

## Lesson Topic: Puberty and How a Pregnancy Happens

### Standards Alignment:

#### National Sex Education Standards

**PD.5.CC.2** – Describe how puberty prepares human bodies for the potential to reproduce and that some healthy people have conditions that impact the ability to reproduce.

**SH.5.CC.1** – Explain the relationship between sexual intercourse and human reproduction.

**SH.5.CC.2** – Explain the range of ways pregnancy can occur (e.g. IVF, surrogacy)

**PD.5.AI.2** – Identify trusted adults, including parents, caregivers, and health care professionals, who students can ask questions about puberty and adolescent health.

#### Nevada Academic Content Standards

**1.HRS.5.3** – Describe how puberty prepares human bodies for the potential to reproduce.

**1.HRS.5.1** – Identify the structures and functions of the human reproductive systems using correct anatomical terms.

### Objectives:

- Describe how puberty prepares the biological male body for potential to reproduce.
- Describe how puberty prepares the biological female body for potential to reproduce.
- Define “sexual intercourse” within the context of human reproduction.
- Describe the process of human reproduction by identifying the correct order of steps involved in conception.
- Describe what cells are involved in human reproduction (sperm and egg).
- Explain at least two ways in which pregnancy can happen that do not include sexual intercourse.
- Name at least two reasons why someone might choose to use one of these methods.
- Define the term abstinence.

### Activities:

**Video:** Menstruation: What to Expect (stop video at 3:00) <https://youtu.be/DBe7-PHRav8>

**Video:** Pregnancy and Reproduction Explained (stop video at 2:15): <https://youtu.be/OejdOS4IqeE>

“How Pregnancy Happens/Human Reproduction Diagram” –attachment

Exit slips – located at end of packet

### Lesson Prep:

- How a pregnancy happens activity- if completing in small groups, make enough copies for one set/group.
- Students will need scissors and glue
- Copies of the exit slip (if you choose to use it), for each of your students. Or you can have them respond on the back of the index card (used for anonymous questions).

### Lesson Intro:

- SHARE is important for everyone in the class.
- The goal is for every one of you to feel that these classes relate to you and your life.
- This curriculum and resulting class discussions are intended to be respectful and inclusive of many perspectives and allow all students to see themselves and understand their own health and sexuality.
- The purpose of SHARE is to assist you in making informed choices and avoid behaviors that put you at risk.
- All questions are welcome. If you don't feel comfortable asking in class, I've provided paper for anonymous questions, or you may talk with me later.

***Use of Slang Words:*** *If students use slang words, keep in mind that may be the only language they have heard before this class. They also may just be trying to get a rise out of you. Since you won't know their motivation, should they use a slang term, gently correct them (remind them that we are using the correct anatomical terms-like scientists) and ask them to continue. For example, if they were to say, “balls” for “testicles,” there is likely to be some laughter. Simply say, “And what is the word we learned for ‘balls?’” and restate using the term testicles.*

**Lesson:**

Explain to students that the focus of the lesson is how puberty can prepare the human body for the potential to reproduce.

**Slide 1:**

- Ask, “Who remembers what puberty is? We talked a little about it in the first lesson and in 4<sup>th</sup> grade.”
  - When our bodies start releasing special hormones from the pituitary gland.
  - When a body begins going through puberty, many changes occur.
    - Two of the changes are:
      - The male body (a body with testicles) begins producing sperm (not born with sperm-when puberty begins, can produce several million sperm /day)
      - The female body (a body with a uterus) (which is born with all the (immature) eggs they will ever have) typically starts their menstrual cycle – *starts their period*.

We’re going to watch a short video on the menstrual cycle. Tell them you will be asking a few questions about the video so pay close attention.

Video: Menstruation: What to Expect (stop video at 3:00) <https://youtu.be/DBe7-PHRav8>

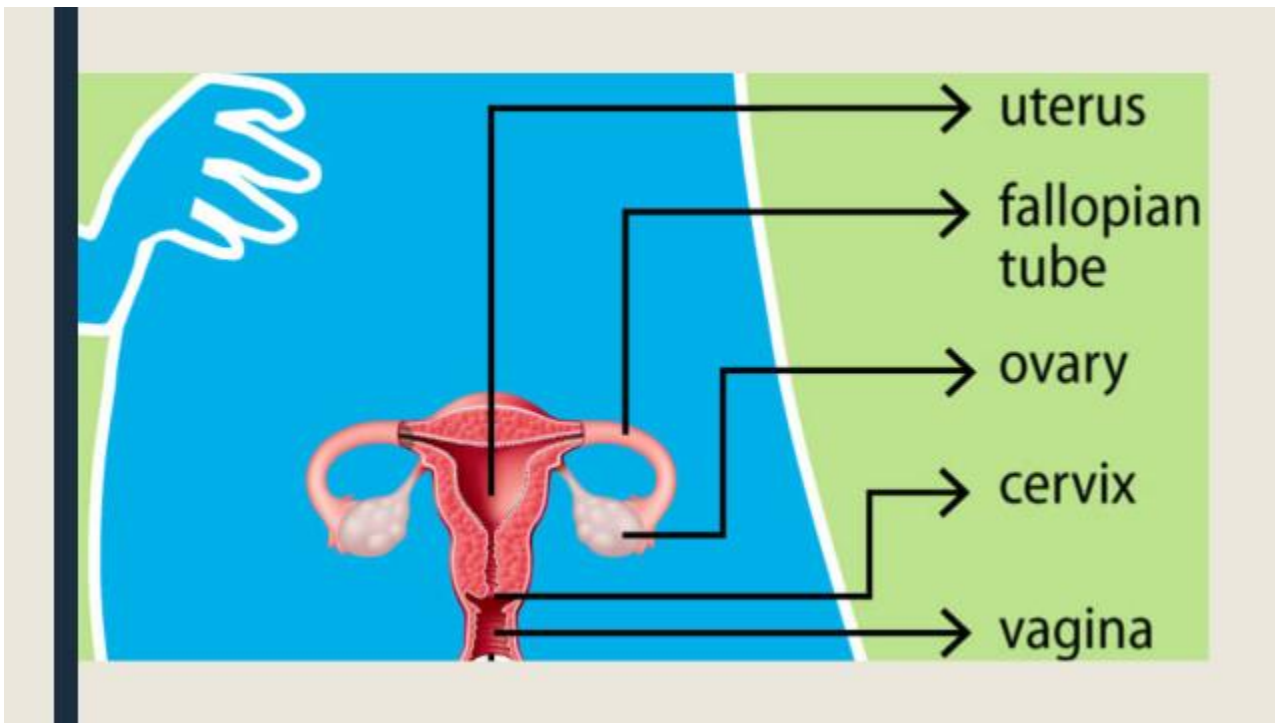
Slide2:

## Menstruation: What To Expect



- Video review- Ask students
  - What is the menstrual cycle?
    - The monthly process that happens in a female's body to prepare for a possible pregnancy.

## Slide 3:



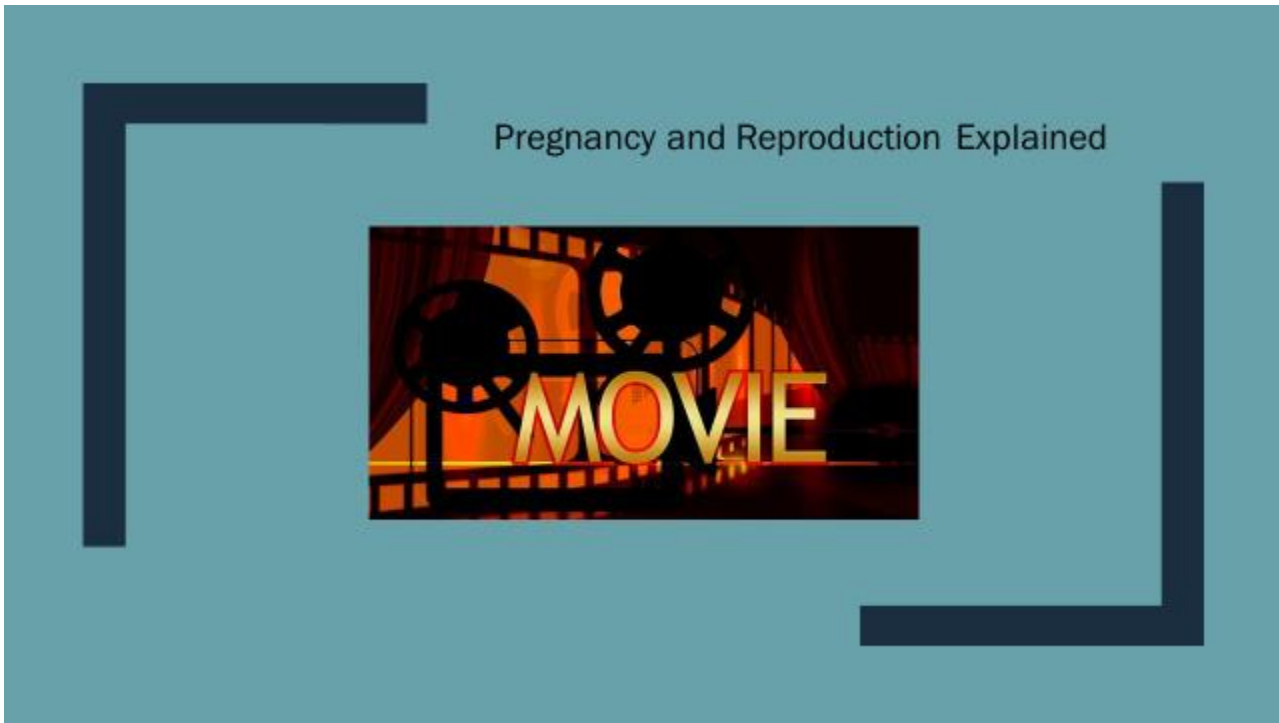
- What are some things that happen during the cycle? (probe for any of the following)
  - Release of an egg from the ovaries (called ovulation)
  - Thickening of the uterine wall
  - PMS- symptoms
  - Shedding of the thickened uterine wall through bleeding (called menstruation, also known as a “period” )
  - More info to share with students: Hormonal fluctuations drive the changes that occur during the menstrual cycle. If pregnancy does not occur (the egg is not met by a sperm and fertilized), the body sheds the extra lining of the uterus. The blood and tissue leave the uterus through the cervix and exit the body through the vagina.
  - The purpose of the thickened uterine walls is to prepare for a fertilized egg and pregnancy to begin.

“What happens when that egg does get fertilized?”

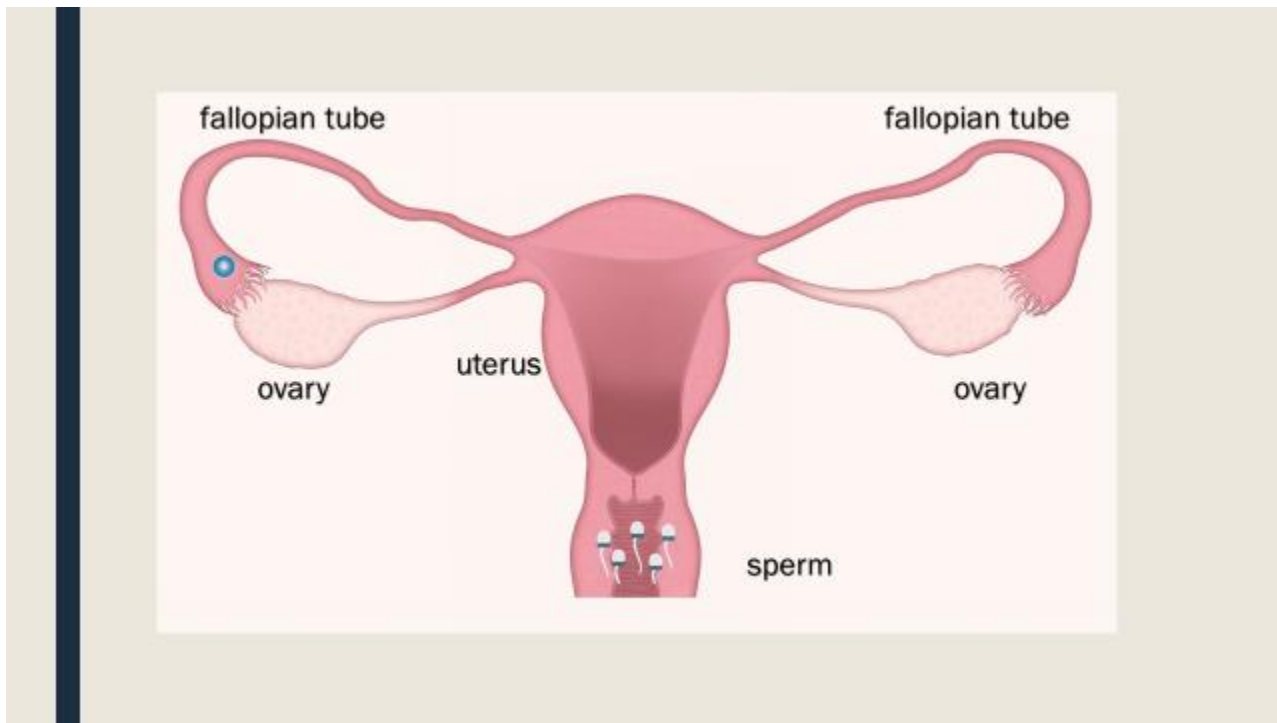
**Slide4:**

Video: Pregnancy and Reproduction Explained (stop video at 2:15): Video <https://youtu.be/OeidOS4lqeE>

- While watching the video, have students pay attention to what is needed for a pregnancy to occur.

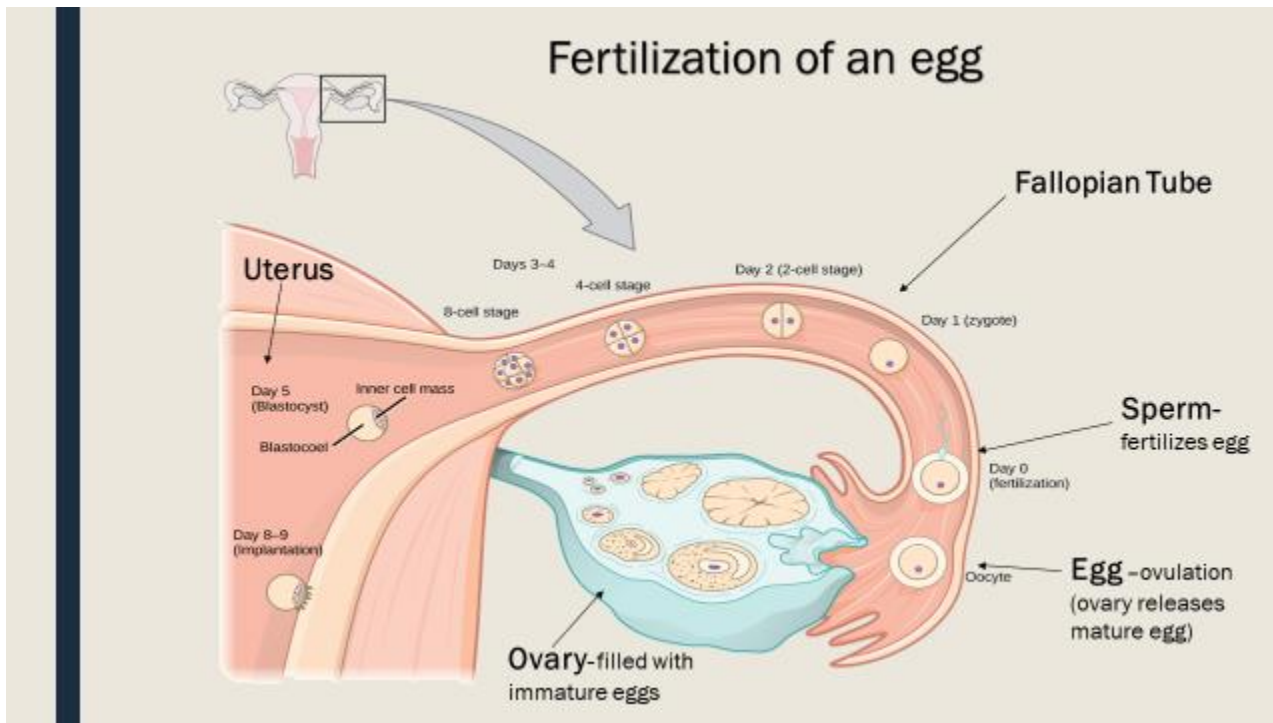


Check for questions of anything included in the video.

**Slide 5:** Steps of fertilization

- Sperm from the testicles get inside the vagina. (if asked “how does that happen” tell students you will get to that in a few moments and to hold the question)
- Sperm swim up into the uterus and into both fallopian tubes looking for an egg.

Slide 6: Fertilization of the egg.



- An egg comes out of one of the ovaries (Ovulation-this happens approximately once/month).
  - If the sperm finds an egg, they all try to get inside.
  - Usually only one sperm does, and then no other sperm can get inside.
- When an egg has a sperm inside it, the egg has been fertilized.
  - Fertilized means adding something to make a living cell grow.
  - Once the egg is fertilized, though, pregnancy hasn't begun –one last step has to take place.
- The fertilized egg goes into the uterus, and tries to attach itself (implantation) to one of the walls of the uterus.
  - If successful, a pregnancy begins.
  - If not successful, it breaks apart and leaves through the vagina.

Slide 6 Teacher Notes:

- Inside the teal ovary, houses all the eggs a female will ever have.
- Hormones in the body and in the corpus luteum (which is formed in the ovary as shown on the diagram) will secrete hormones at the site of a follicle and then once matured, will release the ovum (or the egg) which is then picked up by the arms of the fallopian tube.
- The size of the corpus luteum can be variable based on the time of a menstruation cycle and if the egg is not fertilized, the corpus luteum becomes inactive after about 10-14 days and that is why menstruation occurs.

- Once the sperm enters/fertilizes the egg, it will travel down the fallopian tube; as it travels, the cells are dividing fast and form into a blastocyst which is then ready to be implanted in the uterine lining.
  - When someone with a uterus/ovaries is born, they will have 1-2 million eggs in their ovaries, that number continues to decrease as you age; on average, out of all those eggs, you will only ovulate about 300-400 eggs in your lifetime.
  - Those who are born with a penis and testicles will start to make sperm during puberty and then continue regenerating sperm throughout their lifetime-several million sperm are produced daily.
- 

Activity: How Pregnancy Happens (located at end of this lesson)

- Students work as partners or in small groups.
- Pass out one set of Reproduction cards and one diagram
  - Students cut out cards and place in the correct spot on the diagram
- Provide enough time to cut cards (model a quick way to cut) and glue on diagram (10ish minutes).
- Go over answer key and students self correct.

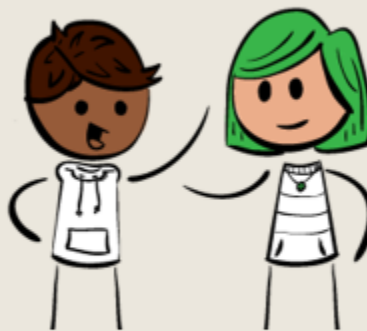
Slide 7:

Have students work in small groups to complete how a pregnancy happens diagram.

## Activity

With a partner

- Complete “How Pregnancy Happens”



Say something like, “You’ve done a great job remembering how sperm get inside the uterus to try to create a pregnancy. The video we watched a little bit ago said there were three ways that this can happen.

- Who remembers what they were?

Slide 8:



- Probe for: penis-vagina sexual intercourse, artificial insemination and in-vitro fertilization.
  - Penis-vagina sexual intercourse: The insertion of the penis into the vagina.
  - Artificial or alternative insemination: When a healthcare professional helps, someone become pregnant without them having penis-vagina sexual intercourse. The healthcare provider might insert sperm-filled semen into a vagina to try to create a pregnancy.
  - In-vitro-fertilization: The healthcare provider takes an egg from an ovary and inserts sperm into it to fertilize the egg. That egg is placed up into the uterus in the hope that it will attach itself to the wall of the uterus, called implantation.
- Can anyone think of a reason someone might choose one of the alternative methods instead of penis-vagina sexual intercourse?
  - Probe for:
    - If a couple (one partner has testicles and one has ovaries) is trying to have a baby, and after unsuccessful attempts, they need some help.

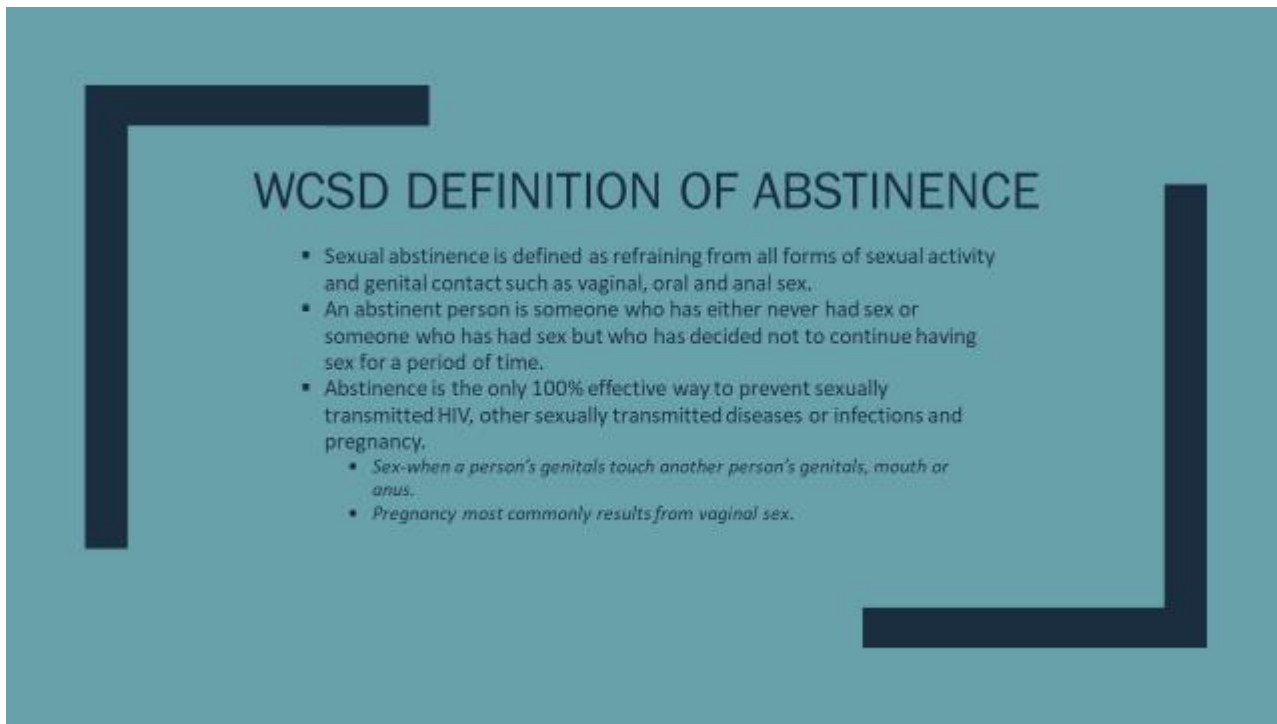
- If a person with a uterus gets older (40+), it can be more challenging to become pregnant. Therefore, they may choose one of the alternative methods to increase their chances of success.
- If a lesbian couple, or a couple in which both partners have a uterus, wants to have a baby and one partner wishes to become pregnant. (there may be a question about gay couples or a couple in which both partners have testicles, wanting to have a baby –adoption or a surrogacy-When another person with a uterus carries the pregnancy)
- If someone with a uterus wants to carry a pregnancy, but either does not have a partner with a penis and testicles, or does not want to have penis-vagina intercourse in order to become pregnant.

## Abstinence

- The focus has been on how a pregnancy happens, but we also need to address the topic of abstinence.
- Choosing to have sex for the first time is a big decision that's very personal.
  - People think about lots of different things: religious, spiritual, and moral beliefs; family and personal values; desire; love; and/or relationships.
  - Whatever your reason is, it's important to wait until you're sure you're ready to have sex.
  - Many teens who've had sex say they wish they had waited.
  - Just because someone has had sex before doesn't mean that they have to do it again.
  - People can be abstinent (not have sex) at any time, for any reason. And some people choose to never have sex — that's totally okay, too.

**Slide 9: Abstinence:**

- WCSD Definition of Abstinence



### WCSD DEFINITION OF ABSTINENCE

- Sexual abstinence is defined as refraining from all forms of sexual activity and genital contact such as vaginal, oral and anal sex.
- An abstinent person is someone who has either never had sex or someone who has had sex but who has decided not to continue having sex for a period of time.
- Abstinence is the only 100% effective way to prevent sexually transmitted HIV, other sexually transmitted diseases or infections and pregnancy.
  - *Sex-when a person's genitals touch another person's genitals, mouth or anus.*
  - *Pregnancy most commonly results from vaginal sex.*

- Sexual abstinence is defined as refraining from all forms of sexual activity and genital contact such as vaginal, oral and anal sex.
- An abstinent person is someone who has either never had sex or someone who has had sex but who has decided not to continue having sex for a period of time.
- Abstinence is the only 100% effective way to prevent sexually transmitted HIV, other sexually transmitted diseases or infections and pregnancy.
  - Sex-when a person's genitals touch another person's genitals, mouth or anus.
  - Pregnancy most commonly results from vaginal sex.
- Virginity vs Abstinence – oftentimes students confuse the two. Make sure to point out that abstinence or being abstinent is not the same as virginity.
  - Virgin-is someone who has never had sex (as defined in the WCSD definition of abstinence).
  - Virginity means different things to different people.

## SHARESlide 10:

Where can you go if you have more questions?



## Slide 11:

## EXIT SLIP

When a sperm gets inside an egg, it's called?

What does an egg with a sperm inside it have to do before a pregnancy can start?

## Exit Slip

Name \_\_\_\_\_

1. When a sperm gets inside an egg, it's called \_\_\_\_\_
2. What does an egg with a sperm inside it have to do before a pregnancy can start?

---

---

---

## Exit Slip

Name \_\_\_\_\_

3. When a sperm gets inside an egg, it's called \_\_\_\_\_
4. What does an egg with a sperm inside it have to do before a pregnancy can start?

---

---

---