

# Body Basics: Growing Up

A Lesson Plan from Rights, Respect, Responsibility: A K-12 Curriculum  
*Fostering respect and responsibility through age-appropriate sexuality education.*

**TARGET GRADE:** Grade 4

**TIME:** 40 Minutes

## **MATERIALS NEEDED:**

- Re-titled newsprint sheets as described
- Changes of Puberty sheets printed – two changes for each pair
- Teacher's Guide: "Changes of Puberty" – one copy
- Answer Key: "Changes of Puberty" – one per student (to be distributed at the end of class)
- Student Worksheet: Male Reproductive System
- Student Worksheet: Female Reproductive System
- PPT Sexual and Reproductive Anatomy
- Answer Key: Body Part Definitions
- Masking tape
- Extra pencils in case students do not have their own

## **ADVANCE PREPARATION FOR LESSON:**

If you don't have a white board at the front of the room, take three sheets of newsprint paper. On the top of the first write, "Physical," on the top of the second write, "Social and Emotional." Post these at the front of the room with another blank sheet over each to hide what is written there.

Have approximately 30 one-inch pieces of masking tape pre-torn and partially stuck to the board or a desk at the front of the room to save time during the activity. Cut the "Changes of Puberty" sheet along dotted lines to form strips.

## **LEARNING OBJECTIVES:**

By the end of this lesson, students will be able to:

1. Describe at least three changes that take place during puberty. [Knowledge]
2. Differentiate between what could be considered physical, and what are social and emotional changes of puberty. [Knowledge, Skill]
3. Correctly name at least two parts of two reproductive systems. [Knowledge]

## **PROCEDURE:**

### **STEP 1:**

Tell the class that you are going to be talking about puberty today. Say, "Puberty is something everyone goes through starting at around your age and over their teen years. It has to do with all the ways our bodies change to prepare us for becoming adults. This includes how we change emotionally – and socially – as well as physically. Puberty happens at different times for everyone. Although puberty can start as early as 8 or 9 years old for some people, it can start as late as 12 or 13 for others. Whenever you start puberty is normal for you."

Reveal the three flipchart sheets and say, "Most people know something about the physical changes of puberty – what our bodies go through. But there are also emotional changes – ways in which we change that has to do with our feelings."

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And there are also social changes – ways in which we change based on the people we spend the most time with. We are going to do an activity now that looks at these changes.”

Divide the group into pairs. Once they are in their pairs, say, “I am going to give each pair two sheets of paper. On each sheet of paper you will see one of the changes of puberty. Please decide whether each one is a physical change, or an emotional or social change of puberty. Once you have decided, bring your sheets up to the front of the room, take a piece of tape, and stick it on the sheet you’ve decided they go on.”

Answer any questions, and then distribute two sheets from Changes of Puberty to each pair. Tell them they have 5 minutes in which to decide and bring their sheets up to the front of the room and place them on the correct list.

*(7 minutes)*

**Note to the Teacher:** *If you have a larger class, you may wish to break the students into groups of 3 as needed. As you distribute the sheets, try to mix them up so that the pairs/groups receive sheets that go on different lists when you can.*

### STEP 2:

Ask for student volunteers to take turns reading each sheet aloud. Once all the sheets have been read out, ask the students whether they think they are all in the correct column, or whether any need to be moved. Move any as needed. Then ask students whether they have any questions about what any of the changes mean.

**Note to the Teacher:** *As you go through the information with the students, emphasize whenever possible that the changes you are discussing are all normal, but some people go through them sooner than others and this is also normal.*

Say something like, “It can be a really good idea to figure out how you can manage puberty changes, whether they are social, emotional, or physical. One way to do this is by finding an adult you can talk with who can answer your questions and make a plan together for how to handle each change.”

Distribute the answer key with the physical, social and emotional changes of puberty.

*(12 minutes)*

### STEP 3:

Say, “Since many of the changes we experience during puberty are physical, it’s important that we’re familiar with our body parts and how they work. *While there are all these body parts that almost everyone has, like elbows, there are also body parts that only some people have, like body parts in our reproductive systems. Reproductive systems are used in making and having babies when you’re older, if you choose to do that. Today, we’re going to focus on the parts that are involved in reproduction, or making babies.*”

### STEP 4:

Go to slide 2 and say something like, “We have reproductive body parts from the time we’re born, but we can’t make babies when we’re little. When we reach puberty – which

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can start anywhere between the ages of 9 and 14 – our bodies start releasing special hormones from the pituitary gland. Hormones are the natural chemicals in our bodies that are responsible for different functions and changes.”

Go to slide 3 and point out that one change they may have noticed already is that their clothes from last year might not fit as well now this year, as they have continued to grow taller and have their bodies change in other ways.

(2 minutes)

### STEP 5:

Go to slide 4, and distribute the **Male Reproductive System Student Worksheet** and ask students to take out something to write with.

***Note to the Teacher:** We have used “male” and “female” to title the reproductive systems in this lesson for consistency and ease of understanding at the elementary level. However, it is important to point out that body parts are not necessarily gendered. This lesson uses references to a person’s anatomy based on their sex assigned at birth, which may or may not match their gender.*

Ask students, “**Does anyone know why this systems is called the reproductive system?**” Allow a few students to respond and explain that this system includes the organs that allow people to reproduce, or in other words, have babies. Share that puberty is the process that prepares a person’s body to be able to start and maintain a pregnancy, and deliver a baby.

Explain that there are two different kinds of reproductive systems, and you’re going to go through the first one now. Ask the students to write the name of each body part on their sheet as you explain what each is. [**Note: You should click before revealing each term on slide 4; each time you read a word that is bold and underlined, stop and remind students to write that word on their worksheets.**]

Go to slide #5. Click to reveal the word penis on the diagram, explaining that it’s the part that extends from the body to the tip.

***Note to the Teacher:** When the word “penis” is first said out loud, there is likely to be a big reaction – giggling, laughter, embarrassment. This is perfectly ok. Allow the students a few moments to laugh and get it out of their systems, then ask: “Why do we laugh when we hear the word “penis?” Be prepared to have a brief discussion about this. It is important to acknowledge their discomfort and normalize use of the proper terms. Tell students, it is perfectly ok to feel embarrassed or uncomfortable since we hardly hear the word “penis” or some of the other words we will discuss but that it is important to learn them.*

Point to the opening in the penis and say, “This is the opening to the urethra. Does anyone know what comes out from here? Take a few responses and say, “It is the opening where urine, or pee, comes out. It’s also where sperm come out. During puberty, the body of someone with a penis and testicles begins to make sperm. Sperm are one of the two tiny cells that are needed to make a baby. We’ll talk about the other type of cell in a minute.”

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Point to the testicles on the PPT and say something like, "**Testicles** are two little round organs that make sperm." Point to the **scrotum** and pronounce the term. Say, "The scrotum is the pouch of skin that holds the testicles." Explain that the penis and scrotum make up one type of genitals.

Point back to the urethral opening and show on the diagram how sperm can be made in the testicles and travel through the reproductive system to leave the body through the urethral opening.

Answer any student questions.

*(8 minutes)*

### STEP 6:

Go to slide #6 and distribute the **Female Reproductive System Student Worksheet**. Explain that this is another system involved in reproduction, and again, that they should write in the name of each body part as you go through them. Go to slide #6 to start going through the parts.

Point to the two **ovaries**. Pronounce the word then say, "Does anyone know what the ovary does?" Take a few responses and say, "The ovaries are two little round organs that store egg cells. Remember how I said before that sperm is one of the two cells needed to make a baby? The other one is eggs. When **puberty** begins, the ovaries start to send out one egg from one of the ovaries each month. The egg goes from the ovary into the **fallopian tube** where they start making their way down to the **uterus**."

Next, say something like, "If sperm doesn't get inside the body to make a pregnancy, the egg leaves the body along with blood and tissue that have built up inside the uterus in case pregnancy happens. That's called menstruation, or having a period."

Next, point out the **vagina**. Pronounce the word and say, "This is the passageway leading from the uterus to the outside of the body. The vagina is where a baby comes out of the body during childbirth. The opening to the vagina is also where menstrual blood leaves the body, and where a tampon can be inserted during menstruation. It's also how sperm gets inside the body to try to find an egg to start a pregnancy."

At slide 8, say, "The vaginal opening is located at the top of the **vulva**." Explain that "vulva" is another word for genitals that include the parts on this slide, and that these parts are on the outside of her body." First, point to the **urethral opening**. Say that this is the opening through which urine leaves the body. Explain that everyone has a urethra, and therefore, everyone has a urethral opening.

Reveal the words for the **outer labia** and **inner labia**. Explain that labia is another word for "lips," and that these two sets of lips protect the rest of the genitals, especially the openings you just described.

Answer any questions students may have.

*(8 minutes)*

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### **STEP 7:**

Say, "Now we have a chance to quickly review what we just learned. The next few slides will include a definition of a body part, and I'd like for each of you to circle on your notes page what the correct word is. Advance through Slides 9 through 15 and pause at each one to let students put a star (\*) next to which body part they think it describes on their notes sheet. Review each answer with students. Note that not each body part is included in this activity; feel free to add definitions for time if you'd like.

*(5 minutes)*

**Get Taller**

**Grow breasts**

**Weight**

**gain**



**Grow hair under  
arms, on legs,  
around genitals**

**Get Acne**

**Hair texture  
may change**

**Hormones  
are raging**

**Voice**

**deepens**

# **Spontaneous erections**

# Menstruation

**Wet dreams**



**Hips widen**

# Voice cracks

# **Muscle Growth**

**Sweat starts  
to smell**

**May want to  
try more and  
riskier things**

**More interested  
in being with  
friends**

**May have more  
conflict with  
parents**

**Start to become  
interested in others as  
more than  
friends/finding  
partners**



**Peer pressure  
increases**

# Mood swings

# **Anxiety and stress**

**Intense feelings**

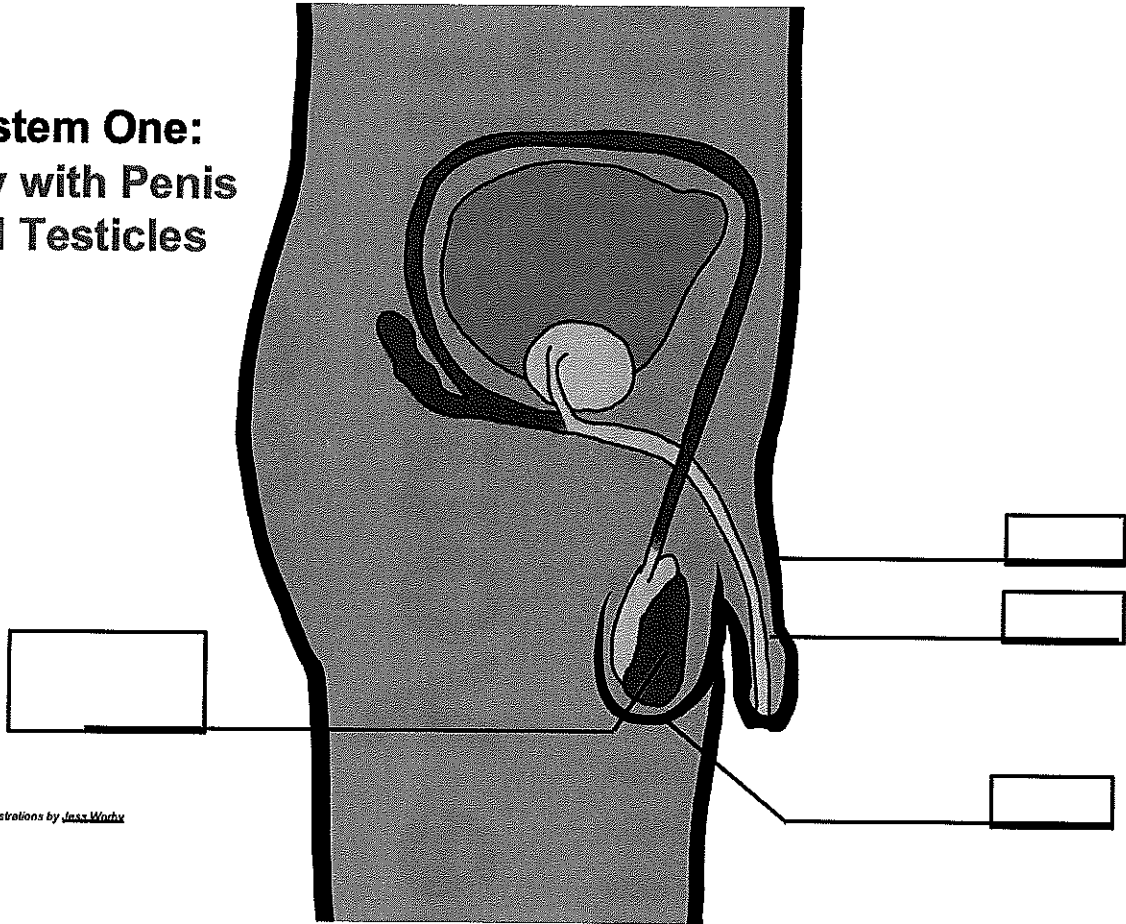
**Might have hard  
time making up  
your mind/feel  
unsure a lot**

**Might feel that  
everyone could be  
looking at you or  
talking about you.**

**Might start thinking,  
Who Am I? and try  
to define yourself as  
a person**

Male Reproductive System: Student Worksheet

**System One:  
Body with Penis  
and Testicles**

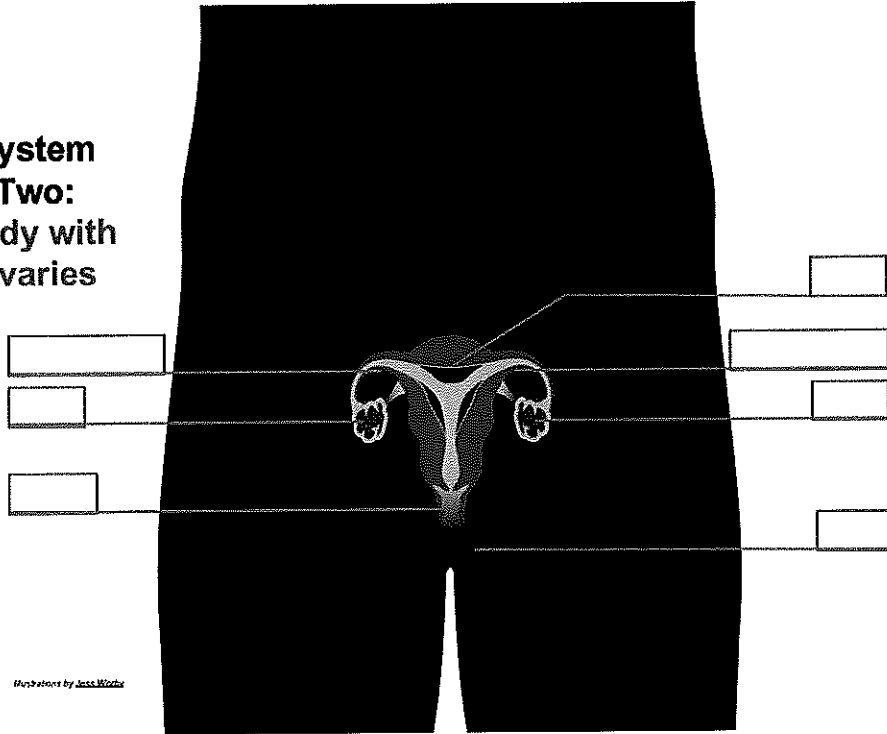


*Illustrations by Jess Winkler*



## Female Reproductive System: Student Worksheet

**System  
Two:  
Body with  
Ovaries**



# Changes of Puberty

## *Answer Key*

### **PHYSICAL CHANGES OF PUBERTY**

Get taller  
Grow breasts  
Weight gain  
Grow hair under arms, on legs, around genitals  
Get acne  
Active hormones  
Voice deepens  
Spontaneous erections  
Menstruation  
Wet dreams  
Hips widen  
Voice cracks  
Muscle growth  
Sweat starts to smell

### **SOCIAL CHANGES OF PUBERTY**

May want to try more and riskier things  
More interested in being with friends  
May want to spend less time with family members  
Start to become interested in others as more than friends/finding a partner  
Peer pressure may increase

### **EMOTIONAL CHANGES OF PUBERTY**

Mood swings  
Anxiety and stress  
Intense feelings  
Might have hard time making up your mind/feel unsure a lot  
Might feel that everyone could be looking at you or talking about you.  
Might start thinking, "Who Am I?" and try to define yourself as a person

# Changes of Puberty

## Teacher's Guide

### Physical

#### *Get taller*

Everyone goes through puberty at different rates. This is totally normal. How tall you will be is determined a lot by genes – or whether your biological family members were tall or short or somewhere in between.

#### *Grow breasts*

It is normal for one breast to be slightly larger than the other

If you have ovaries and a uterus, you're most likely to develop breasts. If you have a penis and testicles, however, you may temporarily develop breasts during puberty. This is called "gynecomastia," and it can be very embarrassing and sensitive when it happens. A lot of teasing and bullying can take place, which is completely inappropriate and wrong. Gynecomastia usually goes away by itself.

#### *Weight gain*

All young people gain weight during puberty. Sometimes this is due to physical growth; sometimes this is due to an increase in fat on the body. Both are completely normal.

Many young people try to diet to lose weight during this time – and while it's always important to eat healthy food and exercise, a lot of the weight gain during puberty is temporary and evens itself out if you maintain a healthy lifestyle.

#### *Grow hair under arms, on legs, around genitals*

For people with darker hair, this hair growth may be more apparent.

Some people choose to shave this hair, whether it's on the face, legs, under the arms or elsewhere. There is no medical reason to shave, it is only about personal preference. If shaving anywhere near your genitals, it's really important to be extra careful.

#### *Get acne*

During puberty, your body starts producing more oil. The oil and dirt that gets trapped in the pores can lead to pimples or more widespread acne.

Pimples can appear on the face or other parts of the body, like the back or shoulders.

#### *Active hormones*

Hormones are the natural chemicals found in our bodies. We all have them, whether we are kids or adults.

Hormones are responsible for all of the physical changes in puberty (as well as some of the emotional ones). During puberty, they're present at really high levels – but they even out a bit once puberty is done.

### *Voice deepens*

This is more pronounced in boys. But kids of all genders may experience a deepening of their voice during puberty.

### *Spontaneous erections*

When penises stand up by themselves it's called an "erection." This has been happening since infancy and is totally normal. But during puberty and beyond, it can happen more often and can be more noticeable. Also, the erections can last longer.

During puberty, erections can happen out of nowhere, or spontaneously. They don't even have to be thinking about or looking at anything in particular. While this can be embarrassing they also tend to go away on their own after a short period.

### *Voice cracks*

Sometimes, kids' voices will deepen dramatically, going from higher to lower. Other times, there will be a transition between the two where the voice cracks. This can sound funny, but it usually makes the person feel self-conscious. The cracking is temporary, and the voice will be lower at the other end of it!

### *Menstruation*

One of the most dramatic changes a body with ovaries goes through is menstruating or getting a period. This is part of the normal monthly cycle where the body is preparing for a possible pregnancy by building up a lining of blood and body tissue in her uterus.

Once a month, one of the ovaries releases an ovum or egg. This is a tiny egg, it's not like a chicken egg! This means the body is preparing for a possible pregnancy. If sperm gets inside the vagina and swims up into the uterus and fallopian tube after the egg is released, that egg and sperm could meet. If that sperm-filled egg then attaches itself to the wall of the uterus, a pregnancy begins. If that doesn't happen, the lining in the uterus is no longer needed, so it and the tiny egg leave the body during menstruation. This lasts about 5 to 7 days.

### *Wet dreams*

During puberty, testicles start producing sperm, which as you just heard can cause a pregnancy if it meets an egg in the uterus. Sperm come out of the penis inside a fluid called "semen." It's normal for this semen to come out sometimes while sleeping. This is called a "nocturnal emission" or a "wet dream."

This is different from wetting the bed, and is perfectly normal. Wet dreams happen less and less frequently with age.

### *Hips widen*

This can range from subtle to more pronounced. Both are completely normal!

### *Acne*

Young people of all genders experience this at some point. Usually, this is an occasional zit here and there; sometimes it can be more serious. If you get a lot of acne, talk with a parent or caregiver about seeing a dermatologist (skin doctor).

### *Muscle growth*

All bodies and muscles develop during puberty. Everyone is different, and so some people may be more or less muscular.

### *Sweat starts to smell*

Puberty is when we tend to see a big increase in how frequently kids shower or take baths. This is also when a lot of young people start using deodorant.

## **Social**

### *May want to try more and riskier things*

Puberty is a time of lots of brain growth. As the brain grows and develops, it seeks out new and risky experiences.

### *More interested in being with friends*

You may find yourself wanting more time with your peers, and less with your family members.

### *May want to spend less time with family members*

You may feel that you would like more space from your family, may notice differences in opinions or beliefs between yourself and your family, or may argue more with your family. You may also still enjoy spending time with your family, and talk with them about important things in your life.

### *Start to become interested in others as more than friends/finding a partner*

As your hormones start in puberty, you may feel romantically attracted to another person for the first time. This may be noticing another person is attractive, or having feelings like wanting to kiss or touch another person in a romantic way.

### *Peer pressure may increase*

In puberty, your friends often start to have a big influence on your choices and behaviors. You may feel that your friends are pressuring you to try new things. Sometimes these new behaviors are healthy and safe, like trying out roller skating for the first time even though you feel nervous, and sometimes they aren't, like using drugs or alcohol.

## **Emotional Changes**

### *Anxiety and stress*

It's normal to feel anxious and stress during puberty, and afterwards. Increased pressure in academics, afterschool activities, and new and changing relationships mixed with big hormonal changes can cause feeling overwhelmed, stressed, anxious, or even depressed. It's important to pay attention to these feelings. Having a few feelings of anxiety and stress is to be expected, but if you feel it's happening very often, it can help to talk with a trusted adult and get help.

### *Mood swings*

Hormones can cause you to feel happy one minute, and then something can make you feel angry or sad the next minute.

### *Intense feelings*

Feeling strong emotions quickly is a normal part of puberty. You may feel sadder or more angry than you used to about certain things, or you may feel like you're starting to understand yourself and be excited in ways that feel new to you.

### *Might have hard time making up your mind/feel unsure a lot.*

You may have a harder time making decisions, and you may feel like you have lots of people telling you what to do. You could have friends, parents, or others in your life telling you what you could or should do and it may be overwhelming.

### *Might feel that everyone could be looking at you or talking about you.*

This is often called feeling "self-conscious" or more aware of yourself and your feelings or behaviors. You may think that because something is important to you, it's being noticed by everyone else around you. But, that's usually not the case.

### *Might start thinking, "Who Am I?" and try to define yourself as a person.*

You may start to realize that things you "always did" like a sport, or an afterschool activity don't interest you anymore, or you may get even more involved in activities you like. You'll seek out friends who are similar to you, and try to figure out what you're all about as a person – either the same as or different from others.

## Body Part Definitions *Answer Key*

Two round organs that make sperm: **Testicles**

The place where a fetus grows: **Uterus**

The part of the body in which urine, or pee, comes out: **Urethra**

Two small organs that store egg cells: **Ovaries**

The passageway that leads from the uterus to outside the body: **Vagina**

A body part that extends from the body where urine (pee), or sperm comes out: **Penis**

A word to describe all of the body parts on the outside of the body on females: **Vulva**

