# Pregnancy, day 2

**Grades 4-6, Lesson #14**

## Time Needed

40-50 minutes

## Student Learning Objectives

To be able to...

1. Recognize the definitions of: miscarriage, prenatal care, premature birth, and birth defect.
2. Explain the importance of prenatal care.
3. List at least 3 health behaviors recommended for pregnant women.
4. List at least 3 causes of miscarriages or birth defect.

## Agenda

1. Explain reasons for lesson.
2. Explain PRENATAL CARE and list causes of premature birth, birth defects, genetic conditions and miscarriages.
3. Use *Pregnancy Worksheet #2* as a small group exercise to reinforce Activity #2, above.
4. Use *Pregnancy Worksheet #3* as a large group exercise to summarize the lesson.

## Materials Needed

### Student Materials: (for each student)

*Pregnancy Worksheets #2 and #3*

## Activity

1. **Explain the reasons for this lesson.**
   Explain that sometimes things "go wrong" in a pregnancy. There are ways we can reduce the chances of problems. This lesson will help everybody understand how we can make babies as healthy as possible.

2. **Answer "Anonymous Question Box" questions about BIRTH DEFECTS, PREMATURE BIRTH, MISCARRIAGE and PRENATAL CARE.**
   Whether or not students raise the issues, be sure to define these new terms and to cover the following:

   - Miscarriages and birth defects may be caused by
     ...a chromosomal abnormality in the ovum or sperm
     ...mother's consumption of drugs (including alcohol and tobacco)
     ...father's consumption of drugs (including alcohol and tobacco)
     ...mother's illness
     ...radiation and environmental pollution
     ...mother's age (the healthiest, safest time is in her 20s and early 30s)
     ...father's age
     ...birth trauma
     ...unknown factors

   - Some possible reasons for the higher rate of birth defects, miscarriages, premature birth, and low birth weight in babies born to teens are:
     ...no prenatal care
     ...late prenatal care
     ...poor nutrition
     ...consumption of alcohol, cigarettes and other drugs

3. **Use *Pregnancy Worksheet #2* as a small group exercise to reinforce Activity #2, above.**
   Allow 10 minutes for teams of 2 or 3 students to cooperatively complete it. Discuss the worksheet as a large group, encouraging students to add to, or modify, the answers they've already written.

4. **Use *Pregnancy Worksheet #3* as a large group exercise to summarize the lesson.**
   Have volunteers read aloud one sentence each, filling in the blank(s).

## Related Activities For Integrated Learning

**A. Language Arts**
Students compiling glossaries can add "Caesarian Section," "chromosome," "embryo," "fetus," "fraternal twins," "identical twins," "gene," "implantation," "conception," "placenta," "prenatal care," and "umbilical cord."

**B. Social Studies**

Have students look up and report on one of the following people from whom we have learned about reproduction and pregnancy:

Gregor Mendel (scientist)
Fernand Lamaze (physician)
Patrick Steptoe (physician)
Lennart Nilsson (photographer)
Geraldine L. Flanagan (author)

## Homework

Students' options:

- Ask an adult in your family to describe your (the student's) birth. [NOTE: If you offer this as an option, it's important to acknowledge aloud to the class that you realize that not everybody lives with, or is in contact with, their birth mother or anyone who was there when they were born. That is part of why there are alternate ways to earn the same credit.]
- Discuss Pregnancy Worksheets 1 and 2 with an adult. *
- Find out what a *midwife* is and what a *doula* is. Report back.

*see "Preparing Parents" page 4-5

# Pregnancy Worksheet 2

**NAME** _____ **DATE** _____

DIRECTIONS: Use complete sentences to answer these questions. Watch your spelling, capitalization and punctuation.

1. Why do children often look like their parents?

_____

_____

_____

_____

2. What's the difference between fraternal and identical twins?

_____

_____

_____

_____

3. What is "prenatal care" and why is it important?

_____

_____

_____

_____

4. What kinds of things could cause a baby to be born with a disability?

_____

_____

_____

_____

# Pregnancy Worksheet 3

**NAME** _____ **DATE** _____

DIRECTIONS: Put the following words in the blanks below. Some may be used more than once. Make a word plural if the sentence makes more sense that way.

| | | | |
|---|---|---|---|
| ALCOHOL | DIET | GENE | PRENATAL |
| CELL | DRUG | IDENTICAL | SICK |
| CAESAREAN | EMBRYO | MISCARRIAGE | UMBILICAL |
| CHROMOSOME | FETUS | NAVEL | VAGINA |
| CIGARETTE | FRATERNAL | PLACENTA | |

The body is made up of _____. Each one contains 46 _____ which determine a lot about how the person looks and how fast he or she grows. The person's mother and father each contributed 23 of these _____ (made up of many separate _____ ). That's why people often look like other members of their families.

Let's look at how it all begins. Two special _____ (the sperm and the ovum) combine to make one fertilized egg. The fertilized egg travels down the fallopian tube dividing into a ball of _____. This ball nests in the uterus. Inside this special ball is the developing _____. After it grows for about ten weeks, it may be called, instead, a _____.

Once in a while, a fertilized egg will divide into a ball with TWO _____ inside. They have exactly the same _____, so they will grow to look exactly alike. They're called _____ twins. Other times, the ovary may release two separate egg cells at once. If two sperm meet these two eggs, we have _____ twins. They won't look exactly alike. In fact they MAY even be one boy and one girl, because their _____ are different.

While it is growing in the uterus, the _____ gets food and oxygen through its _____ cord. This cord is connected to the _____, a special part which grew from the original ball of cells to feed the developing _____.

After about nine months a baby is ready to be born. Usually, the uterus will contract and push the baby out through the _____. Sometimes this isn't possible, so the doctor has to operate to remove the baby directly from the uterus. We call this special kind of birth a _____ section.

Once the baby is born it can eat through its mouth and breathe through its nose. It no longer needs the _____ cord so the doctor cuts and ties it, forming a "belly button" or _____. This cutting doesn't hurt. It's like cutting your finger nails.

Why do some babies die before they are ready to be born? We call that a _____. Why are other babies born too soon or born with handicaps? There can be many reasons. There might have been something wrong with the parents' _____. The mother might have been _____. Sometimes we do not know why. We do know this: In order to help make herself and the baby as healthy as possible, a pregnant woman should not drink _____, smoke _____, or use any other _____ without asking her doctor. She should eat a balanced _____ and see a doctor regularly for _____ care.

LET'S HEAR IT FOR STRONG, HEALTHY BABIES!

# Pregnancy Worksheet 2 – answer key

**NAME** _____ **DATE** _____

DIRECTIONS: Use complete sentences to answer these questions. Watch your spelling, capitalization and punctuation.

1. Why do children often look like their parents?

   *They have some of the parents' genes. **

   *They have some of the parents' chromosomes. **

2. What's the difference between fraternal and identical twins?

   *Fraternal twins come from two different eggs and two different sperm. They look different from one another. Identical twins look alike because they come from one sperm and one ovum.*

3. What is "prenatal care" and why is it important?

   *Prenatal care means going to the doctor very often when you are pregnant. It's important because the doctor can help the mother and baby to be as healthy as possible.*

4. What kinds of things could cause a baby to be born with a disability?

   *Causes could include the mother being sick while she's pregnant, something wrong with the mother's or father's genes, or the mother not eating healthy foods or drinking alcohol, smoking or using other drugs. Sometimes the baby is harmed during birth.*

**NOTE: Different wording is fine. These are simply examples.**

# Pregnancy Worksheet 3 – answer key

**NAME** _____ **DATE** _____

DIRECTIONS: Put the following words in the blanks below. Some may be used more than once. Make a word plural if the sentence makes more sense that way.

The body is made up of ***cells.*** Each one contains 46 ***chromosomes*** which determine a lot about how the person looks and how fast he or she grows. The person's mother and father each contributed 23 of these ***chromosomes*** (made up of many separate ***genes***). That's why people often look like other members of their families.

Let's look at how it all begins. Two special ***cells*** (the sperm and the ovum) combine to make one fertilized egg. The fertilized egg travels down the fallopian tube dividing into a ball of ***cells.*** This ball nests in the uterus. Inside this special ball is the developing ***embryo***. After it grows for about ten weeks, it may be called, instead, a ***fetus***.

Once in a while, a fertilized egg will divide into a ball with TWO ***embryos*** inside. They have exactly the same ***genes***, so they will grow to look exactly alike. They're called ***identical*** twins. Other times, the ovary may release two separate egg cells at once. If two sperm meet these two eggs, we have ***fraternal*** twins. They won't look exactly alike. In fact they MAY even be one boy and one girl, because their ***genes*** are different.

While it is growing in the uterus, the ***fetus*** gets food and oxygen through its ***umbilical*** cord. This cord is connected to the ***placenta***, a special part which grew from the original ball of cells to feed the developing ***fetus***.

After about nine months a baby is ready to be born. Usually, the uterus will contract and push the baby out through the ***vagina***. Sometimes this isn't possible, so the doctor has to operate to remove the baby directly from the uterus. We call this special kind of birth a ***Caesarian*** section.

Once the baby is born it can eat through its mouth and breathe through its nose. It no longer needs the ***umbilical*** cord so the doctor cuts and ties it, forming a "belly button" or ***navel.*** This cutting doesn't hurt. It's like cutting your finger nails.

Why do some babies die before they are ready to be born? We call that a ***miscarriage***. Why are other babies born too soon or born with handicaps? There can be many reasons. There might have been something wrong with the parents' ***chromosomes***.* The mother might have been ***sick***. Sometimes we do not know why. We do know this: In order to help make herself and the baby as healthy as possible, a pregnant woman should not drink ***alcohol***, smoke ***cigarettes***, or use any other ***drugs*** without asking her doctor. She should eat a balanced ***diet*** and see a doctor regularly for ***prenatal*** care.

LET'S HEAR IT FOR STRONG, HEALTHY BABIES!

***** “genes” is also an acceptable response.