

# **Lesson 1A**

## **The Female Reproductive System**

### **Overview**

This lesson teaches about the female reproductive system. After exploring the changes girls go through during puberty, students learn the names and functions of the external and internal female reproductive organs and test their knowledge through a matching activity.

**Time:** 45–60 minutes

### **National Sexuality Education Standards**

#### **AP.8.CC.1**

Describe male and female sexual and reproductive systems including body parts and their functions.

### **Lesson Objectives**

**Students will be able to:**

1. Summarize basic female reproductive body parts and their functions.

### **Materials & Preparation**

#### **Prepare**

- Review or establish class groundrules for discussions around sexual health to ensure that students will feel comfortable and safe.
- Have **What Is Puberty?**, **Female Reproductive Organs—External** and **Female Reproductive Organs—Internal** slides or make transparencies, if needed.
- Have blank index cards and box or container for anonymous questions.

#### **Copy**

- **Female Reproductive Organs Matching Activity** masters. Copy and cut apart the cards. Make enough cards for each student to have one.
- **Female Reproductive Organs and Understanding the Female Reproductive System** activity sheets for each student.

### Review

- **Tips for Answering Questions About Sexuality.**
- **Female Reproductive Organs Key.**
- **Understanding the Female Reproductive System Key and Scoring Rubric.**

### Health Terms

Review the teaching steps, slides, master and activity sheets for any terms or concepts your students may not know, and be prepared to explain them. Examples:

- |                   |                       |
|-------------------|-----------------------|
| • birth canal     | • mons pubis          |
| • cervix          | • organ               |
| • clitoris        | • ovaries             |
| • external        | • puberty             |
| • fallopian tubes | • reproductive        |
| • genitals        | • urinary opening     |
| • hormone         | • uterus              |
| • internal        | • vagina              |
| • labia majora    | • vaginal intercourse |
| • labia minora    | • vaginal opening     |
| • menstruation    | • vulva               |

### Support for Diverse Learners

*To ensure student success with comprehending concepts:*

- Pre-teach new concepts and terms. Write new terms on the board. Frequently use verbal checks for comprehension.
- Add a discussion of myths and facts about puberty to address misinformation and other things students may have heard or worry about. Clarify the changes girls go through, as needed.
- If available, use a 3-dimensional model or color poster of the female reproductive system (internal and external) to provide a visual example.
- Make enough sets of the **Female Reproductive Organs Matching Activity** cards for students to practice matching all of the organs and their functions with a partner, to reinforce concepts and help students become more comfortable with the terms.

*To ensure student success with reading and writing:*

- Distribute copies of the **Female Reproductive Organs—Internal** and **External** slides for students to review and use when they complete the activity sheets.
- Make a slide or transparency of the **Female Reproductive Organs Key** and review the answers with students.
- Allow students to complete the **Understanding the Female Reproductive System** activity sheet as homework, and/or work with an adult family member to complete.

## Teaching Steps

### ■ Get students ready for learning

#### Explain

Today, you're going to learn about changes female bodies go through as they mature, and about the female *reproductive* system. The reproductive system is made up of all the body parts, or organs, that allow a woman to reproduce, or have a baby.

#### Motivate

You may have a question you'd like to ask about the ways the female body changes or the female reproductive system. You'll have a chance to ask it anonymously, without giving your name, now.

*Distribute an index card to each student. Explain that students can write a question and that you'll be answering some of these questions during the lesson. If students don't have a question at this time, tell them to write "no question" on the card. Tell students not to put their names on the cards, unless they would like a private answer. When students have finished, go around the room and collect the cards in a box or other container.*

*(Note: You will review these questions later in the lesson.)*

### ■ Describe puberty

#### Survey

How would you define the word *puberty*?

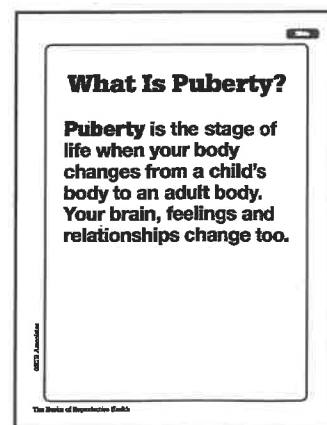
*Allow students to share their ideas.*

#### Prepare

*Show the What Is Puberty? slide.*

#### State

*Puberty is the stage of life when your body changes from a child's body to an adult body. Your brain, feelings and relationships change too.*



Slide

**Explain**

Puberty can begin any time between ages 9 and 16. Puberty happens to everybody, and each person goes through puberty at his or her own pace. Girls often begin puberty 1 to 2 years earlier than boys do.

During puberty, glands in the body begin to produce *hormones*. Hormones are chemicals that signal parts of the body to grow and change. One of the things these hormones do is cause the reproductive system to mature. These are the body parts that allow people to reproduce, or have children.

After puberty, girls can get pregnant and boys can father a child. But even though their bodies can reproduce, most young people aren't ready to raise or support a child until many years after puberty.

Puberty brings other changes too. Some are mental and emotional. Teens' brains are changing, and they can understand the results of their actions more clearly than they did as children. They are able to think and solve problems in more complex ways.

Feelings change too. Hormones can cause more ups and downs in feelings. Moods may change quickly. Both girls and boys become more aware of their bodies as they go through puberty. Some may feel excited about growing up. Many feel shy, embarrassed or worried about the changes. All of these feelings are normal.

Other changes of puberty are social. Friends can become more important, and teens may care more about being liked or fitting in. They may begin to have romantic thoughts or feel sexually attracted toward others. Sometimes teens may feel left out or lonely, or have problems at home as they try to establish a more independent or adult relationship with their parents and other family members. Again, all of these things are normal.

**■ Discuss physical changes for females****Explain**

Today, we're going to focus on the physical changes that happen as female bodies mature.

**Ask & Discuss**

What are some of the physical changes girls go through during puberty?

*Allow students to respond to the question and discuss their ideas. Make a list of key points on the board, being sure the points summarized below are included.*

## Summarize

These are some of the main changes that happen to girls during puberty:

- Hips get wider.
- Waist gets smaller.
- Hair grows under arms.
- Hair grows around *genitals* (pubic area).
- Breasts develop. One breast sometimes grows faster or larger than the other. This is normal.
- The *vagina* makes a white, sticky substance. This is normal. It's how the vagina cleans itself.
- *Menstruation* ("having periods") starts any time from age 9 to 16. You'll be learning more about this later.

Hormones cause other changes as well. During puberty, girls:

- Grow quickly and sometimes feel clumsy in their taller, larger bodies.
- Sweat more and may have body odor.
- Get oilier skin and may have pimples.

These general body changes happen to boys too.

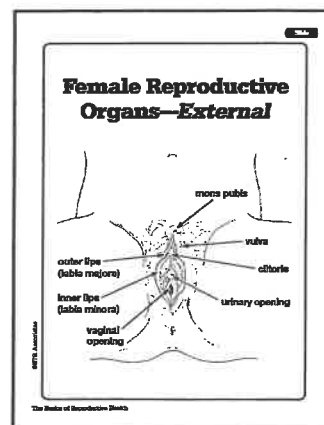
## ■ Teach about the female reproductive system

### Explain

During puberty, the female body becomes able to get pregnant and have a baby. Each of the organs you'll learn about today plays a role.

### Prepare

Show the **Female Reproductive Organs—External** slide.



Slide

## Complete

Distribute the **Female Reproductive Organs** activity sheet.

As I review each organ and what it does, fill in the blanks on the activity sheet.

## Explain

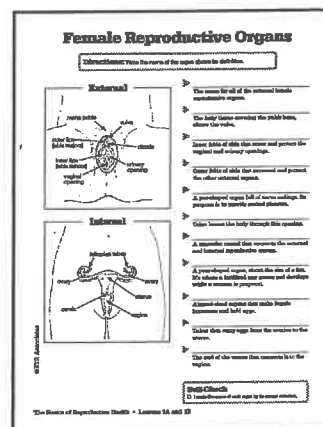
Review the external female organs. Direct students to fill in the correct blank for each organ as it is introduced. If there is time, ask students to guess the function of some of the organs before telling them.

The external female reproductive organs are the *labia majora*, *labia minora*, *clitoris*, *urinary opening* and *vaginal opening*. Together they are called the *vulva*.

- The *mons pubis* is the area where fat under the skin covers the pubic bone. Hair grows in this area during puberty.
- The *outer lips* (*labia majora*) and *inner lips* (*labia minora*) are folds of skin that surround and protect the clitoris, vaginal opening, and urinary opening.
- The *clitoris* is about the size of a pea and is full of sensitive nerve endings. Its purpose is to provide sexual pleasure.
- Below or behind the clitoris is the *urinary opening*. This is where urine leaves the body.
- Below or behind the urinary opening is the *vaginal opening*. This is where menstrual fluid leaves the body and where a baby comes out during childbirth.

## Review

Be sure students have correctly identified the external female reproductive organs on the activity sheet before you review the internal organs. Make any needed corrections before continuing. (See the **Female Reproductive Organs Key**.)



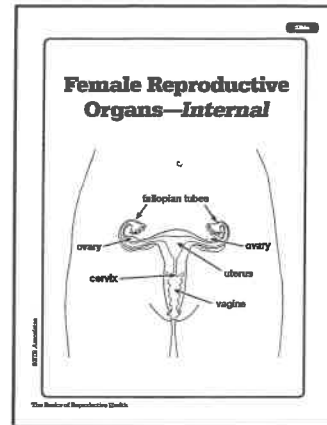
Activity Sheet

## Prepare

Show the **Female Reproductive Organs—Internal** slide.

## Explain

Review the internal female organs. Direct students to fill in the correct blank for each organ as it is introduced. If there is time, ask students to guess the function of some of the organs before telling them.



Slide

The *internal* female reproductive organs include the *vagina*, *uterus*, *fallopian tubes* and *ovaries*.

- The *vagina* is a muscular tunnel about 4 inches long that goes from the vaginal opening to the opening of the uterus. It provides a way for menstrual fluid to leave the body, and receives a man's penis during vaginal intercourse. It is also the passage through which a baby is born, so it is sometimes called the *birth canal*.
- The *uterus* is a pear-shaped organ, about the size of a fist. It is one of the strongest muscles in the body because it has to be able to push a baby out during childbirth. It's where a fertilized egg grows and develops into a baby when a woman is pregnant.
- The *ovaries* are almond-shaped organs that make female *hormones* and hold the female's eggs. When a girl is born, her ovaries contain more than 300,000 egg cells.
- The *fallopian tubes* come out of each side of the uterus. An egg travels from an ovary through a fallopian tube to get to the uterus. Fertilization happens when a male sperm enters the female egg while it is in the fallopian tube.
- The *cervix* is the narrow end of the uterus that opens into the vagina. During pregnancy, it stays tightly closed to help protect the developing fetus.

## ■ Students identify female reproductive organs

(Note: This activity is provided as a way to reinforce the learning and ensure student mastery. Although its use is strongly encouraged, it may be skipped if time is limited.)



## Review

You're going to have a chance to see how well you remember the names and functions of the female reproductive organs. Take a few minutes to review your **Female Reproductive Organs** activity sheet.

Allow a few minutes for students to quietly review their activity sheets.

## Complete & Share

Distribute the **Female Reproductive Organs Matching Activity** cards, one to each student. Each card has either the name of a female reproductive organ or its definition/function.

Ask students to find the person with the card that matches their card's word or definition/function. Once they have found the person with the matching card, they should stand next to each other in a circle.

After everyone has found his or her partner, ask each pair to read the word and definition/function and ask the other students to give a thumbs-up if they think it is a correct match, or a thumbs-downs if they think the match is incorrect. Provide corrective feedback as needed.

**Female Reproductive Organs Matching Activity**

Directions: Copy and cut apart the cards. Mix enough so that each student has a partner. Have them match the right name to the definition.

Female Reproductive Organs	Definitions or Functions
Outer lips (Labia majora)	Outer folds of skin that surround and protect external reproductive organs
Inner lips (Labia minora)	Inner folds of skin that cover and protect the vaginal and urinary openings
Clitoris	A small, highly sensitive organ that provides sexual pleasure
Urinary opening	The opening through which urine leaves the body
Vagina	The canal that provides a way for menstrual fluid to leave the body and through which a baby is born

The Basics of Reproductive Health

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## Assessment & Closure

### Students demonstrate learning

(Note: The assessment activity sheet may be completed as homework if time is limited.)

### Complete

Distribute the **Understanding the Female Reproductive System** activity sheet.

Think about what you learned today as you complete this activity sheet.

**Understanding the Female Reproductive System**

Directions: Answer the questions using what you've learned.

- What are 3 things the vagina does?
- Where does the fertilized egg grow and develop while a woman is pregnant?
- What do the ovaries do?
- Where is an egg fertilized?
- What is the name for all of the external female reproductive organs?
- What 2 parts protect the internal reproductive organs?
- What is the name of the sensitive organ that provides sexual pleasure?
- What is the narrow end of the uterus called?

Self-Check  
If I cannot do it, I will ask for help.

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Activity Sheet

*Allow time for students to complete the activity sheet. Take time while students are working on the activity sheet to review the anonymous questions collected at the beginning of class. Remove any questions that are inappropriate or irrelevant.*

## ■ End the lesson

### Close

Let's see if your questions about female bodies and the female reproductive system were answered today.

*Read the question cards collected at the beginning of class. Use them to review the material learned by asking the question and allowing the class to answer it when possible. Be sure to supply the correct terminology for any vernacular used in students' questions.*

### Assess

Collect students' **Understanding the Female Reproductive System** activity sheets and evaluate their work for this lesson.

#### **Assessment Evidence**

##### **Objective 1**

**Students summarized basic female reproductive body parts and their functions by:**

- ☐ Completing the **Understanding the Female Reproductive System** activity sheet.

## **Lesson 2A**

# **The Male Reproductive System**

### **Overview**

This lesson teaches about the male reproductive system. After exploring the changes boys go through during puberty, students learn the names and functions of the male reproductive organs and test their knowledge through a matching activity.

**Time:** 45–60 minutes

### **National Sexuality Education Standards**

#### **AP.8.CC.1**

Describe male and female sexual and reproductive systems including body parts and their functions.

### **Lesson Objective**

**Students will be able to:**

1. Summarize basic male reproductive body parts and their functions.

### **Materials & Preparation**

#### **Prepare**

- Review or establish class groundrules for discussions around sexual health to ensure that students will feel comfortable and safe.
- Have **What Is Puberty?** and **Male Reproductive Organs** slides, or make transparencies, if needed.
- Have blank index cards and box or container for anonymous questions.

#### **Copy**

- **Male Reproductive Organs Matching Activity** masters. Copy and cut apart the cards. Make enough cards for each student to have one.
- **Male Reproductive Organs and Understanding the Male Reproductive System** activity sheets for each student.

### Review

- **Tips for Answering Questions About Sexuality.**
- **Male Reproductive Organs Key.**
- **Understanding the Male Reproductive System Key** and Scoring Rubric.

### Health Terms

Review the teaching steps, slide, master and activity sheets for any terms or concepts your students may not know, and be prepared to explain them. Examples:

- |                   |                      |
|-------------------|----------------------|
| • absorbed        | • scrotum            |
| • bladder         | • semen              |
| • Cowper's glands | • seminal fluid      |
| • epididymis      | • seminal vesicles   |
| • erection        | • sexual intercourse |
| • fertilize       | • sperm              |
| • genitals        | • testicles          |
| • hormone         | • testosterone       |
| • penis           | • tissue             |
| • prostate gland  | • urethra            |
| • puberty         | • vas deferens       |
| • reproductive    |                      |

### Support for Diverse Learners

*To ensure student success with comprehending concepts:*

- Pre-teach new concepts and terms. Write new terms on the board. Frequently use verbal checks for comprehension.
- Add a discussion of myths and facts about puberty to address misinformation and other things students may have heard or worry about. Clarify the changes boys go through, as needed.
- If available, use a 3-dimensional model or color poster of the male reproductive system to provide a visual example.
- Make enough sets of the **Male Reproductive Organs Matching Activity** cards for students to practice matching all of the organs and their functions with a partner, to reinforce concepts and help students become more comfortable with the terms.

*To ensure student success with reading and writing:*

- Distribute copies of the **Male Reproductive Organs** slide for students to review and use when they complete the activity sheets.
- Make a slide or transparency of the **Male Reproductive Organs Key** and review the answers with students.
- Allow students to complete the **Understanding the Male Reproductive System** activity sheet as homework, and/or work with an adult family member to complete.

## Teaching Steps

### ■ Get students ready for learning

#### Explain

Today, you're going to learn about the changes male bodies go through as they mature, and about the male reproductive system. The reproductive system is made up of all the body parts, or organs, that allow a man to reproduce, or father a baby.

#### Motivate

If you have a question you'd like to ask about ways the male body changes or the male reproductive system, you have a chance to ask it anonymously, without giving your name, now.

*Distribute an index card to each student. Explain that students can write a question and that you'll be answering some of these questions during the lesson. If students don't have a question at this time, tell them to write "no question" on the card. Tell students not to put their names on the cards, unless they would like a private answer. When students have finished, go around the room and collect the cards in a box or other container.*

*(Note: You will review these questions later in the lesson.)*

### ■ Describe puberty

*(Note: If you taught the general description of puberty during the lesson on the Female Reproductive System, you can skip to the teaching step on physical changes for males. If you are starting with this lesson, or teaching boys and girls separately, include the step below.)*

## Survey

How would you define the word *puberty*?

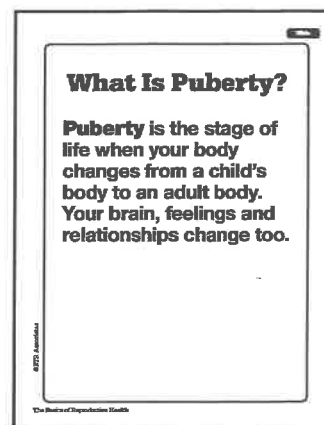
*Allow students to share their ideas.*

## Prepare

*Show the What Is Puberty? slide.*

## State

*Puberty is the stage of life when your body changes from a child's body to an adult body. Your brain, feelings and relationships change too.*



Slide

## Explain

Puberty can begin any time between ages 9 and 16. Puberty happens to everybody, and each person goes through puberty at his or her own pace. Boys often begin puberty 1 to 2 years later than girls do.

During puberty, glands in the body begin to produce hormones. Hormones are chemicals that signal parts of the body to grow and change. One of the things these hormones do is cause the reproductive system to mature. These are the body parts that allow people to reproduce, or have children. After puberty, boys can father a child and girls can get pregnant. But even though their bodies can reproduce, most young people aren't ready to raise or support a child until many years after puberty.

Puberty brings other changes too. Some are mental and emotional. Teens' brains are changing, and they can understand the results of their actions more clearly than they did as children. They are able to think and solve problems in more complex ways.

Feelings change too. Hormones can cause more ups and downs in feelings. Moods may change quickly. Both girls and boys become more aware of their bodies as they go through puberty. Some may feel excited about growing up. Many feel shy, embarrassed or worried about the changes. All of these feelings are normal.

Other changes of puberty are social. Friends can become more important, and teens may care more about being liked or fitting in. They may begin to have romantic thoughts or feel sexually attracted toward others. Sometimes teens may feel left out or lonely, or have

problems at home as they try to establish a more independent or adult relationship with their parents and other family members. Again, all of these things are normal.

## ■ Discuss physical changes for males

### Explain

Today, we're going to focus on the physical changes that happen as male bodies mature.

### Ask & Discuss

What are some of the physical changes boys go through during puberty?

*Allow students to respond to the question and discuss their ideas. Make a list of key points on the board, being sure the points summarized below are included.*

### Summarize

These are some of the main changes that happen to boys during puberty:

- Shoulders get broader.
- Muscles grow.
- Voice gets deeper.
- Hair grows under arms and on arms, legs, chest and face.
- Hair grows around *genitals* (pubic area).
- *Penis* and *testicles* grow larger. One testicle usually hangs lower than the other. This is normal.
- The penis may become firm and stand out from the body at times. This is called an *erection*. Erections can happen in response to sexual thoughts or feelings, during sleep or sometimes for no clear reason.
- Boys' breasts may feel tender and grow a little. This is normal. It will go away.

Hormones cause other changes as well. During puberty boys:

- Grow quickly and sometimes feel clumsy in their taller, larger bodies.
- Sweat more and may have body odor.
- Get oilier skin and may have pimples.

These general body changes happen to girls too.

## ■ Teach about the male reproductive system

### Explain

During puberty, a male's body becomes able to *fertilize* a female's egg to cause a pregnancy. Each of the organs you'll learn about today plays a role.

### Prepare

Show the **Male Reproductive Organs** slide.

### Complete

Distribute the **Male Reproductive Organs** activity sheet.

As I review each organ and what it does, fill in the blanks on the activity sheet.

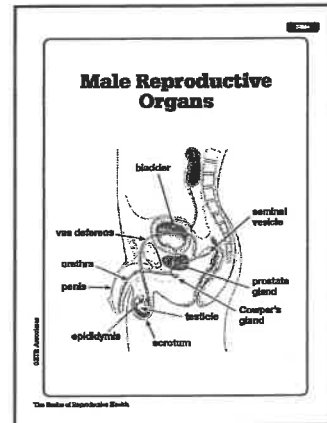
### Explain

Review the male organs. Direct students to fill in the correct blank for each organ as it is introduced. If there is time, ask students to guess the function of some of the organs before telling them.

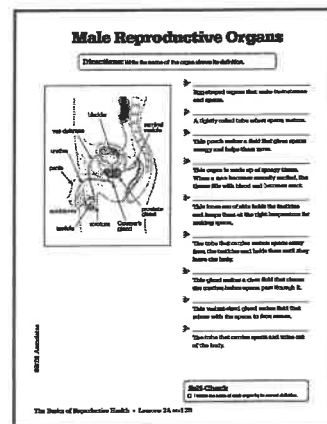
The male reproductive system includes the *penis*, *scrotum*, *urethra*, *testicles*, *epididymis*, *vas deferens*, *seminal vesicles*, *prostate gland* and *Cowper's glands*.

- The *penis* is made up of spongy tissue. Most of the time it's soft and limp. But when a man becomes sexually excited, the tissue of the penis fills with blood and becomes larger and firm. This is called an *erection*. It happens before sexual intercourse, or when the man has sexual feelings or thoughts. It can also happen during sleep.

(Note: The drawing shows a *circumcised penis*. Teachers may want to explain that *circumcision* is when the fold of skin that covers the tip of the penis when a boy is born is removed for religious or cultural reasons. Both *circumcised* and *uncircumcised* penises are normal. Circumcision has no effect on how the penis works.)



Slide



Activity Sheet



- The 2 *testicles* are about the size and shape of small plums. They make the hormone *testosterone* and produce *sperm*, the male reproductive cells. Every day, a healthy male produces several hundred million sperm. The testicles make sperm best at a few degrees cooler than normal body temperature. This is why they hang outside the body in the scrotum.
- The *scrotum* is a loose sac of skin that hangs behind the penis. It holds the testicles. If the testicles get cold, the scrotum hugs the body to warm them up to the best temperature for making sperm. If the testicles get too warm, the scrotum hangs low to cool them down.
- The *epididymis* is a tightly coiled tube that curves over the top of each testicle. After sperm are made they move into the epididymis for up to 6 weeks. There they mature and develop the ability to swim.
- The *vas deferens* is the tube that leads out of the epididymis. There are 2 of them, one from each testicle. Each vas is about 17 inches long. Mature sperm move from the epididymis into the vas deferens where they are stored until they leave the body. Unused sperm get broken down and *absorbed* by the body.
- The *prostate gland* is about the size and shape of a walnut. The prostate makes a thin, milky fluid that helps the sperm move. The prostate grows larger at puberty.
- The *seminal vesicles* are pouches that connect to each vas deferens before it reaches the prostate gland. They make a sticky yellow liquid called *seminal fluid* that gives sperm energy and helps them move. Together, the fluid from the seminal vesicles and prostate gland make *semen*—the milky white liquid containing sperm that leaves the penis when a man ejaculates. *Ejaculation* is when the muscles of the reproductive organs contract and push the semen out of the man's body.
- The *urethra* is a tube that starts at the *bladder* and runs through the penis to its end. It carries both urine and semen out of the body, but never at the same time. When a man is sexually excited, a valve closes off the bladder, so urine can't pass through the urethra.
- The *Cowper's glands* are 2 small glands along the urethra. They make a clear fluid that passes through the urethra before a man ejaculates to flush out any traces of urine. This fluid is called pre-ejaculate. Sometimes this fluid can contain sperm that have been left in the urethra from earlier ejaculations.

## ■ Students identify male reproductive organs

(Note: This activity is provided as a way to reinforce the learning and ensure student mastery. Although its use is strongly encouraged, it may be skipped if time is limited.)

### Review

You're going to have a chance to see how well you remember the names and functions of the male reproductive organs. Take a few minutes to review your **Male Reproductive Organs** activity sheet.

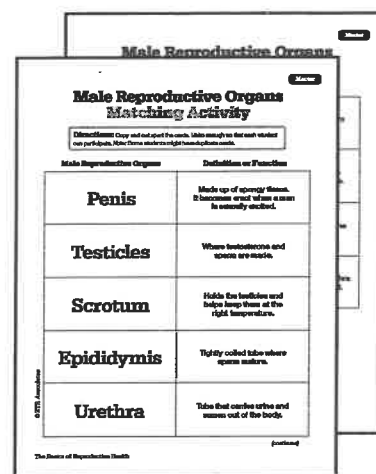
Allow a few minutes for students to silently review their activity sheets.

### Complete

Distribute the **Male Reproductive Organs Matching Activity** cards, one to each student. Each card has either the name of a male reproductive organ or its definition/function.

Ask students to find the person with the card that matches their card's word or definition/function. Once they have found the person with the matching card, they should stand next to each other in a circle.

After everyone has found his or her partner, ask each pair to read the word and definition/function and ask the other students to give a "thumbs-up" if they think it is a correct match, or a "thumbs-downs" if they think the match is incorrect. Provide corrective feedback as needed.



The image shows a matching activity card titled "Male Reproductive Organs Matching Activity". It includes instructions to cut out and match organs to their definitions. The card is divided into two columns: "Male Reproductive Organs" and "Definitions or Functions".

Male Reproductive Organs	Definitions or Functions
Penis	Made up of spongy tissue. It becomes erect when a man is sexually excited.
Testicles	Where testosterone and sperm are made.
Scrotum	Holds the testicles and helps keep them at the right temperature.
Epididymis	Tightly coiled tube where sperm mature.
Urethra	Tube that carries urine and semen out of the body.

Small text at the bottom left: ETR Associates. Small text at the bottom right: (continued)

Masters

## Assessment & Closure

### ■ Students demonstrate learning

(Note: The assessment activity sheet may be completed as homework if time is limited.)

### Complete

Distribute the **Understanding the Male Reproductive System** activity sheet.

Think about what you learned today as you complete this activity sheet.

*Allow time for students to complete the activity sheet. Take time while students are working on the activity sheet to review the anonymous questions collected at the beginning of class. Remove any questions that are inappropriate or irrelevant.*

## ■ End the lesson

### Close

Let's see if your questions about male bodies and the male reproductive system were answered today.

*Read the question cards collected at the beginning of class. Use them to review the material learned by asking the question and allowing the class to answer it when possible. Be sure to supply the correct terminology for any vernacular used in students' questions.*

### Assess

Collect students' **Understanding the Male Reproductive System** activity sheets and evaluate their work for this lesson.

**Understanding the Male Reproductive System**

Directions: Answer the questions using what you've learned.

1. What does the scrotum do?
2. Where are sperm and male hormones made?
3. What is the thing that the testis do?
4. What is the organ that the testis are made of?
5. Where do the sperm mature and become able to swim?
6. What is the tube called that carries the sperm away from the testis and stores them until they leave the body?
7. What is the name of the organ that fills with blood and becomes erect during sex?
8. Which glands make a fluid that cleans the urethra before sperm pass through it?

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Full Circle  
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Activity Sheet

### Assessment Evidence

#### Objective 1

Students summarized basic male reproductive body parts and their functions by:

- ☐ Completing the **Understanding the Male Reproductive System** activity sheet.