

Sub-Task #2 How the Changes at Puberty Relate to the Reproductive System-Male

Materials

See list of Appendices

Description

Students will discuss the male changes at puberty and how they relate to the reproductive system through teacher led discussion, and labelling of male reproductive worksheets.

Expectation Code	Learning Expectation
6p2	Identify the major parts of the reproductive system and their functions and relate them to puberty
6p8	Relate the changes at puberty to the reproductive organs and their functions

Assessment Opportunities – Suggestions for Assessing Expectations

Diagnostic Assessment: Personal/Communication – Classroom discussion can be used to discuss/assess students’ attitudes/understanding of what was taught or as a starting point to determine what students still need to know.

Formative Assessment: Paper and Pencil Task - Students write an explanation as to how the male reproductive system and its function relates to the changes at puberty (see Teaching Learning Strategy #4 and Appendix X for a peer assessment tool).

Teaching/Learning Strategies

1. Introduction: Looking At Myself (see Appendix D)

- Students will refer to “Looking at Myself” worksheet (completed as homework from Sub-Task #1).
- Initiate a discussion and record on the board/chart paper a list of:
 - what students look forward to about growing up;
 - what students are concerned about with regards to growing up.
- The teacher should emphasize that changes at puberty are inevitable. The extent and timing of these changes vary. There is a wide range of “normal.”

2. Male Reproductive System

- The teacher will distribute the Male Reproductive System sheet (see Appendix E and Appendix F). Have students label these cooperatively with the teacher. Teacher reviews and discusses the function of each part. (see Appendix G).

3. How A Male Becomes Reproductive

- Using the overhead “Hormones Cause Changes In The Male,” explain how the pituitary gland begins producing FSH. (See teacher explanation in Appendix H). Using the information in Notes to Teacher “Male Reproductive System,” explain to students how the changes at puberty relate to the reproductive organs and their functions.

4. Male Reproductive System

- At the end of the sub-task, distribute two sheets of paper to each student. On one piece of paper have them write a question about the male reproductive system and on the other have them write one statement about the male reproductive system and its function relating to the changes at puberty. The teacher should collect the question papers from students. Use these questions as a starter for discussion with the students in Sub-Task #3. The teacher may script for those students who may not be able to write effectively. The students switch the statement paper with a partner and assess each other’s understanding of how to relate the changes at puberty to the reproductive organs and their functions (see Appendix X).

Notes to Teacher

- During the discussion of the “Looking at Myself” worksheet (see Appendix D), introduce the idea that the changes in puberty include both emotional/social, as well as physical changes during puberty.

Male Reproductive Organs:

External	Changes at Puberty	Function
Penis	<ul style="list-style-type: none">• tube-like organ of spongy tissue (no bone)• grows (average size between 2-4"; size not important; erect size average 6-7")• number of erections increase	<ul style="list-style-type: none">• reproduction function• organ through which urine and semen leave the body
Scrotum	<ul style="list-style-type: none">• grows to adult size• darkens in colour• grows hair	<ul style="list-style-type: none">• helps maintain sperm at correct temperature (lower than body temperature) because it is outside the body• protective covering/sac for testes
Testicles	<ul style="list-style-type: none">• grow to adult size (walnut size)• one may be smaller and/or hang lower than the other• begins to produce the hormone testosterone	<ul style="list-style-type: none">• produces sperm continuously• produces the hormone testosterone

Notes to Teacher *continued*

Internal	Changes at Puberty	Function
Sperm	<ul style="list-style-type: none"> starts to be produced in testicles at puberty and continues throughout lifetime 	<ul style="list-style-type: none"> if united with egg, makes a baby
Urethra	<ul style="list-style-type: none"> tube in penis from bladder 	<ul style="list-style-type: none"> tube in penis that carries urine and semen out of the body when semen is released, valve blocks off branch to bladder and vice versa
Prostate gland	<ul style="list-style-type: none"> produces a fluid at puberty that mixes with sperm 	<ul style="list-style-type: none"> makes seminal fluid
Seminal vesicles	<ul style="list-style-type: none"> two glands begin to produce fluid at puberty 	<ul style="list-style-type: none"> makes seminal fluid
Vas deferens	<ul style="list-style-type: none"> tube from testicles that joins with seminal vesicles 	<ul style="list-style-type: none"> produces seminal fluid part of the path that carries sperm

Care of male reproductive organs

- daily cleansing with soap and water (bath or shower)
- for an uncircumcised* male, foreskin must be pulled back in order to be cleansed properly
- protective gear (jock strap) is necessary during contact sports because most of the male reproductive organs are located outside the body

*circumcision- the surgical removal of foreskin at the head of the penis: usually for religious or cultural reasons; rarely for medical reasons. Does not affect function.

Ontario Catholic School Graduate Expectations

CGE(6) The graduate is expected to be a caring family member who attends to family, school, parish, and the wider community

CGE6(b) Recognizes human intimacy and sexuality as God-given gifts, to be used as the Creator intended

Fully Alive

In teaching the material on puberty and reproduction Theme 3, **Created Sexual: Male and Female** MUST be the resource used with the students. In using **Fully Alive** as the teaching resource, the students are also deepening their understanding of human sexuality as a gift from God which empowers the human person to be loving and life-giving co-creators with God.

Theme 3, **Created Sexual: Male and Female** , Topic 2, Love and Life

- explore the meaning of sexuality as loving and life-giving
- deepen their understanding of human fertility

TM pp. 53-56, SB pp. 58-64

Theme 3, **Created Sexual: Male And Female** , Topic 4, Growing and Changing

- explore some of the ways in which heredity and environment influence development
- deepen their understanding of the changes of puberty

TM pp. 63-69, SB pp. 74-84

Appendices

Unit 4 Appendix D	Looking at Myself - Question Sheet
Unit 4 Appendix E	Male Reproductive System - Worksheet
Unit 4 Appendix F	Male Reproductive System - Answer Sheet
Unit 4 Appendix G	The Male Anatomy/Reproductive System - Definitions
Unit 4 Appendix H	Hormones Cause Changes in the Male - Diagram