

# Pregnancy

Grades 9-12, Lesson 3

## Summary

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The teacher uses visuals to describe the main processes related to pregnancy. The class brainstorms the early signs of pregnancy and discusses local pregnancy testing resources. The lesson concludes with a game to review content.

## Student Learning Objectives

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The student will be able to ...

1. Identify the laws related to reproductive and sexual health care services.
2. Describe the signs of pregnancy.
3. Describe prenatal practices that can contribute to or threaten a healthy pregnancy.
4. Access medically accurate information about pregnancy, pregnancy options and prenatal care services.

## Lesson Timing

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Warm up	Bell work + 2 minutes
Purpose of lesson	3 minutes
Process of conception	5 minutes
Early signs of pregnancy and testing	8 minutes
9 Months of pregnancy	7 minutes
Review game	22 minutes
Assign homework	
Exit ticket	3 minutes
Total	50 minutes

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### Materials Needed

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#### Student Materials

- *Sexual Health Resources - King County, National*, or develop a local resource sheet
- Local clinic brochures, if available
- *Two Truths and a Lie*
- Blank paper for Two Truths and a Lie game
- *Individual Homework: Pregnancy*
- *Family Homework: Pregnancy*, available in multiple languages on the FLASH website
- *Lesson 3 Exit Ticket*

#### Classroom Materials

- *Lesson 3 Warm Up*
- *Visuals 1, 2 and 3*

#### Teacher Materials

- *Developing a Local Sexual Health Resources List: Teacher Guide* for those developing a local resource sheet

### Teacher Preparation

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1. Create a local Sexual Health Resource Sheet for students, following the instructions in *Developing a Local Sexual Health Resources List: Teacher Guide*
2. Call your local family planning clinic to acquire brochures and learn if pregnancy testing is confidential for minors in your state. Many related state laws are listed at [www.guttmacher.org](http://www.guttmacher.org).

When sharing clinic resources with students, only include clinics that can answer “yes” to the following questions:

- Does the clinic offer clinical services with a licensed health care provider?
- Does the clinic provide or refer for all FDA-approved contraceptive methods?
- Does the clinic provide or refer for prenatal care, adoption and abortion?

Some clinics advertise as full-service pregnancy centers, even though they are staffed by lay people rather than licensed medical providers. Their purpose is often to dissuade clients from using birth control or accessing abortion services.

3. Prepare Visuals for document camera or projector.

## Activities

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### 1. Warm up

Display warm up as bell work.

**Question:** There are many changes to the body that happen during a pregnancy. List as many as you can.

**Possible answers:**

- No period
- Tender, swollen breasts
- Feeling tired
- Nausea or vomiting
- Urinating more often
- Like or dislike certain foods
- More sensitive to smell
- Sometimes no symptoms at all

### 2. Explain purpose of lesson

*Today's class will focus on pregnancy, building on what we learned about the reproductive system. We will cover some of the basics about pregnancy including conception, how people know they're pregnant, the stages of pregnancy and having a healthy pregnancy.*

### 3. Briefly cover the process of conception

Project and discuss *Visual 1* and *Visual 2*.

**Visual 1: Sperm and Egg**

- The human body is made of billions of cells: brain cells, blood cells, bone cells and many more. This includes egg cells and sperm cells. It takes an egg cell and a sperm cell to start a pregnancy.
- The egg cell and sperm cell are different from all the other cells in the human body. They have half as many chromosomes. Chromosomes are the parts inside a cell that determine which characteristics are passed from generation to generation.
- When sperm and egg join, their chromosomes form into pairs, making them like all the other body cells, with 2 pairs of 23 chromosomes, for a total of 46.

**Visual 2: The First Week**

- The egg cell and sperm cell can join in a few different ways: through vaginal sex, donation of sperm, or the help of medical technology.
- When ejaculation happens during vaginal sex without a condom, a teaspoon of semen goes in the vagina. The semen contains about 300 million sperm. Thousands enter the uterus, and travel toward the Fallopian tubes with help from the fluid in the cervix. It takes 2 days for sperm to begin reaching a Fallopian tube.
- If ovulation happened recently and an egg cell is present, one sperm cell may enter the egg. Fertilization is complete when the egg cell and sperm cell have joined.

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- *About half of the time, the fertilized egg continues growing. It travels down the Fallopian tube toward the uterus. (If not, the fertilized egg leaves the body with the period blood<sup>1,2</sup>).*
- *By the fourth or fifth day, the fertilized egg is only the size of a grain of sand. It enters the uterus and attaches to the rich lining. This process is called implantation.*
- *Now conception is complete.*

#### **Chromosomes**

- *Every cell in the human body has a pair of chromosomes that help determine a person's assigned sex. Remember that egg and sperm cells only have half the chromosomes of other cells. Most egg cells have an X chromosome. Sperm cells usually have either an X or Y chromosome.*
- *When an egg joins a sperm with a Y chromosome, the newly formed cell usually has XY chromosomes and will have a male assigned sex.*
- *When an egg joins a sperm with an X chromosome, the newly formed cell usually has XX chromosomes and will have a female assigned sex.*
- *Sometime when an egg joins a sperm the newly formed cell has XO, XXY, XYY or XXX chromosomes. People with these sets of chromosomes are usually intersex. The doctor may assign the baby male or female sex, depending on the appearance of their genitals. About 1 out of every 2000 people is intersex.*

#### **4. Brainstorm early signs of pregnancy**

Have students brainstorm the early signs of pregnancy. Write the signs of pregnancy on the board as students suggest them, providing additional information as needed.

Provide local resources for pregnancy testing by distributing the *Sexual Health Resources* (King County, National, or the local one you developed), or clinic brochures, and review state laws for confidential pregnancy testing.

*What are some common signs of pregnancy? Let's brainstorm them as a class. (Write students suggestions on the board and add information as needed.)*

#### **No period:**

*Most of the time, periods stop from the beginning of pregnancy, but not always.*

#### **Tender, swollen breasts:**

*As early as 2 weeks after conception, hormone changes may make the breasts feel tender, sore, fuller or heavier.*

#### **Feeling tired:**

*Hormone changes during pregnancy can make a person feel sleepy and less energetic.*

#### **Nausea:**

*Sometimes called "morning sickness," nausea can happen any time of the day. It also comes from the hormone changes of pregnancy. It can include vomiting or not.*

#### **Urinate more often:**

*The feeling of having to go to the bathroom a lot can also be a symptom of pregnancy. This sensation sometimes stops and then comes back later in the pregnancy.*

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*If a person thinks they might be pregnant, even without any of these symptoms, they should get a pregnancy test. A pregnancy test can be done at a clinic or purchased at a drug store to be used at home. It takes about 5 minutes to get the results. At a clinic, the person pees into a cup and a medical staff person runs the test. In a home test, the person pees on the plastic stick that comes with the test. The test can be done 7-10 days after pregnancy begins.*

*How can people know they are getting a pregnancy test at a reliable clinic?*

Answer:

- Clinic has medical staff, such as doctors, nurse practitioners or physician assistants.
- Staff will provide information about places that will help them if they choose to become a parent, have an abortion, or make an adoption plan, without giving personal opinions, or trying to promote a particular choice.

### **For teachers in King County, Washington:**

Hand out *Sexual Health Resources in King County*.

*Teens in Washington State can get a pregnancy test confidentially.*

### **For teachers in other parts of the country:**

Use *Developing a Local Sexual Health Resources List: Teacher Guide* to develop a local resource sheet or hand out *Sexual Health Resources in the U.S.* Call your local family planning clinic to acquire brochures and learn about relevant state laws. Many state laws are listed at [www.gutmacher.org](http://www.gutmacher.org).

## 5. Briefly describe each trimester of pregnancy

Project and discuss *Visual 3*. Summarize the main events of each trimester of pregnancy, including fetal development, prenatal care and pregnancy options.

### **Pregnancy trimesters**

*For the first 2 months, the set of developing cells is called an embryo. After that, it is called a fetus. People often use the word "baby" during pregnancy, but baby refers to the time after birth. Pregnancies are often described in 3-month periods of time or "trimesters." Each trimester is made up of about 12 weeks.*

**The first trimester** of pregnancy is the first 3 months after conception.

- *During this time, all the organs begin to develop. This is when the embryo is most at risk for damage from infections and substances such as alcohol and nicotine.<sup>3</sup>*
- *The term "prenatal care" means taking care of the pregnant person's health, which is very important right from the start of the pregnancy. Trying to eat well, rest, take vitamins, exercise, and avoid alcohol, nicotine and other drugs are all important things to do. Seeing a prenatal doctor or midwife is also important at this time.*
- *Most miscarriages happen during the first trimester. A miscarriage is when a pregnancy ends before the fetus can survive on its own. The cause for most miscarriages is not known.*
- *The first trimester is also when most abortions take place. Abortion is ending a pregnancy with the help of a doctor. It is the most common medical procedure in the United States<sup>4</sup>. People have many different beliefs and feelings about abortion.*

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- *By the end of the first trimester, the fetus weighs about a half ounce, about the weight of 3 nickels.*

**The second trimester** is the next 3 months of pregnancy.

- *During this time, the organs continue to grow and mature.*
- *In the middle of the second trimester, the fetus weighs just about 1 pound, about as much as 4 sticks of butter. By the end of the second trimester, it is still unable to survive outside the uterus without extraordinary medical attention.*
- *Prenatal care is still very important at this time.*

**The third trimester** is the last 3 months of pregnancy until birth.

- *During this last trimester, the fetus's brain and lungs continue to mature. The fetus begins to open and close its eyes, suck its thumb, and respond to light and sound.*
- *By the end of the third trimester, when the baby is born, the average weight is 6½ pounds, about as much as 3 quarts of milk, though many babies are smaller or larger.*
- *It's important to know about laws that protect newborns. These are often called "safe haven" laws. Every state allows people in crisis to hand over their newborns to the proper authorities, such as a hospital or fire station, anonymously and without getting in trouble. The purpose of these laws is to protect infants and make sure that there is someone to take care of them.*
- *Stillbirth is the death of a baby before or during delivery. Many of the causes of stillbirth are unknown. Under 1% of babies are stillborn in the United States<sup>5</sup>.*

**At any time in a pregnancy**, an adoption plan can be made.

- *Adoption is when people become the legal parent of a child that is not their biological child. Adoption is more common than many people think; over 2% of all U.S. children are adopted.<sup>6</sup> If there is an adoption plan in place, the baby will go to live with the adoptive parents after it is born.*

### 6. Play "Two Truths and a Lie" game

Hand out the *Two Truths and a Lie* worksheet to each student. Divide the class into teams of three to four people. The teacher reads a statement, and all the teams huddle to decide which statement is untrue (the "lie"). Teams write their answer on a piece of blank paper (1, 2 or 3), and show their answers at the same time. Each team with a correct answer gets a point. Have students correct their worksheets, after each answer is given.

Conclude the lesson.

*Today we have talked about how pregnancy happens, and how people know they are pregnant. Later, we will discuss how to prevent pregnancy.*

### 7. Assign homework

Allow students to choose between the individual or family homework and explain the assignments as needed.

*Individual Homework: Pregnancy*

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*Family Homework: Pregnancy*, available in multiple languages on the FLASH website

**8. Exit ticket**

Hand out the *Lesson 3 Exit Ticket*.

**Questions:**

Can teens get a pregnancy test confidentially at a doctor's office or clinic in this state?  
Where can teens and adults get a pregnancy test in our community?

**Answer:** Depends on community. Use information acquired for Activity 4.