out during ejaculation. Semen consists of sperm from the testicles and fluids from other reproductive organs, including the seminal vesicles, prostate, and Cowper's gland.

- **Bladder.** The bladder is a hollow organ that stores urine until there is an appropriate time to urinate. During urination urine is expelled by the bladder muscles, through the urethra.
Anus. An opening where feces (or food waste) leaves the body. It is not part of the man’s reproductive organs.