Pregnancy, day 1

Grades 4-6, Lesson #13

Time Needed

50-60 minutes

Student Learning Objectives

To be able to...

1. Distinguish among definitions of: Caesarian section, cell, chromosome, gene, navel, umbilical cord, fetus, embryo, placenta.
2. Recognize that vaginal birth is the most common type.
3. Explain the difference between fraternal and identical twins.

Agenda

1. Explain lesson's purpose.
2. Explain normal pregnancy and birth, defining 12 key terms.
3. Discuss how sperm determines the biological sex.
4. List pregnancy symptoms and discuss pregnancy tests.
5. Use rulers to help students visualize embryo/fetus size throughout pregnancy.
6. OPTIONAL: Use fetal models to reinforce #5, above.
7. Use *Pregnancy Worksheet #1* to reinforce new terminology from Activity #2, above.

Materials Needed

Classroom Materials:

- OPTIONAL: *Pregnancy Transparency/Worksheet #1*, as a transparency (if you prefer not to draw)
- Nine rulers and nine pieces of chalk (or whiteboard markers)
- OPTIONAL: fetal models (See Activity #6, below)
  Available from your district or your Educational Service District or the local chapter of the March of Dimes.
- OPTIONAL: a blank bulletin board entitled, "PREGNANCY"

Student Materials: (for each student)

- *Pregnancy Transparency/Worksheet #1* (as a worksheet)

Activity

1. **Explain the lesson's purpose.**
   Explain that today's lesson will help students understand better how babies develop, from the time they are a sperm and an egg to the day they are born.

2. **Answer "Anonymous Question Box" questions about pregnancy.**
   Use the *Transparency* or, better yet, draw so that you can introduce one part at a time and so that your drawing won't exactly duplicate the *Worksheet* your students will be filling out later in the lesson.

   Hold back on questions concerning birth defects, prematurity and miscarriage; those will be answered tomorrow. If no questions address the following terms, explain them anyway:

CELL	FETUS	FRATERNAL TWINS
BREAST	CHROMOSOME	PLACENTA
IDENTICAL TWINS	GENE	UMBILICAL CORD
VAGINAL BIRTH	EMBRYO	NAVEL
CAESARIAN SECTION		

3. **Explain how the baby's biological sex is determined.**
   Specifically, describe how sperm can have either male – Y -- or female – X –chromosomes and only one sperm fertilizes an ovum.

4. **Explain how a woman "knows she is pregnant" (symptoms, pregnancy test).**

5. **Use rulers to help students visualize embryo/fetus size throughout pregnancy.**

   Have 9 students volunteer to measure and mark on the blackboard or whiteboard, or on a special "Pregnancy" bulletin board the size of an embryo or fetus in each of the 9 months of pregnancy as follows:

4 weeks = 7 mm (0.3 inches)	21 weeks = 25 cm (10 inches)
8 weeks = 4 cm (1.6 inches)	25 weeks = 30 cm (12 inches)
12 weeks = 10 cm (4 inches)	29 weeks = 34 cm (14 inches)
16 weeks = 18 cm (7 inches)	36 weeks = 43 cm (17 inches)
	40 weeks = 51 cm (20 inches)

   Point out that the ovum itself is the size of the period at the end of a sentence (have students look in a book and actually find a period). Point out that the sperm itself is microscopic.

6. **OPTIONAL: Use fetal models to reinforce #5, above.**
   Pass around or display plastic models of an embryo and fetus at various stages of development.

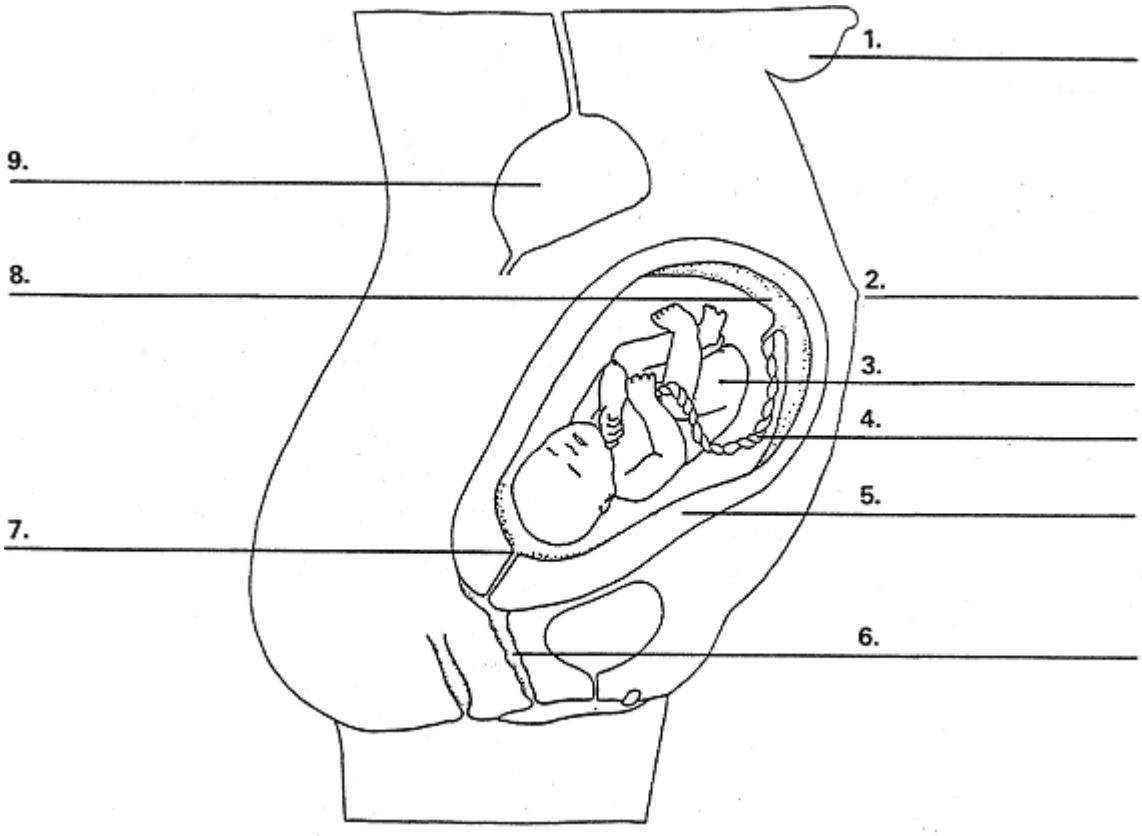
7. **Use *Pregnancy Worksheet #1* to reinforce new terminology from Activity #2, above.**
   Allow students 5 minutes to complete it, discuss it as a large group, and optionally, post several students' correct worksheets on a "Pregnancy" bulletin board.

Pregnancy Transparency/Worksheet 1

NAME _____ **DATE** _____

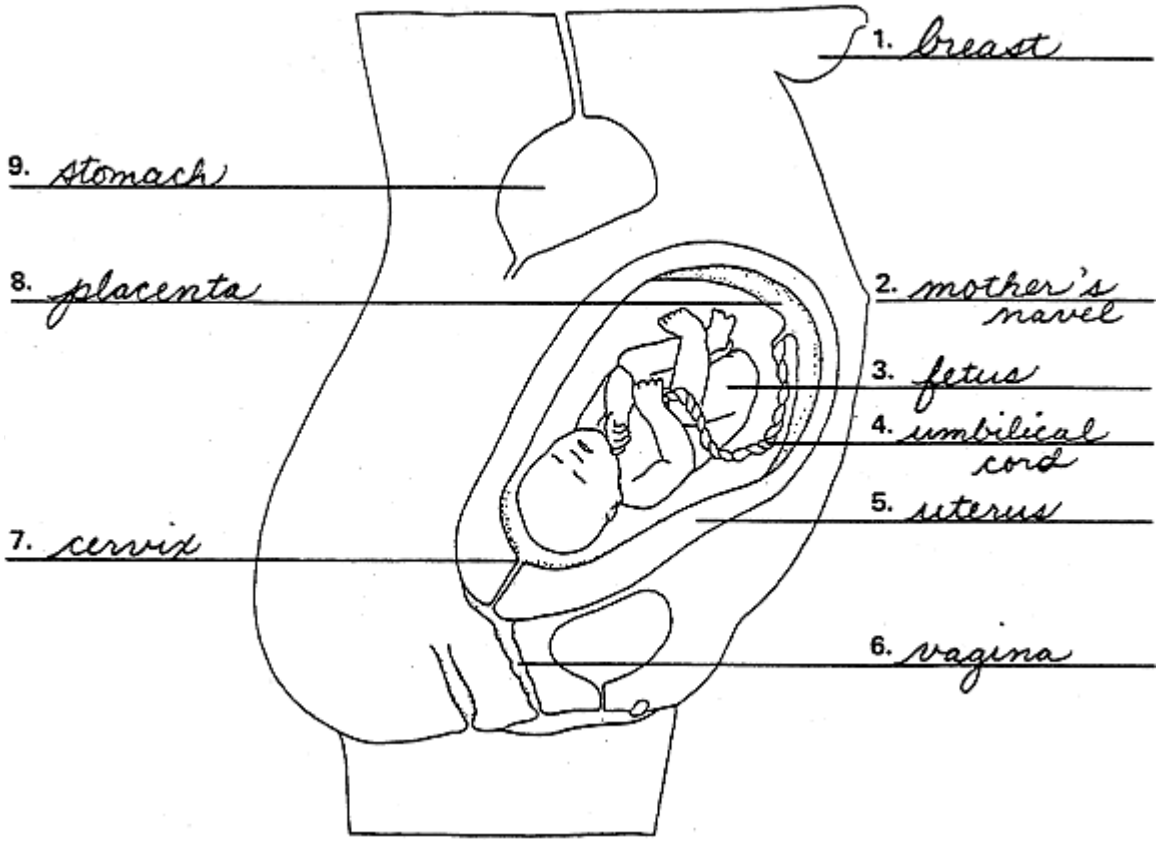
DIRECTIONS: Fill in the chart, using the following terms:

BREAST	MOTHER'S NAVEL (clue: it is not connected to the baby)
CERVIX	UMBILICAL CORD
FETUS	STOMACH (clue: this is not where a baby develops)
PLACENTA	UTERUS (clue: this is also called the "womb")
	VAGINA (clue: this is also called the "birth canal")



Pregnancy Transparency/Worksheet 1 – Answer Key

NAME _____ **DATE** _____

DIRECTIONS: Fill in the chart, using the following terms:

BREAST	MOTHER'S NAVEL (clue: it is not connected to the baby)
CERVIX	UMBILICAL CORD
FETUS	STOMACH (clue: this is not where a baby develops)
PLACENTA	UTERUS (clue: this is also called the "womb")
	VAGINA (clue: this is also called the "birth canal")