

Lesson One – Growth and Development: How People Grow and Change

PowerPoint available on T – Drive, Health Resources Strands 9 & 10, 4th Grade, PowerPoint Presentations, “Growth and Development Revised 2008”

You are taking part in the Kyrene School District Growth and Development and HIV/AIDS Education Programs. Your parent(s)/guardian(s) have given permission for you to participate in four carefully planned lessons. You will have an opportunity to gather information and ask questions during these lessons. Remember your parent(s)/guardian(s) and other trusted adults are reliable sources of accurate information. Some of the things you will be learning may be kind of uncomfortable to discuss because they are about parts of the body that we normally consider private. In fact, many times those parts of the body are called the “private parts.” It is normal to feel a little uncomfortable when these types of things are discussed. Your parent(s)/guardian(s) feel you are mature enough to know and understand the facts about what happens to your body as you change from a child to an adult. This program is designed to give you information and encourage you to talk with your parent(s)/guardian(s) about questions you may have about this time in your life.

Ground Rules

- **Be a good listener- No put downs!**
- **Share, but keep information away from a personal level- Don't use names.**
- **Respect the privacy of others and the comments they make during the lessons**
- **It is OK to ask your parents questions.**
- **It is OK to ask your teacher questions.**

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Review Ground Rules with students.

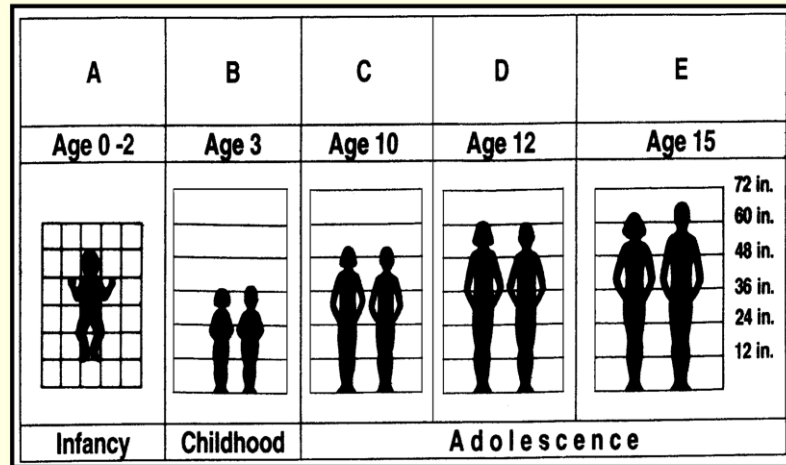
As we go through these lessons, you may have questions. At the beginning of each lesson, I am going to give you a blank index card. During the lesson, you may write out questions or make comments about the things that you are learning. You do not have to put your name on the card. At the end of the lesson I will collect all the cards, even if they are blank. I will read over the questions and decide how to answer them.

Distribute note cards.

Today you will learn how girls and boys grow and mature physically, emotionally, and socially from childhood through their early teen years. All people experience growth and change throughout their lifetime. We will be looking at the changes you will encounter as you become teenagers.

Go to next slide.

Stages of Human Growth



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All people go through stages of growing. The stages come at slightly different ages for different people. Girls and boys grow taller at different rates. So when I tell you about the rate at which boys and girls grow, I will use the word **most**. That is because this information does not apply to all children at exactly the same time. Every child grows at his or her own rate, and whatever rate it happens to be is normal.

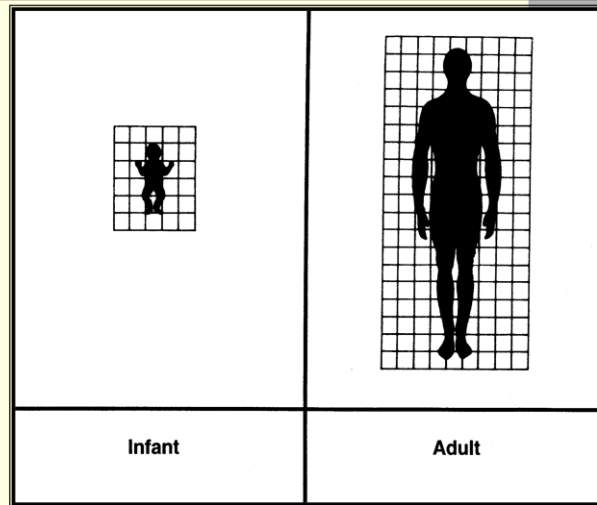
Childhood lasts for about eight years - from about age 2 to about age 10. During childhood, both boys and girls grow at a slow, steady rate. *Point to Section B of the chart.* The girl is on the left and the boy is on the right. Who is taller at age three—the girl, or the boy? *Answer: The boy is taller.* That is correct. During childhood **most** girls grow about two inches a year. During childhood **most** boys grow slightly more than two inches a year. On average, boys become slightly taller. Remember that some girls are taller during this time, and that is normal because every child grows at his or her own rate.

Adolescence lasts from about age 10 to about age 18. During **adolescence** the body begins to develop many of the characteristics of an adult. This time when the body is changing is called puberty. *Point to Section C of the chart.* In early adolescence there is a rapid growth in height and weight. This is called a **growth spurt** and is a normal part of the growth process. Girls and boys have growth spurts at different ages.

Look at this chart again. *Point to Section D of the chart.* The girl is on the left and the boy is on the right. Who is taller at age twelve—the girl, or the boy? *Answer: The girl is taller.* That is correct. During early adolescence from age 10 to age 14, girls start growing rapidly and they tend to be taller and heavier than boys of the same age. They could add as much as three and a half inches to their height within a year. This **growth spurt** lasts about three years. Most girls of twelve to thirteen, therefore, are taller than boys of the same age. Most girls reach their full height by about age sixteen.

Point to Section E of the chart. The girl is on the left and the boy on the right. Who is taller at age fifteen—the girl, or the boy? *Answer: The boy is taller.* That is correct. Between the ages of 12 and 16, boys begin their rapid growth period, often becoming taller as well as heavier than girls their age. It is not uncommon for a boy of this age to grow as much as four inches taller within a single year. By the age of fifteen, most boys are again taller than most girls of the same age. Most boys reach their full height by their eighteenth birthday. Some boys, however, continue to grow until they are about twenty. (*Next slide.*)

Patterns of Growth



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Refer to Slide 3 as you read the following information:

During physical growth, the form and shape of the body changes in several ways. The head, the arms and legs, and other parts of the body grow at different rates at different times. The arms, legs, and feet are short at birth. Then, at about the age of 9 or 10, they start to grow longer. They keep growing through **adolescence and puberty**. At first, the hands and the feet grow so quickly that they may suddenly seem too big for the rest of the body. Then the teenager's arms and legs begin their rapid growth. At this stage, teenagers may appear clumsy. They may even drop things and bump into objects. This stage, however, does not last long.

Look at these pictures of an infant and an adult. You can see that the infant's head is about one-fourth the length of its body. An adult's head is about one-eighth the length of its body. What other differences do you see in these two pictures?

Possible answers: arms are longer legs are longer shoulders are wider neck is longer feet are larger hands are larger the adult has a waistline

Go to Part 2 for lesson one (the videos for boys and girls.)