SEVENTH/EIGHTH GRADE
LESSON XII
FETAL DEVELOPMENT AND CHILDBIRTH

Objectives
• Students will discuss fetal development and childbirth

Concepts
1. Fertilization and Conception—Pregnancy begins when an egg cell from the mother and sperm cell from the father unite. This is called fertilization.
   A. Some people have difficulty with fertility (infertility) and may consult a physician who is a Fertility Specialist.
   B. During sexual intercourse, the erect penis is placed in the vagina and hundreds of millions of sperm are released during ejaculation. Fertilization occurs in the fallopian tubes. One sperm will fertilize one egg and the remaining sperm will eventually die. The moment of fertilization is called conception.

2. Labor and Birth—for nine months, the cervix is held tightly shut, in order to keep the baby inside the uterus. Now it must open, or dilate, to allow the baby to pass through.
   A. Contractions begin, which means that a muscle gets tense and then relaxes. Labor begins with mild muscle contractions that grow stronger and last longer as the time of birth approaches. The muscles of the uterus and abdomen work together to push the baby out. The cervix stretches to about the size of a grapefruit (10 centimeters) to let the baby’s head out.
   B. The fetus travels down through the vagina and completely out of the mother’s body. Most babies are born head first, face down, but sometimes a breech birth occurs (buttocks, arm, leg first).
   C. After the baby emerges, the doctor cuts the umbilical cord about 1 inch from the baby’s stomach. The cord dries up and falls off in one to two weeks, leaving the navel.
   D. Once the baby is born, the uterus pushes out the placenta, or afterbirth. During the next six weeks, the uterus gradually returns to normal.

Materials
• “A New Life Begins, Fertilization to Birth” chart
• Worksheet “My Birth”
• Video Fetal Development: A Nine Month Journey (15 minutes)

Activities
1. Include the following vocabulary as the concepts are discussed.
   A. Fraternal twins—two eggs (ovum) are fertilized by two sperm.
   B. Identical twins—a single ovum is fertilized by a single sperm then immediately splits. Each half of the split ovum grows into a complete baby.
C. Premature—a baby who is born in less than the 38-week gestation period, and/or a baby weighing less than five pounds. They may have lung or other difficulties because development is not quite finished.
D. Miscarriage—the mother’s body is not able to continue a pregnancy.
E. Cesarean birth—the doctor cuts through the walls of the abdomen and uterus, quickly removes the baby and placenta and closes the incision.

2. Study Chart “A New Life Begins, Fertilization to Birth.”
3. Have students complete “My Birth” worksheet with a family member. Discuss it the following day.

4. Exceptional Education Inclusion Activity
   A. Cut out pictures of a fetus at various stages of development and have the students put them in order.
   B. Have a pregnant friend visit the class.
   C. Allow the students to tape the interview with their parents.
MY BIRTH
Directions: Fill out the following information with your parents. If not living with natural parents, interview the person who can best answer these questions (you may want to do the second half of this worksheet only).
1. Place of birth (city, hospital, etc.).
2. Time of birth (weather, historical events at this time).
3. Where were they when labor began?
4. How long was labor?
5. People present at birth. (family, medical persons, other)
6. Weight at birth.
7. Any unusual happenings?
8. How did they pick your name?
9. What were the first six months like? First year?
10. Ask the questions you would like to know about your birth and early childhood, such as diseases, first steps, first words, etc.
11. What sources of information about yourself are available to you, for example, baby books, family records, albums, photos, traditional stories?

If you are adopted or not living with your natural parents, interview the person who can best answer these questions.

12. What do they know about your birth? (where, time [events happening], size)
13. What was it like the first time they saw you? How long had they known you were coming to live with them?
14. Ask about the day you came to live with them.
15. What were your first six months together like?
16. What can they tell you about your name?
17. What do they know about your early life (first words, childhood illnesses).
18. What sources of information are available (baby books, records, photographs)?