Reproduction, Day 2: Pregnancy
Special Education: Secondary, Lesson #20

Student Learning Objectives:

To be able to...

1. Correctly label pictures of women as obviously pregnant or not pregnant
2. Define pregnancy as the period of time (nine months) when the baby grows inside the mother’s uterus
3. Explain the relationship between the concepts of intercourse, fertilization, pregnancy and parenthood

Materials Needed:

Transparencies - prenatal development
Magazine pictures of pregnant and non-pregnant women - try maternity clothing ads
Sequence flash cards

Agenda:

1. Defining pregnancy
2. Picture sorting
3. Pregnancy changes
4. Fetal development
5. Sequence of reproduction
6. Birth
7. Changes & responsibilities of pregnancy
Your students may or may not ever experience pregnancy first-hand. They will all, however, observe pregnancy in others at some time. And they will likely have many questions. This lesson will help to answer some of those questions.

Activities:

1. **Defining Pregnancy**
   Define pregnancy as “the time -- about nine months -- when the baby (also called a fetus) is growing inside the mother’s uterus.”

2. **Picture Sorting**
   A. Collect a variety of pictures of women - pregnant and not pregnant.
   B. Have students sort pictures you have collected into two piles - visibly pregnant and not visibly pregnant.
   C. Ask them to explain their decisions and point out some of the cues from the pictures that helped them to decide.

3. **Pregnancy Changes**
   Brainstorm with your students some of the differences between pregnant women and non-pregnant women. Write their ideas on the blackboard. Be sure to include:
   - mood changes (anger, tears, afraid, very happy, excited)
   - no drugs, alcohol, caffeine, cigarettes, or medications
   - need to eat healthy food - to help baby grow
   - body changes - weight gain, posture, hair and skin changes, difference in waistline - belly is distended
   - wear maternity clothes instead of regular clothes
   - need to see the doctor regularly - good prenatal (before birth) care
   - may need more rest, be nauseated, urinate more often.

4. **Fetal Development**
   A. Discuss that at the same time as the pregnant woman (“Mother”) has body and feeling changes, the fetus (“baby”) growing inside her is also changing.
   B. Project the fetal development transparencies and discuss the growth and body changes of the developing fetus at various stages of pregnancy (each trimester).

5. **Sequence of reproduction**
   A. Divide students into small groups.
   B. Hand out the reproduction sequence flash cards - one set for each group
   C. Ask students to arrange the cards in the correct sequence.

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Fetal development models or “The Miracle of Life” a NOVA video tells the story of the growth of the fetus.
Match to sample using two sets of cards

- deciding to have a baby
- sexual intercourse
- fertilization (egg and sperm meet)
- pregnancy
- birth
- parenthood

6. Birth

A. Discuss with students that at the end of pregnancy (usually at about 9 months), the baby is ready to be born.

B. There are two ways babies can be born.
   1. Most babies are born through the mother’s vagina. This means that the baby is pushed out of the mother’s uterus and comes out of her vagina. This pushing is extremely hard work and is called “labor.”
   2. Some babies are not able to be born through the vagina. They are instead born by “Caesarian Section.” In this kind of birth, a doctor numbs the mother’s belly, and operates to take the baby straight out of the uterus.

7. Changes & Responsibilities of Pregnancy

Discuss with your students that pregnancy is a time of many changes for families. Explain that the next lesson will help them to think about what some of the changes might be. Being a parent is a lot of work and has a lot of responsibilities associated with it.
Dear Trusted Adult,

In class we talked about physical changes of pregnancy, and discussed the sequence of the life cycle (i.e. deciding to have a baby, sexual intercourse, fertilization, pregnancy, birth, parenthood). We also talked about two different methods of giving birth; vaginal delivery and Caesarian Section.

You can support this learning by:

- Being available to discuss questions or thoughts students may have
- Visiting the library (community or school) and exploring materials that discuss pregnancy and birth with students. The NOVA presentation “The Miracle of Life” is a photographic presentation of the actual developing fetus and has been very helpful for many students.
- Discuss your feelings about pregnancy and birth

If you have any questions or comments, please call me.

Sincerely,

____________________________________
Teacher, Principal or Nurse

NOTE: All Trusted Adult Exercises are Optional.
# Prenatal Development: the first three months

| During 1st month: | Blood begins circulating  
|                  | Brain is just beginning to form, though it does not work yet |
| During 2nd month: | Arms, legs, and internal organs begin forming  
|                  | Genitals are starting to form, but male and female still look alike  
|                  | Tail disappears |
| During 3rd month: | Male and female begin to look different  
|                  | Fingers, toes, and fingernails form  
|                  | The head is almost half the size it will be at birth |

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Inches</th>
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<tbody>
<tr>
<td>4</td>
<td>1/5</td>
</tr>
<tr>
<td>6</td>
<td>1/2</td>
</tr>
<tr>
<td>8</td>
<td>1 and 1/16</td>
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<tr>
<td>9½</td>
<td>2 inches</td>
</tr>
<tr>
<td>11</td>
<td>3 inches</td>
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</tbody>
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# Prenatal Development: the second three months

| During 4th month: | Muscles move  
|                 | Skin is transparent  
|                 | Sweat glands, eyebrows, and eyelashes form |
| During 5th month: | Hair, eyelashes, eyebrows form  
|                 | Hiccups begin and other movement can be felt  
|                 | Heartbeat can be heard  
|                 | There is hair on the head |
| During 6th month: | Brain waves begin (brain starts working)  
|                 | Eyes open  
|                 | Ears begin to work  
|                 | There are fingerprints and footprints |

19 weeks: 8 inches
Prenatal Development: the last three months

| During 7th month:       | Adds body fat  
|                         | Moves a lot    
|                         | Responds to sound  
|                         | Sometimes awake, sometimes asleep  

| During 8th month:       | Less active, less wrinkled  
|                         | Still growing longer, heavier  
|                         | Nails, bones begin to harden  

| During 9th month:       | Lungs and other organs finish maturing  
|                         | (The brain won’t be fully mature for two more years; the reproductive system for at least twelve more years.)  

1. Uterus  
2. Placenta  
3. Umbilical cord  
4. Amniotic sac  
5. Amniotic fluid  
6. Fetus  
7. Cervix
Sequencing Flash Cards

- deciding to have a baby
- sexual intercourse
- fertilization
- pregnancy
- birth
- parenthood

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