

Lesson Plan – Sexual & Reproductive Anatomy and Physiology Part I

TOPIC: Sexual & Reproductive Anatomy and Physiology Part I	TARGET-AGE RANGE: 9–15	TIME: 45 minutes
SUBJECT: Life Skills		
IDEAL NUMBER OF LEARNERS: 25–40		
WHAT ADVANCE PREPARATION, IF ANY, IS REQUIRED OF THE TEACHER FOR THIS LESSON? <ul style="list-style-type: none">• Review Teacher Background on Reproductive Systems due to large number of terms and definitions.		
LEARNING OUTCOMES: <p>By the end of this lesson learners will be able to:</p> <ol style="list-style-type: none">1) Locate and name at least five parts of each of the male and female reproductive systems. [knowledge]		
LIFE SKILLS DEMONSTRATED IN THIS LESSON: <ol style="list-style-type: none">1) Seek information about sexual and reproductive anatomy.		
RESOURCE MATERIALS FOR TEACHER: <ul style="list-style-type: none">• Teacher Background on Reproductive Systems		
MATERIALS FOR LEARNER: <ul style="list-style-type: none">• None		



Lesson Plan – Sexual & Reproductive Anatomy and Physiology Part I

This lesson is enhanced when learners have the following background knowledge: Content from the International Technical Guidance on Sexuality Education—Key Concept 4 – Human Development; 4.1 Sexual and Reproductive Anatomy and Physiology; Level I

PROCEDURE:

Step 1) 5 minutes

Begin the lesson by informing learners that, “Today we are going to learn about the human reproductive system. The male and female reproductive systems are composed of external and internal organs. Ask students what function the reproductive system has in our bodies.” Responses should include:

- To produce the sperm and egg cells that allow us to reproduce
- To transport and sustain these cells
- To nurture the developing offspring
- To produce hormones

Next, explain by saying, “The lesson will provide an overview of the body parts that everyone has that allow them to reproduce later in life, if they so choose, and explain the functions of each of the reproductive organs. Understanding one’s body and how it works is important to staying healthy.”

Step 2) 35 minutes

Write on the chalkboard three columns: Male/Female/Both. Explain the activity by saying the following, “Next we will brainstorm the sexual and reproductive anatomy we all have and try to determine if it’s a male part, female part, or body part everyone has. Let’s also keep in mind that some people’s bodies don’t fit neatly into one category or another and they might be born with ambiguous genitalia. Those people are called intersex and see me if you want more information about that. Let’s now think of the names of the parts of the body, both inside and outside, that are part of the reproductive system.” **[Teacher’s Note: For more information about intersex, please go to—<http://oii.org.au/wp-content/uploads/key/OII-Australia-Intersex-Ally.pdf>]**

Write the body parts in the correct column on the board using the Teacher Background on Reproductive Systems. Add in any body parts the class does not list. As you list the body parts in one of the three columns, briefly define each reproductive body part, where it is in the body and what it does. Use the Reproductive Visuals 4–5 to aid with the review of the male and female reproductive systems as appropriate. **[Teacher’s Note: Please do not feel that you must convey every bit of information in the Teacher Background. Most of the information is provided as background on Reproductive Systems for you and to allow you to supplement what your learners know and are curious about.]**

Step 3) 5 minutes

Conclude by telling learners that these are the main sexual and reproductive male and female body parts, each with a very specific function. Explain that the second part of the lesson on another day will allow learners to better understand how the parts on the inside of the body work.

Ask learners the following question and have each learner share their response in rapid succession.

- What is one new piece of information you are leaving today’s lesson with?



Lesson Plan – Sexual & Reproductive Anatomy and Physiology Part I

KEY MESSAGES OF LESSON:

- 1) Knowing the male and female reproductive anatomy and the function of each part is important to understanding how your body works and to ultimately staying healthy.

ASSESSMENT OF LEARNING OBJECTIVES AT CONCLUSION OF LESSON:

- Teachers can have learners list at least two body parts and their functions for females and two body parts for males on a piece of paper to submit for assessment of the learning objectives.

HOMEWORK WITH FOCUS ON FAMILY INVOLVEMENT ACTIVITIES:

- None

POSSIBLE ADAPTATIONS:

- Large class size—None
- Limited materials/technology—None

Adapted from: *Family Life and Sexual Health – High School Version, Lesson 2: Reproductive System; Public Health – Seattle & King County, Revised 2011*
www.kingcounty.gov/health/flash



Teacher Background on Reproductive Systems

MALE PART	WHAT IT IS / WHAT IT DOES
PENIS (made up of shaft, glans, and foreskin)	Allows passage of urine and semen Provides sensation (has many nerve endings) The average penis measures 3–4 inches when it's not erect (flaccid) and 5–7 inches when erect
FORESKIN	Protects the glans of the penis Provides sensation Males who have been circumcised don't have one
SCROTUM	Muscular sac which is shorter when cold, longer when warm Holds testes Controls temperature Provides sensation
TESTES (also called testicles)	Produces sperm and sex hormones (androgens and testosterone) Each is made of 500–1,200 feet of tightly coiled tubes
EPIDIDYMIS	Allows maturation of sperm
SPERMATAZOA (sperm)	Cell from a man called sperm Sperm carry the strings of genes (called chromosomes) or DNA instructions in case the sperm meets with an egg cell and fertilizes it
SPERMATIC CORDS	Suspends the testicles Supply blood to the testicles Provide sensation Carry sperm from the testicles
VAS DEFERENS	Provides storage for sperm Allow passage of sperm Provides sensation Carries sperm from the testes

Teacher Background on Reproductive Systems

MALE PART	WHAT IT IS / WHAT IT DOES
SEMINAL VESICLES	Contributes fructose (sugar) to semen for nourishing the sperm
SEMEN	Helps sperm live longer and travel better About a teaspoon per ejaculation Contains hundreds of millions of sperm
PROSTATE GLAND	Produces most of the fluid that makes up semen
COWPER'S GLAND (also called bulbourethral glands)	Pair of glands Produces pre-ejaculatory fluid (called "pre-cum") that cleans the urethra to protect sperm. Some pre-ejaculatory fluid may contain sperm



Teacher Background on Reproductive Systems

FEMALE PART	WHAT IT IS / WHAT IT DOES
<p>UTERUS (made up of muscular walls, a lining called the endometrium, and a cervix. The uterus is also called “womb”)</p>	<p>Houses and protects embryo/fetus/baby</p> <p>Allows nutrient & waste exchange with placenta during pregnancy</p> <p>Nourishes an embryo before a placenta grows</p>
<p>CERVIX</p>	<p>The bottom section of the uterus</p> <p>Produces fluids to help sperm travel</p> <p>Produces a mucus plug to keep out germs during pregnancy</p>
<p>VAGINA</p>	<p>Allows passage of sperm</p> <p>Produces fluid daily to cleanse and lubricate itself and help sperm travel</p> <p>Allows passage of shed endometrium during menstrual period</p> <p>Allows passage of baby</p> <p>Provides sensation (has many nerve endings especially in outer third)</p> <p>A collapsed tube, like a deflated balloon</p> <p>Three inches long when not aroused and five to six inches long when aroused and very stretchy</p> <p>Is the middle of the three openings between a female’s legs</p>
<p>HYMEN</p>	<p>Membrane some females have that partly covers the vaginal opening</p> <p>Some girls are both without a hymen</p> <p>May be stretched during use of a tampon, having finger inserted or during sexual intercourse</p>
<p>OVUM (also called “egg cell”)</p>	<p>Carries strings of genes called chromosomes which mix with chromosomes of sperm if fertilization occurs</p> <p>They dissolve in the Fallopian tube after about 24 hours if not fertilized</p>



Teacher Background on Reproductive Systems

FEMALE PART	WHAT IT IS / WHAT IT DOES
OVARY	<p>Provide storage for the ovum (eggs)</p> <p>Allow maturation of the ovum</p> <p>Produce sex hormones (estrogen, progesterone and androgens)</p>
FALLOPIAN TUBES	<p>Allow passage of ovum toward uterus</p> <p>Allow passage of sperm from uterus</p>
FIMBRIA	<p>Guides a mature ovum, when it is released from an ovary, into a Fallopian tube</p> <p>Fringe-like or finger-like outer ends of the Fallopian tubes</p>
SKENE'S GLANDS	<p>Area of firm tissue towards the front wall of the vagina surrounding the urethra</p> <p>Responds to pressure sometimes causing orgasm that may or may not produce fluid (the fluid is not urine)</p> <p>Also known as the Graffenberg-spot (G-spot) or the female prostate gland</p>
VULVA (made up of labia majora, labia minora, and clitoris)	<p>Protect opening of urethra and vagina, as eyelids protect eyes</p> <p>Provide sensation (has many nerve endings)</p> <p>Labia are folds of skin</p> <p>Outer labia (labia majora) have pubic hair</p>
CLITORIS (made up of shaft, crura [internal branches], glans and hood)	<p>Provides sensation (has many nerve endings)</p> <p>Each internal branch of erectile tissue is about 3.5 inches long</p> <p>The glans (the visible part) is usually .25-.5 inches long, comparable in size to a pearl at the front of the vulva where the labia meet</p>
CLITORIAL HOOD	<p>Protects the glans of the clitoris</p> <p>Provides sensation (has many nerve endings)</p> <p>Like a cap, mostly covers the clitoris when it is not erect</p>

Teacher Background on Reproductive Systems

BOTH MALE AND FEMALE	WHAT IT IS / WHAT IT DOES
NAVEL	<p>Allows passage of oxygen and nourishment before birth</p> <p>After birth it serves no purpose</p> <p>Not part of the reproductive system</p>
ABDOMEN (also called the belly)	<p>Contains most of our internal organs</p> <p>The part of the body between the rib cage and pelvis</p>
BUTTOCKS	<p>Provides cushion for tail bone and aids in walking and standing</p> <p>Contains muscle for movement</p> <p>Not part of the reproductive system</p>
PELVIS	<p>Bowl-shaped bone structure that supports and protects the internal reproductive organs</p> <p>Men's and women's pelvises are shaped differently so that women can give birth if they choose</p>
CILIA	<p>Hair-like structures which line the Fallopian tubes and the epididymis</p> <p>Sweep an ovum down the Fallopian tube or the sperm cells through the epididymis</p>
BLADDER	<p>Provides storage for urine</p> <p>Not part of the reproductive system</p>
URETHRA	<p>Allows passage of urine</p> <p>In males allows passage of semen</p> <p>In males is the tube inside the penis</p> <p>In females it is below the clitoris and above the opening to the vagina</p> <p>Not part of the reproductive system</p> <p>Some females ejaculate a clear fluid that is not urine from their urethra during orgasm. This is normal and natural and women should not think they are urinating during orgasm if this happens.</p>
ANUS	<p>Allows passage of bowel movements (feces)</p> <p>Provides sensation (has many nerve endings)</p> <p>The opening from the rectum and lower intestines</p> <p>Not part of the reproductive system</p>

Lesson Plan – Sexual & Reproductive Anatomy and Physiology Part II

TOPIC: Sexual & Reproductive Anatomy and Physiology Part II	TARGET-AGE RANGE: 9–15	TIME: 45 minutes
SUBJECT: Life Skills		
IDEAL NUMBER OF LEARNERS: 25–40		
WHAT ADVANCE PREPARATION, IF ANY, IS REQUIRED OF THE TEACHER FOR THIS LESSON? <ul style="list-style-type: none">• Review Teacher Background on Reproductive Systems from Part I due to large number of terms and definitions.• Make copies of materials listed below and prepare visuals needed for lesson.• Prepare enlarged illustrations of the male and female genitals and reproductive organs—for classes that are bigger than 25.		
LEARNING OUTCOMES: <p>By the end of this lesson learners will be able to:</p> <ol style="list-style-type: none">1) Describe the path of an egg (ovum) during menstruation. [knowledge]2) Describe the path of a sperm during ejaculation. [knowledge]3) Understand there is a wide range of “normal” anatomy. [knowledge]		
LIFE SKILLS DEMONSTRATED IN THIS LESSON: <ol style="list-style-type: none">1) Seek information about sexual and reproductive anatomy.2) Collaborate with others to put the reproductive system together in a small group activity.		
RESOURCE MATERIALS FOR TEACHER: <ul style="list-style-type: none">• Reproductive System Visuals 4–5 (made larger if not distributing to students)• Labelled body parts for classroom activity, one set per class or small group• Seven pairs of scissors• Chalkboard and chalk• A few pieces of tape		
MATERIALS FOR LEARNER: <ul style="list-style-type: none">• Reproductive System Worksheets 4–5 ONLY—One copy per learner		



Lesson Plan – Sexual & Reproductive Anatomy and Physiology Part II

This lesson is enhanced when learners have the following background knowledge: Content from the International Technical Guidance on Sexuality Education—Key Concept 4 – Human Development; 4.1 Sexual and Reproductive Anatomy and Physiology; Level I

PROCEDURE:

Step 1) 2 minutes

Begin the lesson by informing learners that, “Today we are going to learn more about the human reproductive system. Remind students that the male and female reproductive systems are composed of external and internal organs, which function to produce the sperm and egg cells that allow us to reproduce, to transport and sustain these cells, to nurture the developing offspring, and to make hormones.

Next, explain by saying, “This lesson will build on what we learned in the first part of the lesson in order to better understand how the internal organs work. Knowing how your body works can help you explain to a health care provider should you have a question or think there might be a problem. It will also help you later when there are lessons about birth control and sexually transmitted infections.”

Step 2) 20 minutes

Ask for six volunteers and give each volunteer one piece from the female reproductive system puzzle. Ask volunteers to cut out their body part and then try and tape their pieces together on the chalkboard correctly to form the female internal reproductive system. As you review the female system, make sure to describe the path of the ovum by saying something like, “The ovum or egg leaves the ovary and travels down the fallopian tube through the cervix and into the uterus. During this time, if there are no sperm that join with the egg, the ovum and lining of the uterus shed and leave the body through the vagina approximately once a month, which is called her menstrual period.”

Help learners using the Reproductive System Visual #5 as needed. Thank learners and have them return to their seats.

Step 3) 20 minutes

Repeat the same procedure for the male system by asking for eight different volunteers. Give each volunteer one piece from the male reproductive system puzzle. Ask volunteers to cut out their body part and then try and tape their pieces together on the chalkboard correctly to form the male reproductive system. Make sure to describe the path of a sperm from being made in the testicles by saying something like, “The sperm are made in the testicles and take time to mature in the epididymis before traveling through the vas deferens, mixing with fluid from the prostate and seminal vesicles to form the fluid called semen that eventually leaves through the urethra in the penis during ejaculation.”

Help learners using the Reproductive System Visual #4 as needed. Thank learners and have them return to their seats.

Step 4) 3 minutes

As closure for the lesson, remind learners that there is a wide range of what bodies can look like and almost all physical appearances are considered perfectly normal. Ask learners the following question and have each learner share their response in rapid succession.

- What is one new piece of information you are leaving today’s lesson with?



Lesson Plan – Sexual & Reproductive Anatomy and Physiology Part II

KEY MESSAGES OF LESSON:

- 1) There is a wide range of “normal” when it comes to how people’s bodies look.
- 2) Knowing the male and female reproductive anatomy and the function of each part is important to understanding how your body works and to ultimately staying healthy.

ASSESSMENT OF LEARNING OBJECTIVES AT CONCLUSION OF LESSON:

- Teachers can ask learners to write down the one piece of new information they are leaving the lesson with and submit for assessment of the learning objectives.

HOMEWORK WITH FOCUS ON FAMILY INVOLVEMENT ACTIVITIES:

- None

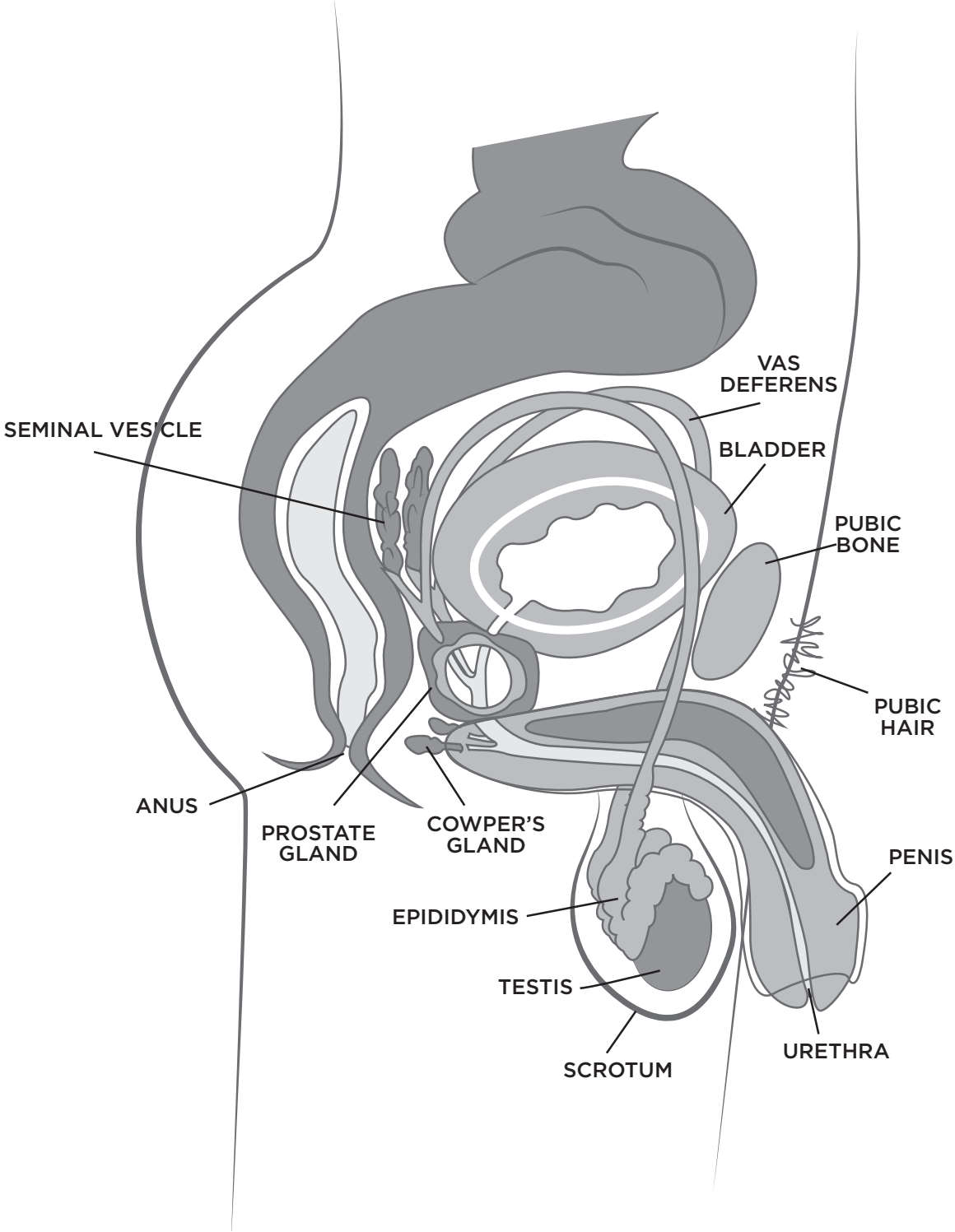
POSSIBLE ADAPTATIONS:

- Large class size—With a large group, you can conduct the reproductive system puzzles in teams as a competition or in small groups.
- Limited materials/technology—Instead of using the puzzle pieces, the teacher can assign a different part of the reproductive system to each volunteer (or learner within a small group) and ask them to draw on the chalkboard, so that the picture becomes more complete as each volunteer adds their drawing. The teacher may need to draw the different organs along the side of the chalkboard so that volunteers can use this for reference when adding their drawing to the chalkboard.

Adapted from: *Family Life and Sexual Health – High School Version, Lesson 2: Reproductive System; Public Health – Seattle & King County, Revised 2011*
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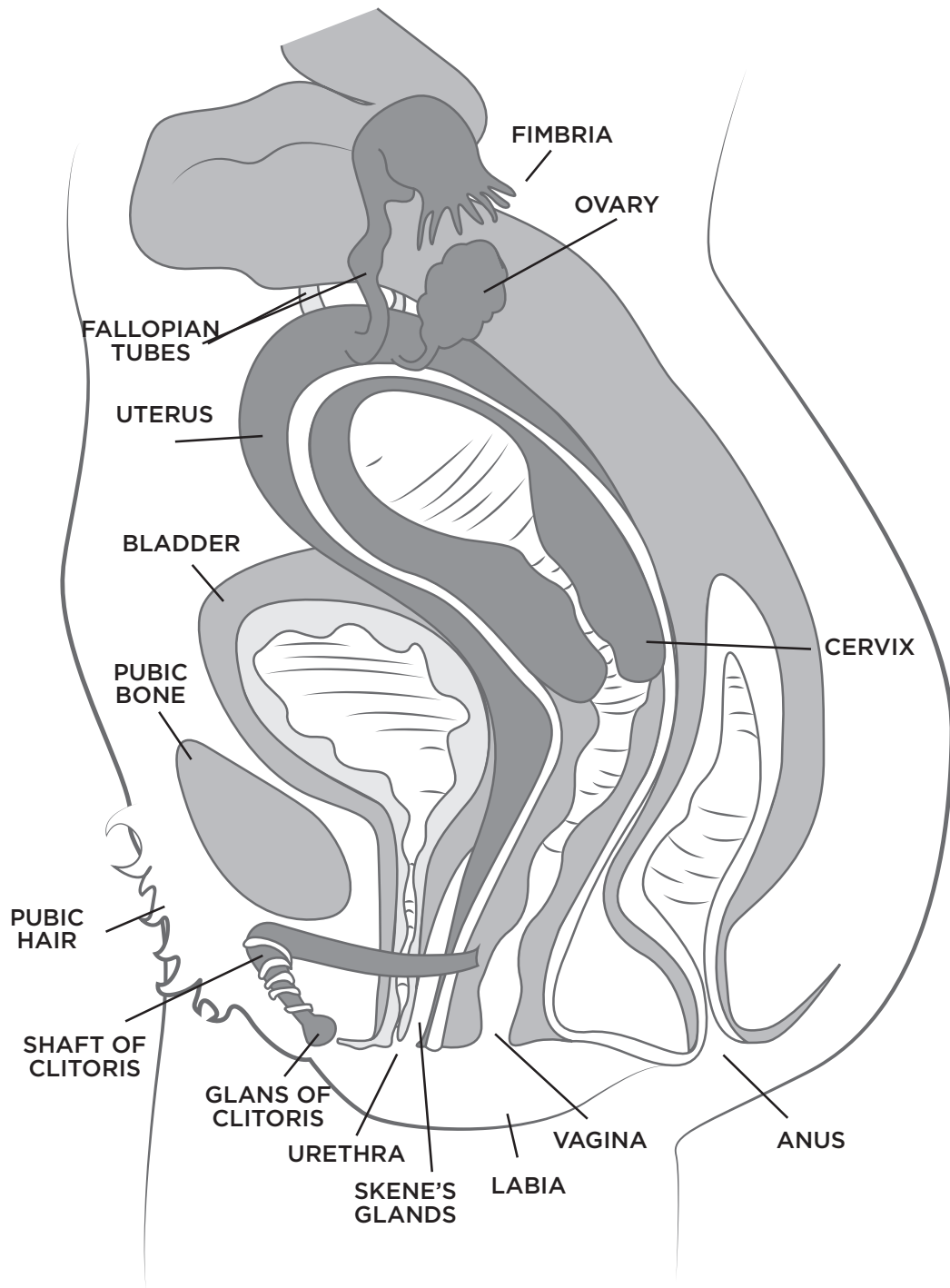
Reproductive System Visual 4 - Male Internal View



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



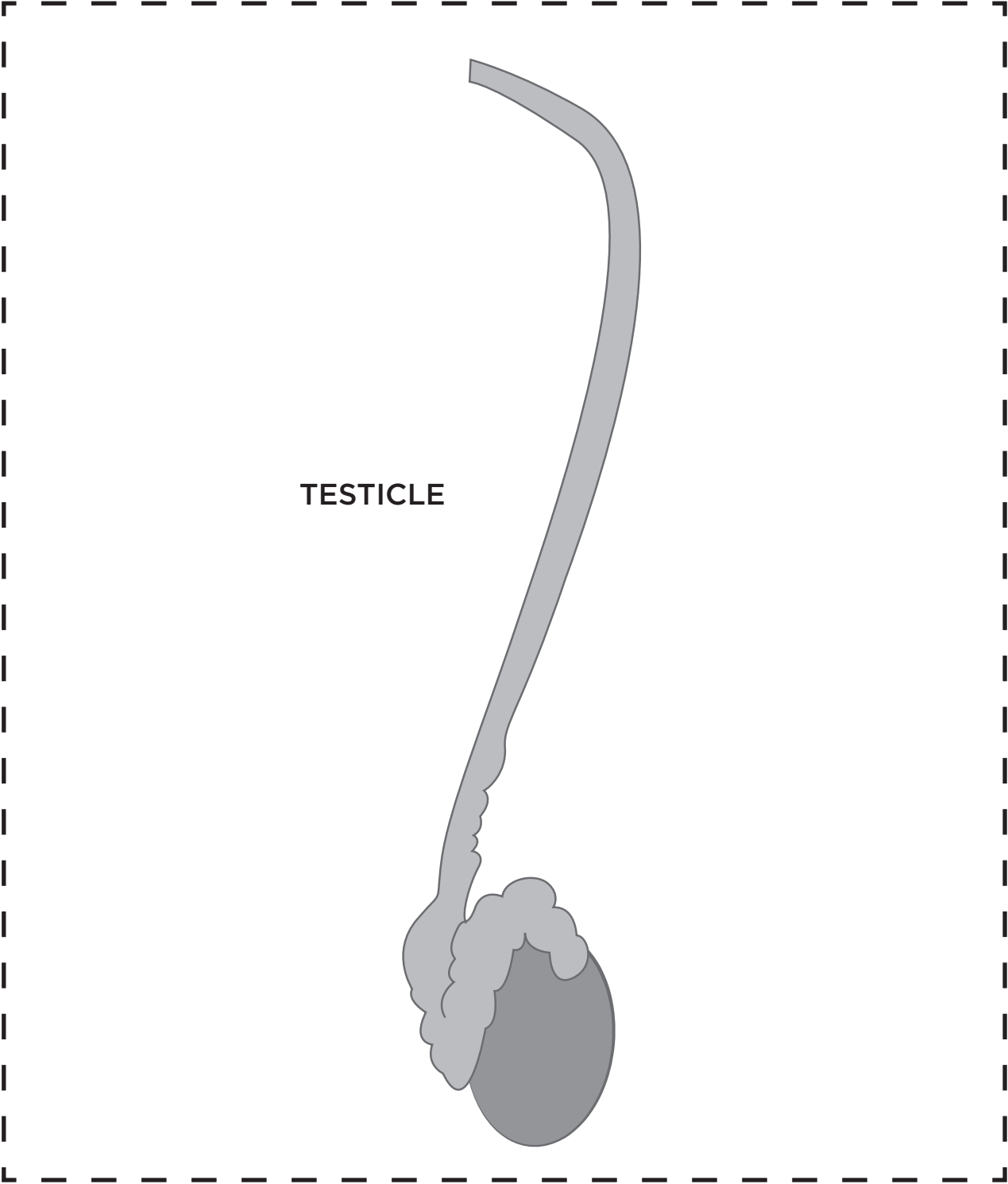
Reproductive System Visual 5 - Female Internal View



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



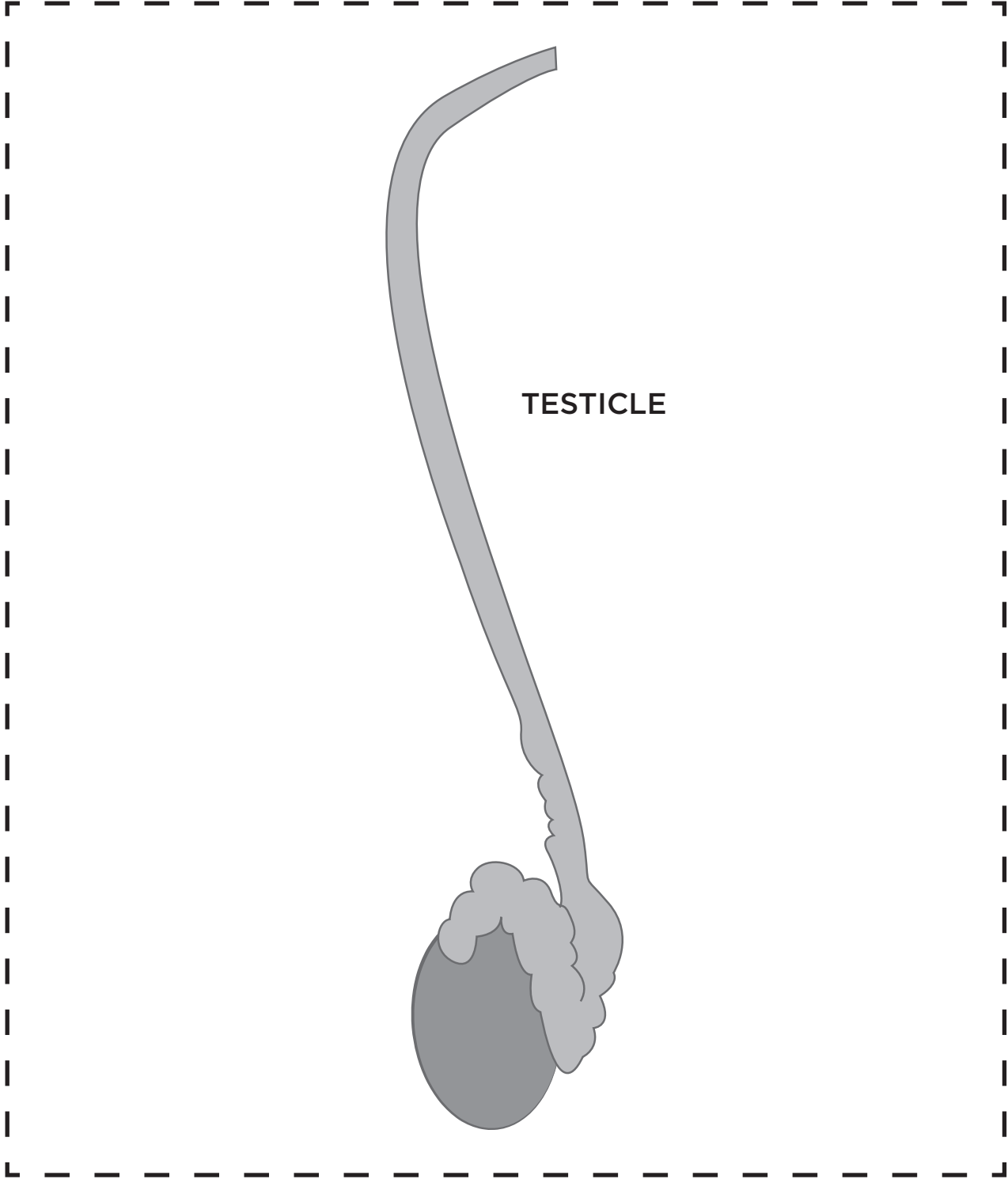
Reproductive System Puzzle - Part 1



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



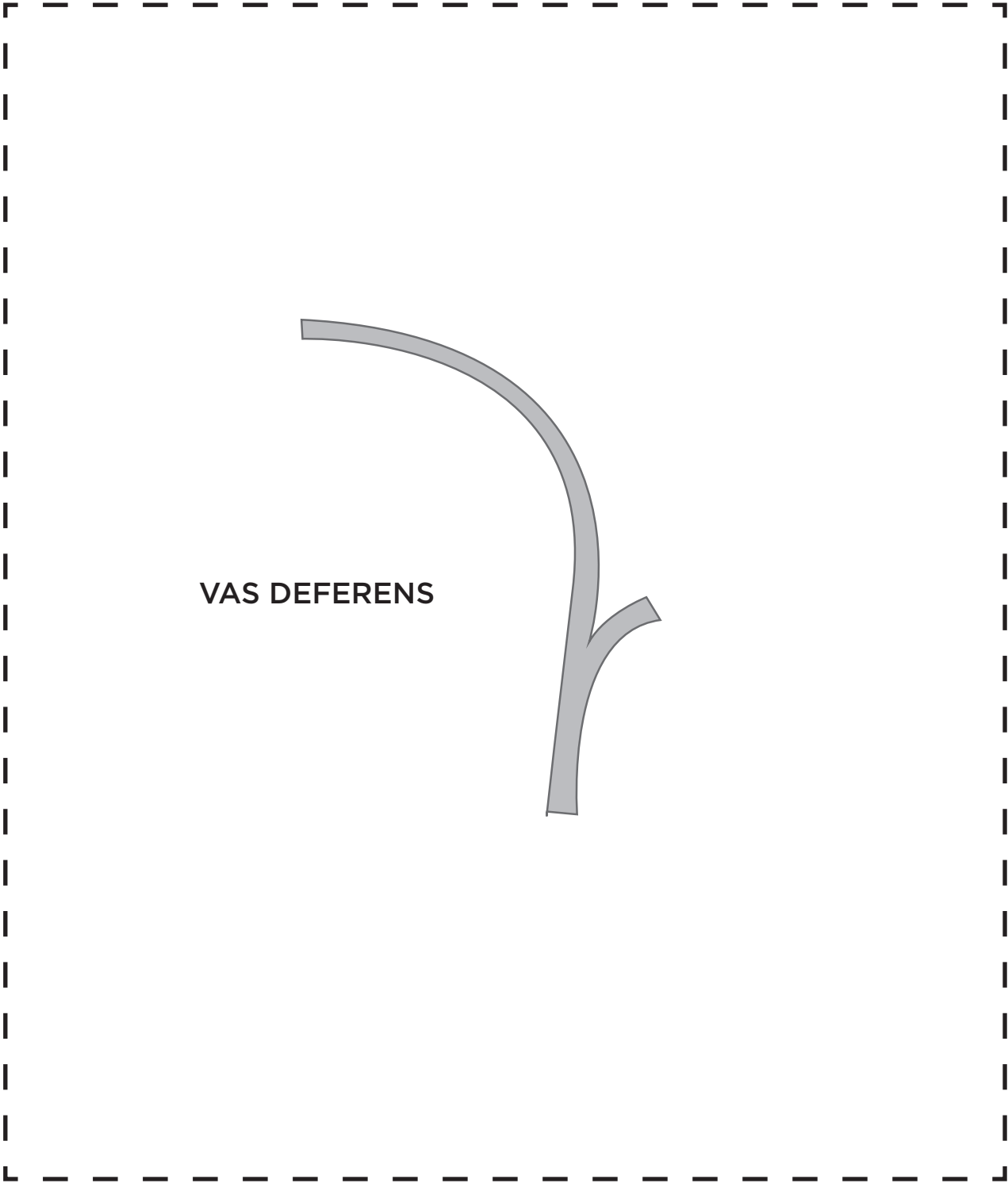
Reproductive System Puzzle - Part 2



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



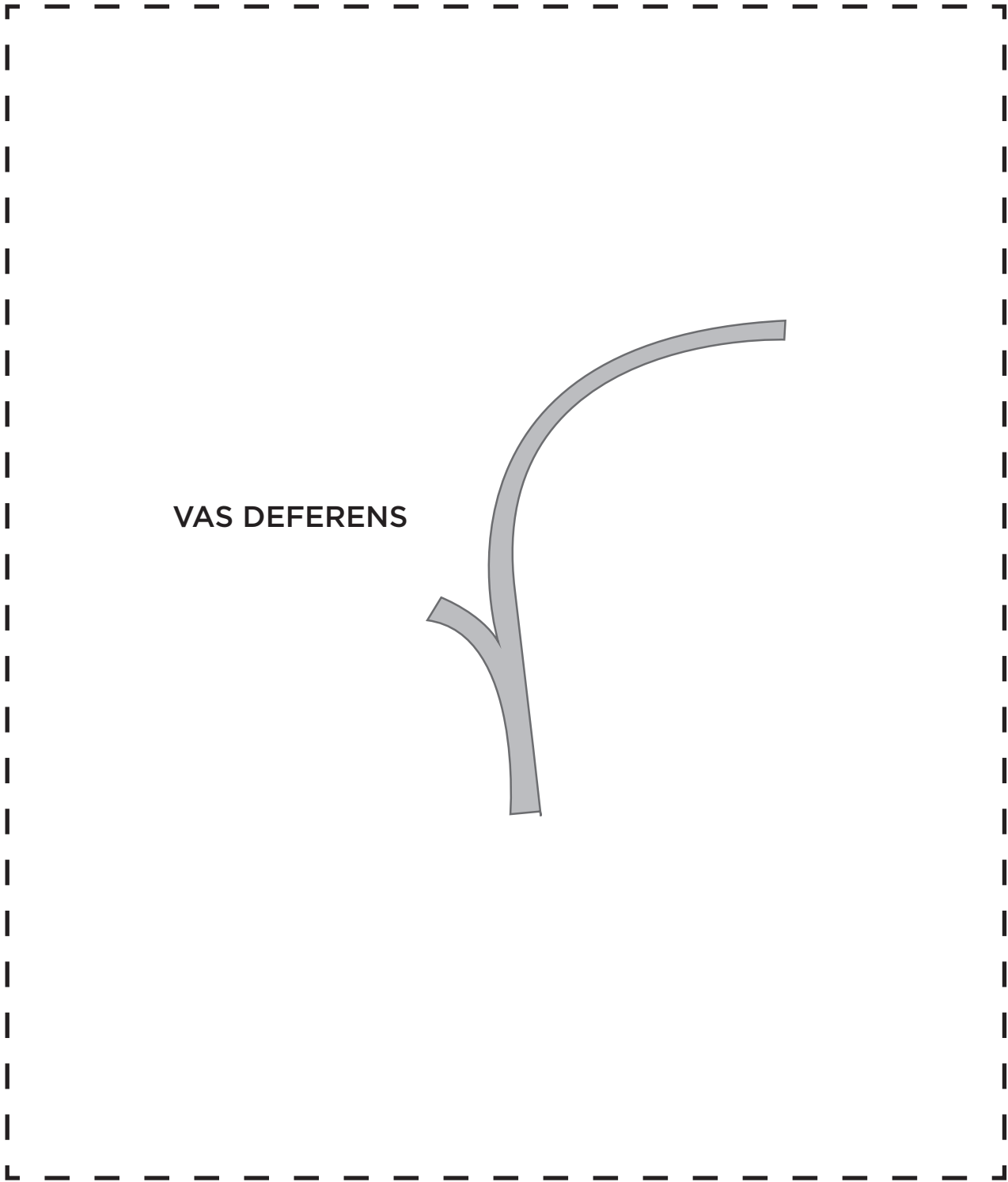
Reproductive System Puzzle - Part 3



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



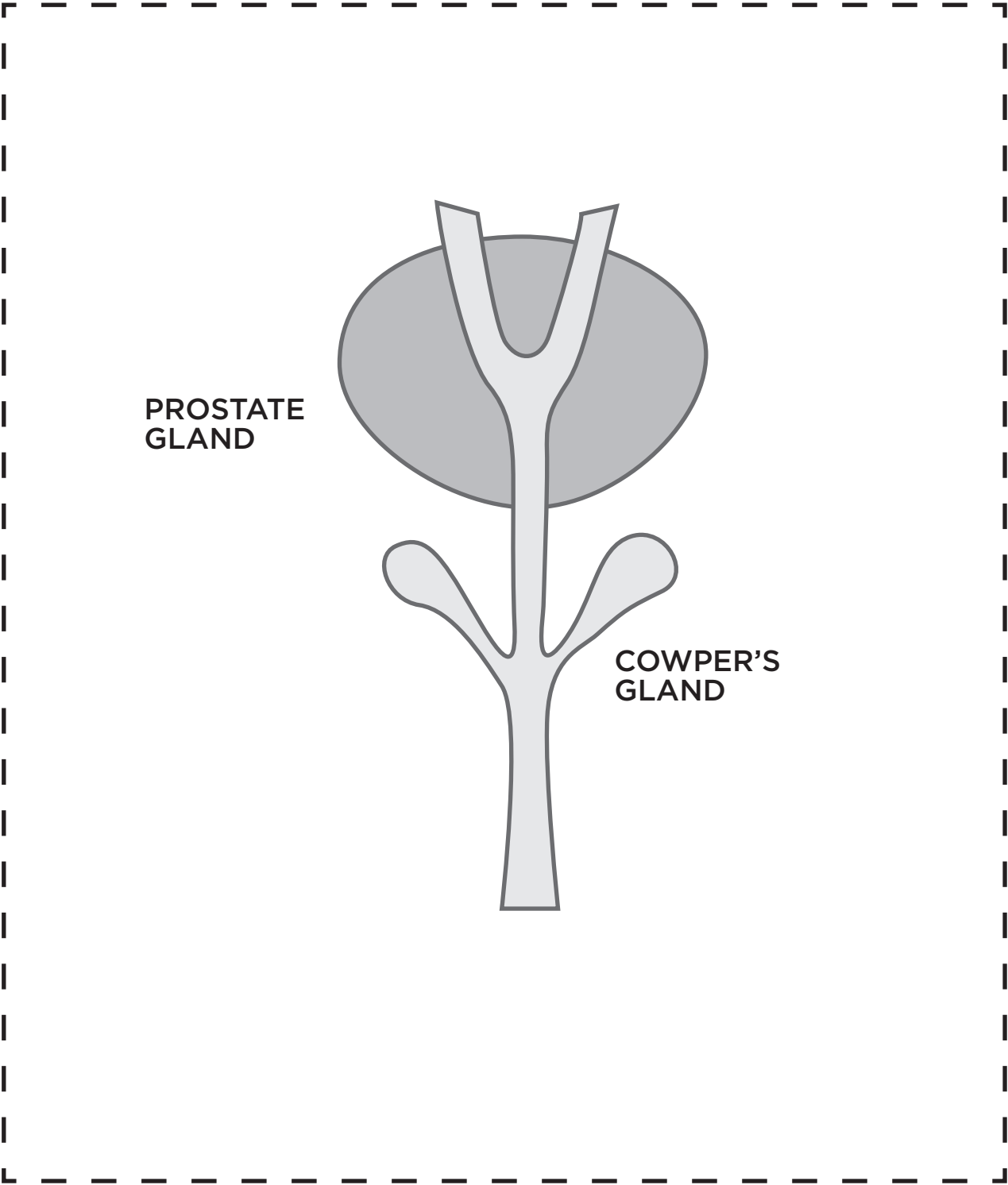
Reproductive System Puzzle - Part 4



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



Reproductive System Puzzle - Part 5



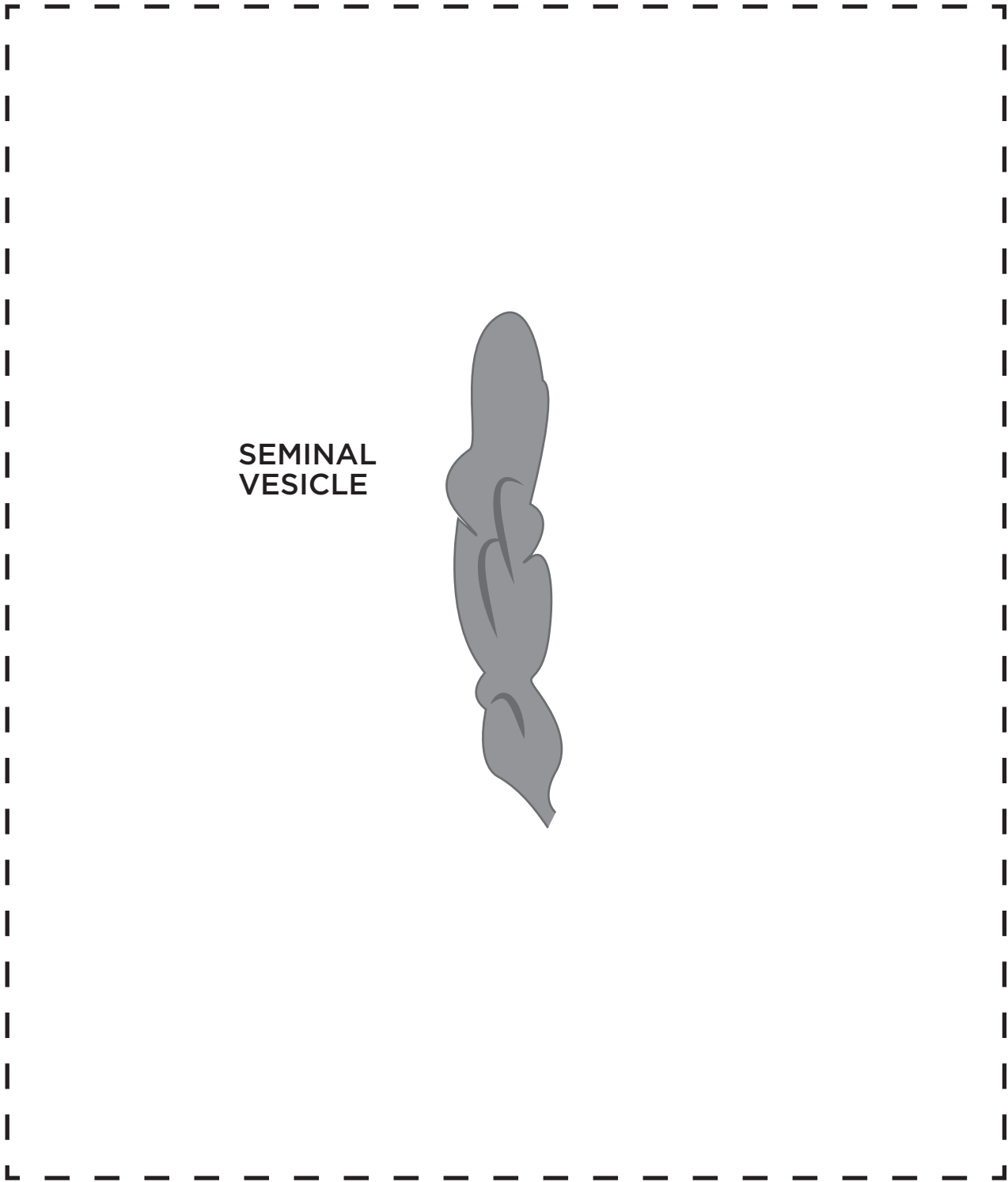
PROSTATE
GLAND

COWPER'S
GLAND

Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



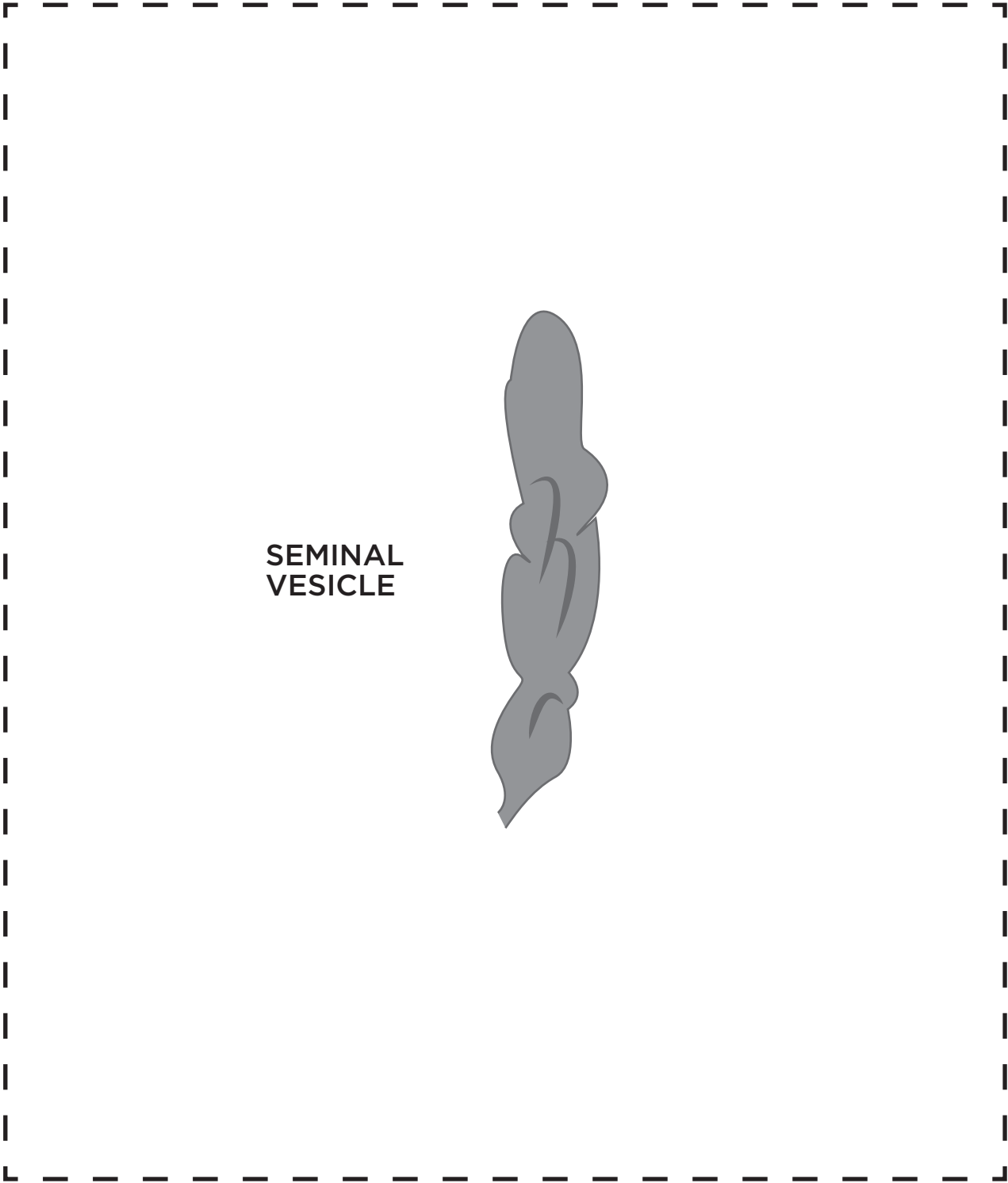
Reproductive System Puzzle - Part 6



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



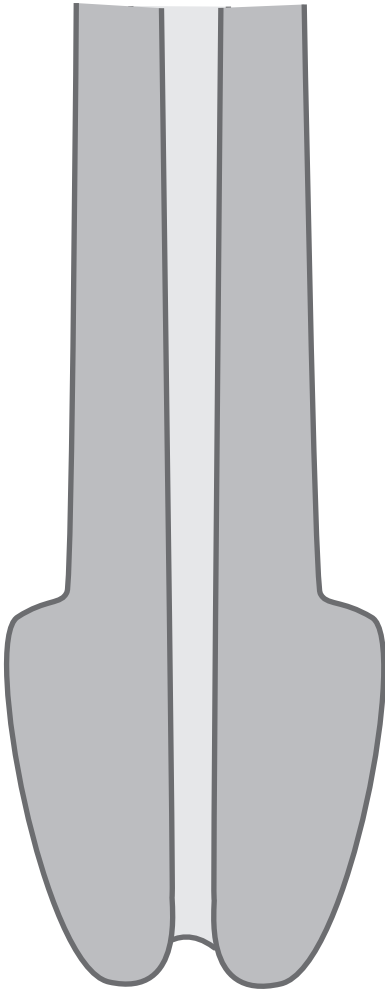
Reproductive System Puzzle - Part 7



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



Reproductive System Puzzle - Part 8

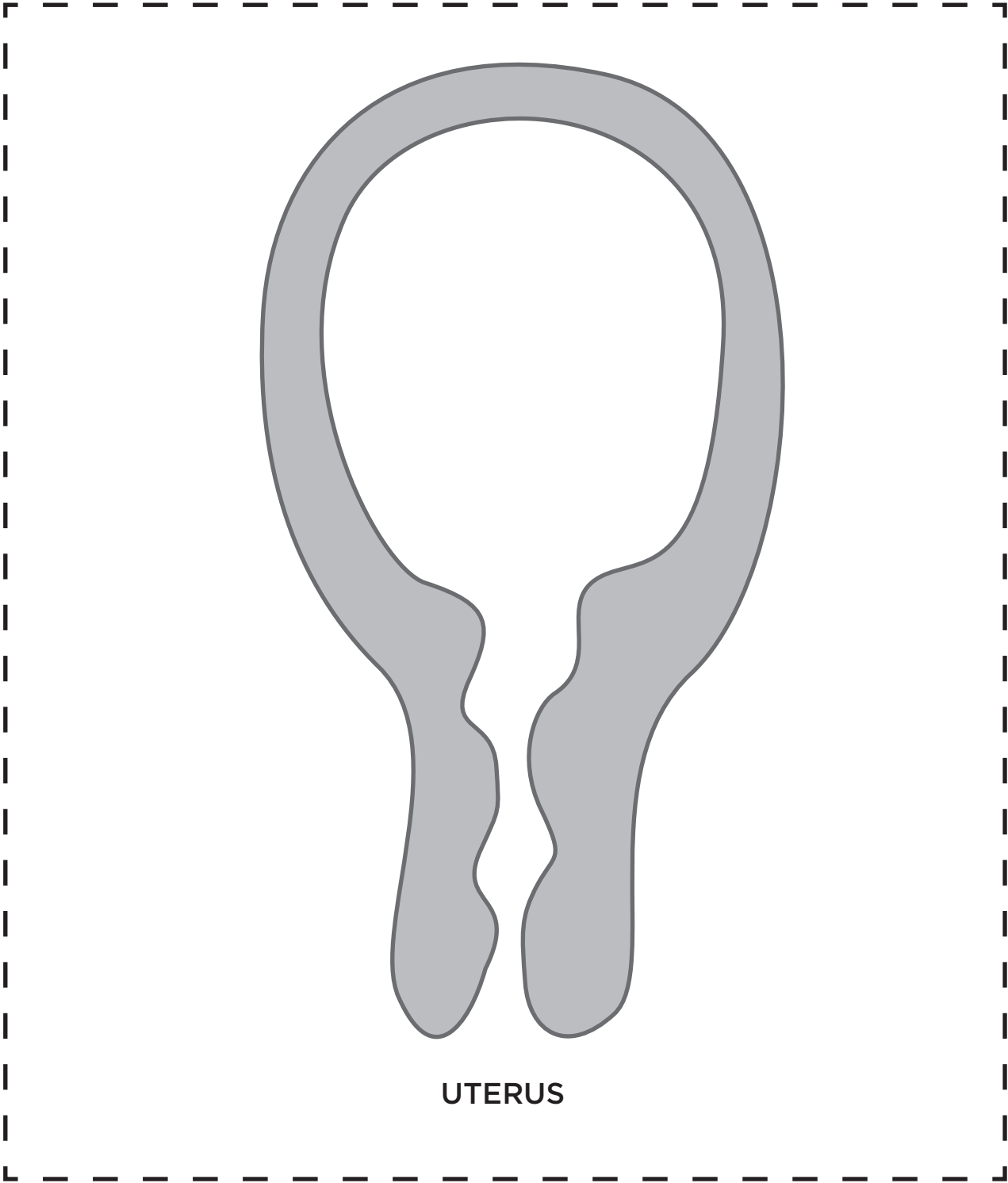


PENIS

Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



Reproductive System Puzzle - Part 9



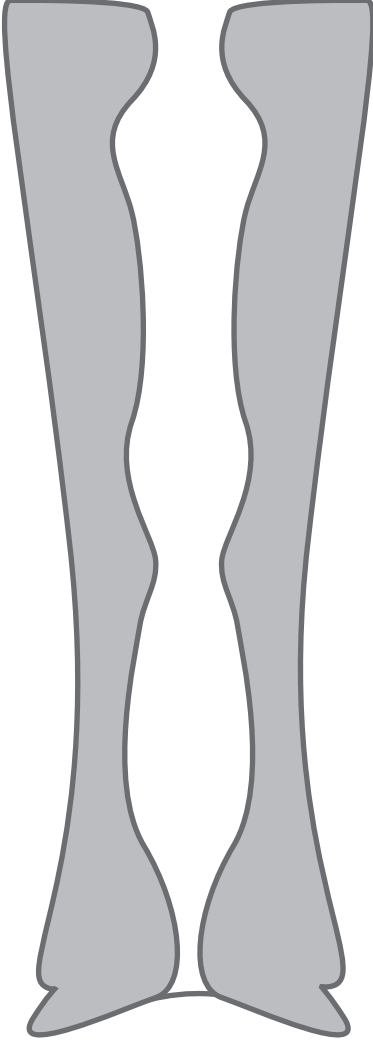
UTERUS

Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



Reproductive System Puzzle - Part 10

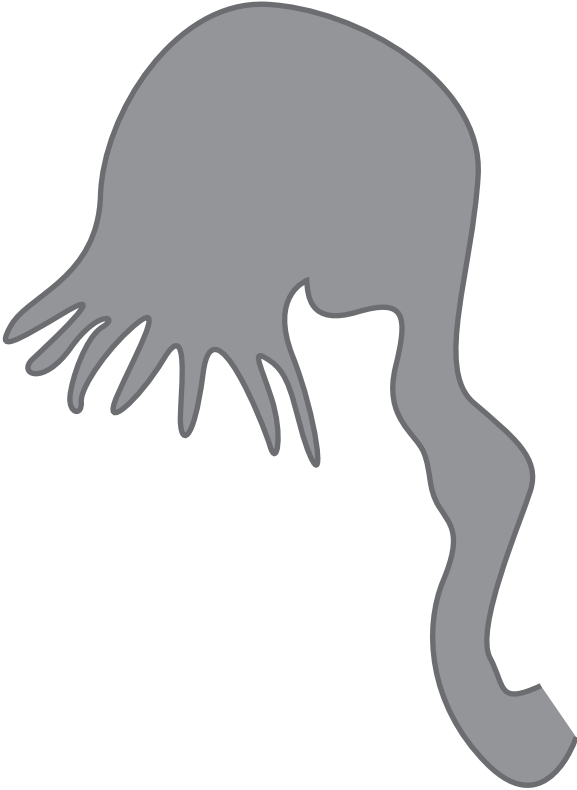
VAGINA



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



Reproductive System Puzzle - Part 11

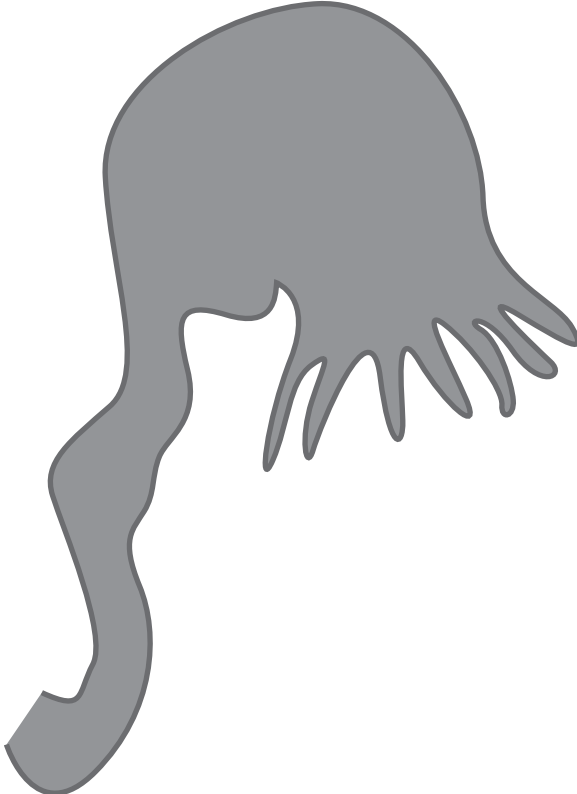


FALLOPIAN TUBE

Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



Reproductive System Puzzle - Part 12

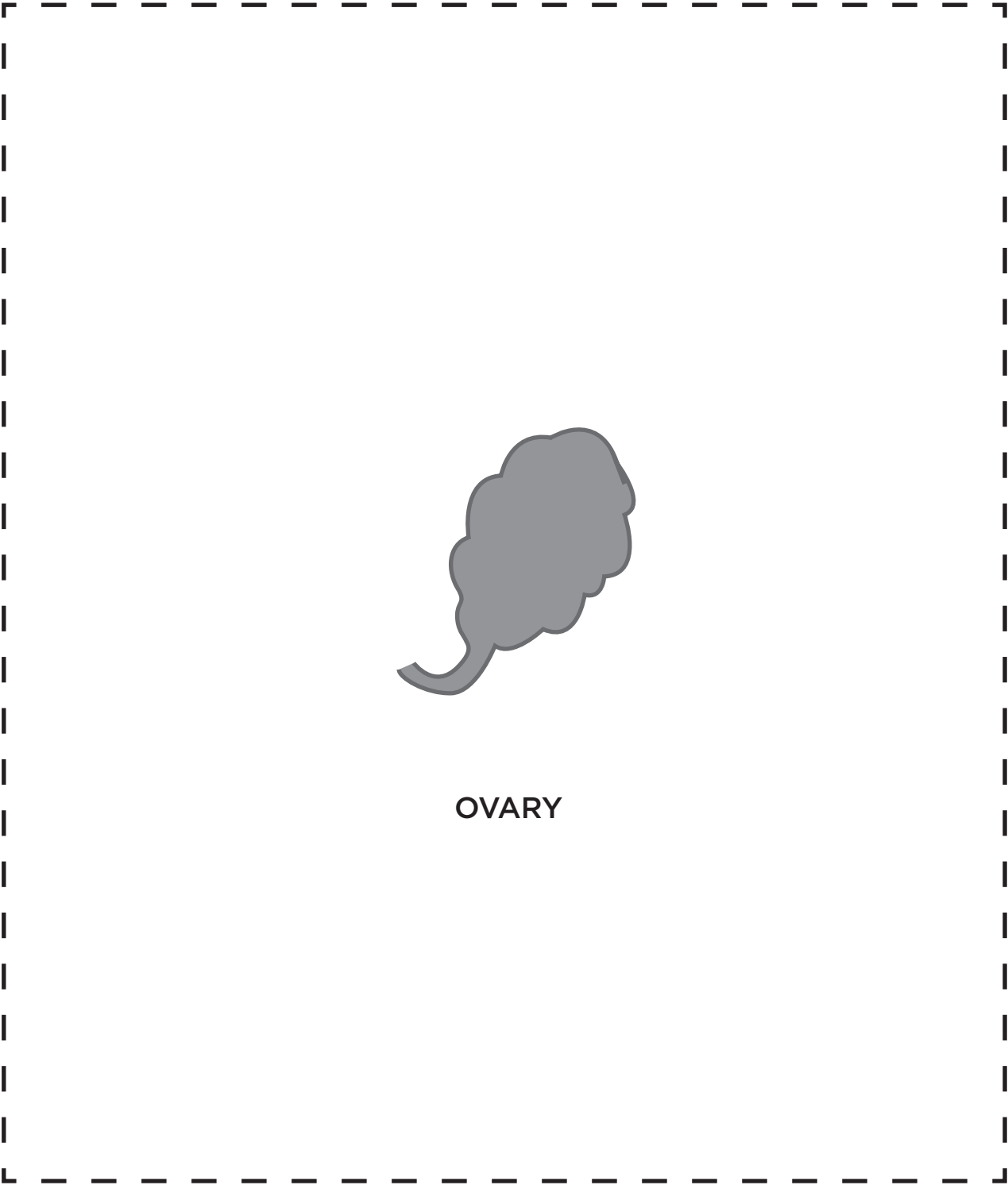


FALLOPIAN TUBE

Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



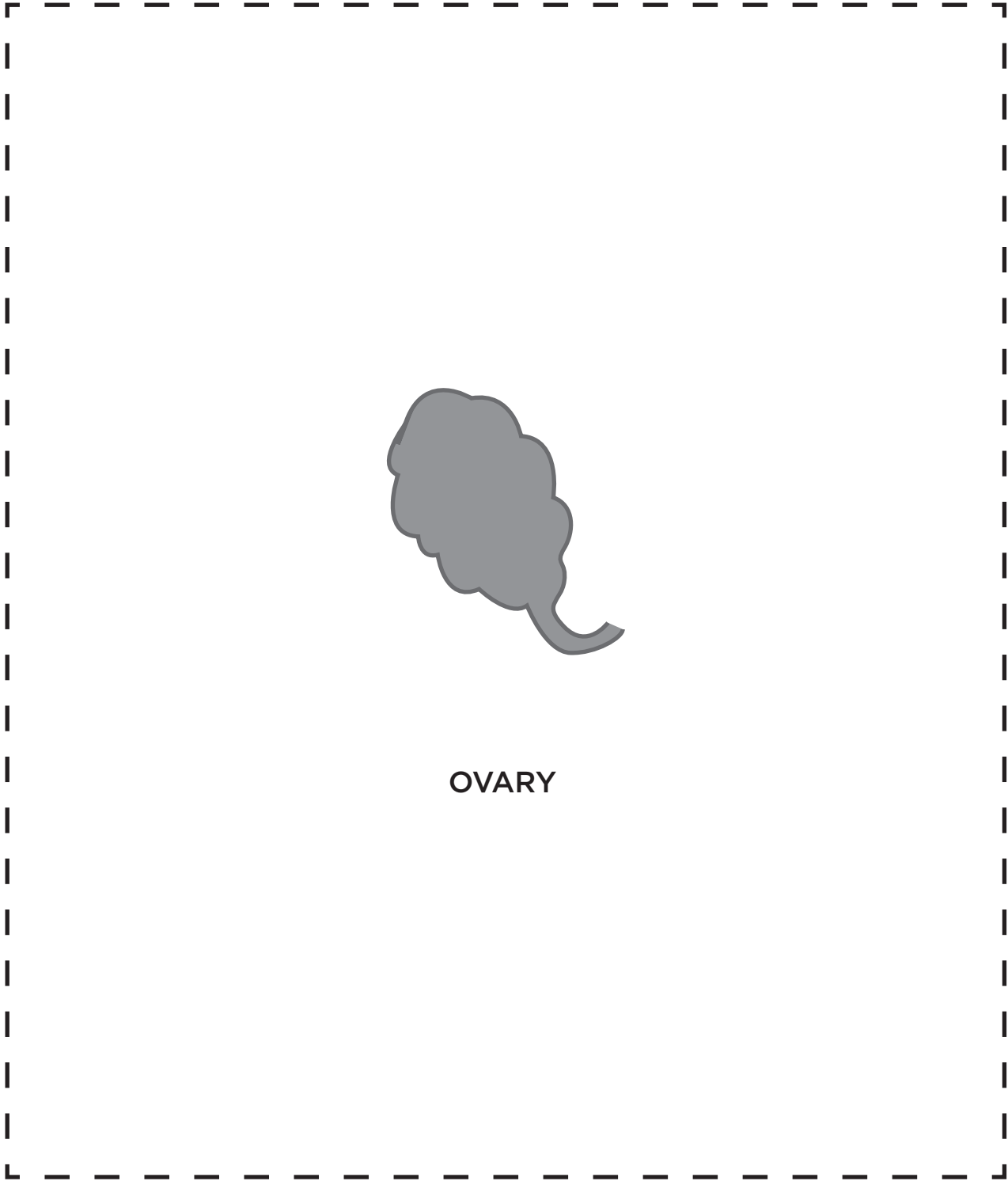
Reproductive System Puzzle - Part 13



Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



Reproductive System Puzzle - Part 14



OVARY

Adapted from Family Life And Sexual Health (F.L.A.S.H.) Curriculum, Seattle and King County Family Planning Program.



