

Anatomy and Physiology

Supplementary Resources

- ▶ Handout 1: Male Reproductive System
- ▶ Handout 2: Male Anatomy Diagram
- ▶ Handout 3: Female Reproductive System
- ▶ Handout 4: Female Anatomy Diagram
- ▶ Handout 5: Reproductive Anatomy Word Search
- ▶ Handout 6: Males / Females / Both Checklist
- ▶ Cards 1: Male Anatomy Definitions
- ▶ Cards 2: Male Anatomy Terms
- ▶ Cards 3: Female Anatomy Definitions
- ▶ Cards 4: Female Anatomy Terms
- ▶ Overhead 1: Pregnancy
- ▶ Answer Key 1: Male Anatomy Diagram
- ▶ Answer Key 2: Female Anatomy Diagram
- ▶ Answer Key 3: Reproductive Anatomy Word Search



Ensure that ground rules are established before starting your classes. For classes that have already established ground rules, quickly reviewing them can promote a successful lesson.



Experience

Students will become familiar with appropriate terms for reproductive anatomy and become more comfortable using such terminology within the classroom setting.

Choose one or two of the following options that best suit the level of your students.

Option 1. Establishing Landmarks

1. Get your students to feel for their hipbones.
2. Then get them to wiggle their bottoms on their seats. Let the students know that we are going to be talking body parts mainly from the hipbones to the sitting bones.
3. Ask your students
 - a. "Are you a female or a male?"
 - b. How can you tell the difference between a male and a female?
4. Explain to your students that it is normal to be embarrassed about this sometimes, but we are in a safe place to discuss this.

Option 2. Three's Company in the Body

1. Ask your students if they can name 10 parts of their body that are common to both males and females that are spelled with only 3 letters.
2. No slang (eg. Bum) or shortened words (eg. Lid is the short form for eyelid) are allowed.
3. A clue is that 5 parts are above the neck and 5 are below.

Answer Key			
≅	Lip	≅	Arm
≅	Gum	≅	Rib
≅	Eye	≅	Leg
≅	Ear	≅	Toe
≅	Jaw	≅	Hip

Option 3. Language of Sex

1. Ask students to think of the real words for body parts that are not related to our reproductive systems (*elbow, etc.*). Ask them to raise their hands and share these words. Write each word on the board under the heading "Other Body Parts."
2. Ask students to think of the real words for body parts related to our reproductive systems. Acknowledge that there are slang words, but for this activity we are trying to learn the correct terms. Ask them to raise their hands and share these words. Write each word on the board under the heading "Sexual Body Parts."
3. Debrief using the following questions:
 - a. How did it feel to say/hear the words on the first list (other body parts)?
≅ *Comfortable, easy.*
 - b. How did it feel to say/hear the words on the second list (sexual body parts)?
≅ *Embarrassed, comfortable, private, afraid someone will laugh.*
 - c. Why do we sometimes use slang words for body parts related to our reproductive system?
≅ *To hide embarrassment.*
 - d. What are the benefits of using "proper" words (real words)?
≅ *It is important to be able to understand what is happening to your body and to be able to ask questions if confused or worried. It also shows that we respect our bodies.*



Information

Students will be able to identify the basic parts of the male and female reproductive systems.

Male and Female Reproductive Systems

1. Distribute Handouts 1 and 2: Male Reproductive System and Male Anatomy Diagram.
2. Ask students to label and color the diagram according to the instructions. You may choose to do this activity together with the students using an overhead of the Male Anatomy

Diagram and colored markers while student volunteers read from the handout Male Reproductive System.

3. Ask students to correct their diagram's using Answer Key 1: Male Anatomy Diagram. It may be helpful to make this answer key into an overhead and display it during this step.
4. Repeat steps 1 – 3 using Handouts 3 and 4: Female Reproductive System and Female Anatomy Diagram and Answer Key 2: Female Anatomy Diagram.
5. Also show Overhead 1: Pregnancy so your students can understand where the baby grows.
6. Ask your students: Why is it important to use proper words for these parts?

Application

The students will be able to use the appropriate terms for the reproductive anatomy. They will also be able to determine the difference between males and females.

Choose one or two of the following options that best suit the level of your students.

Option 1. Reproductive Anatomy Word Search

1. Have the students Handout 5: Reproductive Anatomy Word Search.
2. Correct the handout using Answer Key 3: Reproductive Anatomy Word Search.

Adapted from: Choices and Changes, 2001

Option 2. The Difference Between Male and Female Parts

1. Ask your students:
 - a. What are the main parts of the male reproductive system?
 - b. What are the main parts of the female reproductive system?
 - c. What reproductive parts do females have that are the same as the males?
 - d. What is the big difference between the male and female body?
 - ≅ Point out that females have 3 genital openings (*anus, vaginal opening, and urinary opening*), males only have 2. Discuss the purpose of these openings.

Option 3. Public and Private Conversations

1. Reinforce Public and Private conversations when using words to describe the parts of the body. What words would you use if you were talking to a doctor? To a parent? To a friend? To a stranger?

Action

Students will be able to match the basic components of the male and female human reproductive system to its functions.

Complete both of the following activities with your students.

Male Anatomy Matching Game

1. Display Cards 1: Male Anatomy Definitions around the room. It may be best to laminate the cards for future use.
2. Divide students into two teams.
3. Distribute Cards 2: Male Anatomy Terms to each team. (Each set should be on a different color paper.) It may be best to laminate the cards for future use.
4. Have teams decide under which definition each word belongs and post the words on the appropriate poster.
5. Review each team's responses referring to the definitions / guidelines below:

Male Reproductive System Definitions for Teacher's Use

Penis

- ▶ *The male external sex organ.*
- ▶ *Semen and urine are discharged from the penis.*
- ▶ *It is made up of spongy material that fills up with extra blood (becomes erect) when sexually aroused.*
- ▶ *There is no bone in the penis.*
- ▶ *The penis continues to grow as does the rest of the body. Size varies from person to person.*

Scrotum

- ▶ *The sac that holds the testicles.*
- ▶ *The testicles have to be kept at a certain temperature just below body temperature in order to produce healthy sperm. The scrotum pulls the testicles closer to the body if it is cold and lowers away from the body if it is hot.*

Anus

- ▶ *The opening at the end of the digestive tract where feces leaves the body.*
- ▶ *It is not part of the reproductive system, but is part of the digestive system.*

Testicles

- ▶ *The male sex glands.*
- ▶ *They are held in the scrotum.*
- ▶ *They are on the outside of the body so that they can stay cooler than body temperature for healthy sperm production.*
- ▶ *It is normal for one to hang lower.*
- ▶ *This is a very sensitive area. It is important to protect the testicles during contact sports, etc.*

Vas Deferens

- ▶ *This is a narrow tube that carries sperm from the testicles to the urethra.*

Seminal Vesicles

- ▶ *Two small pouches behind the bladder that produce and store seminal fluid.*

- ▶ *This fluid mixes with sperm and other fluid to produce semen.*

Urethra

- ▶ *Urine and semen pass through this tube to the outside of the body.*
- ▶ *Urine and semen cannot come out at the same time. There are two branches to the urethra, one from the bladder and the other from the vas deferens. When the penis is ready to release semen, a valve blocks off the branch to the bladder so urine cannot escape. It is similar to the difference between swallowing and breathing. Air goes to the lungs and food or liquid goes to the stomach even though both substances pass through the esophagus.*

Bladder

- ▶ *The sac that holds the urine produced by the kidney.*
- ▶ *It is not part of the reproductive system, but the urinary system.*

Sperm

- ▶ *The male reproductive cell.*
- ▶ *These cells are very small (over 300 million in 5 ml of semen).*
- ▶ *Millions are made every day in the testicles.*

Female Anatomy Matching Game

1. Repeat steps 1 – 4 of the previous activity using Cards 3: Female Anatomy Definitions and Cards 4: Female Anatomy Terms.
2. Review each team's responses referring to the definitions / guidelines below:

Female Reproductive System Definitions for Teacher's Use

Urethra

- ▶ *The tube through which urine passes from the body.*
- ▶ *It is the opening between the clitoris and the vagina.*
- ▶ *It is not part of the reproductive system, but the urinary system.*

Vagina

- ▶ *The passageway leading from the uterus to the outside of the female body.*
- ▶ *Blood from the uterus passes through the vagina during menstruation.*
- ▶ *The baby passes from the uterus through the vagina during childbirth.*
- ▶ *It is not used for urination. The opening just above the vagina, the urethra, is used for this purpose.*

Anus

- ▶ *The opening at the end of the digestive tract where feces or stool leaves the body.*
- ▶ *It is not part of the reproductive system, but is part of the digestive system.*

Cervix

- ▶ *The bottom of the uterus that opens into the vagina.*

Uterus

- ▶ *The special place in a woman's body where a baby can grow.*
- ▶ *Also called the womb.*
- ▶ *It is about the size of a fist.*
- ▶ *It is the uterus that enlarges during pregnancy, not the stomach.*

Fallopian Tubes

- ▶ *These are narrow tubes that connect the ovaries to the uterus.*
- ▶ *The ovum travels through one of the tubes after ovulation.*
- ▶ *It is in the fallopian tubes that fertilization may occur.*

Ovaries

- ▶ *The female ovum-producing glands.*
- ▶ *These glands contain all of the ovum from birth, and start releasing them once puberty starts.*

Bladder

- ▶ *The sac that holds the urine produced by the kidney.*
- ▶ *It is not part of the reproductive system, but the urinary system.*

Ovum

- ▶ *The ovum is produced in the ovaries.*
- ▶ *The ovum is a special cell which, when fertilized (united with a male sperm cell), can create a baby.*
- ▶ *Each ovary contains about 250,000 ova from birth.*
- ▶ *Ovum are released once a month after puberty begins. Occasionally two or more ovum are released.*
- ▶ *The ovum travel down the fallopian tubes to reach the uterus.*
- ▶ *If the ovum is not fertilized in a day or so, it dissolves.*

**Assessment**

Choose one or two of the following options that best suit the level of your students.

Option 1. Male / Female / Both Checklist

1. Have students complete Handout 6: Male / Female / Both Checklist. The handout has students check if a puberty change happens only in females, males or in both. This activity may be completed as a homework assignment with a parent or guardian.



Keep in mind that all students do not live in a “traditional” family nor do they have equal opportunities for open discussion with their “family.” Although it is best for students to complete this assignment with a supportive parent or guardian, it may not be possible. Be sensitive to the needs of your students.

Option 2. Class Discussion

1. Ask your students:
 - a. What are some of the good things about being a male? Encourage students to provide appropriate comments.
 - b. What are some of the good things about being a female? Encourage students to provide appropriate comments.
 - c. If you have questions about the male or female anatomy, who can you ask? (*Parent, nurse, doctor*)

**References**

Yukon Government (2002). **Choices and Changes.**

The Male Reproductive System

On your diagram of the male anatomy, label and colour the internal and external organs according to the instructions below.

Start at the lower right hand side of your diagram. There is a special sac that holds the two *testicles* (the diagram only shows one testicle). It is called the *scrotum*. Outline the *scrotum* with a yellow pencil crayon. The *scrotum* is a sac that is divided into two parts. Each part contains a *testicle*, and the end of the *vas deferens*. Label the two words *testicle*, *and* *scrotum* on your diagram. Color the *testicle* red.

From the testicle, follow the *vas deferens* tube up to the top of the diagram and around. Color the entire *vas deferens* orange, but be sure to stop coloring where you see a Y section. It is where the *vas deferens* tube and a tube to the bladder connect.

The large egg-shaped organ in the center of your diagram is the bladder. This organ stores urine until it can be removed from the body. It is not considered part of the reproductive system.

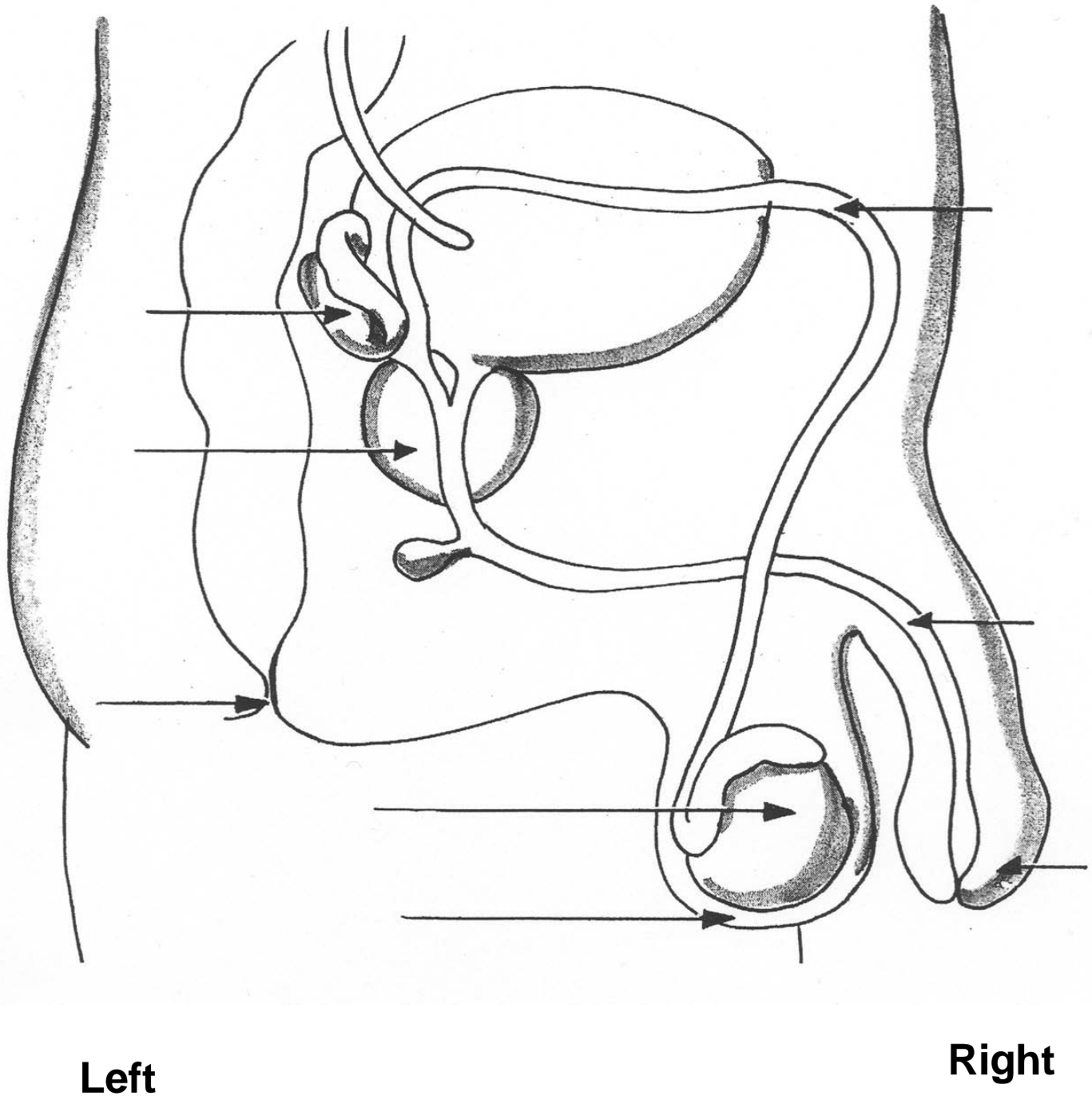
As the *vas deferens* curves along the bladder and back down again, it passes the *seminal vesicle*. This gland is oval-shaped, and is located on the left side of your bladder on your diagram. It stores mature sperm until they are released from the body. The *seminal vesicle* also produces fluids that activate sperm. Color the *seminal vesicle* purple.

The *prostate gland* is located just below the bladder. It supplies most of the liquid that combines with the sperm to make semen. Color the *prostate gland* blue.

The tube leading from the seminal vesicle and prostate gland down the length of the *penis* is called the *urethra*. The *urethra* allows urine to be emptied from the bladder. It also allows semen to travel out of the body. Color the *urethra* green.

The organ in which the *urethra* is housed is called the *penis*. It is the organ from which semen and urine are discharged. Color the *penis* brown.

Male Anatomy Diagram



Canadian Federation for Sexual Health. (2005). Beyond the Basics: A Sourcebook on Sexuality and Reproductive Health Education. Available online at: www.cfsh.ca

The Female Reproductive System

On your diagram of the female anatomy, label and colour the internal and external organs according to the instructions below.

Start at the bottom of your diagram. The opening leading up into the internal reproductive system is called the *vagina*. The *vagina* acts as the birth canal for a baby, and allows menstrual flow to exit the body from the *uterus*. Color the *vagina* blue.

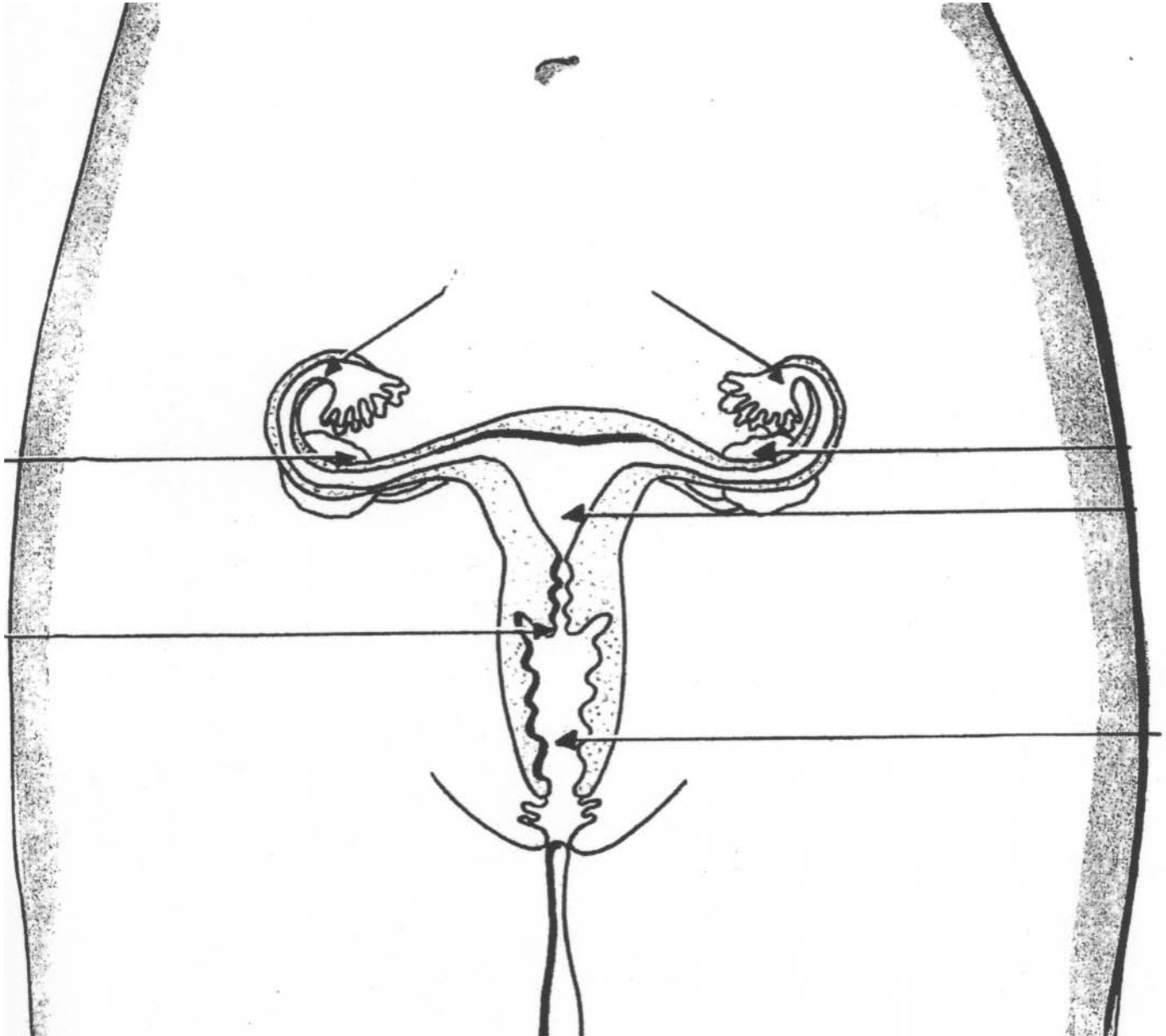
At the top of the *vagina* is the bottom of the *uterus*. This is called the *cervix*. Color the *cervix* purple.

Above the *cervix* is the *uterus*. It is a special place in a woman's body where a baby can grow. It is the size of a woman's fist that stretches during pregnancy. It is the *uterus* that stretches during pregnancy, not the stomach. Color the *uterus* green.

The tubes that connect the *uterus* to the *ovaries* are called the *fallopian tubes*. It goes to the left and right of the *uterus*. The *fallopian tubes* carry the egg from the *ovary* down to the *uterus*. Color the *fallopian tubes* on the diagram orange.

Two egg-shaped organs on either side of the uterus are the *ovaries*. The ovaries are about the size of an almond. When a woman is born, the ovaries already contain all the ova (eggs) she will ever produce. At puberty the ovary begins to release one ovum (a single egg) each month. This is called ovulation. When the *ovary* releases the egg, it travels down the fallopian tube. Color each *ovary* brown.

Female Anatomy Diagram



Left

Right

Canadian Federation for Sexual Health. (2005). [Beyond the Basics: A Sourcebook on Sexuality and Reproductive Health Education](#). Available online at: www.cfsh.ca

Reproductive Anatomy Word Search

- | | | |
|-------------------|-----------------|-------------|
| 1. fallopian tube | 5. testicles | 9. cervix |
| 2. ovary | 6. uterus | 10. egg |
| 3. bladder | 7. vas deferens | 11. vagina |
| 4. penis | 8. urethra | 12. scrotum |

F	A	L	L	O	P	I	A	N	T	U	B	E	T
N	H	R	E	V	E	F	F	X	F	R	F	R	F
B	W	G	R	A	R	S	M	F	P	E	T	D	R
L	Z	H	F	R	V	C	H	E	L	T	G	P	E
A	C	I	G	Y	F	A	T	C	N	H	E	E	A
D	E	U	S	A	X	X	G	R	A	R	G	N	W
D	R	Y	R	D	S	E	T	I	Z	A	B	I	S
E	V	W	Z	X	D	G	E	Z	N	G	J	S	D
R	I	E	A	T	Z	G	R	F	C	A	F	M	F
D	X	R	S	U	T	E	R	U	S	G	H	P	G
D	S	Y	S	S	G	E	P	R	F	E	F	W	G
S	V	A	S	D	E	F	E	R	E	N	S	Q	H
Y	E	A	X	H	G	D	X	D	X	X	Z	K	F
U	L	D	C	N	T	E	S	T	I	C	L	E	S
S	C	R	O	T	U	M	Z	I	K	A	D	F	H

Adapted from: Choices and Changes, 2001

Male / Female / Both Checklist

Name: _____

Directions:

The first column describes characteristics that develop during puberty.

Some changes only happen to Males, while others only happen to Females, and some will happen to Both. Read through the list and put a check in the correct column.

CHARACTERISTICS	MALE	FEMALE	BOTH
1. Body hair grows under arms			
2. Pimples and acne may develop			
3. Hair grows on the face			
4. Breasts develop			
5. Body hair grows near the genitals (pubic hair)			
6. Penis and testicles grow larger			
7. Wet dreams start happening			
8. Hips widen			
9. Voice changes and deepens			
10. Moods swing a lot more			
11. Body odor is stronger			
12. Shoulders widen			

Male Anatomy Definitions

The opening
where feces
leaves the body

A sac that holds
urine

A thick fluid
containing sperm

The male sex
organ from which
semen and urine
are released

External sac
containing the
testicles

Where semen is
stored

Sperm producing
organs

Urine and semen
pass through this
tube to the outside
of the body
Tubes that carry
sperm from the
testicles to the
urethra

Male reproductive cell

Male Anatomy Terms

Anus

Bladder

Penis

Scrotum

Semen

**Seminal
Vesicles**

Sperm

Testicles

Urethra

Vas Deferens

Female Anatomy Definition Cards

The opening
where feces
leaves the body

A sac that holds
urine

The bottom of the uterus that opens into the vagina

Tubes connecting the ovaries to the uterus

**Female glands
that produce ova
(eggs)**

**Urine passes
through this tube
to the outside of
the body**

Where a
developing baby
grows inside the
mother

A passageway
from the uterus to
the outside of the
female body

Female Anatomy Cards

Anus

Bladder

Cervix

**Fallopian
Tubes**

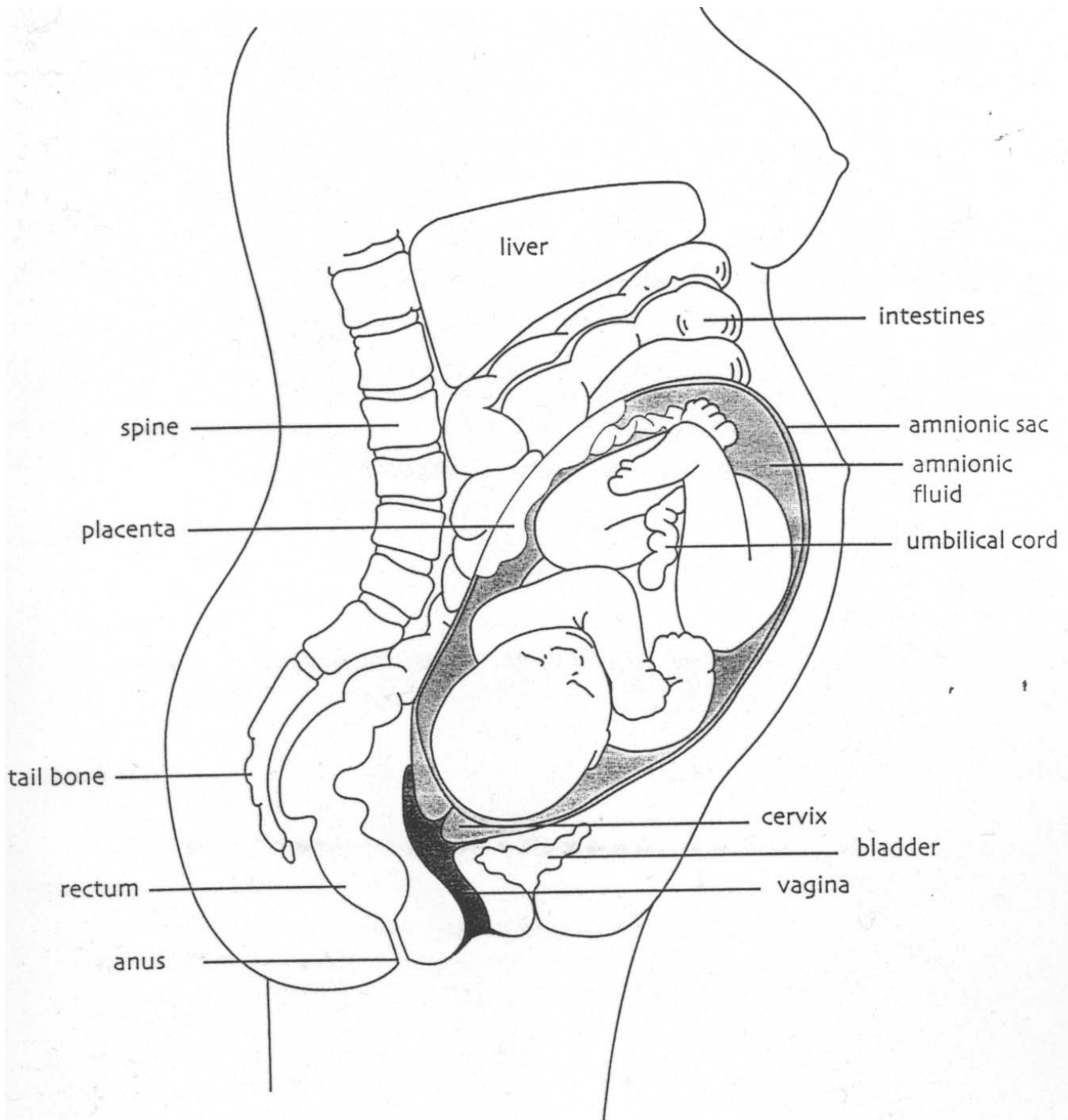
Ovaries

Vagina

Urethra

Uterus

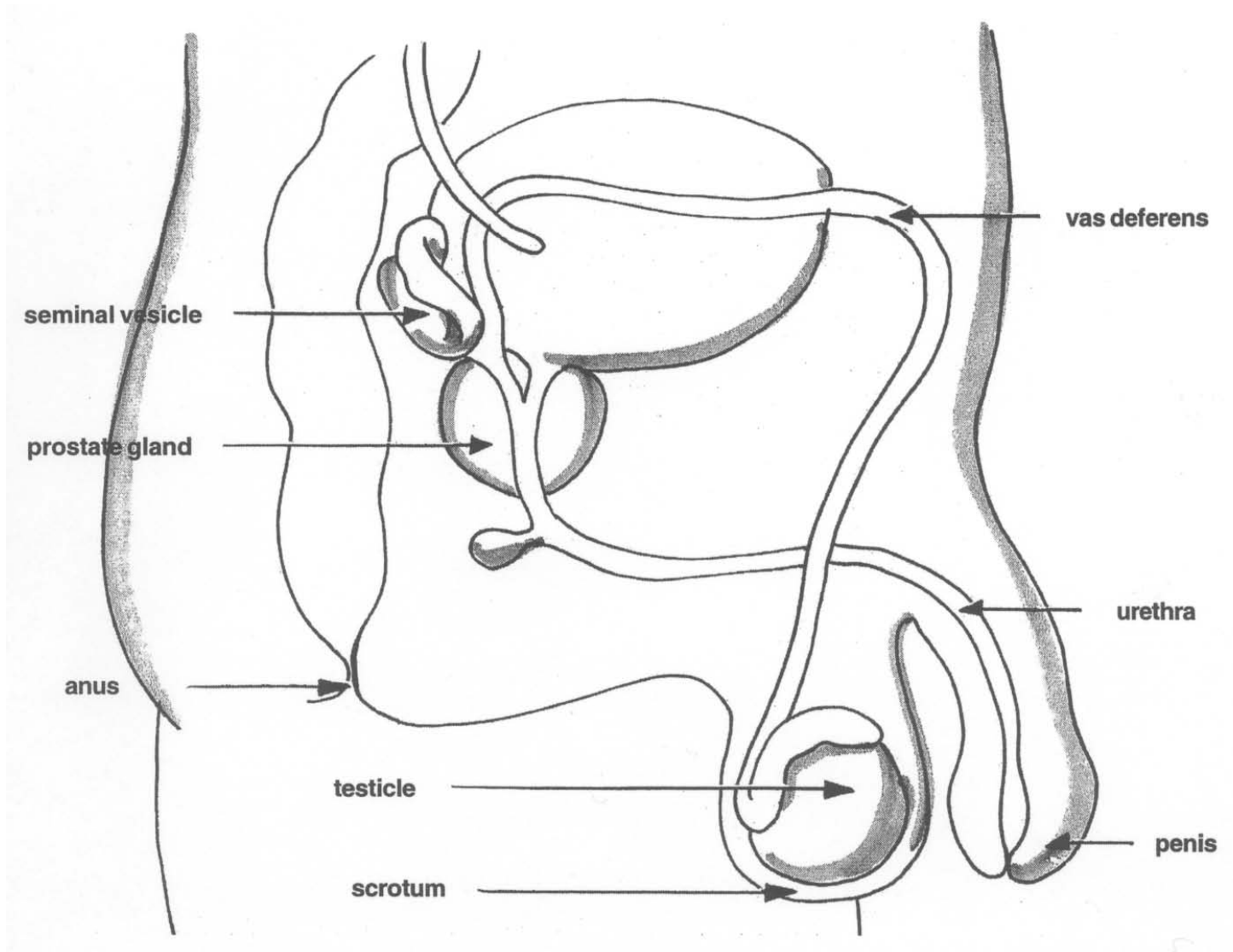
Pregnancy



Adapted from: Sexuality: An Education Resource Book, Canada: Globe/Modern Curriculum Press, page 291

Male Anatomy Diagram

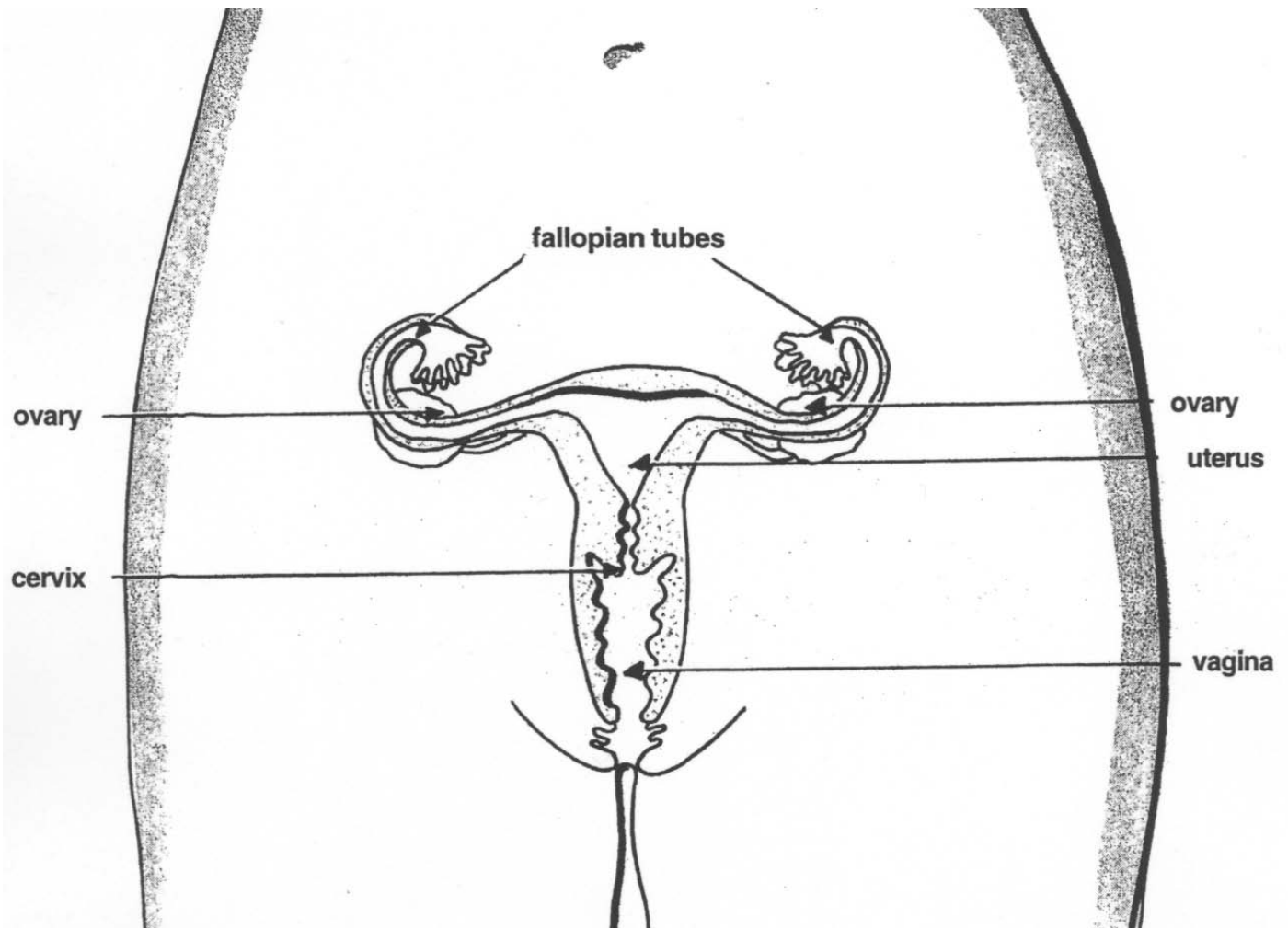
Answer Key



Canadian Federation for Sexual Health. (2005). Beyond the Basics: A Sourcebook on Sexuality and Reproductive Health Education. Available online at: www.cfsh.ca

Female Anatomy Diagram

Answer Key



Canadian Federation for Sexual Health. (2005). Beyond the Basics: A Sourcebook on Sexuality and Reproductive Health Education. Available online at: www.cfsh.ca

Reproductive Anatomy Word Search

Answer Key

- | | | |
|-------------------|-----------------|-------------|
| 1. fallopian tube | 5. testicles | 9. cervix |
| 2. ovary | 6. uterus | 10. egg |
| 3. bladder | 7. vas deferens | 11. vagina |
| 4. penis | 8. urethra | 12. scrotum |

F	A	L	L	O	P	I	A	N	T	U	B	E	T
N	H	R	E	V	E	F	F	X	F	R	F	R	F
B	W	G	R	A	R	S	M	F	P	E	T	D	R
L	Z	H	F	R	V	C	H	E	L	T	G	P	E
A	C	I	G	Y	F	A	T	C	N	H	E	E	A
D	E	U	S	A	X	X	G	R	A	R	G	N	W
D	R	Y	R	D	S	E	T	I	Z	A	B	I	S
E	V	W	Z	X	D	G	E	Z	N	G	J	S	D
R	I	E	A	T	Z	G	R	F	C	A	F	M	F
D	X	R	S	U	T	E	R	U	S	G	H	P	G
D	S	Y	S	S	G	E	P	R	F	E	F	W	G
S	V	A	S	D	E	F	E	R	E	N	S	Q	H
Y	E	A	X	H	G	D	X	D	X	X	Z	K	F
U	L	D	C	N	T	E	S	T	I	C	L	E	S
S	C	R	O	T	U	M	Z	I	K	A	D	F	H

Adapted from: " Choices and Changes, 2001

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