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| COURSE: Health | GRADE(S): 12 th Grade |
| UNIT: Pregnancy and Childbirth | TIMEFRAME: 3 Lessons |

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| NATIONAL STANDARDS: | |
| STANDARD 1: | Students will comprehend concepts related to health promotion and disease prevention to enhance health. |
| STANDARD 2: | Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors. |
| STANDARD 3: | Students will demonstrate the ability to access valid information and products and services to enhance health. |
| STANDARD 4: | Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. |
| STANDARD 5: | Students will demonstrate the ability to use decision-making skills to enhance skills. |
| STANDARD 6: | Students will demonstrate the ability to use goal-setting skills to enhance health. |
| STANDARD 7: | Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks. |
| STANDARD 8: | Students will demonstrate the ability to advocate for personal, family and community health. |

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| STATE STANDARDS: | |
| 10.1. Concepts of Health | |
| 10.1.12.A. | Evaluate factors that impact growth and development during adulthood and late adulthood. |
| 10.1.12.B. | Evaluate factors that impact the body systems and apply protective/preventive strategies. |
| 10.1.12.E. | Identify and analyze factors that influence the prevention and control of health problems. |
| 10.2. Healthful Living | |
| 10.2.12.A. | Evaluate health care products and services that impact adult health practices. |
| 10.2.12.E. | Analyze the interrelationship between environmental factors and community health. |
| <i>Reading Assessment Anchors:</i> | |
| R11.A.2 Understand nonfiction appropriate to grade level | |
| R11.A.2.1 | Identify and apply the meaning of vocabulary in nonfiction |
| R11.A.2.3 | Make inferences, draw conclusions, and make generalizations based on text |
| R11.A.2.4 | Identify and explain main ideas and relevant details |
| R11.B.3 Interpret, describe, and analyze concepts and organization of non-fictional text | |
| R11. B.3.1 | Interpret, describe, and analyze the characteristics and uses of facts and opinions in non-fictional text. |

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| UNIT OBJECTIVES: | CONTENT: |
| Describe the development of human life from conception to birth | I. Fertilization/Conception <ul style="list-style-type: none"> - Moment sperm unites with egg - Occurs in the upper third of fallopian tube within 12-24hours after ovulation. - Fertilized Egg: Blastocyte or Zygote - Twins <ul style="list-style-type: none"> o <i>Identical:</i> one fertilized egg splits |

completely into two.

- o *Fraternal*: two eggs, two sperm.
- o *Multiple Births*: Fertility drugs are usually taken to increase number of eggs, therefore increase probability.

II. Pre-Natal Development

- Fertilization: sperm enters egg
- Development Stages
 - o *Zygote*: immediately upon fertilization
 - o *Embryo*: conception; 2nd month
 - Implanted in uterine lining.
 - Umbilical cord growth and attachment to uterine lining.
 - Placenta forms
 - Development of Heart, Brain, Lungs
- Fetus
 - o All systems of body are forming
 - o All appendages: legs, arms, toes, fingers, nails, hair.
 - o Receives nourishment and rids waste through umbilical cord.
 - o Encased in amniotic sac, practices breathing and swallowing.
 - o Mother can feel movement during the fourth month.
- Stages of Pregnancy
 - o *First Trimester – First 3-Months*
 - Development of all Fetuses' body systems takes place.
 - Mother may experience nausea, vomiting, fatigue, mood swings, and little weight gain.
 - Critical time of development. No smoking, drinking, use of any drugs (even over the counter) unless given approval by obstetrician. Deformities, abnormalities, and or brain damage may occur.
 - o *Second Trimester – Second 3-Months*
 - Refinement of all body systems
 - Hair growth, vernex (creamy substance covers whole body to protect, moisturize, and ease passage during delivery).
 - Fetus is able to hear, suck thumb, move arms, legs, fingers, toes.
 - Freely moves whole body in Amniotic fluid.
 - o *Third Trimester- Last 3-Months*
 - Fetus gains weight
 - Seventh month baby turns so head is in downward position readying for birth.
 - All through the pregnancy the fetus

Critique the different types of Pre-Natal testing.

Summarize the stages of birth.

has received oxygen from the mother via the umbilical cord. Once the umbilical cord is cut, the baby must get oxygen from own lungs. For this to happen, an opening in the fetus's heart must be closed so the blood can be pumped to the lungs. This amazing change takes place within seconds of birth. Sometimes this does not close and the baby would be said to have a hole in the heart. Surgery would be needed for the baby to survive.

- Formation of the pulmonary artery and vein for heart and lungs to work together once the umbilical cord is cut.

- Pre-Natal Testing
 - *ALPHA FETO Protein*
 - *Screening Test*: Measurements of mother's abdomen, baby's heart rate, growth.
 - *Amniocentesis*: Amniotic fluid removed via long needle, ultra-sound at same time to prevent fetal injury.
 - *Chorionic Viscillus Sampling*: Test placenta by taking small amount from vaginal opening.
 - *Fetal Tissue Sampling*: Test actual fetal tissue. This has very high risk and can cause complications.
 - *Ultra-sound*: Sound waves rebound off fetus to determine growth rate, movement, and heart development.
 - *Percutaneous Umbilical Blood Sampling*: Blood is removed from the umbilical cord to check for hereditary diseases.

- Conditions
 - Miscarriage: Baby is expelled from uterus.
 - Ectopic pregnancy: Embryo starts to form outside the middle of the uterus. Very dangerous, can cause hemorrhage in mother.
 - Fetal alcohol syndrome

III. Birth

- Stages of Birth
 - Dilation: opening of cervix to allow baby to exit uterus, usually six centimeters.
 - Expulsion: fetus is pushed out of body

Compare and contrast the different birthing options.

- by uterine contractions.
 - Head first, face in downward position.
 - Baby turns, shoulders in vertical position, then body follows
- Placental: contractions push placenta out of body following birth. All must come out or an infection or hemorrhaging could result.
- Bonding: Baby is placed on mother's body or is held to start the emotional/mental bonding between mother and child.

- Complications of Birth
 - Breech: Baby is born other than head first.
 - Cesarean Birth: Baby is surgically removed from mother by cutting seven layers of tissue. The procedure is necessary due to fetal distress, breech positioning of baby, mother has herpes, mother has medical condition, baby too big to get through the birth canal.
 - Placenta:
 - Placenta Previa: Placenta growing over cervix.
 - Placenta Abruptia: Placenta pulls away from uterine lining, causing bleeding, and risk of miscarriage.

- Birthing Options
 - Natural: No medication is given to assist
 - Lamaze: Use of breathing techniques to enhance and ease birth.
 - Birthing Room: Suite type environment to create a homelike setting, and allows family members to participate in birth.
 - Underwater Birth: Mother is in warm water during delivery to create a relaxing and familiar environment for both mother and baby.
 - Birthing Chair: Stainless steel, hydraulic chair here mother sits allowing gravity to assist in the delivery.
 - Mid-wives: Specialized person to follow mother and child throughout pregnancy and delivery.

- Lactation – Nursing
 - Benefits
 - Antibodies given to child as long as nursing.
 - Perfect food for baby.
 - Assists uterus in resuming shape.

Analyze the types of abortion and various state laws associated with abortion.

- Mother resumes body composition of before pregnancy.
- Acts as a laxative for the baby.
- Stimulates milk production.
- Negatives
 - Milk production lessens if mother stressed.
 - Milk failure.
 - Breast Infections.
 - Alcohol and drugs can be given to baby through the milk.

IV. Abortion

- *Definition:* fetus is removed from the mother's body before full term. Usually takes place in the first trimester.
- *Types of Abortion:*
 - *Spontaneous;* occurs naturally, due to immature cervix.
 - *Surgical/ Medical Forms*
 - *Suction Curettage:* Baby and placenta removed by vacuum. First Trimester.
 - *D & C:* Dilation and curettage: A loop shaped knife scraps uterine wall causing detachment of baby and uterine lining: First Trimester
 - *D & E:* Dilation and Evacuation
Second trimester: Laminaria inserted day or two before. Baby is then dismembered and skull crushed to facilitate removal.
 - *Prostaglandin: Second Trimester:* A hormone injected into amniotic sac which stimulates uterine contractions to expel the fetus, who has usually died.
 - *Saline: Second Trimester:*
Concentrated salt solution is injected through the mother's abdomen into the amniotic sac surrounding the baby. The fetus absorbs the solution, which causes burning, hemorrhage, edema, shock and eventually death. The saline causes the uterus to contract and expel the baby.
 - *D & X:* Dilation and Extraction: Partial Birth Abortion: Second trimester: Cervix dilated with laminaria in two or more sessions. Day of abortion, laminaria removed patient injected with Pitocin to induce contractions. Doctor locates the legs of the fetus. Grasping a leg with a large forceps,

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| | <p>it is then pulled into the vagina and delivers the live baby up to its head. A pair of scissors is then inserted into the base of the skull to create an opening. A suction catheter is inserted in the opening, and the skull contents are suctioned out. The skull decompresses, and is removed. The uterus is then scraped and contents removed with forceps and a suction curette.</p> <ul style="list-style-type: none"> ▪ <i>Morning after pill:</i> ▪ Preven; Estrogen and Progestin ▪ Progestin-only: Plan B ▪ The pills can be started right away after unprotected sex. More effective the earlier it is initiated within seventy-two hours. Second dose taken twelve hours after first dose. Each dose is 1, 2, 4, or pills, depending on the brand. Not all brands of birth control pills can be used for emergency contraception. <ul style="list-style-type: none"> o Laws of Abortion <ul style="list-style-type: none"> ▪ State to state laws. ▪ Continuously being challenged. ▪ Laws different in other countries. |
| <p>ACTIVITIES:</p> <p>In a group situation, students will sequence fetal Developmental pictures/ diagrams from the first month to ninth month. (Interpersonal Communication)</p> <p>Class discussions on pro's and con's of teen pregnancy options: Keeping the child, adoption, Abortion, etc. (Interpersonal Communication, Advocacy)</p> <p><i>Class debate: Abortion vs. Pro-life</i> Class divided in half, research on area, then debate using information gathered. (Interpersonal Communication, Accessing Information, Advocacy, Decision-Making/Goal-Setting)</p> <p><i>Research/presentation/comparison</i> of costs for pregnancy/birth with different private insurance companies, HMO's, Medicare. How much will it cost me if I use this Insurance company? (Accessing Information, Interpersonal Communication)</p> <p><i>Pros/Cons, Similarities/differences of birthing</i></p> | <p>ASSESSMENTS:</p> <p>In a group, students will sequence fetal developmental pictures/ diagrams from the first to ninth month.</p> <p>Written Test with options:</p> <ul style="list-style-type: none"> ✧ True/False, Multiple Choice/Diagram ✧ Completion taken directly from worksheet/ Diagram ✧ Essay: Using diagrams, drawings, explain/list sequence of pregnancy from conception through delivery detailing fetal development time frames and possible birthing options, <p>Students will research on the internet the various types of prenatal testing in the form of a worksheet/study guide</p> <p>Each student will research the different methods of abortion and laws for either the state in which they were born or the state in which they intend to reside</p> <p>REMEDICATION:</p> |

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| <p><i>Options:</i> Following natural childbirth and Cesarean section films students will first discuss pros/cons of each and then the similarities. Answer: If I had a choice, which would I choose? (Analyzing Internal and External Influences, Decision-Making/Goal-Setting)</p> <p>Student Parents Talk to classes about pregnancy, birth, and being a parent. (Analyzing Internal and External Influences, Interpersonal Communication)</p> <p><i>Teacher directed differentiated instructional projects and activities are ongoing and based on student need.</i></p> <p>RESOURCES:</p> <p>Visuals: Posters, Handouts</p> <p><u>Videos:</u> <i>Understanding Human Reproduction</i> Sunburst Communications, 1984 A life begins – 19 minutes The Baby Grows – 20 minutes</p> <p><i>Into the World: The Living Body</i> Films for the Humanities and Science Princeton, NJ 26 minutes</p> <p>Cesarean Section – TV CBS 1 Hour TLC</p> <p>Just Wait: United Learning – 14 minutes 1989</p> <p><u>Books:</u> Health: <i>Choosing Wellness</i>, by Prentice Hall 1992 pp. 545-547</p> <p>Web Sites:</p> <p>www.surebaby.com www.urban.org/family/invaes.html www.bu.edu/cohis/teenpreg/teenpreg.htm www.notmenotnow.org/about.CFM www.avert.org/</p> | <p>Individualized assistance on areas having difficulty during class if possible, or at an agreed upon scheduled time after or before school.</p> <p>Allow student to copy worksheet from reliable classmate.</p> <p>Allow to work in groups, partners, of choice in beginning or end of class to get caught up with teacher approval.</p> <p>Peer helpers</p> <p>Students will interview the school nurse to explain the different birthing options and abortion methods so that they can comprehend medical terminology</p> <p>ENRICHMENT:</p> <p>Extra credit given for summary/critique of current event articles related to topic.</p> <p>Credit given for additional reading and presenting /writing on non-required articles.</p> <p>Credit given for computer designed overheads on related topics developed for teacher use. Research / presentation of specialized related topic. <i>Example:</i> Graph Various Insurance companies' costs for prenatal tests, exams, doctors' visits, medications, anesthesiologists, anesthesia, doctors, and delivery.</p> <p>Interview an OB-GYN and record/present the information gathered.</p> |
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