

# Unit Title: Human Growth and Development

## INSTRUCTIONAL UNIT AUTHORS

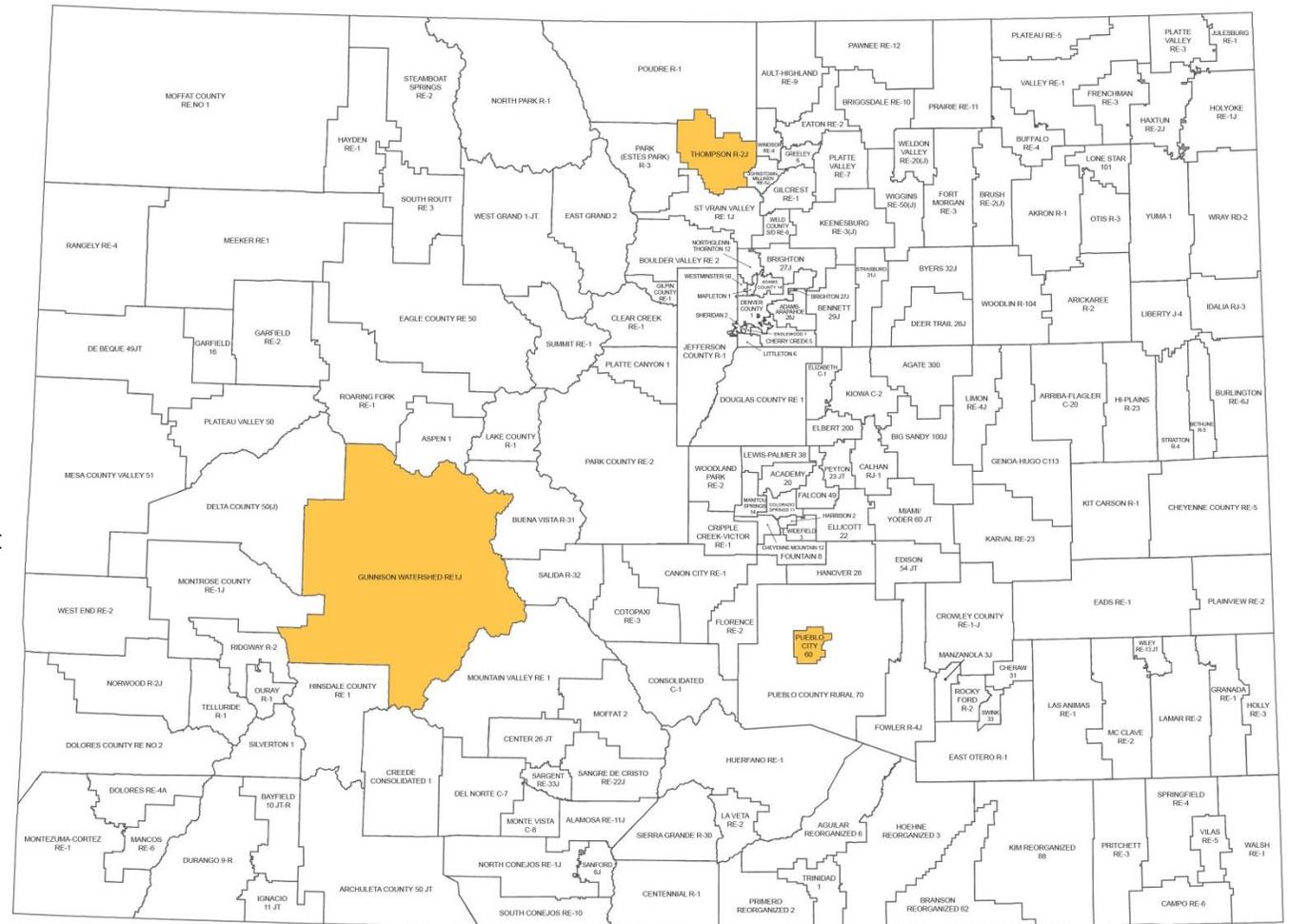
Thompson School District  
Barb Hartman  
Mark Jackson  
Eric Santi  
Kathy Schlepp  
Emily Yenny

## BASED ON A CURRICULUM OVERVIEW SAMPLE AUTHORED BY

Gunnison Watershed School District  
Lindsey Casey  
Megan Wells

Pueblo City School District  
Janelle Guadagno  
Melisa Cellan

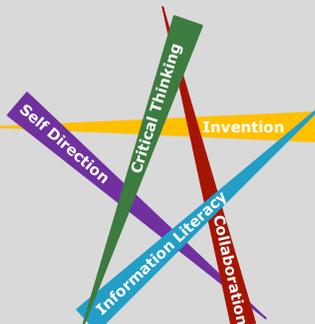
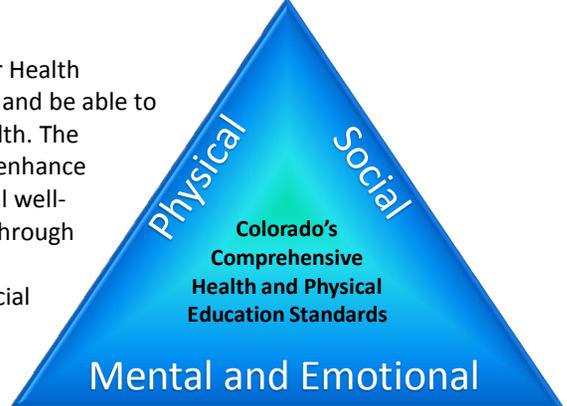
Rocky Mountain Health  
Jamie Hurley



Colorado's District Sample Curriculum Project

*This unit was authored by a team of Colorado educators. The template provided one example of unit design that enabled teacher-authors to organize possible learning experiences, resources, differentiation, and assessments. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students.*

**Colorado Teacher-Authored Sample Instructional Unit**

Content Area	Comprehensive Health	Grade Level	5 <sup>th</sup> Grade
Course Name/Course Code			
Standard	Grade Level Expectations (GLE)	GLE Code	
2. Physical and Personal Wellness	1. Demonstrate the ability to engage in healthy eating behaviors	CH09-GR.5-S.2-GLE.1	
	2. Explain the structure, function, and major parts of the human reproductive system	CH09-GR.5-S.2-GLE.2	
	3. Describe the physical, social, and emotional changes occurring at puberty	CH09-GR.5-S.2-GLE.3	
	4. Demonstrate interpersonal communication skills needed to discuss personal health problems to establish and maintain personal health and wellness	CH09-GR.5-S.2-GLE.4	
	5. Comprehend concepts, and identify strategies to prevent the transmission of disease	CH09-GR.5-S.2-GLE.5	
3. Emotional and Social Wellness	1. Analyze internal and external factors that influence mental and emotional health	CH09-GR.5-S.3-GLE.1	
4. Prevention and Risk Management	1. Access valid information about the effects of tobacco use and exposure to second-hand smoke, and prescription and over-the-counter drugs	CH09-GR.5-S.4-GLE.1	
	2. Demonstrate pro-social behaviors that reduce the likelihood of physical fighting, violence, and bullying	CH09-GR.5-S.4-GLE.2	
	3. Demonstrate basic first aid and safety procedures	CH09-GR.5-S.4-GLE.3	
<p align="center"><b>Colorado 21<sup>st</sup> Century Skills</b></p>  <p><b>Critical Thinking and Reasoning:</b> <i>Thinking Deeply, Thinking Differently</i></p> <p><b>Information Literacy:</b> <i>Untangling the Web</i></p> <p><b>Collaboration:</b> <i>Working Together, Learning Together</i></p> <p><b>Self-Direction:</b> <i>Own Your Learning</i></p> <p><b>Invention:</b> <i>Creating Solutions</i></p>		<p>The Colorado Academic Standards for Health describes what learners should know and be able to do as they develop proficiency in health. The utilization of knowledge and skills to enhance physical, mental, emotional and social well-being will be supported in each unit through the standard areas of Physical and Personal Wellness, Emotional and Social Wellness and Prevention and Risk Management.</p> 	
Unit Titles	Length of Unit/Contact Hours	Unit Number/Sequence	
Human Growth and Development	Teacher's Discretion	6	

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Unit Title</b>	Human Growth and Development		<b>Length of Unit</b>	Teacher's Discretion
<b>Focusing Lens(es)</b>	Functions	<b>Standards and Grade Level Expectations Addressed in this Unit</b>	CH09-GR.5-S.2-GLE.2, CH09-GR.5-S.2-GLE.3	
<b>Inquiry Questions (Engaging-Debatable):</b>	<ul style="list-style-type: none"> <li>Why is it important to know the function of the reproductive system? (CH09-GR.5-S.2-GLE.2)</li> <li>What are hormones? (CH09-GR.5-S.2-GLE.2)</li> <li>Why does puberty begin and end at different ages for different people? (CH09-GR.5-S.2-GLE.3EO.a)</li> </ul>			
<b>Unit Strands</b>	Physical and Personal Wellness			
<b>Concepts</b>	Functions, Relationships, Influence, System, Cycles, Emotions, Behavior, Practices, Reproduction/Procreation			

<b>Generalizations My students will Understand that...</b>	<b>Guiding Questions</b>	
	<b>Factual</b>	<b>Conceptual</b>
Male and female reproductive systems accomplish different tasks in human procreation. (CH09-GR.5-S.2-GLE.2-EO.a)	How does the reproductive system relate to growth and development? (CH09-GR.5-S.2-GLE.2-EO.a;IQ.1)	How has your growth and development changed over the past year? (CH09-GR.5-S.2-GLE.2-EO.a;IQ.1)
The possibility for conception depends on the maturity of the female reproductive system indicated by the onset of the menstrual cycle. (CH09-GR.5-S.2-GLE.2-EO.b)	What does conception mean?	Does physical maturity correlate with emotional maturity?
Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors. (CH09-GR.5-S.2-GLE.3-EO.d)	What are some changes that happen to your body during puberty?	Why are some aspects of puberty "embarrassing"? (CH09-GR.5-S.2-GLE.3-EO.d;IQ.1)

<b>Critical Content: My students will Know...</b>	<b>Key Skills: My students will be able to (Do)...</b>
<ul style="list-style-type: none"> <li>The anatomy of the reproductive system (CH09-GR.5-S.2-GLE.2-EO.a)</li> <li>The development of a fetus during pregnancy (CH09-GR.5-S.2-GLE.2-EO.c)</li> <li>The variances and factors of puberty (CH09-GR.5-S.2-GLE.3-EO.a)</li> <li>The health care products affect personal hygiene (CH09-GR.5-S.2-GLE.3-EO.c)</li> </ul>	<ul style="list-style-type: none"> <li>Identify the structures in the reproductive systems for males and females. (CH09-GR.5-S.2-GLE.2-EO.a)</li> <li>Explain fertilization and development of the embryo and fetus. (CH09-GR.5-S.2-GLE.2-EO.c)</li> <li>Discuss aspects of puberty (CH09-GR.5-S.2-GLE.3-EO.a,b)</li> <li>Examine effective personal health care products (CH09-GR.5-S.2-GLE.3-EO.c)</li> </ul>

**Colorado Teacher-Authored Sample Instructional Unit**

**Critical Language:** includes the Academic and Technical vocabulary, semantics, and discourse which are particular to and necessary for accessing a given discipline.  
**EXAMPLE:** A student in Language Arts can demonstrate the ability to apply and comprehend critical language through the following statement: *“Mark Twain exposes the hypocrisy of slavery through the use of satire.”*

**A student in \_\_\_\_\_ can demonstrate the ability to apply and comprehend critical language through the following statement(s):**

*I will be able to identify various aspects of puberty and understand the structures and functions of the reproductive systems.*

**Academic Vocabulary:**

Functions, Relationships, Influence, System, Cycles, Emotions, Behavior, Practices

**Technical Vocabulary:**

Reproduction, Puberty, Embryo, Fetus, Menstrual cycle, Hygiene

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Unit Description:</b>	This unit examines the structure and function of body systems and the changes that occur as we mature. Throughout the unit students will explore the physical and emotional characteristics of the maturation process, make personal connections to their individual growth and development, and establish positive coping skills. The unit culminates in a performance assessment that asks students to help their peers recognize the natural changes that occur to human bodies at developmental stages.
<b>Considerations:</b>	The male and female growth patterns and changes in the body will be physical transformations that most if not all 5 <sup>th</sup> graders will begin to see happening on a personal level This unit addresses the Colorado Academic Standards designed to help students recognize and understand these changes as natural and universal. The focus, then, is on both the physical and emotional aspects associated with human development that occurs during puberty and includes discussions of the functions of the male and female reproductive structures. <b>*** It is understood that some Colorado school districts teach this content in single sex classroom environments. Therefore, some of the learning experiences are gender specific (e.g., #s 8 &amp; 9) and may or may not be appropriate for all classrooms. In addition, the authors recognize that some schools/districts require signed parental permission forms before students can participate in discussions related to the content of this unit ***</b>
<b>Unit Generalizations</b>	
<b>Key Generalization:</b>	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors
<b>Supporting Generalizations:</b>	Male and female reproductive systems accomplish different tasks in human procreation
	The possibility for conception depends on the maturity of the female reproductive system indicated by the onset of the menstrual cycle

<b>Performance Assessment:</b> <i>The capstone/summative assessment for this unit.</i>	
<b>Claims:</b> (Key generalization(s) to be mastered and demonstrated through the capstone assessment.)	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors.
<b>Stimulus Material:</b> (Engaging scenario that includes role, audience, goal/outcome and explicitly connects the key generalization)	As a guest student-health magazine columnist, you have been asked to create a “guide” for your peers in the form of a friendly advice letter. The “guide” is intended to help your peers better understand some of the physical (and emotional) changes associated with maturation and puberty. Your letter should address the following questions: <ul style="list-style-type: none"> <li>• What are some changes that happen to your body during puberty?</li> <li>• Why does puberty begin and end at different ages for different people?</li> <li>• Why are some aspects of puberty “embarrassing”?</li> </ul>
<b>Product/Evidence:</b> (Expected product from students)	Students’ letters will explain physical and emotional changes they experience as their body and behavior transition through puberty and suggest possible positive ways to manage those transformations. The letters may include information that addresses appearance, height, hair growth, changes in voice, mood changes, menstruation, acne, body odor, etc. <a href="http://www.eduplace.com/activity/letter.html">http://www.eduplace.com/activity/letter.html</a> (Letter writing template and activities)
<b>Differentiation:</b> (Multiple modes for student expression)	Students may: <ul style="list-style-type: none"> <li>• Use a prepared template containing parts of a letter <a href="http://prek-8.com/english/writing/index.php">http://prek-8.com/english/writing/index.php</a> (Friendly letter writing template)</li> <li>• Verbally articulate thoughts to the teacher in lieu of a written letter (audio recording)</li> </ul>

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Texts for independent reading or for class read aloud to support the content</b>	
<b>Informational/Non-Fiction</b>	<b>Fiction</b>
<p><i>Where Did I Come From</i> by Peter Mayle (Human growth &amp; development) (Lexile range 500-565)</p> <p><i>It's Perfectly Normal: Changing Bodies, Growing Up, Sex, and Sexual Health</i> (The Family Library) by Robie H. Harris (Human growth &amp; development) (Lexile range 600 – 700)</p> <p><i>Into Adolescence: A Time of Change</i> by Catherine S. Gollhofer (Teaching human sexuality for grades 5-8) (Lexile range 565 – 800)</p> <p><i>“What’s Happening To My Body?”</i> by Lynda Madaras and Area Madaras (Book for boys) (Lexile range 600 – 700)</p> <p><i>“What’s Happening To My Body?”</i> by Lynda Madaras and Area Madaras (Book for girls) (Lexile range 600 – 700)</p> <p><i>Into Adolescence: A Time of Change:</i> by Catherine S. Gollhofer (Teaching human sexuality for grades 5-8) (Lexile range 565 – 800)</p> <p><i>Sex, Puberty and All That Stuff</i> by Jacqui Bailey (A guide to growing up) (Lexile Range 700 – 800)</p> <p><i>AMA’s Boy’s Guide To Becoming a Teen</i> by American Medical Association (Lexile range 600 – 800)</p> <p><i>AMA’s Girl’s Guide To Becoming a Teen</i> by American Medical Association (Lexile range 600 – 800)</p> <p><i>My Body, Myself for Boys</i> by Lynda Madaras and Area Madaras (Fact filled journal and activity book) (Lexile range 565 – 700)</p>	N/A

<b>Ongoing Discipline-Specific Learning Experiences</b>				
1.	Description:	Think/work like a health scientist: Have awareness of personal growth patterns	Teacher Resources:	<a href="http://www.healthychildren.org">www.healthychildren.org</a> (Article – Ages & Stages/Puberty/Physical Development of School Age Children) <i>“What’s Happening To My Body?”</i> by Lynda Madaras and Area Madaras (Book for boys) <i>“What’s Happening To My Body?”</i> by Lynda Madaras and Area Madaras (Book for girls)
	Skills:	Identify the stages of personal growth and development	Assessment:	Students will construct journal entries throughout the unit describing growth and development changes they have personally noticed as they have matured
2.	Description:	Think/work like a health scientist: Identify one’s own physical and emotional characteristics of and changes during puberty	Teacher Resources:	<a href="http://www.kidshealth.org">www.kidshealth.org</a> (Article-For Kids-Puberty & Growing Up-Boy Stuff) <a href="http://www.kidshealth.org">www.kidshealth.org</a> (Article-For Kids-Puberty & Growing Up-All About Menstruation) <a href="http://www.healthychildren.org">www.healthychildren.org</a> (Article – Ages & Stages/Puberty/Physical Development of School Age Children) <i>AMA’s Boy’s Guide To Becoming a Teen</i> by American Medical Association <i>AMA’s Girl’s Guide To Becoming a Teen</i> by American Medical Association

**Colorado Teacher-Authored Sample Instructional Unit**

	<b>Skills:</b>	Describe your personal feelings about puberty and positive ways to cope with these emotions	<b>Assessment:</b>	Students will construct journal entries about positive ways they have found to cope emotions as they experience changes to their bodies
3.	<b>Description:</b>	Think/work like a health scientist: Understanding of the structures and functions of the male/female reproductive systems	<b>Teacher Resources:</b>	<a href="http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm">http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm</a> (Video of the female reproductive system structures) <a href="http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm">http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm</a> (Video of the male reproductive system structures) "What's Happening To My Body?" by Lynda Madaras and Area Madaras (Book for boys) "What's Happening To My Body?" by Lynda Madaras and Area Madaras (Book for girls)
	<b>Skills:</b>	Make connections between the reproductive system and puberty	<b>Assessment:</b>	Students will use graphic organizers to identify structures in the male & female reproductive system and describe the function of each. <a href="http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf">http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf</a> (T-chart graphic organizer)

**Prior Knowledge and Experiences**

These ongoing learning experiences build upon a presumed (student) working knowledge of the concepts such as functions, relationships, influence, systems, cycles, emotions and behavior. This unit will develop these concepts so students have a working knowledge of the changes that occur during puberty and how the physical and emotional development will impact their overall health and wellness.

**Learning Experiences # 1 – 10**  
**Instructional Timeframe: Teacher Determined**

<b>Learning Experience # 1</b>	
The teacher may introduce the topic of human maturation and reproduction so students can discuss why this topic can be embarrassing, funny, intimidating, etc.	
<b>Generalization Connection(s):</b>	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors
<b>Teacher Resources:</b>	<a href="http://www.toronto.ca/health/healthyschools/pdf/sexual_health/sh_g5_6lesson_plans.pdf">http://www.toronto.ca/health/healthyschools/pdf/sexual_health/sh_g5_6lesson_plans.pdf</a> (Lesson plans) <a href="http://rwd1.needham.k12.ma.us/wellness/Grade%205%20Puberty">http://rwd1.needham.k12.ma.us/wellness/Grade%205%20Puberty</a> (Lesson on puberty) <i>Into Adolescence: A Time of Change:</i> by Catherine S. Golliher (Teaching human sexuality for grades 5-8) <i>AMA's Boy's Guide To Becoming a Teen</i> by American Medical Association (Changes in the male body during puberty) <i>AMA's Girl's Guide To Becoming a Teen</i> by American Medical Association (Changes in the female body during puberty)
<b>Assessment:</b>	Students will begin their journals (See Ongoing Learning Experiences by responding to the discussion. Teacher may wish to provide a prompt (e.g., What is your first reaction to the word puberty?). This response could also be constructed as an anonymous letter to the teacher.

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	The teacher may provide a “question box” for students to submit anonymous questions to ask about changes that may occur during puberty	Students may write questions and submit them anonymously to the “question box”
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	N/A	Students may augment their journal entries by describing how an adolescent may deal with an embarrassing moment/aspect of physical changes
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>• The variances and factors of puberty</li> <li>• Emotional changes</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>• Explore aspects of puberty</li> </ul>	
<b>Critical Language:</b>	Emotions, changes, puberty, growth patterns, behaviors	

<b>Learning Experience # 2</b>		
The teacher may introduce the structure and function of the male reproductive system, including changes that occur during puberty, so students can begin to analyze the components of this body system.		
<b>Generalization Connection(s):</b>	Male and female reproductive systems accomplish different tasks in human procreation	
<b>Teacher Resources:</b>	<i>“What’s Happening To My Body?”</i> by Lynda Madaras and Area Madaras (Book for boys) <i>My Body, My Self for Boys</i> by Lynda Madaras <i>The Body Book for Boys</i> by Rebecca Paley <i>Into Adolescence: A Time of Change</i> by Catherine S. Gollhofer (Teaching human sexuality for grades 5-8) <a href="http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm">http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm</a> (Video of the male reproductive system structures)	
<b>Assessment:</b>	Students will use a graphic organizer to identify the components and functions of the male reproductive system. <a href="http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf">http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf</a> (Cluster web)	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	The teacher may provide a partially completed graphic organizer <a href="http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf">http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf</a> (Cluster web)	Students may use a partially completed graphic organizer to describe the functions of three structures of the male reproductive system
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	N/A	N/A

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>The anatomy of the reproductive system</li> </ul>
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>Identify the structures in the reproductive systems for males and females</li> </ul>
<b>Critical Language:</b>	Penis, testicles (testes), epididymis, scrotum, urethra, prostate gland, semen, reproductive system

**Learning Experience # 3**

The teacher may introduce the structure and function of the female reproductive system including changes that occur during puberty so students can begin to analyze the components of this body system.

<b>Generalization Connection(s):</b>	Male and female reproductive systems accomplish different tasks in human procreation	
<b>Teacher Resources:</b>	<i>What's Happening To My Body?</i> by Lynda Madaras and Area Madaras (Book for girls) <i>The Care and Keeping of You: The body book for younger girls</i> by Valorie Schaefer <i>What's Happening to Me?</i> by Susan Meredith <i>Into Adolescence: A Time of Change</i> by Catherine S. Golliher (Teaching human sexuality for grades 5-8) <a href="http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm">http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm</a> (Video of the female reproductive system structures)	
<b>Assessment:</b>	Students will use a graphic organizer to identify the components and functions of the female reproductive system. <a href="http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf">http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf</a> (Cluster web)	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	The teacher may provide a partially completed graphic organizer <a href="http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf">http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf</a> (Cluster web)	Students may use a partially completed graphic organizer to describe the functions of three structures of the female reproductive system
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	N/A	N/A
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>The anatomy of the reproductive system</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>Identify the structures in the reproductive systems for males and females</li> </ul>	
<b>Critical Language:</b>	Vagina, cervix, uterus, fallopian tube, ovaries, menstruation, reproductive system	

**Learning Experience # 4**

The teacher may bring in resources (videos, texts, etc.) explaining the function of the sperm and the egg, so students can begin to comprehend the process of fertilization.

<b>Generalization Connection(s):</b>	Male and female reproductive systems accomplish different tasks in human procreation
--------------------------------------	--

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Teacher Resources:</b>	<a href="http://www.youtube.com/watch?v= 5OvgQW6FG4">http://www.youtube.com/watch?v= 5OvgQW6FG4</a> (Medical video of human fertilization) <a href="http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm">http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm</a> (Video of the female reproductive system structures) <a href="http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm">http://www.internet4classrooms.com/high_school/human_anatomy_physiology_reproduction_growth_development.htm</a> (Video of the male reproductive system structures) <a href="http://www.coreknowledge.org/mimik/mimik_uploads/lesson_plans/525/Teaching%20A%20Touchy%20Topic%20%20Life%20Cycles%20and%20Reproduction.pdf">http://www.coreknowledge.org/mimik/mimik_uploads/lesson_plans/525/Teaching%20A%20Touchy%20Topic%20%20Life%20Cycles%20and%20Reproduction.pdf</a> (Teaching a Touchy Topic: Life Cycles & Reproduction to 5 <sup>th</sup> Graders) <i>Where Willy Went</i> by Nicholas Allan (A story about the human reproduction process for elementary students) <a href="http://www.youtube.com/watch?v= 5OvgQW6FG4">http://www.youtube.com/watch?v= 5OvgQW6FG4</a> (Medical video of human fertilization)	
<b>Assessment:</b>	Students will use a graphic organizer to document the fertilization process; describing the path the sperm takes through the structures of the female system. <a href="http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/FlowMap.pdf">http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/FlowMap.pdf</a> (Thinking map graphic organizer)	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	The teacher may provide a list of the female reproductive structures for the graphic organizer <a href="http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/FlowMap.pdf">http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/FlowMap.pdf</a> (Thinking map graphic organizer)	Students may describe individually to the teacher the process of fertilization
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	N/A	N/A
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>The anatomy of the reproductive system</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>Identify the structures in the reproductive systems for males and females</li> <li>Explain fertilization</li> </ul>	
<b>Critical Language:</b>	Egg, sperm, ejaculation, fertilization, reproductive system	

<b>Learning Experience # 5</b>	
The teacher may use texts/images that illustrate the stages of fetal growth so students can make connections to their own human growth and development.	
<b>Generalization Connection(s):</b>	The possibility for conception depends on the maturity of the female reproductive system indicated by the onset of the menstrual cycle
<b>Teacher Resources:</b>	<a href="http://www.neok12.com/Cell-Division.htm">http://www.neok12.com/Cell-Division.htm</a> (Stages of fetal growth) <a href="http://app.discoveryeducation.com/search?Ntt=fetus+development">http://app.discoveryeducation.com/search?Ntt=fetus+development</a> (Fetal development) <a href="http://www.neok12.com/Cell-Division.htm">http://www.neok12.com/Cell-Division.htm</a> (Stages of fetal growth) <a href="http://app.discoveryeducation.com/search?Ntt=fetus+development">http://app.discoveryeducation.com/search?Ntt=fetus+development</a> (Fetal development)

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Assessment:</b>	Students will create a life cycle diagram (e.g., zygote, embryo, fetus, baby, etc.) <a href="https://www.teachervision.com/tv/printables/TCR/0743932080_037.pdf">https://www.teachervision.com/tv/printables/TCR/0743932080_037.pdf</a> (Basic cycle graphic organizer)	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	<a href="https://www.teachervision.com/tv/printables/TCR/0743932080_037.pdf">https://www.teachervision.com/tv/printables/TCR/0743932080_037.pdf</a> (Basic cycle graphic organizer)	Students may work with a peer to create the life cycle diagram
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	<a href="https://www.teachervision.com/tv/printables/TCR/0743932080_037.pdf">https://www.teachervision.com/tv/printables/TCR/0743932080_037.pdf</a> (Basic cycle graphic organizer)	Students may create an additional life cycle diagram for another organism and compare it to the life cycle they created for human development
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>The development of a fetus during pregnancy</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>Explain fertilization and development of the embryo and fetus</li> </ul>	
<b>Critical Language:</b>	Pregnancy, trimester, fetus, zygote, embryo, infant, toddler, pre-adolescence, adolescence, adult	

<b>Learning Experience # 6</b>		
The teacher may use texts/images that illustrate the stages of human growth and development so students can anticipate future changes in their personal growth and development.		
<b>Generalization Connection(s):</b>	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors	
<b>Teacher Resources:</b>	<a href="http://www.healthychildren.org">www.healthychildren.org</a> (Article – Ages & Stages/Puberty/Physical Development of School Age Children) <a href="http://www.eduplace.com/graphicorganizer/pdf/timeline.pdf">http://www.eduplace.com/graphicorganizer/pdf/timeline.pdf</a> (Timeline chart) <a href="http://www.Presentation-Process.com/TimelinePk">http://www.Presentation-Process.com/TimelinePk</a> (Power point timelines) <a href="http://www.datesandevents.org/creating-a-timeline.htm">http://www.datesandevents.org/creating-a-timeline.htm</a> (Creating timelines) <a href="http://www.kidshealth.org">www.kidshealth.org</a> (Stages of human growth and development) <a href="http://www.timetoast.com/">http://www.timetoast.com/</a> (Free, online timeline software)	
<b>Assessment:</b>	Students will create a personal timeline that visually and textually documents physical changes they have experienced birth to present (e.g., height, weight, hair/eye color changes, etc.) <a href="http://www.eduplace.com/graphicorganizer/pdf/timeline.pdf">http://www.eduplace.com/graphicorganizer/pdf/timeline.pdf</a> (Timeline chart). Teachers may also wish to ask students to predict another change (e.g., height at maturity).	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	N/A	Students may use images and drawings to create a timeline from birth to present age and dictate events to teacher/peer

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	<a href="http://www.timetoast.com/">http://www.timetoast.com/</a> (Free, online timeline software)	Students may interview family members to create a timeline of their physical changes
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>The variances and factors of puberty</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>Discuss aspects of puberty</li> </ul>	
<b>Critical Language:</b>	Infant, toddler, pre-adolescence, adolescence, adult, emotions, changes, puberty, growth patterns, behaviors, timeline	

**Learning Experience # 7**

The teacher may use texts/images to introduce hormone production so students can describe the function of hormones and their effects on the body.

<b>Generalization Connection(s):</b>	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors	
<b>Teacher Resources:</b>	<a href="http://classroom.kidshealth.org/6to8/personal/growing/puberty.pdf">http://classroom.kidshealth.org/6to8/personal/growing/puberty.pdf</a> (Hormone Olympics) <a href="http://www.livestrong.com/article/168411-the-effects-of-puberty">http://www.livestrong.com/article/168411-the-effects-of-puberty</a> ( Changes during puberty for males and females) <a href="http://www.healthychildren.org">www.healthychildren.org</a> (American Academy of Pediatrics)	
<b>Assessment:</b>	Students will complete a thinking map to compare and contrast the three major hormones and the role of hormones in causing the changes of puberty. <a href="http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/DoubleBubbleMap.pdf">http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/DoubleBubbleMap.pdf</a> (Compare and contrast thinking map)	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	The teacher may provide a partially completed thinking map <a href="http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/DoubleBubbleMap.pdf">http://www.eisd.net/cms/lib04/TX01001208/Centricity/Domain/599/DoubleBubbleMap.pdf</a> (Compare and contrast thinking map)  Students may work with partners to complete the thinking map	Students may individually (or with partners) complete the partially filled-in map
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	<a href="http://teamcfa.org/stories/classroom-activity-hormone-olympics">http://teamcfa.org/stories/classroom-activity-hormone-olympics</a> (Hormone Olympics activity)	Students may utilize the Hormone Olympics activity to evaluate the effects of hormones on the body to create a presentation for the class
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>The variances and factors of puberty</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>Discuss aspects of puberty</li> </ul>	
<b>Critical Language:</b>	Hormones, pituitary gland, testosterone, estrogen, prostaglandin, variance, influence, relationships, emotions, changes, puberty, growth patterns, behaviors	

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Learning Experience # 8</b>		
The teacher may use various texts focusing on physical changes in the male body that occur during puberty so students can associate these changes with personal development (e.g., growing hair, acne, body odor).		
<b>Generalization Connection(s):</b>	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors	
<b>Teacher Resources:</b>	<a href="http://www.healthychildren.org">www.healthychildren.org</a> ( Article – Ages & Stages/Puberty/Physical Development of School Age Children) <a href="http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf">http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf</a> (Puberty Kit) <i>Sex, Puberty and All That Stuff</i> by Jacqui Bailey (A guide to growing up) <i>AMA’s Boy’s Guide To Becoming a Teen</i> by American Medical Association <i>My Body, Myself for Boys</i> by Lynda Madaras <i>The Body Book for Boys</i> by Rebecca Paley <i>Into Adolescence: A Time of Change</i> by Catherine S. Golliver (Teaching human sexuality for grades 5-8)	
<b>Assessment:</b>	Students will choose one advertising campaign specifically aimed at adolescent boys to critique its claims, images, etc. <a href="http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf">http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf</a> (Modifiable list of questions to pose to kids as they analyze their advertisement) <a href="http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf">http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf</a> (T-chart to help students document their responses)	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	The teacher may provide an advertisement for a health care product for the students to critique and determine purpose The teachers may provide advertisements that utilize the home language of students <a href="http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf">http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf</a> (Modifiable list of questions to pose to kids as they analyze their advertisement) <a href="http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf">http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf</a> (T-chart to help students document their responses)	Students may create their critique with a fellow student or in a small group  Students may orally dictate their responses to the critique questions to the teacher or fellow students
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	<a href="http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf">http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf</a> (Puberty Kit lesson plan)	Students may draft a proposal for the creation of personal puberty kits to support their own adolescent needs (e.g., deodorant, soap, hair care products, etc.)
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>• The variances and factors of puberty</li> <li>• The health care products affect personal hygiene</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>• Discuss aspects of puberty</li> <li>• Examine effective personal health care products</li> </ul>	
<b>Critical Language:</b>	Hygiene, products, emotions, changes, puberty, growth patterns, behaviors, acne, body order, healthy body image, feelings, thoughts	

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Learning Experience # 9</b>		
The teacher may use various texts focusing on physical changes in the female body that occur during puberty so students can associate these changes with personal development (e.g., growing hair, acne, body odor).		
<b>Generalization Connection(s):</b>	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors	
<b>Teacher Resources:</b>	<p><i>AMA's Girl's Guide To Becoming a Teen</i> by American Medical Association  <a href="http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf">http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf</a> (Puberty Kit)  <a href="http://www.healthychildren.org">www.healthychildren.org</a> ( Article – Ages &amp; Stages/Puberty/Physical Development of School Age Children)  <i>Sex, Puberty and All That Stuff</i> by Jacqui Bailey (A guide to growing up)  <i>What's Happening To My Body?</i> by Lynda Madaras, Area Madaras (Book for girls)  <i>The Care and Keeping of You: The body book for younger girls</i> by Valorie Schaefer  <i>What's Happening to Me?</i> by Susan Meredith  <i>Into Adolescence: A Time of Change</i> by Catherine S. Golliher (Teaching human sexuality for grades 5-8)</p>	
<b>Assessment:</b>	<p>Students will choose one advertising campaign specifically aimed at adolescent girls to critique its claims, images, etc.  <a href="http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf">http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf</a> (Modifiable list of questions to pose to kids as they analyze their advertisement)  <a href="http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf">http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf</a> (T-chart to help students document their responses)</p>	
<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	<p>The teacher may provide an advertisement for a health care product for the students to critique and determine purpose</p> <p>The teachers may provide advertisements that utilize the home language of students  <a href="http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf">http://www.tennessee.gov/tsla/educationoutreach/worksheet_ad.pdf</a> (Modifiable list of questions to pose to kids as they analyze their advertisement.  <a href="http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf">http://www.eduplace.com/graphicorganizer/pdf/tchart_eng.pdf</a> (T-chart to help students document responses)</p>	<p>Students may create their critique with a fellow student or in a small group</p> <p>Students may orally dictate their responses to the critique questions to the teacher or fellow students</p>
<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	<p><a href="http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf">http://teachers.teachingsexualhealth.ca/wp-content/uploads/Elementary-Puberty-Quick-Lesson.pdf</a> (Puberty Kit lesson plan)</p>	Students may draft a proposal for the creation of personal puberty kits to support their own adolescent needs (e.g., deodorant, soap, hair care products, etc.)
<b>Critical Content:</b>	<ul style="list-style-type: none"> <li>• The variances and factors of puberty</li> <li>• The health care products affect personal hygiene</li> </ul>	
<b>Key Skills:</b>	<ul style="list-style-type: none"> <li>• Discuss aspects of puberty</li> <li>• Examine effective personal health care products</li> </ul>	

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Critical Language:</b>	Hygiene, products, emotions, changes, puberty, growth patterns, behaviors, acne, body order, healthy body image, feelings, thoughts
---------------------------	---

**Learning Experience # 10**

The teacher may use videos and scenarios to explore emotional experiences/changes that occur during puberty so students can begin to consider the emotional aspects associated with times of physical change.

<b>Generalization Connection(s):</b>	Changes during puberty can often dramatically alter personal thoughts, emotions, growth patterns and behaviors
--------------------------------------	--

<b>Teacher Resources:</b>	<p><a href="http://www.eschooltoday.com/boys-and-puberty/other-changes-in-adolescent-boys.html">http://www.eschooltoday.com/boys-and-puberty/other-changes-in-adolescent-boys.html</a> (Emotional changes for boys during puberty)</p> <p><a href="http://www.eschooltoday.com/girls-and-puberty/puberty-other-changes">http://www.eschooltoday.com/girls-and-puberty/puberty-other-changes</a> (Emotional changes for girls during puberty)</p> <p><a href="http://www.eduplace.com/activity/letter.html">http://www.eduplace.com/activity/letter.html</a> (Letter writing activities)</p> <p><a href="http://prek-8.com/english/writing/index.php">http://prek-8.com/english/writing/index.php</a> (Friendly letter writing template)</p> <p><i>AMA’s Girl’s Guide To Becoming a Teen</i> by American Medical Association</p> <p><i>Sex, Puberty and All That Stuff</i> by Jacqui Bailey (A guide to growing up)</p> <p><i>What’s Happening To My Body?</i> by Lynda Madaras, Area Madaras (Book for girls)</p> <p><i>The Care and Keeping of You: The body book for younger girls</i> by Valorie Schaefer</p> <p><i>What’s Happening to Me?</i> by Susan Meredith</p> <p><i>Into Adolescence: A Time of Change</i> by Catherine S. Golliher (Teaching human sexuality for grades 5-8)</p> <p><i>AMA’s Boy’s Guide To Becoming a Teen</i> by American Medical Association</p> <p><i>My Body, Myself for Boys</i> by Lynda Madaras</p> <p><i>The Body Book for Boys</i> by Rebecca Paley</p>
---------------------------	---

<b>Assessment:</b>	<p>Students will write an advice letter to themselves to discuss the positive ways to cope with the emotions that can accompany the physical changes that happen during puberty.</p> <p><a href="http://prek-8.com/english/writing/index.php">http://prek-8.com/english/writing/index.php</a> (Friendly letter writing template)</p>
--------------------	--

<b>Differentiation:</b> (Multiple means for students to access content and multiple modes for student to express understanding.)	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	The teacher may provide a list of feeling words (e.g., fear, frustration, sadness, anxiety, anger, embarrassment etc.)	Students may dictate their letter to themselves to the teacher and/or fellow students

<b>Extensions for depth and complexity:</b>	<b>Access</b> (Resources and/or Process)	<b>Expression</b> (Products and/or Performance)
	N/A	Students may write an advice letter for students in a younger grade to discuss the positive ways to cope with the emotional upheavals and physical changes that happen during puberty <a href="http://prek-8.com/english/writing/index.php">http://prek-8.com/english/writing/index.php</a> (Friendly letter writing template)

**Colorado Teacher-Authored Sample Instructional Unit**

<b>Critical Content:</b>	<ul style="list-style-type: none"><li>• The variance and factors of puberty</li></ul>
<b>Key Skills:</b>	<ul style="list-style-type: none"><li>• Discuss aspects of puberty</li></ul>
<b>Critical Language:</b>	Puberty, emotions, feelings, thoughts, growth patterns, behaviors, self-confidence, healthy body image, healthy lifestyle