

Assignment Discovery Online Curriculum

Lesson title: The Changes of Puberty

Grade level: 6-8

Subject areas: Life Science, Health

Duration: Two class periods

Objectives:

Students will do the following:

- Learn about the changes of puberty for boys and girls
- Make a presentation about significant changes that take place during puberty.

Materials:

- Internet access
- Print reference materials, such as encyclopedias or a biology textbook

Procedures:

1. Define puberty as the time when sexual organs mature and additional physical and emotional changes take place, such as increased growth and more intense mood swings. Explain to students that in this lesson they will be learning more about puberty.
2. Discuss with students their feelings about puberty. Don't be surprised if students are unwilling to express their feelings. Many students at this age are uncomfortable talking about the changes they are experiencing. Be sure to respect each student's comfort level. If you sense that students are uncomfortable, tell them that the best way to overcome those feelings is to learn about what is happening.
3. Explain that they will be working in small groups to find out the following information about puberty:
 - Approximately when it takes place
 - What physical changes occur in females
 - What physical changes occur in males
 - Why these changes occur
 - What a growth spurt is
 - What is involved in a menstrual cycle
 - What and why emotional changes occur during puberty
 - What hormones are responsible for these changes
4. Divide students into groups of four or five. Make sure that both boys and girls are in each group. Have each group research the topics identified in step 3 and record their findings. They can use print resources or the following Web sites:
 - Adolescence: Change and Continuity
<http://www.oberlin.edu/faculty/ndarling/adolesce.htm>
 - What Is Puberty?
<http://www.coolnurse.com/puberty.htm>

- Your Health: Puberty – Male
<http://yourhealth.calgaryhealthregion.ca/Topic.jsp?GUID={61270E52-F1DC-4FB0-A588-FF141F215D47}>
 - Your Health: Puberty – Female
<http://yourhealth.calgaryhealthregion.ca/Topic.jsp?GUID={3FC1E48B-82E4-4A49-91EA-A12580CC24C8}>
 - ParentsTalk: Male Puberty
http://www.parents-talk.com/expertsadvice/ea_ch_0003.html
 - ParentsTalk: Explaining Menstruation
http://www.parents-talk.com/expertsadvice/ea_ch_0002.html
5. Challenge each group to develop a short skit dramatizing one or two changes they have researched and how kids their age feel about it. The skits must address both a physical and emotional adjustment that takes place during puberty. Possible ideas for skits include the following:
 - What it feels like when a girl gets her period for the first time
 - How a boy feels when he his voice cracks when he's delivering a talk at school
 - How it feels to have a bad facial blemish right before going to a big social event- What it feels like as awareness of the opposite sex increases
 - How a girl feels when she can't go to a swim party because she has her period
 - How the smallest boy in the class feels as he watches his peers shoot up
 6. Encourage students to develop skits that accurately depict the situation. During the next class period, have each group perform its skit. Tell students that they can use visual aids, such as charts, to help convey the information.
 7. After all the groups have presented their skits, discuss what students learned from the activity. Do they feel more comfortable talking about these issues with members of the opposite sex? Are they more knowledgeable now about what actually happens during puberty? Encourage students to continue discussing these issues with their friends and family.

Discussion Questions:

1. What do you think is the single hardest thing about going through puberty?
2. What is the greatest benefit of reaching physical adulthood? What is the relationship between hormones and changes taking place in your body?
3. Describe one fact that you learned about the experience of puberty in the opposite sex. Do you have a greater appreciation now of what members of the opposite sex are experiencing?

Evaluation:

Use the following three-point rubric to evaluate how well students conducted research, answered the questions, worked with their groups in preparing and presenting skits, and participated in class discussions.

Three points: showed strong research skills; answered all the questions correctly; showed maturity and insight into the topic while working with a group in preparing and presenting a skit; participated actively in class discussions.

Two points: showed on-grade research skills; answered most of the questions correctly; worked well with a group while preparing and presenting a skit; was somewhat engaged in class discussions.

One point: showed below grade level research skills; answered two questions correctly; had trouble working with a group while preparing and presenting a skit; was not engaged in class discussions.

Extension:

Marking Time: Challenge students to develop a timeline identifying key milestones in their lives. For example, their timelines could include when they first walked and talked, their first play date, their first day of school, their first soccer game, and activities up to the present, including any changes they have experienced during puberty. Encourage students to include at least 10 items. Have students bring in a photograph from home or draw a picture to illustrate each milestone. Have students share their completed timelines with the class. Why did they choose specific events? What features do many of the timelines share? How are the timelines different?

Suggested Reading:

Period: A Girl's Guide by Joann Loulan and Bonnie Worthen. Book Peddlers, 2001. Written for girls who are beginning the process of maturing, this is a straightforward description of the physical changes that happen as girls begin menstruating. Clear diagrams outline the female reproductive system and the process of menstruation. Other chapters discuss how having a period feels and how to cope with all aspects of it. A final chapter explains pelvic exams. An additional section at the end of the book is written for parents and discusses how to talk to your children about menstruation.

What's Going On Down There?: Answers to Questions Boys Find Hard to Ask by Karen Gravelle. Walker and Company, 1998. This is an informative description of the changes that happen as boys mature. Written in a clear and detailed manner, topics include physical and emotional changes, having sex and making (or not making) babies, staying healthy, and the range of normal events that boys experience. There is a chapter about how girls mature as well. Occasional drawings illustrate the text.

Vocabulary:

endocrine system

Definition: Structures or glands that secrete hormones causing bodily functions, including the onset of puberty.

Context: The endocrine system is responsible for regulating the body's growth, metabolism, and functioning of the reproductive organs.

hormone

Definition: A chemical substance produced by an endocrine gland that has a specific effect on the activities of other organs in the body.

Context: During puberty, the body begins secreting hormones, which in turn cause the body to grow and mature.

menstrual cycle

Definition: The time (about every 25 to 28 days) when the uterus prepares for pregnancy by building up its lining, which is discharged if fertilization does not occur, signaling the onset of menstruation.

Context: It's important for girls to keep track of their menstrual cycle so that they have a general idea of when to expect their period each month.

puberty

Definition: The time when a person goes from physical maturity to reproductive maturity.

Context: During puberty, both boys and girls experience many changes, including growth spurts, the maturation of their sex organs, and mood swings.

Academic Standards:

This lesson adheres to the National Science Education Standards for students in grades 5-8: Life Science

Credit:

Marilyn Fenichel, a freelance writer and curriculum developer. This lesson was developed in consultation with Donna Clem, a high school biology teacher.

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