

Pregnancy

Essential Questions

- How does pregnancy happen?
- What are the stages of human pregnancy?

Learning Intentions

- I can explain how pregnancy occurs as part of human reproduction.
- I can identify the stages of human pregnancy.

Introduction

An essential part of learning about our overall well-being and taking care of our sexual health is to understand the basic stages of pregnancy and how pregnancy occurs.

CA Health Standards 7th-8th Grade

- 1.2 Summarize the human reproduction cycle.
- 1.4 Explain how conception occurs, the stages of pregnancy, and the responsibilities associated with parenting.
- 1.13 Evaluate the benefits to mother, father, and child when teenagers wait until adulthood to become parents.
- 3.1 identify trusted adults in one's family, school, and community for advice and counseling regarding reproductive and sexual health.
- 3.2 Locate medically and scientifically accurate sources of information on reproductive health.
- 3.3 Identify health care providers for reproductive and sexual health services.



Pregnancy

Understanding the role of pregnancy in human reproduction

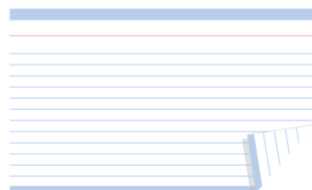


What Do We Already Know and What Do We Want to Learn?

Keep it confidential and anonymous. Do not write your name on the card.

Side 1 List what you already know about how babies are made and the stages of human pregnancy.

Side 2 Write any questions you have about how babies are made and the stages of human pregnancy.



Distribute notecards so that every student has one card. On the front of the card students should describe what they already know about how babies are made, and anything they know about pregnancy.

On the back side students should write any questions they have about how babies are made and pregnancy.

Collect the cards. Use the responses on the cards as a way to preview content for this lesson with students.

Essential Questions

- How does pregnancy happen?
- What are the stages of human pregnancy?

Share the Essential Questions for this lesson with students. Clarify any information

Introduce the salmon colored box with information on where students should go if they need additional resources for their sexual health. Let students know that this information is also on the last page of their workbook for each lesson.

If you need resources or support for your sexual health...

- Talk to a parent/guardian or other trusted adult
- Call 2-1-1
- Visit 211sandiego.org

Learning Intentions

- I can explain how pregnancy occurs as part of human reproduction.
- I can identify the stages of human pregnancy.

Share the Learning Intentions for this lesson with students.
Clarify any information.

Teaching Agreement

It's important to know that...

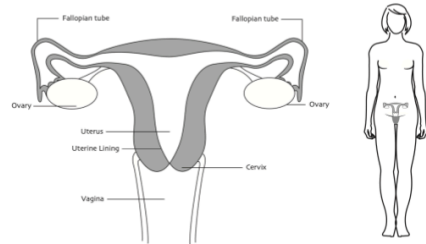
1. I am a mandated reporter, which means I'm required to report suspected abuse or neglect.
2. We will be examining sexual health through research, evidence, and scientific facts.
3. We will be learning and using accurate scientific terms for systems, processes, and anatomy that comes directly from the California Health Standards for 7th and 8th grade.
4. We will not be discussing our personal values or opinions about any of the topics.
5. **We will ensure a safe environment that is inclusive for all students**
6. We will focus on questions that relate to the science we are learning and encourage you to talk to your parent/guardian at home about your values and opinions when it comes to making choices.

Teaching agreement is shared in each lesson. Introduce students to the requirements of being a “mandated reporter”

It is critical for the teacher to demonstrate that they will be keeping agreements as well as the students during each Sexual Health lesson. This helps the teacher model fairness and accountability for students.

Review: Anatomy of the human reproductive system

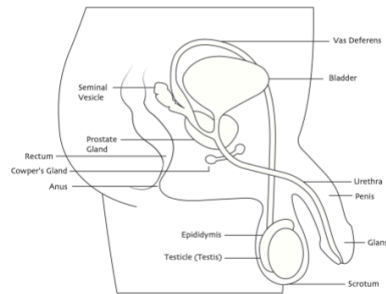
The Female Reproductive System



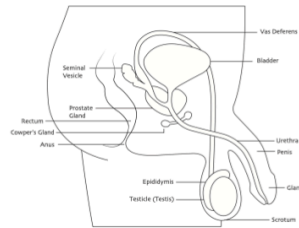
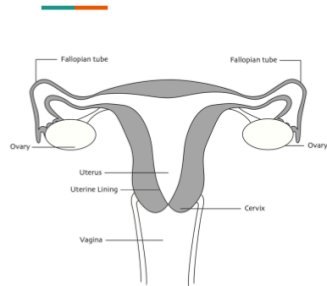
Use the following two slides to have students refer back to what they already know about the parts of the female and male reproductive systems, and how these systems work.

This will act to help students remember the parts, how the systems work, and for students who were not part of the lesson to have an introduction to terms they will hear in this lesson.

The Male Reproductive System



What do you know about how the reproductive system works?



Have students answer this question in their notebooks. They can use any prior knowledge and the charts to answer this question.

How does pregnancy happen?

Know Your Terms: Pregnancy

Egg - A woman's reproductive cells

Sperm - A man's reproductive cells

Fertilization - When a sperm and an egg cell are combined

Zygote - The egg once it is fertilized

Embryo - When the zygote starts dividing into multiple cells

Fallopian tube - The narrow tubes in a woman's abdomen that carry the egg from the ovaries to the uterus, and where fertilization most often occurs

Uterus - a pear-shaped organ in the female reproductive system, and where a fertilized egg implants during pregnancy

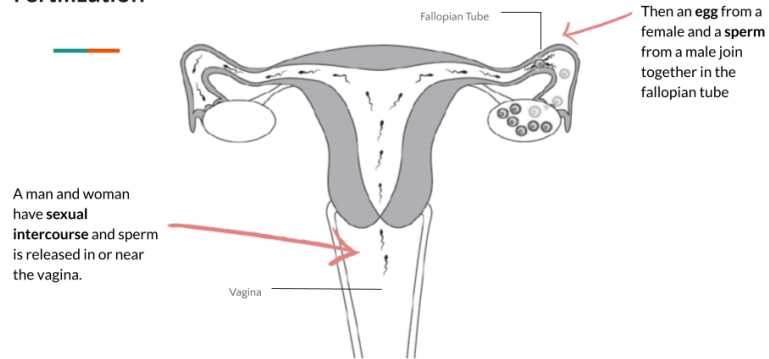
Preview the terms for this part of the lesson with students. Students can use the page in their workbook to fill-in-the-blanks.

Overview of Human Pregnancies



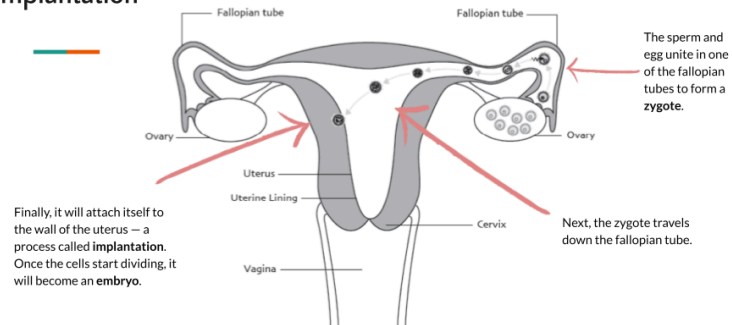
Have students watch the video. Let them know that you will guide them through the process of pregnancy using the following slides after watching the video.

Fertilization



Review the process of fertilization with students, having them follow along in their workbook pages as you describe each step.

Implantation



Pregnancy only happens if sperm can fertilize an egg and implant into the wall of the uterus.

Review the process of implantation with students, having them follow along in their workbook pages as you describe each step.

How Twins are Made: Identical and Fraternal Twins

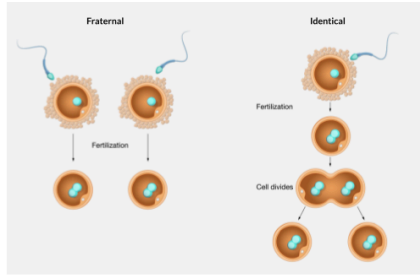
If more than one egg is fertilized, it means a woman may have **fraternal twins**.

Fraternal twins result from the fertilization of two separate eggs with two different sperm during the same pregnancy. They share about half of their genomes, just like any other siblings.

Fraternal twins can be the same or different sexes.



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Identical twins happen when the fertilized egg splits into two before cells begin dividing.

Identical twins share the same genomes and are always of the same sex.



Share the examples of how sometimes fertilization and implantation leads to twins.

How does pregnancy happen?

Answer this question using the charts in your workbook and what you learned in the video

Have students use the diagrams in their workbook to answer the question:

How does pregnancy happen?

Optional: Have students share in pairs, small groups, or whole class

What are the key stages of pregnancy and birth?

Know Your Terms: Pregnancy

Fetus - The name of the baby during pregnancy

Prenatal - The time during pregnancy and before birth

Full term - The beginning of week 39 to the end of week 40 of pregnancy. A baby born during this time is full term

Premature - When a baby is born before week 37 of pregnancy

Labor - When a pregnant woman's body is contracting, pushing, and delivering her baby

Vaginal birth - When the baby is born through the mother's vagina

Cesarean birth - When the baby is delivered through a surgical cut in the abdomen and uterus (also called a 'C-section')

Preview the terms for this part of the lesson with students. Students can use the page in their workbook to fill-in-the-blanks.



At 4 weeks: the size of a poppy seed



At 8 weeks: the size of a kidney bean



At 12 weeks: the size of a lime

First Trimester

- The rapidly dividing cells are in the process of forming the various body systems, including the digestive system.
- Brain and spinal cord begins to grow.
- The heart is beating and developing.
- The eyes, mouth, and tongue are forming.
- Teeth are budding inside the gums. The fetus moves around but the mother can not feel the movements yet.
- Fingernails and toenails are starting to grow.

Some effects on the mother:

- The first thing she might notice is that her period does not arrive, or she may have other signs like feeling sick, tired, and tenderness in her breasts.
- During this trimester, she usually doesn't appear visibly pregnant.

Guide students through the three trimesters of pregnancy, while they follow along in their notebooks.

After each trimester slide, have students:

- Underline the details they think are most important or interesting
- Share these details with a partner or have a few shares out to the whole group.



Second Trimester

- The brain develops a lot.
- The fetus grows eyelashes and eyebrows, can open the eyes, and looks more like a human baby.
- The fetus' ability to hear develops around week 18.

Some effects on the mother:

- Around week 16 to 20, she will start visibly appearing pregnant.
- Develops backaches as her womb gets heavier.
- Headaches and stomachaches are common.
- Breasts may start to leak a little pre-milk.



At 17 weeks: the size of an avocado



At 21 weeks: the length of a banana



At 26 weeks: the size of a cauliflower



Third Trimester

- The fetus has a chance of survival if born after the 24th week. Most babies born before this time cannot live because their lungs and other vital organs are not developed enough.
- The fetus spends most of its time asleep. Its movements are strong and coordinated.
- The fetus can hear and is growing quickly as it gets ready to be born, nearly ½ pound per week.
- Its lungs are growing fast, and it is facing down as it's getting ready to be born.

Some effects on the mother:

- Leg cramps
- Difficulty sleeping
- Tightening in the uterus as her body practices for labor



At 30 weeks: the size of a cabbage



At 35 weeks: the size of a cantaloupe



At 40 weeks: the size of a small pumpkin

The Process of Giving Birth

- The process when the woman gives birth is referred to as **labor**.
- Labor can last for a couple of hours or a couple of days.
- Most babies are pushed out of the woman's vagina.
- If the baby cannot come out that way for medical reasons, doctors will bring the baby out by performing an operation called a Cesarean section or a C-section, where they cut through the woman's abdomen into the uterus.



Have students watch the video

After watching the video, review the four statements with students. Have students fill-in-the-blanks in their workbooks.

Facts about Pregnancy and Raising a Child

Becoming a parent is a very significant task that does not end once you give birth; it is a lifelong responsibility of both parents to their child.



Children do better and grow up to be more successful when they are surrounded by people who love them.

The average cost to raise a child in the United States is approximately \$250,000.

If you live in a part of the United States where the cost of living is very high (such as California), it can cost a parent/guardian closer to \$350,000 to raise a child.



Children also do better in life when their parents/guardians are physically, emotionally, and financially prepared to take care of them.



If you talk to your parent/guardian, they will most likely tell you that it is a lot of work to be a good parent.



This job is very hard to do if you are still a child yourself and getting your education, so it is important to wait until you are an adult in a committed relationship to have a family.

Share the following facts with students about the challenges of raising a child.

How to find out if you are pregnant, and how to stay healthy

If sexually active, the following signs can indicate a pregnancy:

- Missing a period
- Breast tenderness
- Nausea and sickness, especially in the morning
- Tiredness

To know for sure, a woman can take a pregnancy test bought at the pharmacist or drug store or she can do a test at the doctor's office.



If you need resources or support for your sexual health...

- Talk to a parent/guardian or other trusted adult
- Call 2-1-1
- Visit 211sandiego.org

Share the ways to identify if you are pregnant if you are sexually active. Emphasize that these symptoms are often common for people who are not pregnant as well.

Remind students about the resources available to them if they think they are pregnant, or if they need resources or support for their sexual health.

If you are pregnant

- Avoid alcohol and drugs (including prescription medication unless told to use it by a doctor)
- Avoid smoking and being around people who smoke, including vaping
- See a doctor for regular checkups
- Eat a well balanced diet; take prenatal vitamins, including folic acid
- Get plenty of rest and exercise
- Talk to a parent/guardian or trusted adult for support



If you need resources or support for your sexual health...

- Talk to a parent/guardian or other trusted adult
- Call 2-1-1
- Visit 211sandiego.org



Share with students the steps they should take if they are ever pregnant, including reaching out for support

<div data-bbox="163 315 254 367">Exit Slip</div> <div data-bbox="310 337 464 362">3-2-1 Reflection</div> <ul data-bbox="317 383 825 464" style="list-style-type: none"> • Write 3 new things you learned in this lesson. • Write 2 questions you still have about pregnancy. • Write 1 wish you have for a safe and healthy future. 	<p>For the exit slip have students reflect on their learning using the 3-2-1 protocol.</p>
<div data-bbox="163 834 260 862">At Home</div> <p data-bbox="310 786 739 810">With a parent/guardian or other trusted adult:</p> <p data-bbox="350 829 793 881">Option 1: Share your exit slip as a way to begin a conversation.</p> <p data-bbox="350 901 800 925">Option 2: Ask them about the story of your birth.</p> <p data-bbox="350 945 848 997">Option 3: Research the financial costs associated with raising a child in the United States.</p>	<p>Remind students to continue this conversation at home, with a parent/guardian, or other trusted adult.</p>

Sources

National Institute of Health

National Geographic

Cleveland Clinic

Nucleus Medical Media

TED Ed

Newport Academy

The Economist