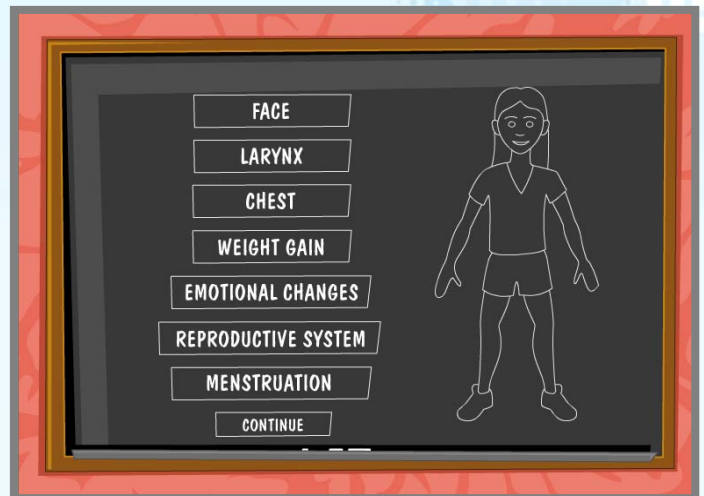


LESSON TITLE:

Becoming a Young Woman

LESSON DESCRIPTION:

In this animated activity, students will go more in depth about changes that happen to females during puberty. The Coach re-introduces Ella Estrogen and Paula Progesterone to the students. Coach then sends Ella and Paula off on their journey to cause the changes associated with puberty. Students will explore how puberty affects females and the female reproductive system.



GRADE LEVEL:

4-6

INSTRUCTION PHASE:

Knowledge, Comprehension, Analysis

DURATION:

30-45 minutes

DELIVERY METHOD:

Educator-led
Individual

MATERIALS:

1. Computer(s) with Internet access or Kit on CD
2. Projector

MANAGEMENT:

- For this educator-led activity, students will be working in one large group or in two to three smaller groups to watch the activity on the projection screen in the front of the classroom. This could also be done as an individual activity with each student at their own computer and working at their own pace.
- This activity is meant to be a continuation of the introduction to **Transformation Information 101**. This specific activity will be focused on the changes that happen to females, and why and how they happen.
- *The educator will need to reserve computer lab time for this activity. Please be aware that the lesson activity after this one may also require the use of this same equipment. If needed, please adjust equipment reservation time accordingly.*

LESSON OBJECTIVES & STANDARDS:

The students will be able to:

1. Define what the term puberty.
2. List physical and emotional changes that occur during puberty for females.
3. Explain the path of an egg for one cycle.

National Standards

[Health](#): 1, 3

PA State Standards

[Health, Safety and Physical Education](#): 10.1.6 A, B

ANTICIPATORY SET:

Begin by relating student experiences to the objectives of the lesson by asking the following:

- *Do you feel now that you are entering adolescence?*
- *How do you think that puberty will affect you?*
- *Who do you trust to talk about puberty?*
- *What changes do you think your body will go through?*
- *Have you seen any of these physical or emotional changes happening to you or people around you?*
- *What can you do to better manage your personal hygiene?*

TEACHING – Input:

Lesson Terms

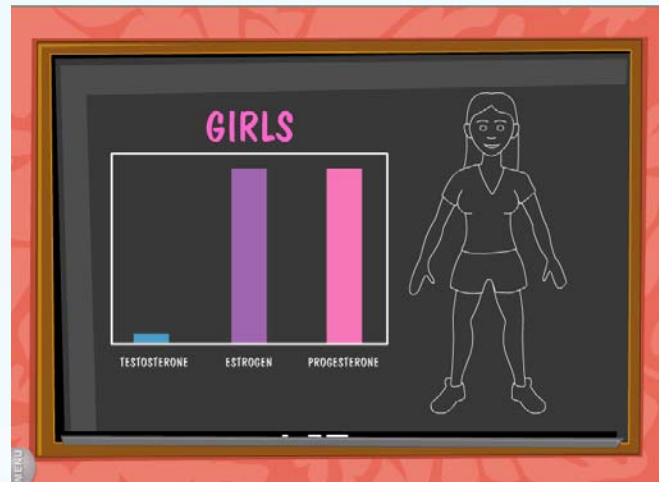
1. **Adolescence** is the stage of the life cycle between the ages of 11 and 21.
2. The organ that holds the urine received from the kidneys is called the **bladder**.
3. The **egg** is the female reproductive cell. It is also called the ovum.
4. The female hormone that produces secondary sexual characteristics and affects the menstrual cycle is called **estrogen**.
5. The **fallopian tubes** are tubes between the ovary and the uterus through which the egg travels.
6. **Fertilization** occurs the moment the egg and sperm come together.
7. **Hormones** are special chemicals made by the body that cause changes.

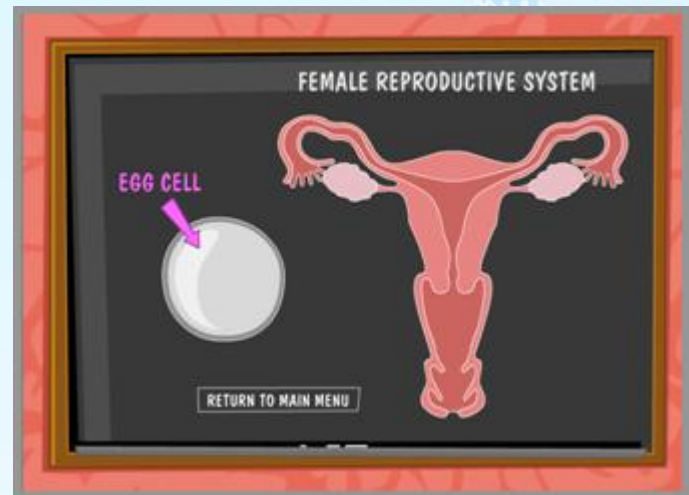
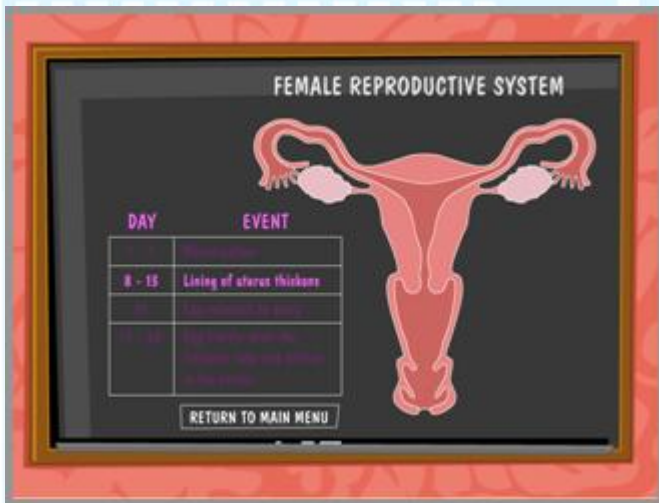
Content Developed by

8. The **hypothalamus** is a small area of the brain that helps control the reproductive functions as well as many other important bodily functions.
9. **Menstruation** is the monthly discharge of blood and cells that are part of the lining of the uterus.
10. The **ovary** is a female gland that produces eggs and secretes hormones.
11. The **pituitary gland** is a pea sized gland found at the base of the brain. It is called the master gland or control gland because the hormones it produces control the other endocrine glands.
12. **Progesterone** is the female hormone that prepares the lining of the uterus for a fertilized egg.
13. **Puberty** is the time in life when boys and girls become physically capable of producing offspring.
14. The **urethra** is the tub leading from the urinary bladder to the outside of the body.
15. The **uterus** is the body cavity in which the fetus develops.
16. The **vagina** is the birth canal.

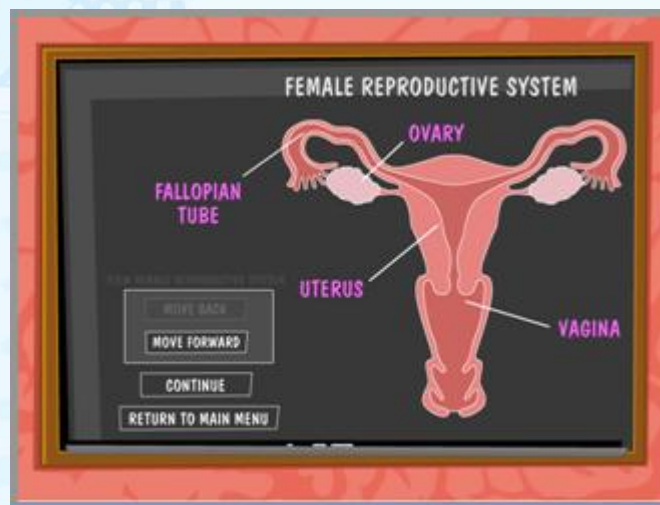
TEACHING – Modeling:

- Students will gather as one large group or two-three smaller groups to watch the activity as it is projected onto the large screen in the classroom. Once the activity is launched, the Coach will appear and introduce the students to **Becoming a Young Woman**.
- The activity begins with the Coach in the **Transformation Information 101** classroom giving a brief overview of some of the changes that begin to happen to females during puberty.
- The Coach will then re-introduce Ella Estrogen and Paula Progesterone, the hormones that are responsible for many of the changes that happen to females during puberty. He will also introduce Keesha, a young woman who is going through puberty.
- After the Coach introduces Ella, Paula, and Keesha, he will send Ella and Paula on their journey through Keesha's body, causing all of the changes associated with puberty.
- The instructor (or student if working independently) will have options to click on the different parts of Keesha's body that Ella and Paula are affecting. After clicking on a specific body part there will be information presented as to just how puberty affects that part of the body. Other options the instructor will have include "Weight Gain", "Emotional Changes", and "Menstruation".
- The "Reproductive System" button will cover and show images of the different parts of the reproductive system.
- Throughout this process, the instructor will have the option to move on to the next part of the activity by simply clicking the "Continue" button at the bottom of the screen.





- If the instructor chooses “Menstruation”, the Coach will go over different facts regarding the menstrual cycle. After this has been completed, the instructor will have the option to navigate manually through the female reproductive system at their own pace.
- By clicking “Move forward” or “Move Backward” the instructor can trace the path of the egg through the reproductive system.
- After this activity is completed, the instructor should hit the “Continue” button at the bottom of the screen.



- After the instructor (or student if working independently) has completed the navigation of the reproductive system and has hit the “Continue” button, the activity will move to its conclusion.
- The Coach will appear and give a small lecture of what it means to be capable of reproduction.
- He will state the just because the body is PHYSICALLY ready for reproduction, it doesn’t mean that person is socially, emotionally, mentally, and financially ready for parenthood.

TEACHING – Check for Understanding:

1. Puberty is defined as a time when the body begins to develop into an adult.
 - What age range does this happen for girls?
 - What are three things you can do to better manage puberty?
 - Does everyone go through puberty the same way and same time?
 - How does puberty fit into adolescence?
2. There are many physical and emotional changes that occur specifically to females as puberty approaches.
 - Can you list three physical changes for females?
 - How would you summarize the emotional changes for females during puberty?
 - Where do you get your information about puberty? What adult do you trust to talk to about puberty?
3. We have a “biological clock” or “master gland” because the hormones it releases start the puberty process and controls the rate of development.
 - What is the name of the “master gland”?
 - Where is the “master gland” located? How big is it?
 - Which hormones are specific to females?
 - Can you explain what physical and emotional changes occur because of the “master gland” during puberty for females?
4. The female reproduction system changes during puberty.
 - List four parts of the female reproduction system.
 - What is the female reproductive cell?
 - Can you explain the path the egg takes during one cycle?
 - Can you describe the process of one menstrual cycle?
5. Personal hygiene is important during puberty because of the many hormonal changes that are happening.
 - Can you list three things you can do for your personal hygiene?
 - Why is it important to use deodorant daily?
 - What types of facial cleansing products can we use?
 - How would you apply what you have learned about personal hygiene into your daily routine?

CLOSURE:

Review key points of the lesson to help students form a coherent understanding of the lesson objectives. Ask students to tell or show you what they have learned, using questions similar to those found in **Check for Understanding**.