

ICEV Child Development SBOE Editorial Edits

Change Type	Current Location	Original Text	Updated Text
Editorial Change	Pregnancy: First Trimester Slide 12	Refers to when a pregnant individual comes in contact with one of the following: pesticides heavy metals organic solvents	Hazardous Materials Exposure Refers to when a pregnant woman comes in contact with one of the following: pesticides heavy metals organic solvents
Editorial Change	Pregnancy: First Trimester Slide 13	Pregnant individuals may encounter pesticides if employed in landscaping, agriculture or farming. In the home environment, contact might include gardening or combating yard pests.	Pregnant women may encounter pesticides if employed in landscaping, agriculture or farming. In the home environment, contact might include gardening or combating yard pests.
Editorial Change	Pregnancy: First Trimester Slide 15	Can be toxic and cause negative health consequences including birth defects if a pregnant individual is exposed to them dental assistants are at risk of encountering hazardous metals if preparing dental fillings paint industry workers and certain types of artists may be at risk of exposure to metals	Can be toxic and cause negative health consequences including birth defects if a pregnant woman is exposed to them dental assistants are at risk of encountering hazardous metals if preparing dental fillings paint industry workers and certain types of artists may be at risk of exposure to metals
Editorial Change	Pregnancy: First Trimester Slide 18	May affect individuals who work in certain occupations such as: areas of the healthcare industry clothing and textiles paint and plastics laboratory workers artists oil and chemical industry workers cosmetologists, beauticians and nail salon technicians metal workers dry cleaning workers	May affect women who work in certain occupations such as: areas of the healthcare industry clothing and textiles paint and plastics laboratory workers artists oil and chemical industry workers cosmetologists, beauticians and nail salon technicians metal workers dry cleaning workers
Editorial Change	Pregnancy: First Trimester Slide 19	May be avoided if the individual is aware of the dangers communication with supervisors for possible reassignments during pregnancy is important	May be avoided if the woman is aware of the dangers communication with supervisors for possible reassignments during pregnancy is important
Editorial Change	Pregnancy: First Trimester Slide 20	May also expose pregnant individuals to environmental hazards working with various cleaning products handling certain home repair and maintenance products applying various garden maintenance products	May also expose pregnant women to environmental hazards working with various cleaning products handling certain home repair and maintenance products applying various garden maintenance products

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Editorial Change		May also expose pregnant individuals to environmental hazards cleaning the cat litter box soaking in a hot tub or sauna using very hot water Toxoplasma gondii, a parasite commonly found in cat feces, causes toxoplasmosis. Toxoplasmosis can be detrimental to pregnant individuals.	May also expose pregnant women to environmental hazards cleaning the cat litter box soaking in a hot tub or sauna using very hot water Toxoplasma gondii, a parasite commonly found in cat feces, causes toxoplasmosis. Toxoplasmosis can be detrimental to pregnant women.
Editorial Change	Pregnancy: First Trimester Slide 21		
Editorial Change		Affecting pregnancy may include: hereditary factors the age of the pregnant individual	Affecting pregnancy may include: hereditary factors the age of the pregnant mother
Editorial Change	Pregnancy: First Trimester Slide 23		
Editorial Change		Age of the Pregnant Individual May also affect conception and development of a new life Might be considered a hereditary or an environmental factor individuals who give birth before the age of 17 or after the age of 35 are at a greater risk of complications	Age of the Pregnant Mother May also affect conception and development of a new life Might be considered a hereditary or an environmental factor mothers who give birth before the age of 17 or after the age of 35 are at a greater risk of complications
Editorial Change	Pregnancy: First Trimester Slide 25		
Editorial Change		Age of the Pregnant Individual May lead to complications related to a lack of prenatal care early in pregnancy younger pregnant individuals are less likely to seek prenatal care in the first trimester specific complications for younger individuals include: pregnancy related high blood pressure premature birth and low birth weight	Age of the Pregnant Mother May lead to complications related to a lack of prenatal care early in pregnancy younger pregnant mothers are less likely to seek prenatal care in the first trimester specific complications for younger mothers include: pregnancy related high blood pressure premature birth and low birth weight
Editorial Change	Pregnancy: First Trimester Slide 26		
Editorial Change	Pregnancy: First Trimester Slide 27	Age of the Pregnant Individual	Age of the Pregnant Mother
Editorial Change		Are essential for the growth and development of the fetus and for the individual's body to support the new life growth of the placenta increased blood supply uterine tissue	Are essential for the growth and development of the fetus and for the mother's body to support the new life growth of the placenta increased blood supply uterine tissue
Editorial Change	Pregnancy: First Trimester Slide 38		
Editorial Change		Is needed to make red blood cells for the growing fetus, placenta and the pregnant individual Is responsible for carrying oxygen in the blood	Is needed to make red blood cells for the growing fetus, placenta and the mother Is responsible for carrying oxygen in the blood
Editorial Change	Pregnancy: First Trimester Slide 51		
Editorial Change		The National Academy of Medicine recognized choline as an essential nutrient in 1998. Both the American Medical Association and the American Academy of Pediatrics advise pregnant individuals to include 450 milligrams per day.	The National Academy of Medicine recognized choline as an essential nutrient in 1998. Both the American Medical Association and the American Academy of Pediatrics advise pregnant women to include 450 milligrams per day.
Editorial Change	Pregnancy: First Trimester Slide 56		

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Editorial Change	Pregnancy: First Trimester Slide 57	Can be worse during pregnancy due to changes in the immune system During pregnancy may lead to miscarriage or premature delivery May affect the fetus even if the individual shows no signs of illness	Can be worse during pregnancy due to changes in the immune system During pregnancy may lead to miscarriage or premature delivery May affect the fetus even if the mother shows no signs of illness
Editorial Change	Pregnancy: First Trimester Slide 63	Enable families and medical teams to determine the best care options for the individual and the developing fetus genetic counselors are also available to help families: understand test results work through available options make decisions for the best possible outcomes	Enable families and medical teams to determine the best care options for the mother and the developing fetus genetic counselors are also available to help families: understand test results work through available options make decisions for the best possible outcomes
Editorial Change	Pregnancy: First Trimester Slide 64	During pregnancy is referred to as prenatal care the best practice is to start prenatal care in the first trimester of pregnancy regular visits may enable complications to be detected early and lead to quality care for the child and the individual if pregnancy is suspected, schedule an appointment with a healthcare practitioner right away to confirm and begin regular checkups prenatal visits are usually scheduled approximately once a month during the first trimester of pregnancy	During pregnancy is referred to as prenatal care the best practice is to start prenatal care in the first trimester of pregnancy regular visits may enable complications to be detected early and lead to quality care for the child and the mother if pregnancy is suspected, schedule an appointment with a healthcare practitioner right away to confirm and begin regular checkups prenatal visits are usually scheduled approximately once a month during the first trimester of pregnancy
Editorial Change	Pregnancy: First Trimester Slide 65	Depends on attending all prenatal appointments issues can be caught early and monitored at regular visits regular visits also provide the opportunity for the individual to ask questions and share concerns with the healthcare practitioner	Depends on attending all prenatal appointments issues can be caught early and monitored at regular visits regular visits also provide the opportunity for the mother to ask questions and share concerns with the healthcare practitioner
Editorial Change	Pregnancy: First Trimester Slide 66	Usually involves: estimation of the due date a full physical exam including: checking blood pressure, weight and drawing blood for lab tests breast, pelvic and cervical examination family and individual health history lifestyle questions such as: diet, exercise, substance use, relationships and mental health honest answers will enable the practitioner to provide specific care for the individual and the developing fetus	Usually involves: estimation of the due date a full physical exam including: checking blood pressure, weight and drawing blood for lab tests breast, pelvic and cervical examination health history lifestyle questions such as: diet, exercise, substance use, relationships and mental health honest answers will enable the practitioner to provide specific care for the mother and the developing fetus

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Editorial Change	Pregnancy: First Trimester Slide 68	Include: routine tests to check both the individual and the developing fetus examples of tests for the individual include: anemia, gestational diabetes and certain infections examples of tests for the fetus include: nonstress test, biophysical profile, ultrasounds and checks for possible birth defects	Include: routine tests to check both the mother and the developing fetus examples of tests for the mother include: anemia, gestational diabetes and certain infections examples of tests for the fetus include: nonstress test, biophysical profile, ultrasounds and checks for possible birth defects
Editorial Change	Pregnancy: First Trimester Slide 69	During the first trimester of pregnancy include maintaining a regular exercise routine physical fitness helps the pregnant individual: keep the heart, bones and mind healthy improve sleep improve self-esteem lower the risk of depression and anxiety	During the first trimester of pregnancy include maintaining a regular exercise routine physical fitness helps the mother: keep the heart, bones and mind healthy improve sleep improve self-esteem lower the risk of depression and anxiety
Editorial Change	Pregnancy: First Trimester Slide 70	Healthy Pregnant Individuals If a pregnant individual has an established exercise routine before becoming pregnant, it is usually safe to continue after becoming pregnant. However, the best practice is to discuss exercise practices with a healthcare practitioner.	Healthy Pregnant Women If a woman has an established exercise routine before becoming pregnant, it is usually safe to continue after becoming pregnant. However, the best practice is to discuss exercise practices with a healthcare practitioner.
Editorial Change	Pregnancy: First Trimester Check for Understanding II Answer Key and Student Version-question 5	Which of the following statements is true concerning the impact of the age of the pregnant individual?	Which of the following statements is true concerning the impact of the age of the woman?
Editorial Change	Pregnancy: First Trimester Check for Understanding IV Answer Key and Student Version-question 1 and 4	Question 1 Answer Choice-Family and individual health history Question 4-Fill in the blanks using the word bank provided below. Regular prenatal care visits may enable complications to be detected early and lead to quality care for the child and the individual.	Question 1 Answer Choice-Health history Question 4-Fill in the blanks using the word bank provided below. Regular prenatal care visits may enable complications to be detected early and lead to quality care for the child and the mother.
Editorial Change	Pregnancy: First Trimester Final Assessment Answer Key and Student Version-question 11, 14, 16, 18	Question 11-Select all of the following recommended practices for individuals to follow during pregnancy. Question 14 Answer Choice-Age of the pregnant individual Question 16 Answer Choice-Is avoidable if an individual gets plenty of exercise Question 18-Which of the following is the recommended amount of exercise for a pregnant individual?	Question 11-Select all of the following recommended practices for women to follow during pregnancy. Question 14 Answer Choice-Age of the pregnant mother Question 16 Answer Choice-Is avoidable if a woman gets plenty of exercise Question 18-Which of the following is the recommended amount of exercise for a pregnant woman?

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Editorial Change	Pregnancy: First Trimester Key Concepts Prenatal Development Segment	Pregnancy (Part 1)-gestational age is counted from the first day of the individual's last menstrual cycle Physical Signs of Pregnancy-this hormone is released into the urine of the individual after implantation has taken place Tenth Week-The blood volume of the individual increases by 40 to 50 percent	Pregnancy (Part 1) gestational age is counted from the first day of the woman's last menstrual cycle Physical Signs of Pregnancy-this hormone is released into the urine of the woman after implantation has taken place Tenth Week-The blood volume of the mother increases by 40 to 50 percent
Editorial Change	Pregnancy: First Trimester Key Concepts Factors Impacting Pregnancy: Environmental and Personal Segment	Personal Factors-the age of the pregnant individual Personal Factors-individuals who give birth before the age of 17 or after the age of 35 are at a greater risk of complications	Personal Factors-the age of the pregnant mother Personal Factors-mothers who give birth before the age of 17 or after the age of 35 are at a greater risk of complications
Editorial Change	Pregnancy: First Trimester Key Concepts Factors Impacting Pregnancy: Nutritional Segment	Proteins-essential for the growth and development of the fetus and the pregnant individual Food Borne Illness-May affect the fetus even if the individual shows no signs of illness	Proteins-essential for the growth and development of the fetus and the mother Food Borne Illness-May affect the fetus even if the mother shows no signs of illness
Editorial Change	Pregnancy: First Trimester Lesson Plan	Description-This lesson guides students through the first trimester of pregnancy including conception and the early development of a new life. Lesson materials also cover the effects of pregnancy on the new parent. Students will investigate topics, such as the stages of prenatal development, physical signs of pregnancy, the importance of maintaining a healthy and safe environment during pregnancy, the significance of proper nutrition for both the pregnant individual and the growing fetus and the impact of proper health care.	Description-This lesson guides students through the first trimester of pregnancy including conception and the early development of a new life. Lesson materials also cover the effects of pregnancy on the new parent. Students will investigate topics, such as the stages of prenatal development, physical signs of pregnancy, the importance of maintaining a healthy and safe environment during pregnancy, the significance of proper nutrition for both the pregnant woman and the growing fetus and the impact of proper health care.
Editorial Change	Pregnancy: First Trimester Project-Meal Planning During Pregnancy	Direction 3-Create a meal plan for a pregnant individual.	Direction 3-Create a meal plan for a pregnant woman.

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Editorial Change	Pregnancy: First Trimester Student Handout- Pregnancy Complications	Gestational Diabetes-Gestational diabetes is a type of diabetes which develops during pregnancy in individuals who did not have diabetes prior to pregnancy. This type of diabetes occurs when the body cannot make enough insulin during pregnancy. Insulin is an important hormone produced in the pancreas which enables the body to allow blood sugar into the cells for use as energy. Having gestational diabetes can increase the risk of high blood pressure. It can also increase the risk of having a large baby which needs to be delivered by cesarean section. Other risk factors include preterm birth, low blood sugar and developing type two diabetes later in life. Preeclampsia-Preeclampsia has to do with high blood pressure. The increased pressure in the placental arteries restricts the blood flow to the placenta. If this condition is not treated, parts of the placenta can die causing the baby to be in distress. It can also lead to seizures in the individual. Seizures are considered a medical emergency. Once it reaches the point of seizures it is referred to as eclampsia.	Gestational Diabetes-Gestational diabetes is a type of diabetes which develops during pregnancy in women who did not have diabetes prior to pregnancy. This type of diabetes occurs when the body cannot make enough insulin during pregnancy. Insulin is an important hormone produced in the pancreas which enables the body to allow blood sugar into the cells for use as energy. Having gestational diabetes can increase the risk of high blood pressure. It can also increase the risk of having a large baby which needs to be delivered by cesarean section. Other risk factors include preterm birth, low blood sugar and developing type two diabetes later in life. Preeclampsia-Preeclampsia has to do with high blood pressure. The increased pressure in the placental arteries restricts the blood flow to the placenta. If this condition is not treated, parts of the placenta can die causing the baby to be in distress. It can also lead to seizures in the mother. Seizures are considered a medical emergency. Once it reaches the point of seizures it is referred to as eclampsia.
Editorial Change	Pregnancy: First Trimester Video	<ol style="list-style-type: none"> 1. Pregnancy is the term used to describe the period in which life develops inside the womb or uterus of an individual. 2. The weeks are counted from the first day of an individual's last menstrual cycle to delivery, which is referred to as gestational age. 3. As this development is taking place inside the body, the pregnant individual may notice physical and emotional signs. 4. This hormone is released into the urine of the pregnant individual after implantation has taken place about 14 days after fertilization. 5. At this time, the blood volume of the pregnant individual increases by 40% to 50%. 	<ol style="list-style-type: none"> 1. Pregnancy is the term used to describe the period in which life develops inside the womb or uterus of a woman. 2. The weeks are counted from the first day of an woman's last menstrual cycle to delivery, which is referred to as gestational age. 3. As this development is taking place inside the body, the mother may notice physical and emotional signs. 4. This hormone is released into the urine of the woman after implantation has taken place about 14 days after fertilization. 5. At this time, the blood volume of the mother increases by 40% to 50%.
Editorial Change	Pregnancy: Second Trimester Slides: 7	Affects the health of the individual as well as the growing fetus A pregnant individual should only add about 300 extra calories each day.	Affects the health of the mother as well as the growing fetus A pregnant woman should only add about 300 extra calories each day.
Editorial Change	Pregnancy: Second Trimester Slide 12	the individual's regulation of body fluids	the woman's regulation of body fluids
Editorial Change	Pregnancy: Second Trimester Slide 21	measures the levels of alpha-fetoprotein in the individual's blood	measures the levels of alpha-fetoprotein in the woman's blood

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Editorial Change	Pregnancy: Second Trimester Slide 26	the age of the pregnant individual and certain environmental factors may play a role in the occurrence of genetic errors	the age of the pregnant woman and certain environmental factors may play a role in the occurrence of genetic errors
Editorial Change	Pregnancy: Second Trimester Slide 28	Enable families and medical teams to determine the best care options for the individual and the developing fetus	Enable families and medical teams to determine the best care options for the mother and the developing fetus
Editorial Change	Pregnancy: Second Trimester Slide 32	assessing the blood pressure and weight gain of the individual checking the iron levels of the individual	assessing the blood pressure and weight gain of the mother checking the iron levels of the mother
Editorial Change	Pregnancy: Second Trimester Slide 36	The Pregnant Individual high blood pressure can cause problems during pregnancy for both the individual and the growing fetus	The Pregnant Woman high blood pressure can cause problems during pregnancy for both the woman and the growing fetus
Editorial Change	Pregnancy: Second Trimester Slide 37	The Pregnant Individual	The Pregnant Woman
Editorial Change	Pregnancy: Second Trimester Slide 38	Individual's body protein and fat	Woman's body protein and fat
Editorial Change	Pregnancy: Second Trimester Slide 40	Is a type of diabetes which develops during pregnancy in individuals who did not have diabetes prior to pregnancy	Is a type of diabetes which develops during pregnancy in women who did not have diabetes prior to pregnancy
Editorial Change	Pregnancy: Second Trimester Slide 47	the recommendation is for pregnant individuals to "listen to their bodies" (Pregnancy Points): The Centers for Disease Control and Prevention (CDC) recommends avoiding activities which require an individual to lay flat on the back after the first trimester.	the recommendation is for pregnant women to "listen to their bodies" (Pregnancy Points): The Centers for Disease Control and Prevention (CDC) recommends avoiding activities which require a woman to lay flat on the back after the first trimester.
Editorial Change	Pregnancy: Second Trimester Slide 53	From drugs, alcohol, tobacco and other harmful substances is one of the best choices a pregnant individual can make for the health of the developing fetus	From drugs, alcohol, tobacco and other harmful substances is one of the best choices a pregnant woman can make for the health of the developing fetus
Editorial Change	Pregnancy: Second Trimester Action Plan	Class 2 Essential Question: 1.What changes in diet might a pregnant individual have to make in order to promote a healthy pregnancy? Class 5 Essential Question 1: What are good health practices for pregnant individuals during the second trimester? Class 5 Step 1: Locate and share an image of a good health practice for pregnant individuals during the second trimester. Participate in a brief class discussion to share your findings.	Class 2 Essential Question: 1. What changes in diet might a pregnant woman have to make in order to promote a healthy pregnancy? Class 5 Essential Question 1: What are good health practices for pregnant women during the second trimester? Class 5 Step 1: Locate and share an image of a good health practice for pregnant women during the second trimester. Participate in a brief class discussion to share your findings.
Editorial Change	Pregnancy: Second Trimester Check for Understanding I Answer Key and Student Version-question 3	For many pregnant individuals, nausea decreases during the second trimester.	For many pregnant women, nausea decreases during the second trimester.
Editorial Change	Pregnancy: Second Trimester Check for Understanding II Answer Key and Student Version-question 2	Pregnant individuals should _____.	Pregnant women should _____.

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Editorial Change	Pregnancy: Second Trimester Check for Understanding IV Answer Key and Student Version-question 3	Obtaining quality sleep is easy for most pregnant individuals during the second trimester because pregnancy is often tiring to the body.	Obtaining quality sleep is easy for most pregnant women during the second trimester because pregnancy is often tiring to the body.
Editorial Change	Pregnancy: Second Trimester Final Assessment Answer Key and Student Version-question 2, 5, 12, 15	2: During the second trimester, for many pregnant individuals, nausea decreases due to _____. 5: Pregnant individuals should aim to eat twice as much food during the second trimester. 12: The age of the pregnant individual may play a role in the occurrence of genetic errors. 15: _____ diabetes is a type of diabetes which develops during pregnancy in individuals who did not have diabetes prior to pregnancy.	2: During the second trimester, for many pregnant women, nausea decreases due to _____. 5: Pregnant women should aim to eat twice as much food during the second trimester. 12: The age of the pregnant woman may play a role in the occurrence of genetic errors. 15: _____ diabetes is a type of diabetes which develops during pregnancy in women who did not have diabetes prior to pregnancy.
Editorial Change	Pregnancy: Second Trimester Key Concepts Answer Key & Student Version: Factors Impacting Pregnancy: Nutritional	Essential Question: What changes in diet might a pregnant individual have to make in order to promote a healthy pregnancy? Nutritional Needs - Nutrition affects the health of the pregnant individual as well as the growing fetus Nutritional Needs - pregnant individuals should only add about 300 extra calories each day Carbohydrates & Protein - is essential for the pregnant individual Dairy Products & Specific Nutrients - provide calcium for the pregnant individual and the fetus	Essential Question: What changes in diet might a pregnant woman have to make in order to promote a healthy pregnancy? Nutritional Needs - Nutrition affects the health of the mother as well as the growing fetus Nutritional Needs - pregnant women should only add about 300 extra calories each day Carbohydrates & Protein - is essential for the pregnant woman Dairy Products & Specific Nutrients - provide calcium for the woman and the fetus
Editorial Change	Pregnancy: Second Trimester Key Concepts Answer Key & Student Version: Factors Impacting Pregnancy: Healthcare	Appropriate Medical Care: assessing the pregnant individual's: Appropriate Medical Care: a type of diabetes which develops during pregnancy in individuals who do not have diabetes prior to pregnancy	Appropriate Medical Care: assessing the pregnant woman's: Appropriate Medical Care: a type of diabetes which develops during pregnancy in women who do not have diabetes prior to pregnancy
Editorial Change	Pregnancy: Second Trimester Key Concepts Answer Key & Student Version: Factors Impacting Pregnancy: Good Health Practices	Essential Question: What are good health practices for pregnant individuals during the second trimester?	Essential Question: What are good health practices for pregnant women during the second trimester?

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Editorial Change	Pregnancy: Second Trimester Lesson Plan	<p>Description: This lesson guides students through the second trimester of pregnancy. Students will investigate topics, such as the stages of prenatal development, physical signs and symptoms of pregnancy, the significance of proper nutrition for both the pregnant individual and the growing fetus, the impact of proper healthcare, the role of medical advances and good health practices during the second trimester.</p> <p>Class 2 Essential Question: What changes in diet might a pregnant individual have to make in order to promote a healthy pregnancy?</p> <p>Class 5 Essential Question: What are good health practices for pregnant individuals during the second trimester?</p> <p>Class 5 Step 1: Have students locate and share an image of a good health practice for pregnant individuals during the second trimester. Lead a brief class discussion so students can share their findings.</p>	<p>Description: This lesson guides students through the second trimester of pregnancy. Students will investigate topics, such as the stages of prenatal development, physical signs and symptoms of pregnancy, the significance of proper nutrition for both the pregnant woman and the growing fetus, the impact of proper healthcare, the role of medical advances and good health practices during the second trimester.</p> <p>Class 2 Essential Question: What changes in diet might a pregnant woman have to make in order to promote a healthy pregnancy?</p> <p>Class 5 Essential Question: What are good health practices for pregnant women during the second trimester?</p> <p>Class 5 Step 1: Have students locate and share an image of a good health practice for pregnant women during the second trimester. Lead a brief class discussion so students can share their findings.</p>
Editorial Change	Pregnancy: Second Trimester Vocabulary Handout	<p>Gestational Diabetes: type of diabetes which develops during pregnancy in individuals who do not have diabetes prior to pregnancy</p> <p>Quickening: first movements felt by the pregnant individual; may feel like butterflies or gas</p>	<p>Gestational Diabetes: type of diabetes which develops during pregnancy in women who do not have diabetes prior to pregnancy</p> <p>Quickening: first movements felt by the pregnant woman; may feel like butterflies or gas</p>
Editorial Change	Pregnancy: Second Trimester Video	<ol style="list-style-type: none"> 1. By this time, the individual may be experiencing body aches numb or tingling hands and swelling in the ankles, fingers, and face. 2. For many individuals, nausea has decreased due to the leveling out of hormones, which may lead to more energy. 	<ol style="list-style-type: none"> 1. By this time, the mother may be experiencing body aches numb or tingling hands and swelling in the ankles, fingers, and face. 2. For many women, nausea has decreased due to the leveling out of hormones, which may lead to more energy.
Editorial Change	Pregnancy: Third Trimester Slide 7	Due to the size and weight of the fetus at this stage, it is recommended for individuals to eat small meals and snacks more often rather than three large meals per day.	Due to the size and weight of the fetus at this stage, it is recommended for pregnant women to eat small meals and snacks more often rather than three large meals per day.
Editorial Change	Pregnancy: Third Trimester Slide 8	fruits, vegetables, whole grain products, protein foods and dairy products will provide the needed nutrients to keep the individual and fetus growing strong	fruits, vegetables, whole grain products, protein foods and dairy products will provide the needed nutrients to keep the mother and fetus growing strong
Editorial Change	Pregnancy: Third Trimester Slide 11	the blood pressure and weight gain of the individual the iron levels of the individual	the blood pressure and weight gain of the mother the iron levels of the mother

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Editorial Change	Pregnancy: Third Trimester Slide 13	checking the individual's weight, blood pressure and urine	checking the pregnant woman's weight, blood pressure and urine
Editorial Change	Pregnancy: Third Trimester Slide 31	From drugs, alcohol, tobacco and other harmful substances is one of the best choices a pregnant individual can make for the health of the developing fetus	From drugs, alcohol, tobacco and other harmful substances is one of the best choices a pregnant woman can make for the health of the developing fetus
Editorial Change	Pregnancy: Third Trimester Slide 33	Individual's body protein and fat	Woman's body protein and fat
Editorial Change	Pregnancy: Third Trimester Action Plan	Class 2 Essential Questions 1. What nutritional needs do pregnant individuals have during the third trimester? 2. What healthcare practices are important for pregnant individuals during the third trimester? Class 3 Essential Questions 1. What are good health practices for pregnant individuals during the third trimester?	Class 2 Essential Questions 1. What nutritional needs do pregnant women have during the third trimester? 2. What healthcare practices are important for pregnant women during the third trimester? Class 3 Essential Questions 1. What are good health practices for pregnant women during the third trimester?
Editorial Change	Pregnancy: Third Trimester Check for Understanding II Answer Key and Student Version Question 2	Due to the size and weight of the fetus at this stage, it is recommended for individuals to eat small meals and snacks more often rather than three large meals per day.	Due to the size and weight of the fetus at this stage, it is recommended for pregnant women to eat small meals and snacks more often rather than three large meals per day.
Editorial Change	Pregnancy: Third Trimester Final Assessment Answer Key and Student Version Question 8 Answer Choices and Question 16	8. Consistent monitoring of the fetus and pregnant individual Routine tests for the health and safety of the fetus and pregnant individual 16. If an individual is at a healthy normal weight prior to pregnancy, what is the recommended amount of weight to gain during pregnancy?	8. Consistent monitoring of the fetus and the mother Routine tests for the health and safety of the fetus and the mother 16. If a woman is at a healthy normal weight prior to pregnancy, what is the recommended amount of weight to gain during pregnancy?
Editorial Change	Pregnancy: Third Trimester Key Concepts Answer Key and Student Version Prenatal Development Segment	Braxton-Hicks Contractions may lead an individual to think labor is starting	Braxton-Hicks Contractions may lead a pregnant woman to think labor is starting
Editorial Change	Pregnancy: Third Trimester Key Concepts Answer Key and Student Version Factors Impacting Pregnancy: Nutritional Segment	Essential Questions 1. What nutritional needs do pregnant individuals have during the third trimester?	Essential Questions 1. What nutritional needs do pregnant women have during the third trimester?
Editorial Change	Pregnancy: Third Trimester Key Concepts Answer Key and Student Version Factors Impacting Pregnancy: Healthcare Segment	Essential Questions 1. What healthcare practices are important for pregnant individuals during the third trimester?	Essential Questions 1. What healthcare practices are important for pregnant women during the third trimester?
Editorial Change	Pregnancy: Third Trimester Key Concepts Answer Key and Student Version Factors Impacting Pregnancy: Good Health Practices Segment	Essential Questions 1. What are good health practices for pregnant individuals during the third trimester? Healthy Weight Gain (Part 2) individual's body protein and fat: seven pounds	Essential Questions 1. What are good health practices for pregnant women during the third trimester? Healthy Weight Gain (Part 2) woman's body protein and fat: seven pounds

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Editorial Change	Pregnancy: Third Trimester Lesson Plan	Description: This lesson guides students through the third trimester of pregnancy. Students will investigate topics, such as the stages of prenatal development, physical signs and symptoms of pregnancy, the significance of proper nutrition for both the pregnant individual and the growing fetus, the importance of maintaining a healthy environment, the impact of proper health care and good health practices during the third trimester. Class 2 Essential Questions 1. What nutritional needs do pregnant individuals have during the third trimester? 2. What healthcare practices are important for pregnant individuals during the third trimester? Class 3 Essential Questions 1. What are good health practices for pregnant individuals during the third trimester?	Description: This lesson guides students through the third trimester of pregnancy. Students will investigate topics, such as the stages of prenatal development, physical signs and symptoms of pregnancy, the significance of proper nutrition for both the pregnant woman and the growing fetus, the importance of maintaining a healthy environment, the impact of proper health care and good health practices during the third trimester. Class 2 Essential Questions 1. What nutritional needs do pregnant women have during the third trimester? 2. What healthcare practices are important for pregnant women during the third trimester? Class 3 Essential Questions 1. What are good health practices for pregnant women during the third trimester?
Editorial Change	Pregnancy: Third Trimester Project - Environmental Hazards During Pregnancy	Possible health consequences for the pregnant individual	Possible health consequences for the pregnant woman
Editorial Change	Pregnancy: Third Trimester Video	1. By now, the pregnant individual may be experiencing common pregnancy symptoms due to the size of the growing fetus. 2. These muscle contractions may lead an individual to think labor is starting. 3. The next phase of life for the pregnant individual is parenthood.	1. By now, the pregnant woman may be experiencing common pregnancy symptoms due to the size of the growing fetus. 2. These muscle contractions may lead a woman to think labor is starting. 3. The next phase of life for the mother is parenthood.
Editorial Change	Labor and Delivery Methods Action Plan	Essential Question Class 2: 1. What types of practitioners care for pregnant individuals using the natural model of care? Essential Question Class 3: 1. What types of practitioners care for pregnant individuals using the medical model of care?	Essential Question Class 2: 1. What types of practitioners care for pregnant women using the natural model of care? Essential Question Class 3: 1. What types of practitioners care for pregnant women using the medical model of care?
Editorial Change	Labor and Delivery Methods Check for Understanding I Answer Key and Student Version - question 5	Question 5 - Fill in the blanks using the word bank provided below. Practitioners who have the natural mindset employ methods and practices which enable individuals to move through the stages of labor according to physiological processes. These professionals specialize in working with healthy pregnancies and often hold the title of midwife.	Question 5 - Fill in the blanks using the word bank provided below. Practitioners who have the natural mindset employ methods and practices which enable females to move through the stages of labor according to physiological processes. These professionals specialize in working with healthy pregnancies and often hold the title of midwife.

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Editorial Change	Labor and Delivery Methods Check for Understanding II Answer Key and Student Version - question 5	Question 5 - The role of a doula during labor and delivery is to support the laboring individual in the following ways.	Question 5 - The role of a doula during labor and delivery is to support the laboring mother in the following ways.
Editorial Change	Labor and Delivery Methods Check for Understanding III Answer Key and Student Version - question 5	Question 5 Answer Choice - A. Helps provide a means for pregnant individuals to express needs, desires and expectations to the attending healthcare practitioner	Question 5 Answer Choice - A. Helps provide a means for pregnant females to express needs, desires and expectations to the attending healthcare practitioner
Editorial Change	Labor and Delivery Methods Check for Understanding IV Answer Key and Student Version - question 5	Question 5 - Fill in the blanks using the word bank provided below. Many individuals find it fascinating to observe the placenta, the organ developed by the body to nourish and protect a new life. Once the job of the placenta is complete, it is no longer needed. After birth, the placenta is also inspected to be sure it is fully intact. If fragments of placenta tissue are left in the uterus, infection and bleeding result.	Question 5 - Fill in the blanks using the word bank provided below. The placenta is the organ developed by the body to nourish and protect a new life. Once the job of the placenta is complete, it is no longer needed. After birth, the placenta is also inspected to be sure it is fully intact. If fragments of placenta tissue are left in the uterus, infection and bleeding result.
Editorial Change	Labor and Delivery Methods Final Assessment Answer Key and Student Version Questions 3, 4, 5, 10, 12,	Question 3-Fill in the blanks using the word bank provided below. Movement during labor allows normal blood flow to the fetus and the individual, promotes gravity and allows the contractions to accomplish the goal of moving the fetus through the body. Question 4 - A _____ is a trained birthing companion who provides informational, physical and emotional support to the laboring individual throughout the duration of labor and delivery. Question 5 - When a laboring individual has continuous support and is permitted to respond to personal pain and comfort cues, the labor is allowed to progress normally and often without complication. Question 10 - Restricting _____ during labor is often practiced at hospitals in case the laboring individual needs emergency procedures. Question 12 - When healthy pregnant individuals go into labor naturally and are allowed to progress normally, medical interventions may not be needed.	Question 3 - Fill in the blanks using the word bank provided below. Movement during labor allows normal blood flow to the fetus and the mother, promotes gravity and allows the contractions to accomplish the goal of moving the fetus through the body. Question 4 - A _____ is a trained birthing companion who provides informational, physical and emotional support to the laboring mother throughout the duration of labor and delivery. Question 5 - When a laboring mother has continuous support and is permitted to respond to personal pain and comfort cues, the labor is allowed to progress normally and often without complication. Question 10 - Restricting _____ during labor is often practiced at hospitals in case the laboring mother needs emergency procedures. Question 12 - When healthy pregnant women go into labor naturally and are allowed to progress normally, medical interventions may not be needed.

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<p>Editorial Change</p>	<p>Labor and Delivery Methods Key Concepts Answer Key and Student Version Models of Care: Medical Segment</p>	<p>Essential Question 1 - 1. What types of practitioners care for pregnant individuals using the medical model of care?</p> <p>Medical Practitioners - Who care for pregnant individuals include:</p> <p>Birth Plans - Enable pregnant individuals to express their needs and desires for labor and delivery to their health care practitioner</p>	<p>Essential Question 1 - 1. What types of practitioners care for pregnant women using the medical model of care?</p> <p>Medical Practitioners - Who care for pregnant women include:</p> <p>Birth Plans - Enable pregnant females to express their needs and desires for labor and delivery to their health care practitioner</p>
<p>Editorial Change</p>	<p>Labor and Delivery Methods Key Concepts Answer Key and Student Version Birth Segment</p>	<p>Birth - if the individual has previously given birth</p>	<p>Birth - if the mother has previously given birth</p>

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Editorial Change	Labor and Delivery Methods Lesson Plan	<p>Essential Question Class 2: 1. What types of practitioners care for pregnant individuals using the natural model of care?</p> <p>Essential Question Class 3: 1. What types of practitioners care for pregnant individuals using the medical model of care?</p>	<p>Essential Question Class 2: 1. What types of practitioners care for pregnant women using the natural model of care?</p> <p>Essential Question Class 3: 1. What types of practitioners care for pregnant women using the medical model of care?</p>
Editorial Change	Labor and Delivery Methods Student Handout - Birth Options Claras Story	<p>The bathroom had a bathtub and Clara was informed some laboring individuals like to take warm baths during labor to ease the pain.</p> <p>The center also had a kitchen where midwives would prepare food and beverages for laboring individuals to help them through the process.</p> <p>In this book, individuals from all walks of life shared their personal experiences of labor and delivery.</p> <p>Some stories included individuals who had one birth at a hospital and one at a birthing center.</p> <p>Each individual must decide where to give birth and who will attend to the needs of their labor and delivery.</p> <p>When pregnant individuals are educated, much of the apprehension of what to expect is relieved.</p>	<p>The bathroom had a bathtub and Clara was informed some laboring mothers like to take warm baths during labor to ease the pain.</p> <p>The center also had a kitchen where midwives would prepare food and beverages for laboring mothers to help them through the process.</p> <p>In this book, mothers from all walks of life shared their personal experiences of labor and delivery.</p> <p>Some stories included mothers who had one birth at a hospital and one at a birthing center.</p> <p>Each mother must decide where to give birth and who will attend to the needs of their labor and delivery.</p> <p>When pregnant mothers are educated, much of the apprehension of what to expect is relieved.</p>

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Editorial Change	Labor and Delivery Methods Check for Understanding II Answer Key and Student Version - question 5	Question 5 - The role of a doula during labor and delivery is to support the laboring individual in the following ways.	Question 5 - The role of a doula during labor and delivery is to support the laboring mother in the following ways.
Editorial Change	Labor and Delivery Methods Check for Understanding III Answer Key and Student Version - question 5	Question 5 Answer Choice - A. Helps provide a means for pregnant individuals to express needs, desires and expectations to the attending healthcare practitioner	Question 5 Answer Choice - A. Helps provide a means for pregnant females to express needs, desires and expectations to the attending healthcare practitioner

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<p>Editorial Change</p>	<p>Labor and Delivery Methods Final Assessment Answer Key and Student Version Questions 3, 4, 5, 10, 12,</p>	<p>Question 3 - Fill in the blanks using the word bank provided below. Movement during labor allows normal blood flow to the fetus and the individual, promotes gravity and allows the contractions to accomplish the goal of moving the fetus through the body.</p> <p>Question 4 - A _____ is a trained birthing companion who provides informational, physical and emotional support to the laboring individual throughout the duration of labor and delivery.</p> <p>Question 5 - When a laboring individual has continuous support and is permitted to respond to personal pain and comfort cues, the labor is allowed to progress normally and often without complication.</p> <p>Question 10 - Restricting _____ during labor is often practiced at hospitals in case the laboring individual needs emergency procedures.</p> <p>Question 12 - When healthy pregnant individuals go into labor naturally and are allowed to progress normally, medical interventions may not be needed.</p>	<p>Question 3 - Fill in the blanks using the word bank provided below. Movement during labor allows normal blood flow to the fetus and the mother, promotes gravity and allows the contractions to accomplish the goal of moving the fetus through the body.</p> <p>Question 4 - A _____ is a trained birthing companion who provides informational, physical and emotional support to the laboring mother throughout the duration of labor and delivery.</p> <p>Question 5 - When a laboring mother has continuous support and is permitted to respond to personal pain and comfort cues, the labor is allowed to progress normally and often without complication.</p> <p>Question 10 - Restricting _____ during labor is often practiced at hospitals in case the laboring mother needs emergency procedures.</p> <p>Question 12 - When healthy pregnant women go into labor naturally and are allowed to progress normally, medical interventions may not be needed.</p>

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<p>Editorial Change</p>	<p>Labor and Delivery Methods Key Concepts Answer Key and Student Version Birth Segment</p>	<p>Birth - if the individual has previously given birth</p>	<p>Birth - if the mother has previously given birth</p>
<p>Editorial Change</p>	<p>Labor and Delivery Methods Lesson Plan</p>	<p>Essential Question Class 2: 1. What types of practitioners care for pregnant individuals using the natural model of care?</p> <p>Essential Question Class 3: 1. What types of practitioners care for pregnant individuals using the medical model of care?</p>	<p>Essential Question Class 2: 1. What types of practitioners care for pregnant women using the natural model of care?</p> <p>Essential Question Class 3: 1. What types of practitioners care for pregnant women using the medical model of care?</p>

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<p>Editorial Change</p>	<p>Labor and Delivery Methods Vocabulary Handout</p>	<p>Birth Plan written plan created by the pregnant individual to voice expectations and preferences during the labor and delivery process</p> <p>Cesarean Section (C-Section) incision made in the abdomen and uterus of a pregnant individual used to deliver a fetus</p> <p>Doula trained birthing companion who provides informational, physical and emotional support to a laboring individual throughout the duration of labor and delivery</p> <p>Midwife practitioner trained to assist pregnant individuals in childbirth</p>	<p>Birth Plan written plan created by the pregnant mother to voice expectations and preferences during the labor and delivery process</p> <p>Cesarean Section (C-Section) incision made in the abdomen and uterus of a pregnant female used to deliver a fetus</p> <p>Doula trained birthing companion who provides informational, physical and emotional support to a laboring mother throughout the duration of labor and delivery</p> <p>Midwife practitioner trained to assist pregnant mothers in childbirth</p>

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<p>Editorial Change</p>	<p>Labor and Delivery Methods Video Birth Options Segment</p>	<p>1. Because every pregnant individual and family is different, some aspects will seem like benefits to some families and drawbacks to others. 2. I would say probably 95% of deliveries, unless you are a higher risk individual, are going to be completely and utterly normal, which is fantastic.</p>	<p>1. Because every pregnant woman and family is different, some aspects will seem like benefits to some families and drawbacks to others. 2. I would say probably 95% of deliveries, unless you are a higher risk mother, are going to be completely and utterly normal, which is fantastic.</p>
	<p>Labor and Delivery Methods Video Models of Care: Natural Segment</p>	<p>1. With the medical model interventions might be used according to the needs and desires of the pregnant individual. 2. Because physicians, midwives, and pregnant individuals have differing views and perspectives of childbirth practices, prenatal care and delivery methods will differ. 3. Practitioners in all settings desire to provide quality care and want what is best for pregnant individuals and their babies. 4. Practitioners who have the natural mindset employ methods and practices which enable individuals to move through the stages of labor according to physiological processes. 5. The American College of Obstetricians and Gynecologists or ACOG is supportive of pregnant individuals having options when choosing childbirth care. 6. Laboring individuals under the care of a midwife will be encouraged to move around and find positions of comfort. 7. Movement during labor provides for normal blood flow to the fetus and the individual, promotes gravity, and allows the contractions to accomplish the goal of moving the fetus through the body. 8. Other natural ways to cope with labor include words of encouragement and coaching from not only the midwife but other support persons, such</p>	<p>1. With the medical model interventions might be used according to the needs and desires of the pregnant mother. 2. Because physicians, midwives, and pregnant mothers have differing views and perspectives of childbirth practices, prenatal care and delivery methods will differ. 3. Practitioners in all settings desire to provide quality care and want what is best for pregnant mothers and their babies. 4. Practitioners who have the natural mindset employ methods and practices which enable mothers to move through the stages of labor according to physiological processes. 5. The American College of Obstetricians and Gynecologists or ACOG is supportive of pregnant mothers having options when choosing childbirth care. 6. Laboring mothers under the care of a midwife will be encouraged to move around and find positions of comfort. 7. Movement during labor provides for normal blood flow to the fetus and the mother, promotes gravity, and allows the contractions to accomplish the goal of moving the fetus through the body. 8. Other natural ways to cope with labor include words of encouragement and coaching from not only the midwife but other support persons, such as the pregnant mother's partner, close friend, or</p>

iCEV Child Development SBOE Editorial Edits

	<p>Labor and Delivery Methods Video Models of Care: Medical Segment</p>	<ol style="list-style-type: none"> 1. Medical practitioners who care for individuals during pregnancy and birth include family physicians and obstetricians. 2. When caring for laboring individuals, medical practitioners often employ methods and routines which align with medical models of care. 3. When healthy pregnant individuals go into labor naturally and are allowed to progress normally, medical interventions may not be needed. 4. Again, pregnant individuals and families have choices when deciding where to deliver. 5. The priority is for pregnant individuals to find the setting which brings them a sense of comfort and trust. 6. Regardless of where an individual chooses to give birth, it is helpful to create a birth plan. 	<ol style="list-style-type: none"> 1. Medical practitioners who care for mothers during pregnancy and birth include family physicians and obstetricians. 2. When caring for laboring mothers, medical practitioners often employ methods and routines which align with medical models of care. 3. When healthy pregnant women go into labor naturally and are allowed to progress normally, medical interventions may not be needed. 4. Again, pregnant mothers and families have choices when deciding where to deliver. 5. The priority is for pregnant mothers to find the setting which brings them a sense of comfort and trust. 6. Regardless of where a woman chooses to give birth, it is helpful to create a birth plan.
	<p>Labor and Delivery Methods Video Stages of Labor Segment</p>	<ol style="list-style-type: none"> 1. Many pregnant individuals also have a strong urge to clean the house and make sure everything is organized for the new baby. 2. For first time pregnancies, this stage usually lasts longer than for individuals who are preparing to give birth to a subsequent child. 3. The length of this stage depends on factors such as pain medication, birthing position, or if the individual has previously given birth. 4. The health care practitioner will usually guide the laboring individual through this process. 	<ol style="list-style-type: none"> 1. Many pregnant women also have a strong urge to clean the house and make sure everything is organized for the new baby. 2. For first time pregnancies, this stage usually lasts longer than for mothers who are preparing to give birth to a subsequent child. 3. The length of this stage depends on factors such as pain medication, birthing position, or if the woman has previously given birth. 4. The health care practitioner will usually guide the laboring mother through this process.

Hazardous Materials Exposure

- Refers to when a pregnant woman comes in contact with one of the following:
 - pesticides
 - heavy metals
 - organic solvents



Pesticides

- Are substances or mixtures of substances used to prevent, destroy or repel unwanted plants or other pests
- May increase the chance of miscarriage, birth defects or other problems



Pregnancy Point:

Pregnant women may encounter pesticides if employed in landscaping, agriculture or farming. In the home environment, contact might include gardening or combating yard pests.

Heavy Metals

- Can be toxic and cause negative health consequences including birth defects if a pregnant woman is exposed to them
 - dental assistants are at risk of encountering hazardous metals if preparing dental fillings
 - paint industry workers and certain types of artists may be at risk of exposure to metals



Pregnancy Point:

In the process of planning a pregnancy, take time to evaluate current work environments.

Organic Solvents

- May affect women who work in certain occupations such as:
 - areas of the healthcare industry
 - clothing and textiles
 - paint and plastics
 - laboratory workers
 - artists
 - oil and chemical industry workers
 - cosmetologists, beauticians and nail salon technicians
 - metal workers
 - dry cleaning workers

Hazardous Substances in the Workplace

- May be avoided if the woman is aware of the dangers
 - communication with supervisors for possible reassignments during pregnancy is important



Certain Household Chores & Activities


- May also expose pregnant women to environmental hazards
 - working with various cleaning products
 - handling certain home repair and maintenance products
 - applying various garden maintenance products



Certain Household Chores & Activities

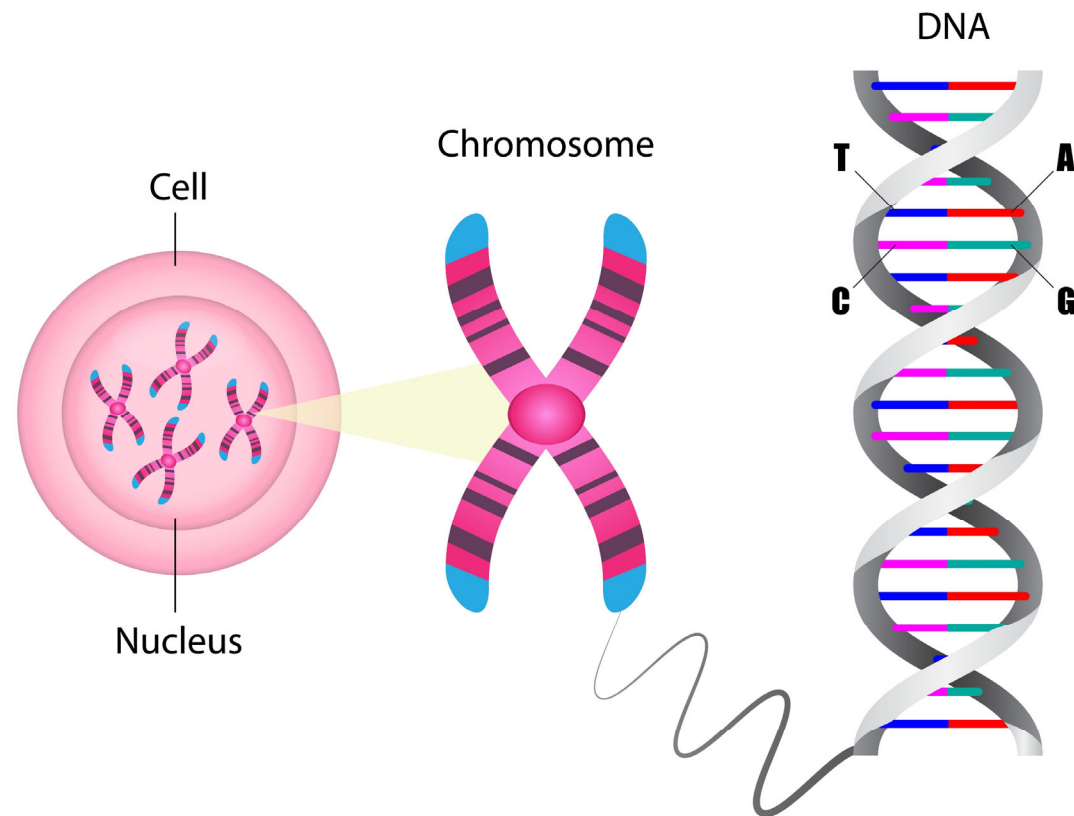
- May also expose pregnant women to environmental hazards
 - cleaning the cat litter box
 - soaking in a hot tub or sauna using very hot water



 **Pregnancy Point:** *Toxoplasma gondii*, a parasite commonly found in cat feces, causes toxoplasmosis. Toxoplasmosis can be detrimental to pregnant women.

Personal Factors

- Affecting pregnancy may include:
 - hereditary factors
 - the age of the pregnant mother



Age of the Pregnant Mother

- May also affect conception and development of a new life
- Might be considered a hereditary or an environmental factor
 - mothers who give birth before the age of 17 or after the age of 35 are at a greater risk of complications

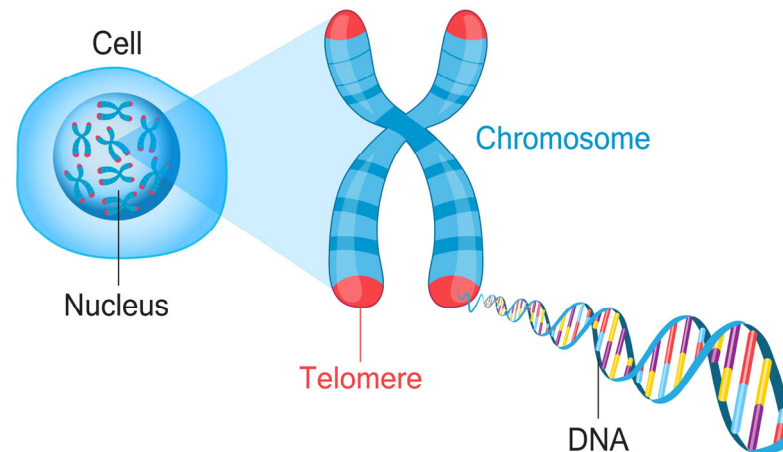
Age of the Pregnant Mother

- May lead to complications related to a lack of prenatal care early in pregnancy
 - younger pregnant mothers are less likely to seek prenatal care in the first trimester
 - specific complications for younger mothers include:
 - pregnancy related high blood pressure
 - premature birth and low birth weight



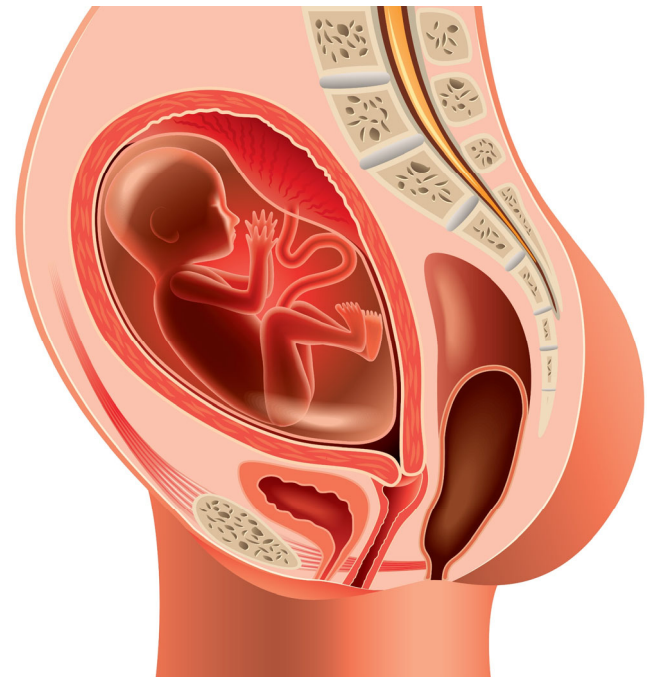
Age of the Pregnant Mother

- May lead to age related complications
 - the classification of “advanced maternal age” begins at age 35
 - pregnancy later in life is considered higher risk due to issues such as:
 - irregular menstrual cycles
 - higher probability of improper chromosome division



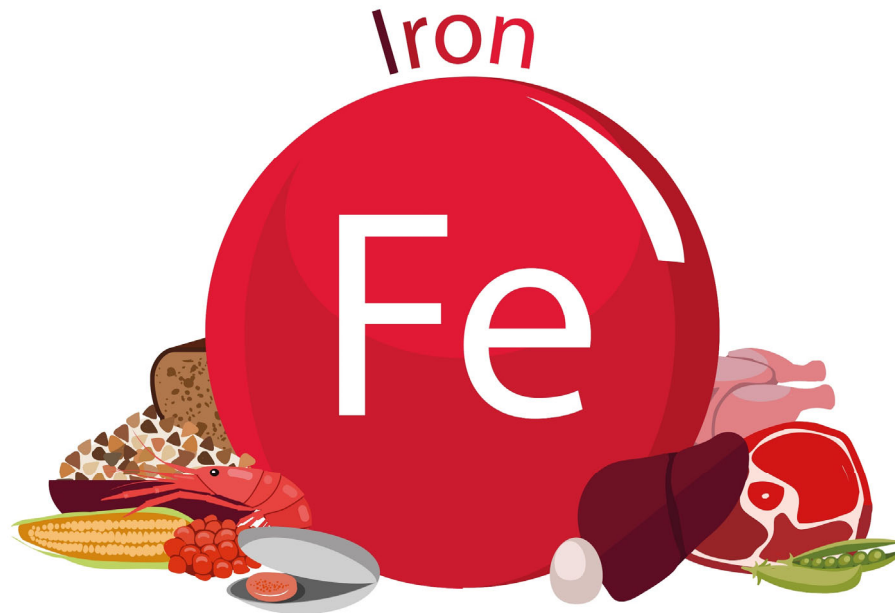
Proteins

- Are essential for the growth and development of the fetus and for the mother's body to support the new life
 - growth of the placenta
 - increased blood supply
 - uterine tissue



Iron


- Is needed to make red blood cells for the growing fetus, placenta and the mother
- Is responsible for carrying oxygen in the blood



Choline

- Is found in foods, such as:
 - beef, eggs, chicken, fish, nuts, legumes, vegetables, broccoli, cauliflower and cabbage



 **Pregnancy Point:** The National Academy of Medicine recognized choline as an essential nutrient in 1998. Both the American Medical Association and the American Academy of Pediatrics advise pregnant women to include 450 milligrams per day.

Food Borne Illness

- Can be worse during pregnancy due to changes in the immune system
- During pregnancy may lead to miscarriage or premature delivery
- May affect the fetus even if the mother shows no signs of illness



Test & Screening Results

- Enable families and medical teams to determine the best care options for the mother and the developing fetus
 - genetic counselors are also available to help families:
 - understand test results
 - work through available options
 - make decisions for the best possible outcomes

Appropriate Medical Care

- During pregnancy is referred to as prenatal care
 - the best practice is to start prenatal care in the first trimester of pregnancy
 - regular visits may enable complications to be detected early and lead to quality care for the child and the mother
 - if pregnancy is suspected, schedule an appointment with a healthcare practitioner right away to confirm and begin regular checkups
 - prenatal visits are usually scheduled approximately once a month during the first trimester of pregnancy

Pregnancy Health

- Depends on attending all prenatal appointments
 - issues can be caught early and monitored at regular visits
 - regular visits also provide the opportunity for the mother to ask questions and share concerns with the healthcare practitioner



The First Prenatal Visit

- Usually involves:
 - estimation of the due date
 - a full physical exam including:
 - checking blood pressure, weight and drawing blood for lab tests
 - breast, pelvic and cervical examination
 - health history
 - lifestyle questions such as:
 - diet, exercise, substance use, relationships and mental health
 - honest answers will enable the practitioner to provide specific care for the mother and the developing fetus

Successive Prenatal Visits

- Include:
 - routine tests to check both the mother and the developing fetus
 - examples of tests for the mother include:
 - anemia, gestational diabetes and certain infections
 - examples of tests for the fetus include:
 - nonstress test, biophysical profile, ultrasounds and checks for possible birth defects



Good Health Practices

- During the first trimester of pregnancy include maintaining a regular exercise routine
 - physical fitness helps the mother:
 - keep the heart, bones and mind healthy
 - improve sleep
 - improve self-esteem
 - lower the risk of depression and anxiety



Healthy Pregnant Women

- Should include:
 - at least two hours and 30 minutes of moderate-intensity aerobic activity per week such as:
 - walking, swimming, water aerobics or dancing
 - strength building exercises at least two times per week
 - strengthening exercises include lifting weights and using resistance bands



Pregnancy Point:

If a woman has an established exercise routine before becoming pregnant, it is usually safe to continue after becoming pregnant. However, the best practice is to discuss exercise practices with a healthcare practitioner.

Factors Impacting Pregnancy: Environmental & Personal Check for Understanding

Directions:

Answer the following questions.

1. Select all of the following environmental factors which can negatively impact pregnancy.
 - Alcohol consumption
 - Certain chores and activities
 - Cigarette smoke
 - Drug use
 - Exercise and rest
 - Hazardous chemicals and materials
 - Healthy nutrition
 - Pesticide exposure
 - Prenatal medical care
2. Alcohol exposure during pregnancy may lead the child to suffer from brain damage, physical abnormalities and learning difficulties.
 - A. True
 - B. False
3. Which of the following is NOT a best practice when using cleaning and gardening products in the home?
 - A. Read and follow all manufacturer's labeling instructions
 - B. Combine chemicals for greater efficiency
 - C. Open a window or turn on a fan when working indoors
 - D. Wear rubber gloves to protect skin
4. _____ are traits or diseases passed down from parents to children over generations.
 - A. Pregnancy complications
 - B. Hereditary factors
 - C. Environmental factors
 - D. Personal factors
5. Which of the following statements is true concerning the impact of the age of the woman?
 - A. Has no bearing on pregnancy
 - B. Guarantees there will be complications
 - C. May affect the pregnancy due to biological factors
 - D. Is irrelevant to healthy pregnancy outcomes

Factors Impacting Pregnancy: Environmental & Personal Check for Understanding Answer Key

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Answer the following questions.

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D. Is irrelevant to healthy pregnancy outcomes



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Factors Impacting Pregnancy: Healthcare Check for Understanding

Directions:

Answer the following questions.

1. Select the following statements which describe the usual first prenatal medical appointment.

- Health history
- Full physical exam
- Questions regarding lifestyle and relationships
- Visit with a nutritionist
- Visit with an athletic trainer

2. Which of the following procedures are NOT a regular part of prenatal health appointments?

- A. Checking blood pressure and weight
- B. Routine lab tests
- C. Visiting with a nutritionist
- D. Measuring fetal heart rate and growth

3. _____ uses high-frequency sound waves to form images of the fetus on a computer screen.

- A. Magnetic resonance imaging (MRI)
- B. Ultrasound
- C. Chorionic villi sampling
- D. Amniocentesis

4. Fill in the blanks using the word bank provided below.

Regular _____ care _____ may enable _____ to be _____ early and lead to _____ care for the child and the _____.

complications detected	mother prenatal	quality visits
---------------------------	--------------------	-------------------

5. Regular exercise should be avoided during pregnancy to protect the fetus.

- A. True
- B. False

Factors Impacting Pregnancy: Healthcare Check for Understanding Answer Key

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complications detected	mother prenatal	quality visits
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5. Regular exercise should be avoided during pregnancy to protect the fetus.

A. True

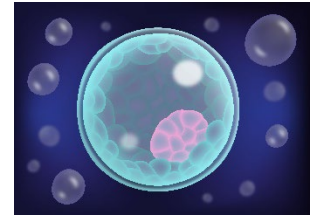
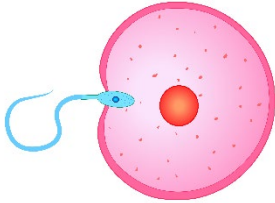
B. False

Pregnancy: First Trimester Final Assessment

Directions:

Answer the following questions.

1. Using the word bank, label the following images related to the first stages of pregnancy.



Blastocyst	Conception	Morula
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2. The _____ is a pear-shaped organ located in the pelvis.
- A. Uterus
 - B. Placenta
 - C. Ovary
 - D. Fallopian tube
3. Which of the following is the ejection of a mature egg or ovum from the ovary into the fallopian tube?
- A. Embolization
 - B. Ovulation
 - C. Colorization
 - D. Pollination
4. The _____ is a combined cell just after fertilization containing genetic information from both parents.
- A. Mitote
 - B. Ligate
 - C. Morula
 - D. Zygote
5. Which of the following is made up of an inner group of cells and an outer structure of cells which implants into the endometrium?
- A. Blastomere
 - B. Embryo
 - C. Blastocyst
 - D. Fetus
6. Fill in the blanks using the word bank provided below.
- The _____ stage is when all the major systems and _____ develop. At

this stage, the cells continue to multiply and _____. However, now they begin to _____. Differentiation means cells take on specific _____ and _____.

characteristics differentiate	embryonic functions	replicate structures
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7. Match the following terms to their definitions.

Description	Term
Term describing the developing baby inside the womb from eight weeks until birth	
Time it takes for the new life to grow and develop from conception to full-term	
Term describing the developing baby inside the womb from five weeks to eight weeks	
When the cell inside the zygote splits and replicates itself	

Cleavage	Embryo	Fetus	Gestation
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8. A pregnancy test will NOT indicate a positive result until _____ is present in the urine.

- A. Deoxyribonucleic acid (DNA)
- B. Human chorionic gonadotropin (hCG) hormone
- C. Folate
- D. Choline

9. Which of the following has been linked to causing various degrees of brain damage, physical abnormalities and learning difficulties in the developing fetus.

- A. Overconsumption of vegetables
- B. Drinking more than a half gallon of water each day
- C. Drinking alcohol
- D. Lack of sleep during pregnancy

10. The damage caused by alcohol to a developing baby can be corrected with surgery.

- A. True
- B. False

11. Select all of the following recommended practices for women to follow during pregnancy.

- Avoid drinking alcohol
- Avoid exercise
- Avoid hazardous chemicals
- Avoid soaking in hot tubs and saunas

- Drink plenty of water
- Eat nutrient dense foods
- Eat processed foods for convenience
- Follow a restricted diet to avoid gaining too much weight

12. Advanced maternal age begins at the age of _____.
- A. 40
 - B. 45
 - C. 35
 - D. 30

13. Fill in the blanks using the word bank provided below.

_____ is crucial for the _____ of the brain and _____ cord. Insufficient _____ of folate may lead to serious birth _____ called neural _____ defects. The most common are Spina bifida and Anencephaly.

amounts defects	folate formation	spinal tube
--------------------	---------------------	----------------

14. Select all of the following which are considered environmental factors impacting a developing fetus.

- Age of the pregnant mother
- Alcohol consumption
- Certain chores and activities
- Cigarette smoke
- Ethnicity
- Exposure to hazardous chemicals
- Genetic diseases
- Heredity

15. E-cigarettes and other tobacco products containing nicotine have no lasting effect on a developing fetus.
- A. True
 - B. False

16. Nausea during pregnancy _____.
- A. Is imaginary
 - B. Is avoidable if a woman gets plenty of exercise
 - C. Is due to changes in hormones
 - D. Only takes place in the morning

17. What specific population is more likely to come in contact with heavy metals in their occupational duties?
- A. Dental assistants

- B. Farm workers
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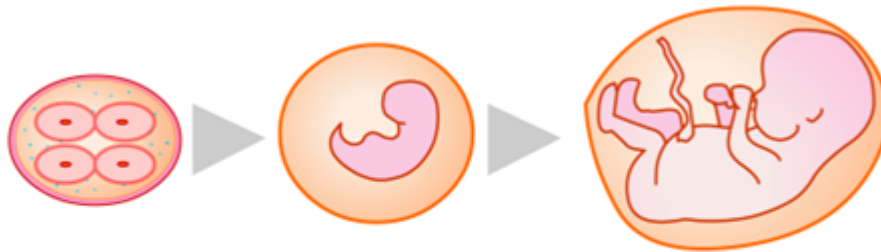
18. Which of the following is the recommended amount of exercise for a pregnant woman?

- A. Two hours per week
- B. Two hours and 30 minutes per week
- C. One hour 15 minutes per week
- D. One hour per day

19. _____ weeks is considered a full-term pregnancy.

- A. 37
- B. 28
- C. 39
- D. 34

20. Using the word bank, label the stages of human development.



embryo	fetus	zygote
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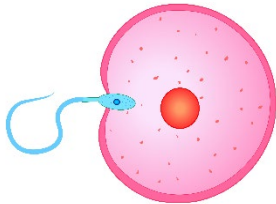
Pregnancy: First Trimester Final Assessment

Answer Key

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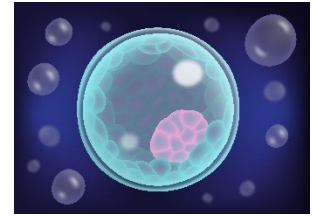
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Morula



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The **embryonic** stage is when all the major systems and **structures** develop. At this stage, the cells continue to multiply and **replicate**. However, now they begin to **differentiate**. Differentiation means cells take on specific **characteristics** and **functions**.

characteristics differentiate	embryonic functions	replicate structures
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Folate is crucial for the **formation** of the brain and **spinal** cord. Insufficient **amounts** of folate may lead to serious birth **defects** called neural **tube** defects. The most common are Spina bifida and Anencephaly.

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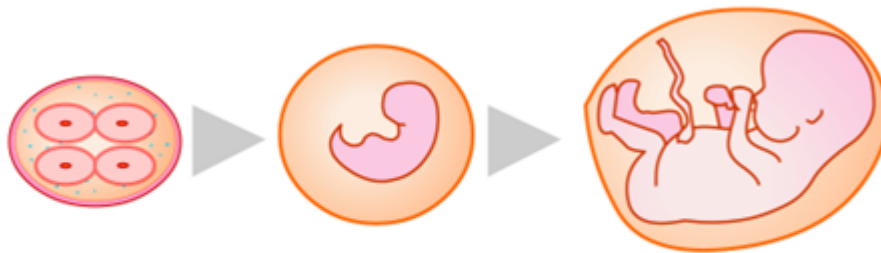
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zygote

embryo

fetus

embryo	fetus	zygote
--------	-------	--------

Pregnancy: First Trimester Key Concepts

Prenatal Development

Essential Questions

1. What are the stages of prenatal development in the first trimester?
2. What are the physical signs of pregnancy in the first trimester?

Pregnancy (Part 1)

- Pregnancy is the period of time in which a new life develops inside the _____ (or womb)
 - the uterus is a hollow, pear-shaped _____ located in the pelvis
- _____ refers to the time it takes for the new life to grow and develop from conception to full-term
 - the designation of full-term begins at _____ weeks and continues through _____ weeks six days
 - _____ is counted from the first day of the woman's last menstrual cycle
 - another way to count the milestones of prenatal development is from the time of _____

Pregnancy (Part 2)

- Prior to pregnancy, _____ must take place
 - ovulation is the ejection of a mature egg (or ovum) from the _____ into the fallopian tube
- Conception, or _____, takes place when a sperm penetrates the egg
 - this combined cell is called a _____
 - the zygote contains the _____ information from both parents to become a fully developed human being

Cleavage & Implantation (Part 1)

- The zygote travels down the _____ tube toward the uterus
- During this journey, the zygote _____ and splits to become two identical cells within the same structure
 - this process is called _____
- Cleavage continues over and over again, creating _____ cells within the same structure
 - after _____ replications, the cluster of cells is called a _____ because it resembles a mulberry

Cleavages & Implantation (Part 2)

- As the cell replication continues, the morula becomes a _____

- the blastocyst is made up of an inner group of cells and an outer structure of cells
- the inner group of cells will become the _____
 - embryo is the term describing the developing fetus inside the womb from _____ to eight weeks
- the outer structure will later grow into the _____
- Once the blastocyst reaches the uterus, it implants into the thickened lining of the _____ wall
 - the uterine wall is called the _____

The Zygote

- The embryo is the body of the baby during the _____ developmental period from four weeks to eight weeks
- The placenta is an _____ produced by the body during pregnancy which nourishes and protects the developing baby
- The inner _____ of cells continues to grow and change
 - layers form, take shape and begin forming the _____ of the different body structures and systems, such as:
 - the central _____ system
 - the gastrointestinal tract
 - internal _____
 - this development of the zygote takes place in the first _____ weeks after conception
 - by four weeks the zygote is approximately the size of a _____ seed

Physical Signs of Pregnancy

- Common _____ of pregnancy include:
 - tender swollen breasts, fatigue, nausea and/or vomiting, a missed _____ cycle, headaches, mood swings, and frequent urination
- A pregnancy test is designed to identify the human chorionic gonadotropin or (hCG) _____
 - this hormone is released into the urine of the woman after _____ has taken place
 - about 14 days after fertilization
- A _____ test will not be able to confirm pregnancy until the monthly menstrual cycle has been missed

Embryonic Stage

- The _____ stage begins at week five after conception, or seven weeks gestation
- This stage is a critical time for _____
 - this is when all the major systems and _____ develop

- external features being to form as well
- Cells continue to _____ and multiply
- Cells begin to _____
 - differentiation means cells take on specific _____ and functions, for example:
 - blood cells
 - _____ cells
 - brain cells
 - bone _____

Sixth Week

- The head and _____ of the embryo become easily recognizable
- Limb _____ form
- Facial features and _____ begin to appear
- The heart _____ in a regular rhythm
- Blood _____ through the main vessels
 - The earliest form of the _____ organs appear, for example:
 - the liver, _____, lungs and thyroid gland
- The body is approximately one half of an _____ long
 - about the length of a small _____

Seventh Week

- Rapid development of the face and _____ takes place
- _____ become visible
- Eye _____ being to form
- Arm buds take on the shape of _____
- Tissue grows which will later become the spine and other _____

Eighth Week

- At week eight the embryo is called a _____
 - fetus is the term used to describe the developing life from eight weeks until _____
- The _____ cord is clearly visible
 - the umbilical _____ is attached to the placenta and to the fetus
 - it functions as a _____ carrying nutrients and oxygen to the fetus and carrying waste products away
- The _____ and leg buds have grown longer
- _____ fingers and toes are visible
- _____ begin to form
- Ears, upper lip and tip of the _____ become recognizable
- Teeth develop under the _____
- _____ are forming

- The _____ of the fetus is approximately one and one fourth to one- and one-half inches long
 - about the length of a small _____ clip

Ninth Week

- Hair _____ form
- Arms continue to _____
- _____ develop
- Fingers and _____ are visible
- A distinct _____ can be seen
- All _____ organs are formed and continue to grow
- Eye muscles and upper _____ form
- The first fetal movements can be detected using an _____

Tenth Week

- Eyelids are further developed and begin to _____
- Outer ears begin to take _____
- _____ features become more distinct
- Rapid brain _____ is occurring
- Males begin producing _____
- The embryonic _____ has disappeared
- The _____ and roof of the mouth have formed
- The blood _____ of the mother increases by 40 to 50 percent
- The _____ of the fetus is about two- and one-half inches long
 - about the size of a _____

Weeks Eleven to 14

- The eyelids close _____
 - the eyelids will stay _____ until about the 28th week
- The _____ is well formed
- The limbs are long and _____
- _____ appear on the fingers and toes
- The fetus can make a _____
- Tooth _____ and genitals appear
- The _____ is making red blood cells
- The head is large in _____ to the rest of the body
 - the head takes up about _____ percent of the length of the body
- The length of the _____ is approximately three- and one-half inches long
 - almost the length of a _____ card
- This week marks the _____ of the first trimester

Factors Impacting Pregnancy: Environmental & Personal

Essential Question

1. What are examples of environmental or personal factors which might impact pregnancy?

Environmental Factors

- Are _____ or activities which can greatly impact pregnancy and include smoking _____ and being exposed to hazardous substances at home or at work

Cigarette Smoke

- Both firsthand and _____ smoke affects developing fetuses
- Cigarette smoke _____ the risk of health problems such as:
 - _____ birth
 - low birth weight
 - birth _____ of the mouth and lip
 - sudden infant _____ syndrome (SIDS)

Drug Use

- Exposes fetuses to drugs in the _____ and places them at risk of :
 - _____
 - being born _____
 - suffering from Neonatal _____ Syndrome (NAS)

Alcohol Consumption

- Affects developing fetuses in _____ degrees depending on the _____ of alcohol consumed during pregnancy
- May cause fetuses to _____ from the following:
 - brain _____
 - _____ abnormalities
 - _____ difficulties

Hazardous Materials

- Exposure includes _____ such as:
 - _____, and _____
 - pesticides are substances or mixtures of substances used to prevent, destroy or repel _____ or other pests and may _____ the change of miscarriage, birth defects or other problems
 - organic solvents are chemicals used to _____ other substances and may increase the risk of miscarriage, stillbirth, preterm birth, low birthweight or birth _____
- Exposure can be _____ by taking _____ at home or at work

Personal Factors

- Affecting _____ include:
 - _____ factors which have the potential to cause genetic _____
 - the _____ of the pregnant mother
 - mothers who give birth **before** the age of 17 or after the age of _____ are at a greater _____ of complications

Factors Impacting Pregnancy: Nutritional

Essential Questions

1. What impact does nutrition have on pregnancy?
2. What are specific vital nutrients during pregnancy?

Nutritional Factors

- Nutrition is _____ during the first trimester of pregnancy and is necessary for _____ growth and development during pregnancy
- Nutrition means providing the body _____ containing essential nutrients for _____ and maintenance of life
- Essential _____ include:
 - carbohydrates
 - proteins
 - _____
 - vitamins
 - minerals
 - water

Carbohydrates

- _____
 - are organic _____ made up of carbon, hydrogen and oxygen
 - may be added to the daily diet by including fruits and _____
 - may be _____ to foods such as:
 - oatmeal, _____, eggs, sandwiches and pasta
 - make easy snacks to take _____ when away from home
 - examples include:
 - _____ fruit, such as apples or grapes
 - trail _____ with dried fruits, nuts and seeds
 - are _____ when dealing with nausea

Proteins

- Are
 - large _____ made up of amino acids
 - a major _____ of all cells

- essential for the growth and _____ of the _____ and the pregnant mother
- an important part of healthy nutrition during _____
- Ways to _____ proteins include:
 - eating _____ meats
 - topping dishes with _____ products
 - packing foods, such as _____ cheese, for snacks when on the go

Fats

- Are needed for
 - energy and _____ storage
 - the health and maintenance of _____ and skin
 - the protection of internal _____
 - keeping the body _____
 - _____ essential vitamins
 - the development of the fetal _____ and nervous system
- Fats can be added to the diet by _____ foods, such as:
 - _____, seeds, nuts and plant oils
 - salmon, cod or _____ tuna
 - chicken, beef and eggs

Vitamins & Minerals

- Vitamins are
 - _____ compounds
 - needed for normal _____ function
 - needed for growth and _____
 - found in all major _____ groups
 - _____ in the processing of foods
- Minerals are
 - inorganic compounds needed in the diet in _____ amounts
 - needed for normal functioning of _____, muscles, heart and brain
 - needed for making _____ and hormones

Water

- Is essential for the _____ of life and health
- Is involved in the _____ of body systems
- helps form the _____ fluid around the fetus
- may be added to the diet during pregnancy by:
 - drinking eight to 12 eight-ounce glasses each day (64 – _____ ounces)
 - eating fresh fruits and _____

Vital Nutrients During Pregnancy

- Are responsible for the _____ of certain body systems and without these specific nutrients during the first trimester, _____ may occur
- Include:
 - folate
 - iron
 - calcium
 - vitamin D
 - _____
 - omega-_____ fatty acids

Folate & Folic Acid

- _____
 - is the naturally occurring form of vitamin _____
 - involved in the formation of _____ material
 - helps the body make red _____ cells
 - is important for the healthy growth and function of _____
 - is crucial for the formation of the _____ and spinal cord
 - insufficient amounts of folate may lead to serious birth _____ called neural tube defects
 - is found naturally in _____, asparagus, brussels sprouts, certain fruits, beans, nuts and peas
- Folic _____
 - is the _____ form of vitamin B9
 - Is added to processed _____ products, such as flour, pasta, rice and breakfast cereals
 - experts recommend taking a prenatal _____ with at least _____ micrograms of folic acid per day during pregnancy in addition to eating folate rich foods

Iron & Calcium

- _____ is
 - needed to _____ red blood cells
 - responsible for carrying _____ in the blood
 - found _____ in foods such as:
 - seafood, eggs, _____, poultry, legumes, certain nuts and seeds and _____ green leafy vegetables
- _____ is
 - important for healthy _____, teeth and gums
 - found in _____, such as:
 - milk, cheese and yogurt
 - _____ and leafy greens

- almonds, poppy, sesame and chia seeds
- canned fish with soft edible bones including sardines and salmon

Vitamin D & Choline

- _____ is needed for the
 - _____ of calcium
 - _____ system
 - function of _____ and nerves
- Fatty fish and vitamin D fortified milk are _____ of vitamin D
- _____ is
 - vital to healthy _____ development and functioning of cell membranes
 - needed for muscle and liver _____
 - involved in the _____ of the brain and spinal cord
 - _____ amounts may lead to neural tube defects
 - found in _____ such as:
 - _____, beef, chicken, fish, nuts, legumes, vegetables, broccoli, cauliflower and cabbage

Food Borne Illness

- Food _____ illness
 - Can be _____ during pregnancy
 - During pregnancy may lead to _____ or premature delivery
 - May affect the _____ even if the mother shows no signs of illness
 - May be avoided by following _____ set forth by FoodSafety.gov

Factors Impacting Pregnancy: Healthcare

Essential Question

1. How does healthcare impact pregnancy?

Health Care Factors

- Influencing pregnancy include:
 - tests and _____
 - results enable _____ teams to determine care options
 - genetic _____ help families understand and make decisions based on _____ results
 - appropriate _____ care
 - visiting a healthcare practitioner _____ in pregnancy may enable possible _____ to be detected and treated early on and may help avoid other complications
 - good health _____
 - include _____ fitness and _____ routines



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Pregnancy: First Trimester Key Concepts

Answer Key

Prenatal Development

Essential Questions

1. What are the stages of prenatal development in the first trimester?
2. What are the physical signs of pregnancy in the first trimester?

Pregnancy (Part 1)

- Pregnancy is the period of time in which a new life develops inside the uterus (or womb)
 - the uterus is a hollow, pear-shaped organ located in the pelvis
- Gestation refers to the time it takes for the new life to grow and develop from conception to full-term
 - the designation of full-term begins at **39** weeks and continues through **40** weeks six days
 - gestational age is counted from the first day of the woman's last menstrual cycle
 - another way to count the milestones of prenatal development is from the time of conception

Pregnancy (Part 2)

- Prior to pregnancy, ovulation must take place
 - ovulation is the ejection of a mature egg (or ovum) from the ovary into the fallopian tube
- Conception, or fertilization, takes place when a sperm penetrates the egg
 - this combined cell is called a zygote
 - the zygote contains the genetic information from both parents to become a fully developed human being

Cleavage & Implantation (Part 1)

- The zygote travels down the fallopian tube toward the uterus
- During this journey, the zygote replicates and splits to become two identical cells within the same structure
 - this process is called cleavage
- Cleavage continues over and over again, creating multiple cells within the same structure
 - after **16** replications, the cluster of cells is called a morula because it resembles a mulberry

Cleavages & Implantation (Part 2)

- As the cell replication continues, the morula becomes a blastocyst

- the blastocyst is made up of an inner group of cells and an outer structure of cells
- the inner group of cells will become the **embryo**
 - embryo is the term describing the developing fetus inside the womb from **five weeks** to eight weeks
- the outer structure will later grow into the **placenta**
- Once the blastocyst reaches the uterus, it implants into the thickened lining of the **uterine** wall
 - the uterine wall is called the **endometrium**

The Zygote

- The embryo is the body of the baby during the **prenatal** developmental period from four weeks to eight weeks
- The placenta is an **organ** produced by the body during pregnancy which nourishes and protects the developing baby
- The inner **structure** of cells continues to grow and change
 - layers form, take shape and being forming the **foundation** of the different body structures and systems, such as:
 - the central **nervous** system
 - the gastrointestinal tract
 - internal **organs**
 - this development of the zygote takes place in the first **four** weeks after conception
 - by four weeks the zygote is approximately the size of a **poppy** seed

Physical Signs of Pregnancy

- Common **indicators** of pregnancy include:
 - tender swollen breasts, fatigue, nausea and/or vomiting, a missed **menstrual** cycle, headaches, mood swings, and frequent urination
- A pregnancy test is designed to identify the human chorionic gonadotropin or (hCG) **hormone**
 - this hormone is released into the urine of the woman after **implantation** has taken place
 - about 14 days after fertilization
- A **urine** test will not be able to confirm pregnancy until the monthly menstrual cycle has been missed

Embryonic Stage

- The **embryonic** stage begins at week five after conception, or seven weeks gestation
- This stage is a critical time for **development**
 - this is when all the major systems and **structures** develop
 - external features begin to form as well

- Cells continue to **replicate** and multiply
- Cells begin to **differentiate**
 - differentiation means cells take on specific **characteristics** and functions, for example:
 - blood cells
 - **muscle** cells
 - brain cells
 - bone **cells**

Sixth Week

- The head and **tail** of the embryo become easily recognizable
- Limb **buds** form
- Facial features and **ears** begin to appear
- The heart **beats** in a regular rhythm
- Blood **pumps** through the main vessels
 - The earliest form of the **internal** organs appear, for example:
 - the liver, **pancreas**, lungs and thyroid gland
- The body is approximately one half of an **inch** long
 - about the length of a small **marble**

Seventh Week

- Rapid development of the face and **brain** takes place
- **Nostrils** become visible
- Eye **lenses** begin to form
- Arm buds take on the shape of **paddles**
- Tissue grows which will later become the spine and other **bones**

Eighth Week

- At week eight the embryo is called a **fetus**
 - fetus is the term used to describe the developing life from eight weeks until **birth**
- The **umbilical** cord is clearly visible
 - the umbilical **cord** is attached to the placenta and to the fetus
 - it functions as a **lifeline** carrying nutrients and oxygen to the fetus and carrying waste products away
- The **arm** and leg buds have grown longer
- **Webbed** fingers and toes are visible
- **Eyelids** begin to form
- Ears, upper lip and tip of the **nose** become recognizable
- Teeth develop under the **gums**
- **Gonads** are forming

- The **body** of the fetus is approximately one and one fourth to one- and one-half inches long
 - about the length of a small **paper** clip

Ninth Week

- Hair **follicles** form
- Arms continue to **grow**
- **Elbows** develop
- Fingers and **toes** are visible
- A distinct **neck** can be seen
- All **essential** organs are formed and continue to grow
- Eye muscles and upper **lip** form
- The first fetal movements can be detected using an **ultrasound**

Tenth Week

- Eyelids are further developed and begin to **close**
- Outer ears begin to take **shape**
- **Facial** features become more distinct
- Rapid brain **development** is occurring
- Males begin producing **testosterone**
- The embryonic **tail** has disappeared
- The **palate** and roof of the mouth have formed
- The blood **volume** of the mother increases by 40 to 50 percent
- The **length** of the fetus is about two- and one-half inches long
 - about the size of a **plum**

Weeks Eleven to 14

- The eyelids close **completely**
 - the eyelids will stay **shut** until about the 28th week
- The **face** is well formed
- The limbs are long and **thin**
- **Nails** appear on the fingers and toes
- The fetus can make a **fist**
- Tooth **buds** and genitals appear
- The **liver** is making red blood cells
- The head is large in **proportion** to the rest of the body
 - the head takes up about **50** percent of the length of the body
- The length of the **body** is approximately three- and one-half inches long
 - almost the length of a **credit** card
- This week marks the **end** of the first trimester

Factors Impacting Pregnancy: Environmental & Personal

Essential Question

1. What are examples of environmental or personal factors which might impact pregnancy?

Environmental Factors

- Are **substances** or activities which can greatly impact pregnancy and include smoking **cigarettes** and being exposed to hazardous substances at home or at work

Cigarette Smoke

- Both firsthand and **secondhand** smoke affects developing fetuses
- Cigarette smoke **increases** the risk of health problems such as:
 - **preterm** birth
 - low birth weight
 - birth **defects** of the mouth and lip
 - sudden infant **death** syndrome (SIDS)

Drug Use

- Exposes fetuses to drugs in the **womb** and places them at risk of :
 - **stillbirth**
 - being born **underweight**
 - suffering from Neonatal **Abstinence** Syndrome (NAS)

Alcohol Consumption

- Affects developing fetuses in **varying** degrees depending on the **amount** of alcohol consumed during pregnancy
- May cause fetuses to **suffer** from the following:
 - brain **damage**
 - **physical** abnormalities
 - **learning** difficulties

Hazardous Materials

- Exposure includes **substances** such as:
 - **pesticides,** and **organic solvents**
 - pesticides are substances or mixtures of substances used to prevent, destroy or repel **unwanted plants** or other pests and may **increase** the change of miscarriage, birth defects or other problems
 - organic solvents are chemicals used to **dissolve** other substances and may increase the risk of miscarriage, stillbirth, preterm birth, low birthweight or birth **defects**
- Exposure can be **avoided** by taking **precautions** at home or at work

Personal Factors

- Affecting **pregnancy** include:
 - **hereditary** factors which have the potential to cause genetic **diseases**
 - the **age** of the pregnant mother
 - mothers who give birth **before** the age of 17 or after the age of **35** are at a greater **risk** of complications

Factors Impacting Pregnancy: Nutritional

Essential Questions

1. What impact does nutrition have on pregnancy?
2. What are specific vital nutrients during pregnancy?

Nutritional Factors

- Nutrition is **vital** during the first trimester of pregnancy and is necessary for **normal** growth and development during pregnancy
- Nutrition means providing the body **food** containing essential nutrients for **growth** and maintenance of life
- Essential **nutrients** include:
 - carbohydrates
 - proteins
 - **fats**
 - vitamins
 - minerals
 - water

Carbohydrates

- **Carbohydrates**
 - are organic **compounds** made up of carbon, hydrogen and oxygen
 - may be added to the daily diet by including fruits and **vegetables**
 - may be **added** to foods such as:
 - oatmeal, **pancakes**, eggs, sandwiches and pasta
 - make easy snacks to take **along** when away from home
 - examples include:
 - **fresh** fruit, such as apples or grapes
 - trail **mix** with dried fruits, nuts and seeds
 - are **helpful** when dealing with nausea

Proteins

- Are
 - large **molecules** made up of amino acids
 - a major **component** of all cells
 - essential for the growth and **development** of the **fetus** and the mother
 - an important part of healthy nutrition during **pregnancy**

- Ways to **incorporate** proteins include:
 - eating **lean** meats
 - topping dishes with **dairy** products
 - packing foods, such as **string** cheese, for snacks when on the go

Fats

- Are needed for
 - energy and **energy** storage
 - the health and maintenance of **hair** and skin
 - the protection of internal **organs**
 - keeping the body **warm**
 - **transporting** essential vitamins
 - the development of the fetal **brain** and nervous system
- Fats can be added to the diet by **choosing** foods, such as:
 - **avocados**, seeds, nuts and plant oils
 - salmon, cod or **canned** tuna
 - chicken, beef and eggs

Vitamins & Minerals

- Vitamins are
 - **essential** compounds
 - needed for normal **cell** function
 - needed for growth and **development**
 - found in all major **food** groups
 - **diminished** in the processing of foods
- Minerals are
 - inorganic compounds needed in the diet in **small** amounts
 - needed for normal functioning of **bones**, muscles, heart and brain
 - needed for making **enzymes** and hormones

Water

- Is essential for the **maintenance** of life and health
- Is involved in the **functioning** of body systems
- helps form the **amniotic** fluid around the fetus
- may be added to the diet during pregnancy by:
 - drinking eight to 12 eight-ounce glasses each day (64 – **96** ounces)
 - eating fresh fruits and **vegetables**

Vital Nutrients During Pregnancy

- Are responsible for the **formation** of certain body systems and without these specific nutrients during the first trimester, **malformations** may occur
- Include:

- folate
- iron
- calcium
- vitamin D
- **choline**
- omega-**three** fatty acids

Folate & Folic Acid

- **Folate**
 - is the naturally occurring form of vitamin **B9**
 - involved in the formation of **genetic** material
 - helps the body make red **blood** cells
 - is important for the healthy growth and function of **cells**
 - is crucial for the formation of the **brain** and spinal cord
 - insufficient amounts of folate may lead to serious birth **defects** called neural tube defects
 - is found naturally in **spinach**, asparagus, brussels sprouts, certain fruits, beans, nuts and peas
- Folic **acid**
 - is the **synthetic** form of vitamin B9
 - Is added to processed **grain** products, such as flour, pasta, rice and breakfast cereals
 - experts recommend taking a prenatal **vitamin** with at least **400** micrograms of folic acid per day during pregnancy in addition to eating folate rich foods

Iron & Calcium

- **Iron** is
 - needed to **make** red blood cells
 - responsible for carrying **oxygen** in the blood
 - found **naturally** in foods such as:
 - seafood, eggs, **beef**, poultry, legumes, certain nuts and seeds and **dark** green leafy vegetables
- **Calcium** is
 - important for healthy **bones**, teeth and gums
 - found in **foods**, such as:
 - milk, cheese and yogurt
 - **broccoli** and leafy greens
 - almonds, poppy, sesame and chia seeds
 - canned fish with soft edible bones including sardines and salmon

Vitamin D & Choline

- **Vitamin D** is needed for the
 - **absorption** of calcium
 - **immune** system
 - function of **muscles** and nerves
- Fatty fish and vitamin D fortified milk are **sources** of vitamin D
- **Choline** is
 - vital to healthy **brain** development and functioning of cell membranes
 - needed for muscle and liver **function**
 - involved in the **structuring** of the brain and spinal cord
 - **inadequate** amounts may lead to neural tube defects
 - found in **foods** such as:
 - **eggs**, beef, chicken, fish, nuts, legumes, vegetables, broccoli, cauliflower and cabbage

Food Borne Illness

- Food **borne** illness
 - Can be **worse** during pregnancy
 - During pregnancy may lead to **miscarriage** or premature delivery
 - May affect the **fetus** even if the mother shows no signs of illness
 - May be avoided by following **guidelines** set forth by FoodSafety.gov

Factors Impacting Pregnancy: Healthcare

Essential Question

1. How does healthcare impact pregnancy?

Health Care Factors

- Influencing pregnancy include:
 - tests and **screenings**
 - results enable **medical** teams to determine care options
 - genetic **counselors** help families understand and make decisions based on **test** results
 - appropriate **medical** care
 - visiting a healthcare practitioner **early** in pregnancy may enable possible **complications** to be detected and treated early on and may help avoid other complications
 - good health **practices**
 - include **physical** fitness and **exercise** routines

Pregnancy: First Trimester

Lesson Overview

Media: Hybrid (9 minutes/70 slides)

Seat Time: 6 Classes | 300 minutes teaching

Goal:

To identify the signs and stages of pregnancy and explore the effects of various factors on conception, pregnancy and fetal development.

Description:

This lesson guides students through the first trimester of pregnancy including conception and the early development of a new life. Lesson materials also cover the effects of pregnancy on the new parent. Students will investigate topics, such as the stages of prenatal development, physical signs of pregnancy, the importance of maintaining a healthy and safe environment during pregnancy, the significance of proper nutrition for both the pregnant woman and the growing fetus and the impact of proper health care.

Objectives:

1. To identify signs and stages of pregnancy.
2. To analyze the effect of environmental and hereditary factors on conception and fetal development.
3. To explore technological advances in prenatal care and the impact on development.
4. To describe nutritional needs during pregnancy.
5. To analyze appropriate medical care and good health practices during pregnancy.

Lesson Plan

Class 1

Class Overview:

Prenatal Development Video Segment

Action Plan

Vocabulary Handout

Key Concepts

Prenatal Development Check for Understanding

Pregnancy Timeline: First Trimester Project

Essential Questions:

1. What are the stages of prenatal development in the first trimester?
2. What are the physical signs of pregnancy in the first trimester?

Step 1: Bell Ringer:

- Place an image of a blastocyst where students can see it and ask them to identify what it is.

Step 2: Distribute the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for students to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which students can fill in to aid in note taking during the lesson.

Step 3: Show the *Prenatal Development* video segment.

- This video is nine minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Administer the **Prenatal Development Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 5: Students should begin the **Pregnancy Timeline: First Trimester Project**.

- Students will research first trimester prenatal development to create a timeline.

Step 6: Exit Ticket:

- Students should provide a progress report on their project.

Class 2

Class Overview:

Factors Impacting Pregnancy: Environmental & Personal Microsoft® PowerPoint® Segment
Action Plan

Key Concepts

Pregnancy Complications Student Handout

Pregnancy Timeline: First Trimester Project

Essential Question:

1. What are examples of environmental or personal factors which might impact pregnancy?

Step 1: Bell Ringer:

- *Think, Pair, Share:* Pose the following question to students and have them consider their response for one or two minutes before asking them to get into groups and share their responses.
 - What does environment refer to when discussing pregnancy?

Step 2: Students should review the **Pregnancy Complications Student Handout**.

- Students should refer to the handout for additional lesson information.

Step 3: Show the ***Factors Impacting Pregnancy: Environmental & Personal*** PowerPoint® segment.

- This segment is 22 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Administer the **Factors Impacting Pregnancy: Environmental & Personal Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 5: Students should continue working on the **Pregnancy Timeline: First Trimester Project**.

- Students will research first trimester prenatal development to create a timeline.

Step 6: Exit Ticket:

- Students should share one thing they found interesting about the content shared in class.

Class 3

Class Overview:

Factors Impacting Pregnancy: Nutritional Microsoft® PowerPoint® Segment
Action Plan

Key Concepts

Pregnancy Timeline: First Trimester Project

Essential Question:

1. What impact does nutrition have on pregnancy?

Step 1: Bell Ringer:

- Ask students to answer the question, “why does nutrition matter during pregnancy” and have them share their answers with the class.

Step 2: Show slides 28 to 46 of the **Factors Impacting Pregnancy: Nutritional** PowerPoint® segment.

- This portion of the segment is 19 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Students should complete the **Pregnancy Timeline: First Trimester Project**.

- Students will research first trimester prenatal development to create a timeline.

Step 4: Exit Ticket:

- Students should submit their projects.

Class 4

Class Overview:

Factors Impacting Pregnancy: Nutritional Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Nutritional Check for Understanding

Meal Planning During Pregnancy Project

Essential Question:

1. What are specific vital nutrients during pregnancy?

Step 1: Bell Ringer:

- Write the terms, “folate” and “choline” on the board and have students work with a partner to create a *T-chart* which compares the similarities of the two and how the nutrients protect a developing fetus. Lead a class discussion so students can share.

Step 2: Show slides 47 to 58 of the **Factors Impacting Pregnancy: Nutritional** PowerPoint® segment.

- This portion of the segment is 12 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Nutritional Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should begin the **Meal Planning During Pregnancy Project**.

- Students will reference pregnancy nutrition resources to create a meal plan.

Step 5: Exit Ticket:

- Students should provide a progress report over the project.

Class 5

Class Overview:

Factors Impacting Pregnancy: Healthcare Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Healthcare Check for Understanding

Meal Planning During Pregnancy Project

Essential Question:

1. How does healthcare impact pregnancy?

Step 1: Bell Ringer:

- Students will complete a *Quick Write*: Allow students five minutes to answer the following question and turn in.
 - What is the most significant concept you have learned so far about the first trimester of

pregnancy?

Step 2: Show the **Factors Impacting Pregnancy: Healthcare** PowerPoint® segment.

- This segment is 12 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Healthcare Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should continue working on the **Meal Planning During Pregnancy Project**.

- Students will reference pregnancy nutrition resources to create a meal plan.

Step 5: Exit Ticket:

- Have students share one idea about how they chose to organize their meal plan.

Class 6

Class Overview:

Action Plan

Pregnancy: First Trimester Final Assessment

Meal Planning During Pregnancy Project

Step 1: Bell Ringer:

- Students should review for the final assessment.

Step 2: Administer the **Pregnancy: First Trimester Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Students should complete the **Meal Planning During Pregnancy Project**.

- Students will reference pregnancy nutrition resources to create a meal plan.

Step 4: Exit Ticket:

- Have students turn in their projects.

Project Overview

Pregnancy Timeline: First Trimester

Students will research first trimester prenatal development to create a timeline.

Accommodations:

Provide students with a list of resources. Also, allow additional time for the project to be completed.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students take the information gathered and create a short video to further illustrate their timeline.

Meal Planning During Pregnancy

Students will reference pregnancy nutrition resources to create a meal plan.

Accommodations:

Provide students a printout of the presentation slides and a list of resources.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students prepare a meal from their meal plan to share with the class.

Career & Technical Student Organizations

FCCLA

Focus on Children

Nutrition & Wellness Event

Career Connections

Using the **Career Connections Activity** allows students to explore careers associated with this lesson by viewing career interviews with various industry professionals. The career interviews are located on the Select Playlist drop down menu on the lesson page. See the **Career Connections Activity** for more details.

Eric Hentges, Ph.D., Executive Director, USDA Center for Nutrition Policy & Promotion

Gary A. Taubes, Author, Co-founder of Nutrition Science Initiative

Jennifer Gorman, MS, RD, LD, Wellness Manager, United Supermarkets

Meal Planning During Pregnancy

Project Overview:

You will reference pregnancy nutrition resources to create a meal plan.

Directions:

1. Your instructor will divide the class into groups of two or three.
2. Using all available resources, locate pregnancy nutrition resources.
3. Create a meal plan for a pregnant woman. Your meal plan must include the following:
 - Meals and snacks for one week
 - for each meal and snack, identify at least three essential nutrients
 - for each nutrient, explain its importance during the first trimester of pregnancy
 - At least five graphics to illustrate your meal plan
 - presentation of the meal plan may be done using an electronic tool or with paper resources
 - A list of references
4. Be prepared to share your findings with the class.
5. Submit your completed plan as directed.

Rubric

Description	Possible Points	Your Score
Research & Organization: <ul style="list-style-type: none">• Proper research was conducted to complete the assignment• Sources were cited appropriately based on instructions provided• Information was presented in a logical organized manner	35	
Concept & Understanding: <ul style="list-style-type: none">• Understanding of the concept is clearly evident• Effective strategies were used to achieve the end product• Logical thinking was utilized to arrive at the conclusion	35	

Creativity/Craftmanship: <ul style="list-style-type: none"> • End product is unique and reflects the student's or group's individuality • End product is clearly high quality 	15	
Production/Effort: <ul style="list-style-type: none"> • Class time provided for the project was used efficiently • Time and effort are evident in the execution of the end product 	15	
Total Points	100	

Pregnancy Complications

<p>Preterm Delivery</p>	<p>Preterm delivery is when the baby is born prior to 37 weeks gestation. Being born too early can lead to complications, such as infections, damage to the lungs and intraventricular hemorrhage (brain bleed). Issues with cognition are also common, such as remembering, learning, concentrating and making decisions. Additionally cerebral palsy, vision and hearing losses may occur in babies when they are born too soon. Children may also have mental health issues, such as anxiety, depression, autism spectrum disorders and attention deficit hyperactivity disorder.</p>
<p>Low Birth Weight</p>	<p>A newborn is considered low birth weight if the weight is five pounds five ounces or less. Low birth weight babies face challenges, such as placental problems, preterm delivery, spontaneous abortion, stillbirth and sudden infant death syndrome (SIDS). Babies born too small may also have a harder time breathing, eating, gaining weight, fighting infection and staying warm. These infants may also incur neurological issues.</p>
<p>Neonatal Death</p>	<p>Neonatal death is when a newborn baby dies in the first 28 days of life.</p>
<p>Iron Deficiency Anemia</p>	<p>Iron deficiency anemia occurs when the body does not have enough iron to produce adequate amounts of hemoglobin. Hemoglobin is a protein in red blood cells responsible for carrying oxygen from the lungs to the rest of the body. Iron deficiency anemia can lead to preterm delivery, low birth weight and even neonatal death.</p>
<p>Gestational Diabetes</p>	<p>Gestational diabetes is a type of diabetes which develops during pregnancy in women who did not have diabetes prior to pregnancy. This type of diabetes occurs when the body cannot make enough insulin during pregnancy. Insulin is an important hormone produced in the pancreas which enables the body to allow blood sugar into the cells for use as energy. Having gestational diabetes can increase the risk of high blood pressure. It can also increase the risk of having a large baby which needs to be delivered by cesarean section. Other risk factors include preterm birth, low blood sugar and developing type two diabetes later in life.</p>
<p>Preeclampsia</p>	<p>Preeclampsia has to do with high blood pressure. The increased pressure in the placental arteries restricts the blood flow to the placenta. If this condition is not treated, parts of the placenta can die causing the baby to be in distress. It can also lead to seizures in the mother. Seizures are considered a medical emergency. Once it reaches the point of seizures it is referred to as eclampsia.</p>

Nutrition

- Continues to be important during the second trimester
- Affects the health of the mother as well as the growing fetus
- Does not mean eating twice as much food



Pregnancy Points

A pregnant woman should only add about 300 extra calories each day.

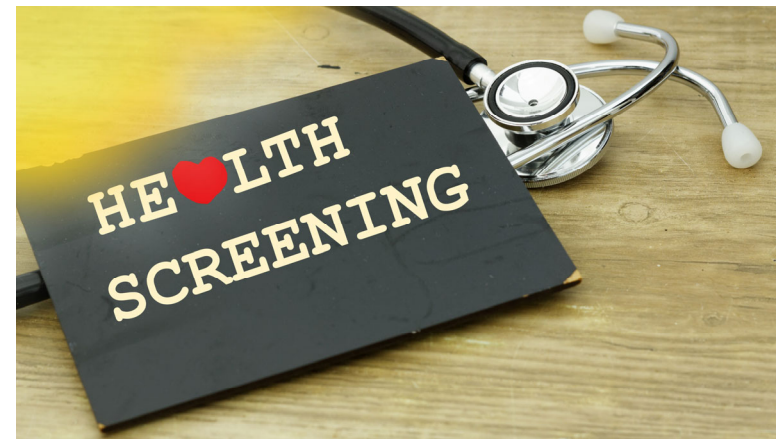
Dairy Products

- Include milk, yogurt and cheese
- Provide calcium for:
 - the growing fetus's bones and teeth
 - the woman's regulation of body fluids
 - calcium recommendation is 1,000 milligrams per day during pregnancy



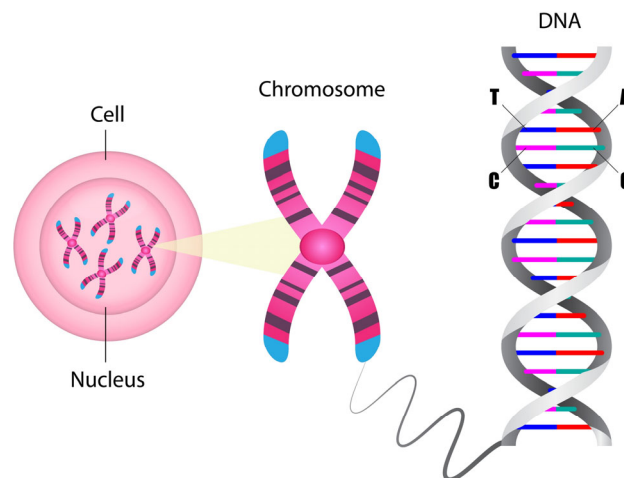
Tests & Screenings

- During the second trimester include:
 - alpha-fetoprotein screening (AFT)
 - measures the levels of alpha-fetoprotein in the woman's blood
 - abnormal levels may indicate brain or spinal cord defects, chromosomal abnormalities, the presence of twins, miscalculated due dates or possible birth defects



Chromosomal Abnormalities

- Can occur:
 - as an accident when the egg or the sperm is formed
 - during the early developmental stages of the fetus
 - the age of the pregnant woman and certain environmental factors may play a role in the occurrence of genetic errors



Test & Screening Results

- Enable families and medical teams to determine the best care options for the mother and the developing fetus
 - genetic counselors are also available to help families:
 - understand test results
 - work through available options
 - make decisions for the best possible outcomes



Prenatal Care Appointments

- During the second trimester include procedures such as:
 - assessing the growth and heart rate of the fetus
 - assessing the blood pressure and weight gain of the mother
 - checking the iron levels of the mother
 - looking for signs of gestational diabetes

The Pregnant Woman

- Will have personal blood pressure assessed at prenatal appointments
 - high blood pressure can cause problems during pregnancy for both the woman and the growing fetus



The Pregnant Woman

- Will have personal weight assessed at prenatal appointments
 - healthy weight gain during pregnancy includes the following recommendations:

Prepregnancy Weight	Recommended Weight Gain in Pounds
Healthy Normal Weight	25 to 35
Underweight	28 to 40
Overweight	15 to 25
Obese	11 to 20

Weight Distribution

- Includes the following:

Location	Pounds
Fetus	Six to eight
Placenta	One to one and a half
Amniotic fluid	Two
Uterus growth	Two
Breast growth	Two
Blood and bodily fluids	Eight
Woman's body protein and fat	Seven

Gestational Diabetes

- Is a type of diabetes which develops during pregnancy in women who did not have diabetes prior to pregnancy



Regular Exercise

- Routines should be able to be continued during the second trimester
 - best practices include checking with a healthcare practitioner if starting a new exercise routine
 - the recommendation is for pregnant women to “listen to their bodies”
 - if the exercise feels too strenuous, it is best to stop and rest



Pregnancy Points

The Centers for Disease Control and Prevention (CDC) recommends avoiding activities which require a woman to lay flat on the back after the first trimester.

Abstinence

- From drugs, alcohol, tobacco and other harmful substances is one of the best choices a pregnant woman can make for the health of the developing fetus
 - health consequences caused by these substances may have serious, irreversible effects



Pregnancy: Second Trimester

Lesson Overview

Objectives:

1. To describe nutritional needs during pregnancy.
2. To explore technological advances in prenatal care and the impact on development.
3. To analyze appropriate medical care and good health practices during pregnancy.

Class 1

Essential Questions:

1. What fetal development milestones take place during the second trimester?
2. What are the physical signs and symptoms of pregnancy during the second trimester?

Step 1: Answer the questions provided by your instructor and participate in a brief class discussion.

Step 2: Access the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for you to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which you can fill in to aid in note taking during the lesson.

Step 3: View the **Prenatal Development** video segment.

- This video is six minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Complete the **Prenatal Development Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 5: Begin the **Pregnancy Timeline: Second Trimester Project**.

- Research second trimester prenatal development and create a timeline.

Step 6: Provide a progress report on the project.

Class 2

Essential Question:

1. What changes in diet might a pregnant woman have to make in order to promote a healthy pregnancy?

Step 1: Answer the **Essential Question** and participate in a brief class discussion.

Step 2: View the **Factors Impacting Pregnancy: Nutritional PowerPoint®** segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Factors Impacting Pregnancy: Nutritional Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: Complete the **Pregnancy Timeline: Second Trimester Project**.

- Research second trimester prenatal development and create a timeline.

Step 5: Turn in the project.

Class 3

Essential Questions:

1. What medical advances impact pregnancy during the second trimester?
2. Why is appropriate medical care important during the second trimester?

Step 1: Consider the scenario provided by your instructor, then get into groups and share your responses.

Step 2: View slides 17 to 30 of the *Factors Impacting Pregnancy: Healthcare* PowerPoint® segment.

- This portion of the segment is 14 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Begin the **Pregnancy Related Health Conditions**.

- Research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize your findings.

Step 4: Share one fact you have discovered in the research for the project.

Class 4

Essential Questions:

1. What medical advances impact pregnancy during the second trimester?
2. Why is appropriate medical care important during the second trimester?

Step 1: Answer the **Essential Questions**.

Step 2: View slides 31 to 42 of the *Factors Impacting Pregnancy: Healthcare* PowerPoint® segment.

- This portion of the segment is 12 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Factors Impacting Pregnancy: Healthcare Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: Continue the **Pregnancy Related Health Conditions Project**.

- Research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize your findings.

Step 5: Share one highlight of the research with the class.

Class 5

Essential Question:

1. What are good health practices for pregnant women during the second trimester?

Step 1: Locate and share an image of a good health practice for pregnant women during the second trimester. Participate in a brief class discussion to share your findings.

Step 2: View the *Factors Impacting Pregnancy: Good Health Practices* PowerPoint® segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Factors Impacting Pregnancy: Good Health Practices Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Continue the **Pregnancy Related Health Conditions Project**.

- Research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize your findings.

Step 5: Provide a progress report on your project.

Class 6

Step 1: Review for the assessment.

Step 2: Complete the **Pregnancy: Second Trimester Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Complete the Pregnancy Related Health Conditions Project.

- Research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize your findings.

Step 4: Submit the completed project.



Prenatal Development Check for Understanding

Directions:

Answer the following questions.

1. The second trimester of pregnancy begins at week _____.
 - A. 16 gestational age or week 14 from conception
 - B. 14 gestational age or week 12 from conception
 - C. 18 gestational age or week 20 from conception
 - D. 12 gestational age or 14 from conception
2. A common outward sign of pregnancy involves patches of darker skin on the face. This is often referred to as which of the following?
 - A. Face of parenthood
 - B. Patches of joy
 - C. Mask of pregnancy
 - D. Facial coverings
3. For many pregnant women, nausea decreases during the second trimester.
 - A. True
 - B. False
4. The ability to feel fetal movements is called _____ and may feel like butterflies or gas.
 - A. Quickening
 - B. Awakening
 - C. Alerting
 - D. Moment of life
5. Which of the following assists with heat production and metabolism later in life?
 - A. Vernix caseosa
 - B. Myelin
 - C. Surfactant
 - D. Brown fat

Prenatal Development Check for Understanding Answer Key

Directions:

Answer the following questions.

1. The second trimester of pregnancy begins at week _____.
 - A. 16 gestational age or week 14 from conception
 - B. 14 gestational age or week 12 from conception**
 - C. 18 gestational age or week 20 from conception
 - D. 12 gestational age or 14 from conception
2. A common outward sign of pregnancy involves patches of darker skin on the face. This is often referred to as which of the following?
 - A. Face of parenthood
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 - C. Alerting
 - D. Moment of life
5. Which of the following assists with heat production and metabolism later in life?
 - A. Vernix caseosa
 - B. Myelin
 - C. Surfactant
 - D. Brown fat**

Factors Impacting Pregnancy: Nutritional Check for Understanding

Directions:

Answer the following questions.

1. Quality nutrition is mainly for the health of the growing fetus during the second trimester of pregnancy.
 - A. True
 - B. False
2. Pregnant women should _____.
 - A. Add about 600 calories per day
 - B. Not adjust calorie intake during pregnancy
 - C. Eat about twice the normal amount of food
 - D. Add about 300 calories per day
3. What category of nutrients includes foods such as lean meats, fish, eggs and nuts?
 - A. Fats
 - B. Proteins
 - C. Carbohydrates
 - D. Fiber
4. What is the main nutrient in whole grain foods?
 - A. Fat
 - B. Protein
 - C. Carbohydrate
 - D. Vitamins
5. Fill in the blanks using the word bank provided below.

_____ is a specific _____ needed in the _____ trimester. Iron helps increase the body's _____ volume and prevents _____. The daily _____ is 27 milligrams.

anemia blood	iron nutrient	recommendation second
-----------------	------------------	--------------------------

Factors Impacting Pregnancy: Nutritional Check for Understanding Answer Key

Directions:

Answer the following questions.

1. Quality nutrition is mainly for the health of the growing fetus during the second trimester of pregnancy.
 - A. True
 - B. False**
2. Pregnant women should _____.
 - A. Add about 600 calories per day
 - B. Not adjust calorie intake during pregnancy
 - C. Eat about twice the normal amount of food
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4. What is the main nutrient in whole grain foods?
 - A. Fat
 - B. Protein
 - C. Carbohydrate**
 - D. Vitamins
5. Fill in the blanks using the word bank provided below.

Iron is a specific **nutrient** needed in the **second** trimester. Iron helps increase the body's **blood** volume and prevents **anemia**. The daily **recommendation** is 27 milligrams.

anemia blood	iron nutrient	recommendation second
-----------------	------------------	--------------------------



Factors Impacting Pregnancy: Good Health Practices Check for Understanding

Directions:

Answer the following questions.

1. Select all of the following which are considered good health practices during the second trimester of pregnancy.
 - Abstaining from harmful substances
 - Developing a regular exercise routine
 - Developing a regular sleep cycle
 - Dieting to lose or maintain weight
 - Exercising to the point of exhaustion
 - Staying up late to research ways to improve health
2. Regular exercise routines during the second trimester of pregnancy _____.
 - A. Helps relieve backaches
 - B. Develops stamina and endurance in preparation for labor
 - C. Protects joints
 - D. All of the choices are correct
3. Obtaining quality sleep is easy for most pregnant women during the second trimester because pregnancy is often tiring to the body.
 - A. True
 - B. False
4. Sasha is 20 weeks pregnant with her first baby. She is having trouble sleeping due to increased anxiety about the upcoming birth. What is the best way for Sasha to cope with her fears and improve her sleep patterns?
 - A. Take sleeping pills
 - B. Watch movies to help her become drowsy
 - C. Participate in childbirth and parenting classes
 - D. Ignore the anxiety and hope it goes away
5. Fill in the blanks using the word bank provided below.

Best _____ for exercise routines include _____ with a healthcare _____ when starting a new routine, “_____ to the body” to know when to slow down or _____ when exercising and including at least _____ and 30 minutes of exercise each _____.

checking listening practices	practitioner stop two hours	week
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Factors Impacting Pregnancy: Good Health Practices Check for Understanding Answer Key

Directions:

Answer the following questions.

1. Select all of the following which are considered good health practices during the second trimester of pregnancy.
 - Abstaining from harmful substances**
 - Developing a regular exercise routine**
 - Developing a regular sleep cycle**
 - Dieting to lose or maintain weight
 - Exercising to the point of exhaustion
 - Staying up late to research ways to improve health
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 - A. Take sleeping pills
 - B. Watch movies to help her become drowsy
 - C. Participate in childbirth and parenting classes**
 - D. Ignore the anxiety and hope it goes away
5. Fill in the blanks using the word bank provided below.
Best **practices** for exercise routines include **checking** with a healthcare **practitioner** when starting a new routine, "**listening** to the body" to know when to slow down or **stop** when exercising and including at least **two hours** and 30 minutes of exercise each **week**.

checking	practitioner	week
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listening practices	stop two hours	
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Pregnancy: Second Trimester Final Assessment

Directions:

Answer the following questions.

1. Select all of the following in which protein is essential.

Development of the fetal immune system

Growing fetus's bones and teeth

Growth of fetal tissue and organs, especially the brain

Production of DNA

Proper building of breast and uterine tissue to support the growing fetus

2. During the second trimester, for many pregnant women, nausea decreases due to _____.

A. The leveling out of hormones

B. An understanding of how to eat

C. The growth of the fetus

D. Personal adjustments to pregnancy

3. Match the following terms to their descriptions.

Description	Term
Soft, fine hair covering the body of the fetus	
Creamy, white protective coating protecting the fetus's skin from the surrounding amniotic fluid.	
First fetal movements felt during the second trimester	
White fatty material which encloses the nerve fibers on the spinal cord	

Lanugo	Myelin	Quickening	Vernix caseosa
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4. The _____ is an involuntary, protective motor response to stimulation.

A. Tonic reflex

B. Moro reflex

C. Rooting reflex

D. Stepping reflex

5. Pregnant women should aim to eat twice as much food during the second trimester.

A. True

B. False

6. Select all of the following foods which belong in the carbohydrates category.

Fruits

Grains
Meats
Seafood
Vegetables

7. _____ is the substance which allows the air sacs in the lungs to inflate and keeps the lungs from collapsing and sticking together when deflating.

- A. Prolactin
- B. Serotonin
- C. Oxytocin
- D. Surfactant

8. Chromosomal abnormalities cannot be diagnosed during pregnancy.

- A. True
- B. False

9. Dairy products provide calcium which is important for the _____.

- A. Building of muscle tissue
- B. Production of blood cells
- C. Regulation of body fluids
- D. Balancing of hormones

10. Fill in the blanks using the word bank provided below.

_____ is needed for _____ healing, teeth and _____ development and _____ processes and can be obtained by _____ a wide variety of fruits and _____.

bone consuming	metabolic vegetables	vitamin C wound
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11. Match the following terms to their descriptions.

Description	Term
Uses high-frequency sound waves to form images of the fetus on a computer screen	
Checks for human chorionic gonadotropin hormone	
Examines the cells shed by the fetus into the surrounding amniotic fluid	
Uses a large magnet and radio waves to look at organs and structures inside the body	

Amniocentesis	Magnetic resonance imaging	Serum test	Ultrasound
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12. The age of the pregnant woman may play a role in the occurrence of genetic errors.
- A. True
 - B. False
13. Select all of the following descriptors relating to Down syndrome.
- Is a chromosomal abnormality
 - Is a numerical abnormality
 - Is also known as trisomy 18
 - Is also known as trisomy 21
 - Is a structural abnormality
 - Occurs when there is an extra copy of chromosome 13
 - Occurs when there is an extra copy of chromosome 21
14. Which medical technology has made it possible to correct certain birth defects before delivery?
- A. Prenatal surgery
 - B. Alpha-fetoprotein screening
 - C. Magnetic resonance imaging (MRI)
 - D. Sonogram
15. _____ diabetes is a type of diabetes which develops during pregnancy in women who did not have diabetes prior to pregnancy.
- A. Gestational
 - B. Fetal
 - C. Conceptual
 - D. Conditional
16. Select all of the following strategies which may help to improve sleep during pregnancy.
- Avoid caffeinated drinks
 - Check email and text messages right before bed
 - Develop a regular sleep cycle even on the weekends
 - Eat a large meal right before bed
 - Exercise right before bed
 - Participate in quiet activities in the hour or so before bed
 - Use extra pillows to support the back, knees and abdomen
17. Health consequences to the fetus caused by the use of harmful substances during pregnancy are often _____.
- A. Reparable with surgery and medication
 - B. Irreversible
 - C. Mild and benign
 - D. Only childhood issues

18. Including adequate amounts of protein in the diet provides a feeling of fullness and may reduce the temptation to overeat.
- A. True
 - B. False
19. Iron is needed to produce adequate amounts of _____.
- A. Protein
 - B. Hormones
 - C. Amniotic fluid
 - D. Hemoglobin
20. Which nutrient is essential for the development of the fetal immune system?
- A. Protein
 - B. Carbohydrates
 - C. Fats
 - D. Water

Pregnancy: Second Trimester Final Assessment Answer Key

Directions:

Answer the following questions.

1. Select all of the following in which protein is essential.

Development of the fetal immune system

Growing fetus's bones and teeth

Growth of fetal tissue and organs, especially the brain

Production of DNA

Proper building of breast and uterine tissue to support the growing fetus

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C. The growth of the fetus

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First fetal movements felt during the second trimester	Quickening
White fatty material which encloses the nerve fibers on the spinal cord	Myelin

Lanugo	Myelin	Quickening	Vernix caseosa
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- A. True
- B. False**

9. Dairy products provide calcium which is important for the _____.

- A. Building of muscle tissue
- B. Production of blood cells
- C. Regulation of body fluids**
- D. Balancing of hormones

10. Fill in the blanks using the word bank provided below.

Vitamin C is needed for **wound** healing, teeth and **bone** development and **metabolic** processes and can be obtained by **consuming** a wide variety of fruits and **vegetables**.

bone consuming	metabolic vegetables	vitamin C wound
-------------------	-------------------------	--------------------

11. Match the following terms to their descriptions.

Description	Term
Uses high-frequency sound waves to form images of the fetus on a computer screen	Ultrasound
Checks for human chorionic gonadotropin hormone	Serum test
Examines the cells shed by the fetus into the surrounding amniotic fluid	Amniocentesis
Uses a large magnet and radio waves to look at organs and structures inside the body	Magnetic resonance imaging

Amniocentesis	Magnetic resonance imaging	Serum test	Ultrasound
---------------	----------------------------	------------	------------

12. The age of the pregnant women may play a role in the occurrence of genetic errors.

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19. Iron is needed to produce adequate amounts of _____.

A. Protein

B. Hormones

C. Amniotic fluid

D. Hemoglobin

20. Which nutrient is essential for the development of the fetal immune system?

A. Protein

B. Carbohydrates

C. Fats

D. Water

Pregnancy: Second Trimester Key Concepts

Prenatal Development

Essential Questions

1. What fetal developmental milestones take place during the second trimester?
2. What are the physical signs and symptoms of pregnancy during the second trimester?

Second Trimester

- Of pregnancy begins at week _____ gestational age or week 12 from _____

Signs and Symptoms of Pregnancy (Part 1)

- Second trimester signs and _____ of pregnancy include:
 - body _____
 - numb or _____ hands
 - swelling in the _____, fingers and face
 - stretch _____
 - _____ of the areola
 - _____ of darker skin on the face or the mask of pregnancy
 - vertical _____ on abdomen

Signs and Symptoms of Pregnancy (Part 2)

- The following _____ take place:
 - leveling out of _____
 - _____ in nausea
 - increase in _____
- “_____” takes place

Week 14

- Lanugo _____
 - lanugo is a soft, fine _____ covering the body of the fetus during prenatal development
- _____ have moved to the sides of the head
- Digestive _____ are complete
- Thyroid begins _____ hormones
- Males begin developing the _____ gland
- Female _____ are moving to the pelvis area
- Hands become _____
- All _____ comes from the placenta

Week 15 and 16

- Fetal _____ increases
- Blood _____ are seen through skin
- Legs are _____ than arms
- Hair _____ produce pigment
- Bones and _____ begin to develop
- Fetus may suck _____ and show facial _____
- Heart rate is approximately 117 to 157 _____ per minute
- _____ of fetus is about four and three fourths inches from head to _____

Weeks 17 and 18

- _____ growth begins to slow
- Production of “_____” begins
 - brown fat prepares the body for heat production and metabolism later in life
- _____ begins to function
- _____ covers body
- _____ and urinary systems are _____
- _____ can be clearly outlined through ultrasound
- Bones _____
- Taste _____ develop
- Head to rump _____ is approximately five- and one-half inches

Weeks 19, 20 and 21

- Motor _____ are rapidly developing
- Vernix _____ begins to coat skin
 - Vernix caseosa is a white _____ which forms on the skin of the developing fetus to provide protection from the amniotic fluid
- Fetus is more active and able to _____
- Head to rump _____ is approximately six inches

Weeks 22-24

- _____ are visible
- Weight is approximately one _____
- Skin is _____ to red, wrinkled and translucent
- Rapid _____ movement takes place
- Finger and _____ are forming
- Regular _____ and wake times are occurring
- Hair is _____ on head

Weeks 25-27

- Moro _____ begins to present

- Fetus may move in _____ to familiar sounds
- Lungs begin to produce _____
 - surfactant is a substance which allows the air sacs in the lungs to inflate and deflate without collapsing and _____
- Length from _____ to bottom is approximately nine inches
- Lungs and _____ systems continues to mature

Factors Impacting Pregnancy: Nutritional

Essential Question

1. What changes in diet might a pregnant woman have to make in order to promote a healthy pregnancy?

Nutritional Needs

- Nutrition affects the _____ of the mother as well as the growing _____
- Does not mean eating _____ as much food
 - pregnant women should only add about _____ extra calories each day
- Nutrition is based on _____ a well-balance _____ which includes:
 - carbohydrates
 - _____
 - dairy _____

Carbohydrates & Protein

- Carbohydrates:
 - include whole _____, fruits and vegetables
 - provide _____, vitamins, minerals and fiber
- Protein:
 - includes _____ meats, fish, eggs, cheese and nuts
 - is _____ for the fetus:
 - to support _____ and development
 - to produce _____
 - is essential for the _____ woman
 - to build _____ in the body to support the fetus
 - to reduce _____ and fluid retention
 - for healthy _____ gain

Dairy Products & Specific Nutrients

- _____ products:
 - include milk, _____ and cheese
 - provide _____ for the woman and the fetus

- Specific _____ needed in the second trimester include:
 - _____
 - increases _____ volume
 - prevents _____
 - folate
 - vitamin C
 - is needed for _____ healing, _____ and bone development and metabolic _____

Factors Impacting Pregnancy: Healthcare

Essential Questions

1. What medical advances impact pregnancy during the second trimester?
2. Why is appropriate medical care important during the second trimester?

Healthcare Factors

- Include:
 - medical _____
 - appropriate _____ care
 - good _____ practices

Medical Advances (Part 1)

- Have made it possible to _____ health issues before a baby is born including _____ abnormalities
- Include tests and _____
 - _____
 - magnetic _____ imaging (MRI)
 - _____ test
 - alpha-_____ screening (AFT)
 - _____
 - serum (blood) test

Chromosomal Abnormalities

- Are identified through _____ tests and screenings
- Can occur:
 - as an _____ when the egg or sperm is formed
 - during the early developmental _____ of the fetus
 - may cause birth _____, miscarriage, disease and/or problems with growth and development

Medical Advances (Part 2)

- Include prenatal _____
 - began in the _____ and has become more common in the United States

- has been _____ in correcting issues prior to birth, such as:
 - _____ defects
 - urinary _____
 - bowel _____
 - _____ malformations
 - spina _____

Appropriate Medical Care

- Includes continuing to attend prenatal _____ appointments
 - prenatal appointments include:
 - _____ the fetus for _____ and heart rate
 - assessing the pregnant woman's:
 - blood _____
 - _____ gain
 - iron _____
 - checking iron levels is important during pregnancy because iron is needed to produce adequate amounts of _____, a protein in red blood cells responsible for carrying _____ from the lungs to the rest of the body
 - looking for possible signs of _____ diabetes
 - a type of diabetes which develops during pregnancy in women who do not have diabetes prior to pregnancy

Factors Impacting Pregnancy: Good Health Practices

Essential Question

1. What are good health practices for pregnant women during the second trimester?

Good Health Practices

- Include:
 - regular _____
 - quality _____
 - abstinence from _____ hazards

Regular Exercise

- Benefits include:
 - relief from _____
 - development of _____ and endurance
 - reduction of _____
 - protection of _____
 - lowered risk of _____ and gestational diabetes
 - _____ sleep
 - improved _____

- lowered risk of _____
- lowered risk of preterm _____
- Recommendations for exercise include:
 - checking with a healthcare _____ before starting a new routine
 - if the exercise feels too _____, stop and rest

Quality Sleep

- May be difficult to _____ due to body changes, discomforts and _____
- May be improved by _____ strategies such as:
 - eliminating _____ drinks
 - eating the last _____ a few hours before bed
 - watching _____ intake before bed
 - using extra _____ to support the back, knees and growing abdomen
 - developing a regular sleep _____
 - having _____ time
 - participating in _____ and parenting classes
 - practicing _____ management

Environmental Hazards

- Abstaining from environmental _____ includes avoiding:
 - drugs
 - _____
 - tobacco
 - other _____ substances
 - health consequences caused by these _____ may have serious, irreversible effects

Pregnancy: Second Trimester Key Concepts Answer Key

Prenatal Development

Essential Questions

1. What fetal developmental milestones take place during the second trimester?
2. What are the physical signs and symptoms of pregnancy during the second trimester?

Second Trimester

- Of pregnancy begins at week **14** gestational age or week 12 from **conception**

Signs and Symptoms of Pregnancy (Part 1)

- Second trimester signs and **symptoms** of pregnancy include:
 - body **aches**
 - numb or **tingling** hands
 - swelling in the **ankles**, fingers and face
 - stretch **marks**
 - **darkening** of the areola
 - **patches** of darker skin on the face or the mask of pregnancy
 - vertical **line** on abdomen

Signs and Symptoms of Pregnancy (Part 2)

- The following **changes** take place:
 - leveling out of **hormones**
 - **decrease** in nausea
 - increase in **energy**
- “**Quickening**” takes place

Week 14

- Lanugo **develops**
 - lanugo is a soft, fine **hair** covering the body of the fetus during prenatal development
- **Ears** have moved to the sides of the head
- Digestive **glands** are complete
- Thyroid begins **producing** hormones
- Males begin developing the **prostate** gland
- Female **ovaries** are moving to the pelvis area
- Hands become **functional**
- All **nourishment** comes from the placenta

Week 15 and 16

- Fetal **mobility** increases
- Blood **vessels** are seen through skin
- Legs are **longer** than arms
- Hair **follicles** produce pigment
- Bones and **marrow** begin to develop
- Fetus may suck **thumb** and show facial **expressions**
- Heart rate is approximately 117 to 157 **beats** per minute
- **Length** of fetus is about four and three fourths inches from head to **rump**

Weeks 17 and 18

- **Rapid** growth begins to slow
- Production of "**brown fat**" begins
 - brown fat prepares the body for heat production and metabolism later in life
- **Myelin** begins to function
- **Lanugo** covers body
- **Circulatory** and urinary systems are **functioning**
- **Skeleton** can be clearly outlined through ultrasound
- Bones **harden**
- Taste **buds** develop
- Head to rump **length** is approximately five- and one-half inches

Weeks 19, 20 and 21

- Motor **neurons** are rapidly developing
- Vernix **caseosa** begins to coat skin
 - Vernix caseosa is a white **protective coating** which forms on the skin of the developing fetus to provide protection from the amniotic fluid
- Fetus is more active and able to **swallow**
- Head to rump **length** is approximately six inches

Weeks 22-24

- **Eyebrows** are visible
- Weight is approximately one **pound**
- Skin is **pink** to red, wrinkled and translucent
- Rapid **eye** movement takes place
- Finger and **footprints** are forming
- Regular **sleep** and wake times are occurring
- Hair is **growing** on head

Weeks 25-27

- Moro **reflex** begins to present

- Fetus may move in **response** to familiar sounds
- Lungs begin to produce **surfactant**
 - surfactant is a substance which allows the air sacs in the lungs to inflate and deflate without collapsing and **sticking together**
- Length from **head** to bottom is approximately nine inches
- Lungs and **nervous** systems continues to mature

Factors Impacting Pregnancy: Nutritional

Essential Question

1. What changes in diet might a pregnant woman have to make in order to promote a healthy pregnancy?

Nutritional Needs

- Nutrition affects the **health** of the mother as well as the growing **fetus**
- Does not mean eating **twice** as much food
 - pregnant women should only add about **300** extra calories each day
- Nutrition is based on **consuming** a well-balance **diet** which includes:
 - carbohydrates
 - **protein**
 - dairy **products**

Carbohydrates & Protein

- Carbohydrates:
 - include whole **grains**, fruits and vegetables
 - provide **energy**, vitamins, minerals and fiber
- Protein:
 - includes **lean** meats, fish, eggs, cheese and nuts
 - is **essential** for the fetus:
 - to support **growth** and development
 - to produce **DNA**
 - is essential for the **pregnant** woman
 - to build **tissue** in the body to support the fetus
 - to reduce **swelling** and fluid retention
 - for healthy **weight** gain

Dairy Products & Specific Nutrients

- **Dairy** products:
 - include milk, **yogurt** and cheese
 - provide **calcium** for the woman and the fetus
- Specific **nutrients** needed in the second trimester include:
 - **iron**
 - increases **blood** volume

- prevents **anemia**
- folate
- vitamin C
- is needed for **wound** healing, **teeth** and bone development and metabolic **processes**

Factors Impacting Pregnancy: Healthcare

Essential Questions

1. What medical advances impact pregnancy during the second trimester?
2. Why is appropriate medical care important during the second trimester?

Healthcare Factors

- Include:
 - medical **advances**
 - appropriate **medical** care
 - good **health** practices

Medical Advances (Part 1)

- Have made it possible to **identify** health issues before a baby is born including **chromosomal** abnormalities
- Include tests and **screenings**
 - **ultrasound**
 - magnetic **resonance** imaging (MRI)
 - **hormone** test
 - alpha-**fetoprotein** screening (AFT)
 - **amniocentesis**
 - serum (blood) test

Chromosomal Abnormalities

- Are identified through **prenatal** tests and screenings
- Can occur:
 - as an **accident** when the egg or sperm is formed
 - during the early developmental **stages** of the fetus
 - may cause birth **defects**, miscarriage, disease and/or problems with growth and development

Medical Advances (Part 2)

- Include prenatal **surgery**
 - began in the **1980s** and has become more common in the United States
 - has been **instrumental** in correcting issues prior to birth, such as:
 - **heart** defects
 - urinary **blockages**

- bowel **obstructions**
- **airway** malformations
- spina **bifida**

Appropriate Medical Care

- Includes continuing to attend prenatal **care** appointments
 - prenatal appointments include:
 - **assessing** the fetus for **growth** and heart rate
 - assessing the pregnant woman's:
 - blood **pressure**
 - **weight** gain
 - iron **levels**
 - checking iron levels is important during pregnancy because iron is needed to produce adequate amounts of **hemoglobin**, a protein in red blood cells responsible for carrying **oxygen** from the lungs to the rest of the body
 - looking for possible signs of **gestational** diabetes
 - a type of diabetes which develops during pregnancy in women who do not have diabetes prior to pregnancy

Factors Impacting Pregnancy: Good Health Practices

Essential Question

1. What are good health practices for pregnant women during the second trimester?

Good Health Practices

- Include:
 - regular **exercise**
 - quality **sleep**
 - abstinence from **environmental** hazards

Regular Exercise

- Benefits include:
 - relief from **backaches**
 - development of **stamina** and endurance
 - reduction of **constipation**
 - protection of **joints**
 - lowered risk of **preeclampsia** and gestational diabetes
 - **improved** sleep
 - improved **self-esteem**
 - lowered risk of **depression**
 - lowered risk of preterm **delivery**
- Recommendations for exercise include:

- checking with a healthcare **practitioner** before starting a new routine
- if the exercise feels too **strenuous**, stop and rest

Quality Sleep

- May be difficult to **maintain** due to body changes, discomforts and **anxiety**
- May be improved by **implementing** strategies such as:
 - eliminating **caffeinated** drinks
 - eating the last **meal** a few hours before bed
 - watching **fluid** intake before bed
 - using extra **pillows** to support the back, knees and growing abdomen
 - developing a regular sleep **cycle**
 - having **transition** time
 - participating in **childbirth** and parenting classes
 - practicing **stress** management

Environmental Hazards

- Abstaining from environmental **hazards** includes avoiding:
 - drugs
 - **alcohol**
 - tobacco
 - other **harmful** substances
 - health consequences caused by these **substances** may have serious, irreversible effects

Pregnancy: Second Trimester

Lesson Overview

Media: Hybrid (6 minutes/53 slides)

Seat Time: 6 Classes | 300 minutes teaching

Goal:

To identify the signs and stages of pregnancy and explore the effects of various factors on pregnancy and fetal development.

Description:

This lesson guides students through the second trimester of pregnancy. Students will investigate topics, such as the stages of prenatal development, physical signs and symptoms of pregnancy, the significance of proper nutrition for both the pregnant woman and the growing fetus, the impact of proper healthcare, the role of medical advances and good health practices during the second trimester.

Objectives:

1. To describe nutritional needs during pregnancy.
2. To explore technological advances in prenatal care and the impact on development.
3. To analyze appropriate medical care and good health practices during pregnancy.

Lesson Plan

Class 1

Class Overview:

Prenatal Development Video Segment

Action Plan

Vocabulary Handout

Key Concepts

Prenatal Development Check for Understanding

Pregnancy Timeline: Second Trimester Project

Essential Questions:

1. What fetal development milestones take place during the second trimester?
2. What are the physical signs and symptoms of pregnancy during the second trimester?

Step 1: Bell Ringer:

- Hold up a dollar bill and ask the question, “how long is this dollar bill” and “how many weeks does it take for a fetus to grow to be this long” and have students answer.

Step 2: Distribute the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for students to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which students can fill in to aid in note taking during the lesson.

Step 3: Show the *Prenatal Development* video segment.

- This video is six minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Administer the **Prenatal Development Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 5: Students should begin the **Pregnancy Timeline: Second Trimester Project**.

- Students will research second trimester prenatal development and create a timeline.

Step 6: Exit Ticket:

- Students should provide a progress report on their project.

Class 2

Class Overview:

Factors Impacting Pregnancy: Nutritional Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Nutritional Check for Understanding

Pregnancy Timeline: Second Trimester Project

Essential Question:

1. What changes in diet might a pregnant woman have to make in order to promote a healthy pregnancy?

Step 1: Bell Ringer:

- Have students answer the **Essential Question** and allow time for a brief class discussion.

Step 2: Show the *Factors Impacting Pregnancy: Nutritional* PowerPoint® segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Nutritional Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should complete the **Pregnancy Timeline: Second Trimester Project**.

- Students will research second trimester prenatal development and create a timeline.

Step 5: Exit Ticket:

- Students should turn in their projects.

Class 3

Class Overview:

Factors Impacting Pregnancy: Healthcare Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Pregnancy Related Health Conditions Project

Essential Questions:

1. What medical advances impact pregnancy during the second trimester?
2. Why is appropriate medical care important during the second trimester?

Step 1: Bell Ringer:

- *Think, Pair, Share:* Pose the following question to students and have them consider their response for one or two minutes before asking them to get into groups and share their responses.
 - What medical advances impact pregnancy during the second trimester?

Step 2: Show slides 17 to 30 of the *Factors Impacting Pregnancy: Healthcare* PowerPoint® segment.

- This segment is 14 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Students should begin the **Pregnancy Related Health Conditions Project**.

- Students will research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize their findings.

Step 4: Exit Ticket:

- Have students share one fact they have discovered in their research for the project.

Class 4

Class Overview:

Factors Impacting Pregnancy: Healthcare Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Healthcare Check for Understanding

Pregnancy Related Health Conditions Project

Essential Questions:

1. What medical advances impact pregnancy during the second trimester?
2. Why is appropriate medical care important during the second trimester?

Step 1: Bell Ringer:

- Have students answer the **Essential Questions**.

Step 2: Show slides 31 to 42 of the *Factors Impacting Pregnancy: Healthcare* PowerPoint® segment.

- This portion of the segment is 12 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Healthcare Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should continue the **Pregnancy Related Health Conditions Project**.

- Students will research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize their findings.

Step 5: Exit Ticket:

- Have students share one highlight of their research with the class.

Class 5

Class Overview:

Factors Impacting Pregnancy: Good Health Practices Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Good Health Practices Check for Understanding

Pregnancy Related Health Conditions Project

Essential Question:

1. What are good health practices for pregnant women during the second trimester?

Step 1: Bell Ringer:

- Have students locate and share an image of a good health practice for pregnant women during the second trimester. Lead a brief class discussion so students can share their findings.

Step 2: Show the *Factors Impacting Pregnancy: Good Health Practices* PowerPoint® segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Good Health Practices Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should continue the **Pregnancy Related Health Conditions Project**.

- Students will research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize their findings.

Step 5: Exit Ticket:

- Students should provide a progress report on their project.

Class 6

Class Overview:

Action Plan

Pregnancy: Second Trimester Final Assessment

Pregnancy Related Health Conditions Project

Step 1: Bell Ringer:

- Students should review for the final assessment.

Step 2: Administer the **Pregnancy: Second Trimester Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Students should complete the **Pregnancy Related Health Conditions Projects**.

- Students will research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize their findings.

Step 4: Exit Ticket:

- Students should submit their completed project.

Project Overview

Pregnancy Timeline: Second Trimester

Students will research second trimester prenatal development and create a timeline.

Accommodations:

Provide students with a list of resources. Also allow additional time for the project to be completed.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students take the information gathered and create a short video to further illustrate their timeline.

Pregnancy Related Health Conditions

Students will research a birth defect, chromosomal abnormality or other pregnancy related health condition and create a presentation to summarize their findings.

Accommodations:

Provide a list of resources students can utilize.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students use the information to create a review game for the class.

Career & Technical Student Organizations

FCCLA

Focus on Children

Nutrition & Wellness Event

Career Connections

Using the **Career Connections Activity** allows students to explore careers associated with this lesson by viewing career interviews with various industry professionals. The career interviews are located on the Select Playlist drop down menu on the lesson page. See the **Career Connections Activity** for more details.

Eric Hentges, Ph.D., Executive Director, USDA Center for Nutrition Policy & Promotion

Gary A. Taubes, Author, Co-founder of Nutrition Science Initiative

Jennifer Gorman, MS, RD, LD, Wellness Manager, United Supermarkets

Pregnancy: Second Trimester Vocabulary Handout

Brown Fat

fat produced in the body of the fetus during prenatal development which helps prepare for heat production and metabolism later in life

Chromosomal Abnormality

error or mutation in the number or structure of human chromosomes during prenatal development

Gestational Diabetes

type of diabetes which develops during pregnancy in women who do not have diabetes prior to pregnancy

Hemoglobin

protein in red blood cells responsible for carrying oxygen from the lungs to the rest of the body

Lanugo

soft, fine hair covering the body of the fetus during prenatal development

Quickening

first movements felt by the pregnant woman; may feel like butterflies or gas

Surfactant

substance which allows the air sacs in the lungs to inflate and deflate without collapsing and sticking together

Vernix Caseosa

creamy white protective coating which forms on the developing baby's skin to provide protection from the amniotic fluid

Nutrition

- Continues to be important during the third trimester
- Provides energy to help the body prepare for labor and delivery



Pregnancy Points

Due to the size and weight of the fetus at this stage, it is recommended for pregnant women to eat small meals and snacks more often rather than three large meals per day.

Nutrition

- Should continue to be based on whole foods from each of the food groups
 - fruits, vegetables, whole grain products, protein foods and dairy products will provide the needed nutrients to keep the mother and fetus growing strong
 - some varieties of fruits and vegetables, such as berries, grapes, broccoli and cabbage, also contain phytonutrients
 - phytonutrients protect the body by decreasing inflammation and lowering the oxidation of cells

Appropriate Medical Care

- Includes continuing to attend prenatal care appointments
 - assessing:
 - the growth, movement and heart rate of the fetus
 - the blood pressure and weight gain of the mother
 - the iron levels of the mother
 - iron is needed to produce adequate amounts of hemoglobin

Prenatal Care

- Visits will include:
 - checking the pregnant woman's weight, blood pressure and urine
 - a regular pelvic exam may also be conducted to monitor the dilation of the cervix
 - checking growth and the heart rate of the fetus



Abstinence

- From drugs, alcohol, tobacco and other harmful substances is one of the best choices a pregnant woman can make for the health of the developing fetus
 - health consequences caused by these substances may have serious, irreversible effects

Healthy Weight Gain

- Is distributed as follows:

Location	Pounds
Fetus	Six to eight
Placenta	One to one and a half
Amniotic fluid	Two
Uterus growth	Two
Breast growth	Two
Blood and bodily fluids	Eight
Woman's body protein and fat	Seven

Pregnancy: Third Trimester

Lesson Overview

Media: Hybrid (5 minutes/32 slides)

Seat Time: 4 Classes | 200 minutes teaching

Goal:

To identify the signs and stages of pregnancy and explore the effects of various factors on pregnancy and fetal development.

Description:

This lesson guides students through the third trimester of pregnancy. Students will investigate topics, such as the stages of prenatal development, physical signs and symptoms of pregnancy, the significance of proper nutrition for both the pregnant woman and the growing fetus, the importance of maintaining a healthy environment, the impact of proper health care and good health practices during the third trimester.

Objectives:

1. To describe nutritional needs during pregnancy.
2. To analyze appropriate medical care and good health practices during pregnancy.

Lesson Plan

Class 1

Class Overview:

Prenatal Development Video Segment

Action Plan

Vocabulary Handout

Key Concepts

Prenatal Development Check for Understanding

Pregnancy Timeline: Third Trimester Project

Essential Questions:

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy in the third trimester?

Step 1: Bell Ringer:

- Display the term, “vernix caseosa” and have students explain the significance of vernix caseosa during prenatal development.

Step 2: Distribute the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for students to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which students can fill in to aid in note taking during the lesson.

Step 3: Show the *Prenatal Development* video segment.

- This video is five minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Administer the **Prenatal Development Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 5: Students should begin the **Pregnancy Timeline: Third Trimester Project**.

- Students will research third trimester prenatal development and create a timeline.

Step 6: Exit Ticket:

- Students should provide a progress report on their project.

Class 2

Class Overview:

Factors Impacting Pregnancy: Nutritional Microsoft® PowerPoint® Segment

Factors Impacting Pregnancy: Healthcare Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Nutritional Check for Understanding

Factors Impacting Pregnancy: Healthcare Check for Understanding

Pregnancy Timeline: Third Trimester Project

Essential Questions:

1. What nutritional needs do pregnant women have during the third trimester?
2. What healthcare practices are important for pregnant women during the third trimester?

Step 1: Bell Ringer:

- Post the question, “why is nutrition important during the third trimester of pregnancy” and have students share their answers with the class.

Step 2: Show the *Factors Impacting Pregnancy: Nutrition* PowerPoint® segment.

- This segment is four slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Nutrition Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Show the *Factors Impacting Pregnancy: Healthcare* PowerPoint® segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 5: Administer the **Factors Impacting Pregnancy: Healthcare Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 6: Students should complete the **Pregnancy Timeline: Third Trimester Project**.

- Students will research third trimester prenatal development and create a timeline.

Step 7: Exit Ticket:

- Have students turn in their projects.

Class 3

Class Overview:

Factors Impacting Pregnancy: Good Health Practices Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Good Health Practices Check for Understanding

Environmental Hazards During Pregnancy Project

Essential Question:

1. What are good health practices for pregnant women during the third trimester?

Step 1: Bell Ringer:

- Using the weight gain information from slides 31 and 32, write the locations (fetus, placenta, breast growth, etc.) on the board and have students brainstorm to determine an object they think might weigh the same amount. Objects might include a gallon jug of water for the fetus, a one pound bag of sugar for the placenta or a two pound hand weight for the amniotic fluid.

Step 2: Show the *Factors Impacting Pregnancy: Good Health Practices* PowerPoint® segment.

- This segment is 13 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Good Health Practices Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should begin the **Environmental Hazards During Pregnancy Project**.

- Students will investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Step 5: Exit Ticket:

- Students should provide which hazard their group will be researching for the project.

Class 4

Class Overview:

Action Plan

Pregnancy: Third Trimester Final Assessment

Environmental Hazards During Pregnancy Project

Step 1: Bell Ringer:

- Students should review for the final assessment.

Step 2: Administer the **Pregnancy: Third Trimester Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Students should complete the **Environmental Hazards During Pregnancy Project**.

- Students will investigate environmental hazards during pregnancy and create a public service announcement (PSA).

Step 4: Exit Ticket:

- Have students turn in their projects.

Project Overview

Pregnancy Timeline: Third Trimester

Students will research third trimester prenatal development and create a timeline.

Accommodations:

Provide students with a list of resources. Also allow additional time for the project to be completed.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students take the information gathered and create a short video to further illustrate their timeline.

Environmental Hazards During Pregnancy

Students will investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Accommodations:

Provide students with a list of resources and allow extra time as needed for individual student needs.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students prepare a script and record their PSA. If possible, have students send their recordings to a radio station for public broadcast.

Career & Technical Student Organizations

FCCLA

Focus on Children
Nutrition & Wellness Event

Career Connections

Using the **Career Connections Activity** allows students to explore careers associated with this lesson by viewing career interviews with various industry professionals. The career interviews are located on the Select Playlist drop down menu on the lesson page. See the **Career Connections Activity** for more details.

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Gary A. Taubes, Author, Co-founder of Nutrition Science Initiative

Jennifer Gorman, MS, RD, LD, Wellness Manager, United Supermarkets

Pregnancy: Third Trimester

Lesson Overview

Objectives:

1. To describe nutritional needs during pregnancy.
2. To analyze appropriate medical care and good health practices during pregnancy.

Class 1

Essential Questions:

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy in the third trimester?

Step 1: Think about the term written on the board and determine the significance during prenatal development.

Step 2: Access the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for you to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which you can fill in to aid in note taking during the lesson.

Step 3: View the **Prenatal Development** video segment.

- This video is five minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Complete the **Prenatal Development Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 5: Begin the **Pregnancy Timeline: Third Trimester Project**.

- Research third trimester prenatal development and create a timeline.

Step 6: Provide a progress report on the project.

Class 2

Essential Questions:

1. What nutritional needs do pregnant women have during the third trimester?
2. What healthcare practices are important for pregnant women during the third trimester?

Step 1: Answer the question, “why is nutrition important during the third trimester of pregnancy” and share your answer with the class.

Step 2: View the **Factors Impacting Pregnancy: Nutritional** PowerPoint® segment.

- This segment is four slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Factors Impacting Pregnancy: Nutritional Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: View the **Factors Impacting Pregnancy: Healthcare** PowerPoint® segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 5: Complete the **Factors Impacting Pregnancy: Healthcare Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 6: Complete the **Pregnancy Timeline: Third Trimester Project**.

- Research third trimester prenatal development and create a timeline.

Step 7: Turn in your project.

Class 3

Essential Question:

1. What are good health practices for pregnant women during the third trimester?

Step 1: Brainstorm to determine an object you think might weigh the same amount as the items written on the board. Share your reasoning with the class.

Step 2: View the **Factors Impacting Pregnancy: Good Health Practices** PowerPoint® segment.

- This segment is 13 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Factors Impacting Pregnancy: Good Health Practices Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: Begin the **Environmental Hazards During Pregnancy Project**.

- Investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Step 5: Provide which hazard your group will be researching for the project.

Class 4

Step 1: Review for the final assessment.

Step 2: Complete the **Pregnancy: Third Trimester Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Complete the **Environmental Hazards During Pregnancy Project**.

- Investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Step 4: Turn in your project.



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Pregnancy: Third Trimester Key Concepts

Prenatal Development

Essential Questions

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy during the third trimester?

The Third Trimester

- Begins at week 28, _____ age or week 26 from _____

Signs and Symptoms of Pregnancy

- Third trimester signs and _____ of pregnancy include:
 - shortness of breath
 - _____
 - _____ urination
 - swelling of the _____, fingers and face
 - hemorrhoids
 - sleeping _____
 - tender breasts
 - _____:
 - often begins to _____ from the breasts during the third trimester
 - is the _____ milk
 - is full of _____ and other important substances which help build a healthy _____ system, stomach, intestines and digestive system

Braxton-Hicks Contractions

- Braxton-Hicks _____:
 - are _____ during the third trimester
 - are named after the _____ who first described them
 - involve a _____ of the muscles surrounding the uterus
 - may lead a pregnant woman to think _____ is starting
 - are _____ from labor contractions
 - come and _____
 - may be _____ but are not usually painful

Week 28

- Weight is _____
- Skin is _____ out
- Organs are _____
- _____ are partially open

- Eyelashes have _____
- Length from head to _____ is approximately ten inches

Weeks 29-33

- Bones are fully developed but soft and _____
- _____ is producing red blood cells
- Eyes are _____ open
- Fetus weighs about _____ pounds
- Central _____ system can control body temperature
- Toenails are _____
- Body begins _____ minerals
- _____ begins to fall off
- Fetus is practicing _____
- Pupils can _____, dilate and detect light

Weeks 34-36

- Fingernails have reached the _____
- _____ begins to thicken
- Fetus is _____ approximately one-half pound per week
- Head to rump length is approximately _____ inches

Monitoring Fetal Movement

- _____ of fetus:
 - will be _____
 - includes _____ of movement and _____
 - includes rolling, _____ and kicking
- Changes in patterns is cause for _____
- Noticeable changes should be _____ to healthcare practitioner

Weeks 37-38

- _____ are ready to function on their own
- Fetus may begin the _____ into the birth canal
 - the birth canal is the _____ extending from the uterus to the outside of the body
- Fetus develops a firm _____
- _____ have reached the tips of the toes
- Most of the _____ has been shed
- Fetus weighs approximately _____ - and one-half pounds

Weeks 39-40

- Fetus is considered _____
- Chest is becoming more _____

- Placenta continues to supply _____
- _____ is reached at 40 weeks
- Average size is _____ - and one-half pounds and about _____ inches from head to toe

Factors Impacting Pregnancy: Nutritional

Essential Question

1. What nutritional needs do pregnant women have during the third trimester?

Nutrition

- Continues to be important during the _____ trimester
- Provides _____ to help the body prepare for _____ and delivery
- Should continue to be based on _____ foods from each of the food groups
- Healthy nutrition _____ include:
 - limiting _____ and empty calorie foods
 - drinking 64 – _____ ounces of water each day

Factors Impacting Pregnancy: Healthcare

Essential Question

1. What healthcare practices are important for pregnant women during the third trimester?

Medical Care

- During the _____ trimester includes:
 - attending prenatal _____ appointments
 - having _____, blood pressure and urine checked
 - checking the _____ and heart rate of the fetus
 - routine testing
 - group B streptococcus (_____) test is vital to have performed for the safety of the fetus
 - this test checks for _____ which may be harmful to the fetus
 - monitoring the _____ date

Important Precautions

- Include:
 - maintaining _____ of normal pregnancy symptoms
 - understanding and _____ public warnings
 - monitoring fetal _____

Factors Impacting Pregnancy: Good Health Practices

Essential Question

1. What are good health practices for pregnant women during the third trimester?

Good Health Practices

- Include:
 - daily _____
 - adequate and _____ sleep
 - abstinence from _____ hazards
 - healthy _____ gain

Daily Exercise

- During pregnancy has many benefits including:
 - reduction of the risk of excessive _____ gain
 - reduction of the risk of _____ diabetes
 - keeping the _____ and lungs healthy
 - increased _____
 - improved _____ and mood
 - possible decrease in the _____ of labor
 - faster recovery after _____
- Recommended exercise _____ include:
 - two hours and _____ minutes of moderate-intensity aerobic activity
 - _____ exercises

Sleep

- During the third trimester
 - must be _____ and quality
 - is affected by _____ and bodily discomforts
 - discomforts include:
 - increased _____ on the bladder and diaphragm
 - increased _____ rate
 - _____ and pains
 - heartburn
 - movement of the _____
 - anxiety and _____ dreams
 - concerns about life _____ due to becoming a parent

Sleep Strategies

- Sleep may be _____ by:
 - eliminating _____ drinks
 - eating the last meal or _____ a few hours before bed
 - watching _____ intake before bed

- using extra _____ to support the changing body
- developing a _____ sleep cycle
- implementing _____ time
- participating in childbirth and _____ classes
- practicing stress _____ techniques

Environmental Hazards

- Abstaining from environmental _____ includes avoiding:
 - drugs
 - _____
 - tobacco
 - other _____ substances
 - health consequences caused by these _____ may have serious, irreversible effects

Healthy Weight Gain (Part 1)

- Regular _____ of quality nutrition and exercise routines encourage _____ weight gain
 - if pre-pregnancy weight is healthy and _____, the recommended weight gain is _____ to 30 pounds
 - if pre-pregnancy weight is _____, the recommended weight gain is _____ to 40 pounds
 - if pre-pregnancy weight is _____, the recommended weight gain is _____ to 25 pounds
 - if pre-pregnancy weight is _____, the recommended weight gain is _____ to 20 pounds

Healthy Weight Gain (Part 2)

- Pregnancy _____ is distributed as follows:
 - fetus: _____ to eight pounds
 - _____: one to one- and one-half pounds
 - amniotic fluid: two pounds
 - _____ growth: two pounds
 - breast _____: two pounds
 - blood and bodily _____: eight pounds
 - woman's body _____ and fat: seven pounds

Pregnancy: Third Trimester Final Assessment

Directions:

Answer the following questions.

1. The third trimester begins at week _____.
 - A. 26 gestational age or week 28 from conception
 - B. 32 gestational age or week 30 from conception
 - C. 28 gestational age or 26 from conception
 - D. 22 gestational age or 24 from conception
2. The first milk produced by the mammary glands is called _____.
 - A. Oxytocin
 - B. Colostrum
 - C. Pitocin
 - D. Prolactin
3. Braxton-Hicks contractions are the first sign of going into labor.
 - A. True
 - B. False
4. The muscular passage extending from the uterus to the outside of the body is known as which of the following?
 - A. Birth canal
 - B. Uterus
 - C. Fallopian tube
 - D. Womb
5. Select the following statements which apply to monitoring the activity of the fetus.

Active periods include rolling, squirming and kicking

If changes in the pattern of rest and activity are noticed, call a healthcare practitioner right away

It is common for the fetus to rest most of the time during the third trimester

No need to worry if the fetus has not moved in 24 hours

Patterns of movement and activity are evident in the third trimester
6. The average size of a full-term newborn baby is 8 1/2 pounds and 18 inches from head to toe.
 - A. True
 - B. False
7. Fill in the blanks using the word bank provided below.

Healthy _____ habits during the _____ trimester include _____ sugar and empty _____ foods and _____ between 64

and 96 ounces of _____ each day.

calorie drinking	limiting nutrition	third water
---------------------	-----------------------	----------------

8. Select all of the following reasons to attend prenatal care appointments during the third trimester of pregnancy.
- Consistent monitoring of the fetus and the mother
 - Meet with a genetic counselor
 - Monitoring the due date
 - Routine tests for the health and safety of the fetus and the mother
 - Visit with a nutritionist
9. The best practice for answering questions about pregnancy during the third trimester is to consult the internet.
- A. True
 - B. False
10. Which of the following reasons for exercise is NOT recommended by experts during the third trimester of pregnancy.
- A. Possible decrease in the duration of labor
 - B. To help lose weight before labor and delivery
 - C. Reduction of the risk of developing gestational diabetes
 - D. Increased energy, improved sleep and mood
11. Fill in the blanks using the word bank provided below.
- Common pregnancy _____ during the third _____ include shortness of _____, heartburn, frequent _____, swelling of the ankles, _____ and face, hemorrhoids and _____ difficulties.
- | | | |
|-------------------|----------------------|------------------------|
| breath
fingers | sleeping
symptoms | trimester
urination |
|-------------------|----------------------|------------------------|
12. The fetus reaches an approximate length of ten inches from head to rump during the _____.
- A. 36th week
 - B. 28th week
 - C. 38th week
 - D. 40th week
13. By week 29, the bones are fully developed, and the marrow is producing red blood cells.
- A. True
 - B. False

14. Which week during the third trimester marks the time when the fetal organs are ready to function on their own?
A. Week 29
B. Week 34
C. Week 30
D. Week 37

15. The fetus cannot make a firm grasp with the hands until after birth.
A. True
B. False

16. If a woman is at a healthy normal weight prior to pregnancy, what is the recommended amount of weight to gain during pregnancy?
A. 15 to 25 pounds
B. 25 to 35 pounds
C. 11 to 20 pounds
D. 28 to 40 pounds

17. Fill in the blanks using the word bank provided below.
_____ should continue to be _____ on _____ foods from each of the food _____, such as fruits, _____, whole grain products, protein foods and dairy products.

based groups	nutrition vegetables	whole
-----------------	-------------------------	-------

18. If the pregnancy goes beyond 40 weeks, the menstrual period may have been inaccurately reported.
A. True
B. False

19. If a pregnancy goes beyond 40 weeks, a(n) _____ may be performed to measure the growth of the fetus and confirm the due date.
A. Amniocentesis
B. Hormone test
C. Ultrasound
D. Magnetic resonance imaging (MRI)

20. Severe or long lasting headaches are normal during the third trimester and should be expected.
A. True
B. False

Pregnancy: Third Trimester Final Assessment

Answer Key

Directions:

Answer the following questions.

1. The third trimester begins at week _____.
A. 26 gestational age or week 28 from conception
B. 32 gestational age or week 30 from conception
C. 28 gestational age or 26 from conception
D. 22 gestational age or 24 from conception
2. The first milk produced by the mammary glands is called _____.
A. Oxytocin
B. Colostrum
C. Pitocin
D. Prolactin
3. Braxton-Hicks contractions are the first sign of going into labor.
A. True
B. False
4. The muscular passage extending from the uterus to the outside of the body is known as which of the following?
A. Birth canal
B. Uterus
C. Fallopian tube
D. Womb
5. Select the following statements which apply to monitoring the activity of the fetus.
Active periods include rolling, squirming and kicking
If changes in the pattern of rest and activity are noticed, call a healthcare practitioner right away
It is common for the fetus to rest most of the time during the third trimester
No need to worry if the fetus has not moved in 24 hours
Patterns of movement and activity are evident in the third trimester
6. The average size of a full-term newborn baby is 8 1/2 pounds and 18 inches from head to toe.
A. True
B. False
7. Fill in the blanks using the word bank provided below.

Healthy **nutrition** habits during the **third** trimester include **limiting** sugar and empty **calorie** foods and **drinking** between 64 and 96 ounces of **water** each day.

calorie drinking	limiting nutrition	third water
---------------------	-----------------------	----------------

8. Select all of the following reasons to attend prenatal care appointments during the third trimester of pregnancy.
- Consistent monitoring of the fetus and the mother**
 - Meet with a genetic counselor
 - Monitoring the due date**
 - Routine tests for the health and safety of the fetus and the mother**
 - Visit with a nutritionist
9. The best practice for answering questions about pregnancy during the third trimester is to consult the internet.
- A. True
 - B. False**
10. Which of the following reasons for exercise is NOT recommended by experts during the third trimester of pregnancy.
- A. Possible decrease in the duration of labor
 - B. To help lose weight before labor and delivery**
 - C. Reduction of the risk of developing gestational diabetes
 - D. Increased energy, improved sleep and mood
11. Fill in the blanks using the word bank provided below.
- Common pregnancy **symptoms** during the third **trimester** include shortness of **breath**, heartburn, frequent **urination**, swelling of the ankles, **fingers** and face, hemorrhoids and **sleeping** difficulties.

breath fingers	sleeping symptoms	trimester urination
-------------------	----------------------	------------------------

12. The fetus reaches an approximate length of ten inches from head to rump during the _____.
- A. 36th week
 - B. 28th week**
 - C. 38th week
 - D. 40th week
13. By week 29, the bones are fully developed, and the marrow is producing red blood cells.
- A. True**

B. False

14. Which week during the third trimester marks the time when the fetal organs are ready to function on their own?

- A. Week 29
- B. Week 34
- C. Week 30
- D. Week 37**

15. The fetus cannot make a firm grasp with the hands until after birth.

- A. True
- B. False**

16. If a woman is at a healthy normal weight prior to pregnancy, what is the recommended amount of weight to gain during pregnancy?

- A. 15 to 25 pounds
- B. 25 to 35 pound**
- C. 11 to 20 pounds
- D. 28 to 40 pounds

17. Fill in the blanks using the word bank provided below.

Nutrition should continue to be **based** on **whole** foods from each of the food **groups**, such as fruits, **vegetables**, whole grain products, protein foods and dairy products.

based groups	nutrition vegetables	whole
-----------------	-------------------------	-------

18. If the pregnancy goes beyond 40 weeks, the menstrual period may have been inaccurately reported.

- A. True**
- B. False

19. If a pregnancy goes beyond 40 weeks, a(n) _____ may be performed to measure the growth of the fetus and confirm the due date.

- A. Amniocentesis
- B. Hormone test
- C. Ultrasound**
- D. Magnetic resonance imaging (MRI)

20. Severe or long lasting headaches are normal during the third trimester and should be expected.

- A. True
- B. False**

Pregnancy: Third Trimester Key Concepts

Answer Key

Prenatal Development

Essential Questions

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy during the third trimester?

The Third Trimester

- Begins at week 28, gestational age or week 26 from conception

Signs and Symptoms of Pregnancy

- Third trimester signs and symptoms of pregnancy include:
 - shortness of breath
 - heartburn
 - frequent urination
 - swelling of the ankles, fingers and face
 - hemorrhoids
 - sleeping difficulties
 - tender breasts
 - colostrum:
 - often begins to drip from the breasts during the third trimester
 - is the first milk
 - is full of nutrients and other important substances which help build a healthy immune system, stomach, intestines and digestive system

Braxton-Hicks Contractions

- Braxton-Hicks contractions:
 - are common during the third trimester
 - are named after the doctor who first described them
 - involve a tightening of the muscles surrounding the uterus
 - may lead a pregnant woman to think labor is starting
 - are different from labor contractions
 - come and go
 - may be uncomfortable but are not usually painful

Week 28

- Weight is increasing
- Skin is smoothing out
- Organs are maturing
- Eyelids are partially open

- Eyelashes have **formed**
- Length from head to **rump** is approximately ten inches

Weeks 29-33

- Bones are fully developed but soft and **pliable**
- **Marrow** is producing red blood cells
- Eyes are **wide** open
- Fetus weighs about **three** pounds
- Central **nervous** system can control body temperature
- Toenails are **visible**
- Body begins **absorbing** minerals
- **Lanugo** begins to fall off
- Fetus is practicing **breathing**
- Pupils can **constrict**, dilate and detect light

Weeks 34-36

- Fingernails have reached the **fingertips**
- **Vernix** begins to thicken
- Fetus is **gaining** approximately one-half pound per week
- Head to rump length is approximately **12** inches

Monitoring Fetal Movement

- **Movement** of fetus:
 - will be **evident**
 - includes **patterns** of movement and **inactivity**
 - includes rolling, **squirming** and kicking
- Changes in patterns is cause for **concern**
- Noticeable changes should be **reported** to healthcare practitioner

Weeks 37-38

- **Organs** are ready to function on their own
- Fetus may begin the **descent** into the birth canal
 - the birth canal is the **muscular passage** extending from the uterus to the outside of the body
- Fetus develops a firm **grasp**
- **Toenails** have reached the tips of the toes
- Most of the **lanugo** has been shed
- Fetus weighs approximately **six-** and one-half pounds

Weeks 39-40

- Fetus is considered **full term**
- Chest is becoming more **prominent**

- Placenta continues to supply **antibodies**
- **Due date** is reached at 40 weeks
- Average size is **seven**- and one-half pounds and about **20** inches from head to toe

Factors Impacting Pregnancy: Nutritional

Essential Question

1. What nutritional needs do pregnant women have during the third trimester?

Nutrition

- Continues to be important during the **third** trimester
- Provides **energy** to help the body prepare for **labor** and delivery
- Should continue to be based on **whole** foods from each of the food groups
- Healthy nutrition **habits** include:
 - limiting **sugar** and empty calorie foods
 - drinking 64 – **96** ounces of water each day

Factors Impacting Pregnancy: Healthcare

Essential Question

1. What healthcare practices are important for pregnant women during the third trimester?

Medical Care

- During the **third** trimester includes:
 - attending prenatal **care** appointments
 - having **weight**, blood pressure and urine checked
 - checking the **growth** and heart rate of the fetus
 - routine testing
 - group B streptococcus (**strep**) test is vital to have performed for the safety of the fetus
 - this test checks for **bacteria** which may be harmful to the fetus
 - monitoring the **due** date

Important Precautions

- Include:
 - maintaining **awareness** of normal pregnancy symptoms
 - understanding and **heeding** public warnings
 - monitoring fetal **movements**

Factors Impacting Pregnancy: Good Health Practices

Essential Question

1. What are good health practices for pregnant women during the third trimester?

Good Health Practices

- Include:
 - daily **exercise**
 - adequate and **quality** sleep
 - abstinence from **environmental** hazards
 - healthy **weight** gain

Daily Exercise

- During pregnancy has many benefits including:
 - reduction of the risk of excessive **weight** gain
 - reduction of the risk of **gestational** diabetes
 - keeping the **heart** and lungs healthy
 - increased **energy**
 - improved **sleep** and mood
 - possible decrease in the **duration** of labor
 - faster recovery after **childbirth**
- Recommended exercise **routines** include:
 - two hours and **30** minutes of moderate-intensity aerobic activity
 - **strengthening** exercises

Sleep

- During the third trimester
 - must be **adequate** and quality
 - is affected by **changes** and bodily discomforts
 - discomforts include:
 - increased **pressure** on the bladder and diaphragm
 - increased **heart** rate
 - **aches** and pains
 - heartburn
 - movement of the **fetus**
 - anxiety and **disturbing** dreams
 - concerns about life **changes** due to becoming a parent

Sleep Strategies

- Sleep may be **improved** by:
 - eliminating **caffeinated** drinks
 - eating the last meal or **snack** a few hours before bed
 - watching **fluid** intake before bed
 - using extra **pillows** to support the changing body
 - developing a **regular** sleep cycle
 - implementing **transition** time
 - participating in childbirth and **parenting** classes

- practicing stress **management** techniques

Environmental Hazards

- Abstaining from environmental **hazards** includes avoiding:
 - drugs
 - **alcohol**
 - tobacco
 - other **harmful** substances
 - health consequences caused by these **substances** may have serious, irreversible effects

Healthy Weight Gain (Part 1)

- Regular **patterns** of quality nutrition and exercise routines encourage **healthy** weight gain
 - if pre-pregnancy weight is healthy and **normal**, the recommended weight gain is **25** to 30 pounds
 - if pre-pregnancy weight is **underweight**, the recommended weight gain is **28** to 40 pounds
 - if pre-pregnancy weight is **overweight**, the recommended weight gain is **15** to 25 pounds
 - if pre-pregnancy weight is **obese**, the recommended weight gain is **11** to 20 pounds

Healthy Weight Gain (Part 2)

- Pregnancy **weight** is distributed as follows:
 - fetus: **six** to eight pounds
 - **placenta**: one to one- and one-half pounds
 - amniotic fluid: two pounds
 - **uterus** growth: two pounds
 - breast **growth**: two pounds
 - blood and bodily **fluids**: eight pounds
 - woman's body **protein** and fat: seven pounds



Factors Impacting Pregnancy: Nutritional Check for Understanding Answer Key

Directions:

Answer the following questions.

1. Nutrition should be based on processed foods from select food groups.

- A. True
- B. False**

2. Fill in the blanks using the word bank provided below.

Due to the size and **weight** of the **fetus** at this stage, it is recommended for pregnant women to eat **small** meals and snacks more **often** rather than **three** large **meals** per day.

fetus meals	often small	three weight
----------------	----------------	-----------------

3. According to the presentation, _____ protect the body by decreasing inflammation and lowering the oxidation of cells.

- A. Antioxidants
- B. Phytonutrients**
- C. Aroma therapy
- D. Quality sleep practices

4. Nutrition provides energy to help the body prepare for labor and delivery.

- A. True**
- B. False

5. Which of the following is the recommended amount of water to include each day during the third trimester?

- A. Three to five, eight-ounce glasses
- B. Four to eight, eight-ounce glasses
- C. Five to ten, eight-ounce glasses
- D. Eight to 12, eight-ounce glasses**

Environmental Hazards During Pregnancy

Project Overview:

You will select and investigate an environmental hazards which can be harmful during pregnancy and create a public service announcement (PSA).

Directions:

1. Your instructor will divide the class into groups of three or four.
2. In your group, select a specific substance or hazard to investigate.
3. Using all available resources, research your assigned topic and gather the following information:
 - Name or title of the substance
 - Possible health consequences for the pregnant woman
 - Possible health consequence to the developing fetus
 - Relevant statistics
 - Expected implications or consequences to the family
 - Treatment and care options
 - Community resources which provide help and support to families affected by the environmental hazard or substance
 - At least three graphics or pictures
 - A list of references
4. Using your findings, create a PSA to inform members of the community about the consequences of contact with environmental hazards during pregnancy. Your PSA may be in the form of a poster, billboard, social media advertisement or audio/video script to be used on radio or television.
5. Be prepared to share your PSA with the class.
6. Submit your completed project as directed.

Examples of substances:

- Alcohol
- Heavy metals
- Home and garden maintenance products
- Illicit drugs
 - cocaine
 - heroine
 - methamphetamines
- Nicotine (Tobacco Products and e-Cigarettes)

- Marijuana
- Organic Solvents
- Over-the-Counter Drugs
- Pesticides
- Prescription Drugs

Rubric

Description	Possible Points	Your Score
Research & Organization: <ul style="list-style-type: none"> • Proper research was conducted to complete the assignment • Sources were cited appropriately based on instructions provided • Information was presented in a logical organized manner 	35	
Concept & Understanding: <ul style="list-style-type: none"> • Understanding of the concept is clearly evident • Effective strategies were used to achieve the end product • Logical thinking was utilized to arrive at the conclusion 	35	
Creativity/Craftmanship: <ul style="list-style-type: none"> • End product is unique and reflects the student's or group's individuality • End product is clearly high quality 	15	
Production/Effort: <ul style="list-style-type: none"> • Class time provided for the project was used efficiently • Time and effort are evident in the execution of the end product 	15	
Total Points	100	

Factors Impacting Pregnancy: Nutritional Check for Understanding

Directions:

Answer the following questions.

1. Nutrition should be based on processed foods from select food groups.

- A. True
- B. False

2. Fill in the blanks using the word bank provided below.

Due to the size and _____ of the _____ at this stage, it is recommended for pregnant women to eat _____ meals and snacks more _____ rather than _____ large _____ per day.

fetus meals	often small	three weight
----------------	----------------	-----------------

3. According to the presentation, _____ protect the body by decreasing inflammation and lowering the oxidation of cells.

- A. Antioxidants
- B. Phytonutrients
- C. Aroma therapy
- D. Quality sleep practices

4. Nutrition provides energy to help the body prepare for labor and delivery.

- A. True
- B. False

5. Which of the following is the recommended amount of water to include each day during the third trimester?

- A. Three to five, eight-ounce glasses
- B. Four to eight, eight-ounce glasses
- C. Five to ten, eight-ounce glasses
- D. Eight to 12, eight-ounce glasses

Pregnancy: Third Trimester

Lesson Overview

Objectives:

1. To describe nutritional needs during pregnancy.
2. To analyze appropriate medical care and good health practices during pregnancy.

Class 1

Essential Questions:

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy in the third trimester?

Step 1: Think about the term written on the board and determine the significance during prenatal development.

Step 2: Access the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for you to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which you can fill in to aid in note taking during the lesson.

Step 3: View the **Prenatal Development** video segment.

- This video is five minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Complete the **Prenatal Development Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 5: Begin the **Pregnancy Timeline: Third Trimester Project**.

- Research third trimester prenatal development and create a timeline.

Step 6: Provide a progress report on the project.

Class 2

Essential Questions:

1. What nutritional needs do pregnant women have during the third trimester?
2. What healthcare practices are important for pregnant women during the third trimester?

Step 1: Answer the question, “why is nutrition important during the third trimester of pregnancy” and share your answer with the class.

Step 2: View the **Factors Impacting Pregnancy: Nutritional** PowerPoint® segment.

- This segment is four slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Factors Impacting Pregnancy: Nutritional Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: View the **Factors Impacting Pregnancy: Healthcare** PowerPoint® segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 5: Complete the **Factors Impacting Pregnancy: Healthcare Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 6: Complete the **Pregnancy Timeline: Third Trimester Project**.

- Research third trimester prenatal development and create a timeline.

Step 7: Turn in your project.

Class 3

Essential Question:

1. What are good health practices for pregnant women during the third trimester?

Step 1: Brainstorm to determine an object you think might weigh the same amount as the items written on the board. Share your reasoning with the class.

Step 2: View the **Factors Impacting Pregnancy: Good Health Practices** PowerPoint® segment.

- This segment is 13 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Factors Impacting Pregnancy: Good Health Practices Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: Begin the **Environmental Hazards During Pregnancy Project**.

- Investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Step 5: Provide which hazard your group will be researching for the project.

Class 4

Step 1: Review for the final assessment.

Step 2: Complete the **Pregnancy: Third Trimester Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Complete the **Environmental Hazards During Pregnancy Project**.

- Investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Step 4: Turn in your project.



Factors Impacting Pregnancy: Nutritional Check for Understanding

Directions:

Answer the following questions.

1. Nutrition should be based on processed foods from select food groups.

- A. True
- B. False

2. Fill in the blanks using the word bank provided below.

Due to the size and _____ of the _____ at this stage, it is recommended for pregnant women to eat _____ meals and snacks more _____ rather than _____ large _____ per day.

fetus meals	often small	three weight
----------------	----------------	-----------------

3. According to the presentation, _____ protect the body by decreasing inflammation and lowering the oxidation of cells.

- A. Antioxidants
- B. Phytonutrients
- C. Aroma therapy
- D. Quality sleep practices

4. Nutrition provides energy to help the body prepare for labor and delivery.

- A. True
- B. False

5. Which of the following is the recommended amount of water to include each day during the third trimester?

- A. Three to five, eight-ounce glasses
- B. Four to eight, eight-ounce glasses
- C. Five to ten, eight-ounce glasses
- D. Eight to 12, eight-ounce glasses

Factors Impacting Pregnancy: Nutritional Check for Understanding Answer Key

Directions:

Answer the following questions.

1. Nutrition should be based on processed foods from select food groups.

- A. True
- B. False**

2. Fill in the blanks using the word bank provided below.

Due to the size and **weight** of the **fetus** at this stage, it is recommended for pregnant women to eat **small** meals and snacks more **often** rather than **three** large **meals** per day.

fetus meals	often small	three weight
----------------	----------------	-----------------

3. According to the presentation, _____ protect the body by decreasing inflammation and lowering the oxidation of cells.

- A. Antioxidants
- B. Phytonutrients**
- C. Aroma therapy
- D. Quality sleep practices

4. Nutrition provides energy to help the body prepare for labor and delivery.

- A. True**
- B. False

5. Which of the following is the recommended amount of water to include each day during the third trimester?

- A. Three to five, eight-ounce glasses
- B. Four to eight, eight-ounce glasses
- C. Five to ten, eight-ounce glasses
- D. Eight to 12, eight-ounce glasses**

Pregnancy: Third Trimester Final Assessment

Directions:

Answer the following questions.

1. The third trimester begins at week _____.
 - A. 26 gestational age or week 28 from conception
 - B. 32 gestational age or week 30 from conception
 - C. 28 gestational age or 26 from conception
 - D. 22 gestational age or 24 from conception
2. The first milk produced by the mammary glands is called _____.
 - A. Oxytocin
 - B. Colostrum
 - C. Pitocin
 - D. Prolactin
3. Braxton-Hicks contractions are the first sign of going into labor.
 - A. True
 - B. False
4. The muscular passage extending from the uterus to the outside of the body is known as which of the following?
 - A. Birth canal
 - B. Uterus
 - C. Fallopian tube
 - D. Womb
5. Select the following statements which apply to monitoring the activity of the fetus.

Active periods include rolling, squirming and kicking

If changes in the pattern of rest and activity are noticed, call a healthcare practitioner right away

It is common for the fetus to rest most of the time during the third trimester

No need to worry if the fetus has not moved in 24 hours

Patterns of movement and activity are evident in the third trimester
6. The average size of a full-term newborn baby is 8 1/2 pounds and 18 inches from head to toe.
 - A. True
 - B. False
7. Fill in the blanks using the word bank provided below.

Healthy _____ habits during the _____ trimester include _____ sugar and empty _____ foods and _____ between 64

and 96 ounces of _____ each day.

calorie drinking	limiting nutrition	third water
---------------------	-----------------------	----------------

8. Select all of the following reasons to attend prenatal care appointments during the third trimester of pregnancy.
- Consistent monitoring of the fetus and the mother
 - Meet with a genetic counselor
 - Monitoring the due date
 - Routine tests for the health and safety of the fetus and the mother
 - Visit with a nutritionist
9. The best practice for answering questions about pregnancy during the third trimester is to consult the internet.
- A. True
 - B. False
10. Which of the following reasons for exercise is NOT recommended by experts during the third trimester of pregnancy.
- A. Possible decrease in the duration of labor
 - B. To help lose weight before labor and delivery
 - C. Reduction of the risk of developing gestational diabetes
 - D. Increased energy, improved sleep and mood
11. Fill in the blanks using the word bank provided below.
- Common pregnancy _____ during the third _____ include shortness of _____, heartburn, frequent _____, swelling of the ankles, _____ and face, hemorrhoids and _____ difficulties.
- | | | |
|-------------------|----------------------|------------------------|
| breath
fingers | sleeping
symptoms | trimester
urination |
|-------------------|----------------------|------------------------|
12. The fetus reaches an approximate length of ten inches from head to rump during the _____.
- A. 36th week
 - B. 28th week
 - C. 38th week
 - D. 40th week
13. By week 29, the bones are fully developed, and the marrow is producing red blood cells.
- A. True
 - B. False

14. Which week during the third trimester marks the time when the fetal organs are ready to function on their own?
A. Week 29
B. Week 34
C. Week 30
D. Week 37

15. The fetus cannot make a firm grasp with the hands until after birth.
A. True
B. False

16. If a woman is at a healthy normal weight prior to pregnancy, what is the recommended amount of weight to gain during pregnancy?
A. 15 to 25 pounds
B. 25 to 35 pounds
C. 11 to 20 pounds
D. 28 to 40 pounds

17. Fill in the blanks using the word bank provided below.
_____ should continue to be _____ on _____ foods from each of the food _____, such as fruits, _____, whole grain products, protein foods and dairy products.

based groups	nutrition vegetables	whole
-----------------	-------------------------	-------

18. If the pregnancy goes beyond 40 weeks, the menstrual period may have been inaccurately reported.
A. True
B. False

19. If a pregnancy goes beyond 40 weeks, a(n) _____ may be performed to measure the growth of the fetus and confirm the due date.
A. Amniocentesis
B. Hormone test
C. Ultrasound
D. Magnetic resonance imaging (MRI)

20. Severe or long lasting headaches are normal during the third trimester and should be expected.
A. True
B. False

Pregnancy: Third Trimester Final Assessment

Answer Key

Directions:

Answer the following questions.

1. The third trimester begins at week _____.
A. 26 gestational age or week 28 from conception
B. 32 gestational age or week 30 from conception
C. 28 gestational age or 26 from conception
D. 22 gestational age or 24 from conception
2. The first milk produced by the mammary glands is called _____.
A. Oxytocin
B. Colostrum
C. Pitocin
D. Prolactin
3. Braxton-Hicks contractions are the first sign of going into labor.
A. True
B. False
4. The muscular passage extending from the uterus to the outside of the body is known as which of the following?
A. Birth canal
B. Uterus
C. Fallopian tube
D. Womb
5. Select the following statements which apply to monitoring the activity of the fetus.
Active periods include rolling, squirming and kicking
If changes in the pattern of rest and activity are noticed, call a healthcare practitioner right away
It is common for the fetus to rest most of the time during the third trimester
No need to worry if the fetus has not moved in 24 hours
Patterns of movement and activity are evident in the third trimester
6. The average size of a full-term newborn baby is 8 1/2 pounds and 18 inches from head to toe.
A. True
B. False
7. Fill in the blanks using the word bank provided below.

Healthy **nutrition** habits during the **third** trimester include **limiting** sugar and empty **calorie** foods and **drinking** between 64 and 96 ounces of **water** each day.

calorie drinking	limiting nutrition	third water
---------------------	-----------------------	----------------

8. Select all of the following reasons to attend prenatal care appointments during the third trimester of pregnancy.
- Consistent monitoring of the fetus and the mother**
 - Meet with a genetic counselor
 - Monitoring the due date**
 - Routine tests for the health and safety of the fetus and the mother**
 - Visit with a nutritionist
9. The best practice for answering questions about pregnancy during the third trimester is to consult the internet.
- A. True
 - B. False**
10. Which of the following reasons for exercise is NOT recommended by experts during the third trimester of pregnancy.
- A. Possible decrease in the duration of labor
 - B. To help lose weight before labor and delivery**
 - C. Reduction of the risk of developing gestational diabetes
 - D. Increased energy, improved sleep and mood
11. Fill in the blanks using the word bank provided below.
- Common pregnancy **symptoms** during the third **trimester** include shortness of **breath**, heartburn, frequent **urination**, swelling of the ankles, **fingers** and face, hemorrhoids and **sleeping** difficulties.

breath fingers	sleeping symptoms	trimester urination
-------------------	----------------------	------------------------

12. The fetus reaches an approximate length of ten inches from head to rump during the _____.
- A. 36th week
 - B. 28th week**
 - C. 38th week
 - D. 40th week
13. By week 29, the bones are fully developed, and the marrow is producing red blood cells.
- A. True**

B. False

14. Which week during the third trimester marks the time when the fetal organs are ready to function on their own?

- A. Week 29
- B. Week 34
- C. Week 30
- D. Week 37**

15. The fetus cannot make a firm grasp with the hands until after birth.

- A. True
- B. False**

16. If a woman is at a healthy normal weight prior to pregnancy, what is the recommended amount of weight to gain during pregnancy?

- A. 15 to 25 pounds
- B. 25 to 35 pound**
- C. 11 to 20 pounds
- D. 28 to 40 pounds

17. Fill in the blanks using the word bank provided below.

Nutrition should continue to be **based** on **whole** foods from each of the food **groups**, such as fruits, **vegetables**, whole grain products, protein foods and dairy products.

based groups	nutrition vegetables	whole
-----------------	-------------------------	-------

18. If the pregnancy goes beyond 40 weeks, the menstrual period may have been inaccurately reported.

- A. True**
- B. False

19. If a pregnancy goes beyond 40 weeks, a(n) _____ may be performed to measure the growth of the fetus and confirm the due date.

- A. Amniocentesis
- B. Hormone test
- C. Ultrasound**
- D. Magnetic resonance imaging (MRI)

20. Severe or long lasting headaches are normal during the third trimester and should be expected.

- A. True
- B. False**

Pregnancy: Third Trimester Key Concepts

Prenatal Development

Essential Questions

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy during the third trimester?

The Third Trimester

- Begins at week 28, _____ age or week 26 from _____

Signs and Symptoms of Pregnancy

- Third trimester signs and _____ of pregnancy include:
 - shortness of breath
 - _____
 - _____ urination
 - swelling of the _____, fingers and face
 - hemorrhoids
 - sleeping _____
 - tender breasts
 - _____:
 - often begins to _____ from the breasts during the third trimester
 - is the _____ milk
 - is full of _____ and other important substances which help build a healthy _____ system, stomach, intestines and digestive system

Braxton-Hicks Contractions

- Braxton-Hicks _____:
 - are _____ during the third trimester
 - are named after the _____ who first described them
 - involve a _____ of the muscles surrounding the uterus
 - may lead a pregnant woman to think _____ is starting
 - are _____ from labor contractions
 - come and _____
 - may be _____ but are not usually painful

Week 28

- Weight is _____
- Skin is _____ out
- Organs are _____
- _____ are partially open

- Eyelashes have _____
- Length from head to _____ is approximately ten inches

Weeks 29-33

- Bones are fully developed but soft and _____
- _____ is producing red blood cells
- Eyes are _____ open
- Fetus weighs about _____ pounds
- Central _____ system can control body temperature
- Toenails are _____
- Body begins _____ minerals
- _____ begins to fall off
- Fetus is practicing _____
- Pupils can _____, dilate and detect light

Weeks 34-36

- Fingernails have reached the _____
- _____ begins to thicken
- Fetus is _____ approximately one-half pound per week
- Head to rump length is approximately _____ inches

Monitoring Fetal Movement

- _____ of fetus:
 - will be _____
 - includes _____ of movement and _____
 - includes rolling, _____ and kicking
- Changes in patterns is cause for _____
- Noticeable changes should be _____ to healthcare practitioner

Weeks 37-38

- _____ are ready to function on their own
- Fetus may begin the _____ into the birth canal
 - the birth canal is the _____ extending from the uterus to the outside of the body
- Fetus develops a firm _____
- _____ have reached the tips of the toes
- Most of the _____ has been shed
- Fetus weighs approximately _____ - and one-half pounds

Weeks 39-40

- Fetus is considered _____
- Chest is becoming more _____

- Placenta continues to supply _____
- _____ is reached at 40 weeks
- Average size is _____ - and one-half pounds and about _____ inches from head to toe

Factors Impacting Pregnancy: Nutritional

Essential Question

1. What nutritional needs do pregnant women have during the third trimester?

Nutrition

- Continues to be important during the _____ trimester
- Provides _____ to help the body prepare for _____ and delivery
- Should continue to be based on _____ foods from each of the food groups
- Healthy nutrition _____ include:
 - limiting _____ and empty calorie foods
 - drinking 64 – _____ ounces of water each day

Factors Impacting Pregnancy: Healthcare

Essential Question

1. What healthcare practices are important for pregnant women during the third trimester?

Medical Care

- During the _____ trimester includes:
 - attending prenatal _____ appointments
 - having _____, blood pressure and urine checked
 - checking the _____ and heart rate of the fetus
 - routine testing
 - group B streptococcus (_____) test is vital to have performed for the safety of the fetus
 - this test checks for _____ which may be harmful to the fetus
 - monitoring the _____ date

Important Precautions

- Include:
 - maintaining _____ of normal pregnancy symptoms
 - understanding and _____ public warnings
 - monitoring fetal _____

Factors Impacting Pregnancy: Good Health Practices

Essential Question

1. What are good health practices for pregnant women during the third trimester?

Good Health Practices

- Include:
 - daily _____
 - adequate and _____ sleep
 - abstinence from _____ hazards
 - healthy _____ gain

Daily Exercise

- During pregnancy has many benefits including:
 - reduction of the risk of excessive _____ gain
 - reduction of the risk of _____ diabetes
 - keeping the _____ and lungs healthy
 - increased _____
 - improved _____ and mood
 - possible decrease in the _____ of labor
 - faster recovery after _____
- Recommended exercise _____ include:
 - two hours and _____ minutes of moderate-intensity aerobic activity
 - _____ exercises

Sleep

- During the third trimester
 - must be _____ and quality
 - is affected by _____ and bodily discomforts
 - discomforts include:
 - increased _____ on the bladder and diaphragm
 - increased _____ rate
 - _____ and pains
 - heartburn
 - movement of the _____
 - anxiety and _____ dreams
 - concerns about life _____ due to becoming a parent

Sleep Strategies

- Sleep may be _____ by:
 - eliminating _____ drinks
 - eating the last meal or _____ a few hours before bed
 - watching _____ intake before bed

- using extra _____ to support the changing body
- developing a _____ sleep cycle
- implementing _____ time
- participating in childbirth and _____ classes
- practicing stress _____ techniques

Environmental Hazards

- Abstaining from environmental _____ includes avoiding:
 - drugs
 - _____
 - tobacco
 - other _____ substances
 - health consequences caused by these _____ may have serious, irreversible effects

Healthy Weight Gain (Part 1)

- Regular _____ of quality nutrition and exercise routines encourage _____ weight gain
 - if pre-pregnancy weight is healthy and _____, the recommended weight gain is _____ to 30 pounds
 - if pre-pregnancy weight is _____, the recommended weight gain is _____ to 40 pounds
 - if pre-pregnancy weight is _____, the recommended weight gain is _____ to 25 pounds
 - if pre-pregnancy weight is _____, the recommended weight gain is _____ to 20 pounds

Healthy Weight Gain (Part 2)

- Pregnancy _____ is distributed as follows:
 - fetus: _____ to eight pounds
 - _____: one to one- and one-half pounds
 - amniotic fluid: two pounds
 - _____ growth: two pounds
 - breast _____: two pounds
 - blood and bodily _____: eight pounds
 - woman's body _____ and fat: seven pounds

Pregnancy: Third Trimester Key Concepts

Answer Key

Prenatal Development

Essential Questions

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy during the third trimester?

The Third Trimester

- Begins at week 28, gestational age or week 26 from conception

Signs and Symptoms of Pregnancy

- Third trimester signs and symptoms of pregnancy include:
 - shortness of breath
 - heartburn
 - frequent urination
 - swelling of the ankles, fingers and face
 - hemorrhoids
 - sleeping difficulties
 - tender breasts
 - colostrum:
 - often begins to drip from the breasts during the third trimester
 - is the first milk
 - is full of nutrients and other important substances which help build a healthy immune system, stomach, intestines and digestive system

Braxton-Hicks Contractions

- Braxton-Hicks contractions:
 - are common during the third trimester
 - are named after the doctor who first described them
 - involve a tightening of the muscles surrounding the uterus
 - may lead a pregnant woman to think labor is starting
 - are different from labor contractions
 - come and go
 - may be uncomfortable but are not usually painful

Week 28

- Weight is increasing
- Skin is smoothing out
- Organs are maturing
- Eyelids are partially open

- Eyelashes have **formed**
- Length from head to **rump** is approximately ten inches

Weeks 29-33

- Bones are fully developed but soft and **pliable**
- **Marrow** is producing red blood cells
- Eyes are **wide** open
- Fetus weighs about **three** pounds
- Central **nervous** system can control body temperature
- Toenails are **visible**
- Body begins **absorbing** minerals
- **Lanugo** begins to fall off
- Fetus is practicing **breathing**
- Pupils can **constrict**, dilate and detect light

Weeks 34-36

- Fingernails have reached the **fingertips**
- **Vernix** begins to thicken
- Fetus is **gaining** approximately one-half pound per week
- Head to rump length is approximately **12** inches

Monitoring Fetal Movement

- **Movement** of fetus:
 - will be **evident**
 - includes **patterns** of movement and **inactivity**
 - includes rolling, **squirming** and kicking
- Changes in patterns is cause for **concern**
- Noticeable changes should be **reported** to healthcare practitioner

Weeks 37-38

- **Organs** are ready to function on their own
- Fetus may begin the **descent** into the birth canal
 - the birth canal is the **muscular passage** extending from the uterus to the outside of the body
- Fetus develops a firm **grasp**
- **Toenails** have reached the tips of the toes
- Most of the **lanugo** has been shed
- Fetus weighs approximately **six-** and one-half pounds

Weeks 39-40

- Fetus is considered **full term**
- Chest is becoming more **prominent**

- Placenta continues to supply **antibodies**
- **Due date** is reached at 40 weeks
- Average size is **seven**- and one-half pounds and about **20** inches from head to toe

Factors Impacting Pregnancy: Nutritional

Essential Question

1. What nutritional needs do pregnant women have during the third trimester?

Nutrition

- Continues to be important during the **third** trimester
- Provides **energy** to help the body prepare for **labor** and delivery
- Should continue to be based on **whole** foods from each of the food groups
- Healthy nutrition **habits** include:
 - limiting **sugar** and empty calorie foods
 - drinking 64 – **96** ounces of water each day

Factors Impacting Pregnancy: Healthcare

Essential Question

1. What healthcare practices are important for pregnant women during the third trimester?

Medical Care

- During the **third** trimester includes:
 - attending prenatal **care** appointments
 - having **weight**, blood pressure and urine checked
 - checking the **growth** and heart rate of the fetus
 - routine testing
 - group B streptococcus (**strep**) test is vital to have performed for the safety of the fetus
 - this test checks for **bacteria** which may be harmful to the fetus
 - monitoring the **due** date

Important Precautions

- Include:
 - maintaining **awareness** of normal pregnancy symptoms
 - understanding and **heeding** public warnings
 - monitoring fetal **movements**

Factors Impacting Pregnancy: Good Health Practices

Essential Question

1. What are good health practices for pregnant women during the third trimester?

Good Health Practices

- Include:
 - daily **exercise**
 - adequate and **quality** sleep
 - abstinence from **environmental** hazards
 - healthy **weight** gain

Daily Exercise

- During pregnancy has many benefits including:
 - reduction of the risk of excessive **weight** gain
 - reduction of the risk of **gestational** diabetes
 - keeping the **heart** and lungs healthy
 - increased **energy**
 - improved **sleep** and mood
 - possible decrease in the **duration** of labor
 - faster recovery after **childbirth**
- Recommended exercise **routines** include:
 - two hours and **30** minutes of moderate-intensity aerobic activity
 - **strengthening** exercises

Sleep

- During the third trimester
 - must be **adequate** and quality
 - is affected by **changes** and bodily discomforts
 - discomforts include:
 - increased **pressure** on the bladder and diaphragm
 - increased **heart** rate
 - **aches** and pains
 - heartburn
 - movement of the **fetus**
 - anxiety and **disturbing** dreams
 - concerns about life **changes** due to becoming a parent

Sleep Strategies

- Sleep may be **improved** by:
 - eliminating **caffeinated** drinks
 - eating the last meal or **snack** a few hours before bed
 - watching **fluid** intake before bed
 - using extra **pillows** to support the changing body
 - developing a **regular** sleep cycle
 - implementing **transition** time
 - participating in childbirth and **parenting** classes

- practicing stress **management** techniques

Environmental Hazards

- Abstaining from environmental **hazards** includes avoiding:
 - drugs
 - **alcohol**
 - tobacco
 - other **harmful** substances
 - health consequences caused by these **substances** may have serious, irreversible effects

Healthy Weight Gain (Part 1)

- Regular **patterns** of quality nutrition and exercise routines encourage **healthy** weight gain
 - if pre-pregnancy weight is healthy and **normal**, the recommended weight gain is **25** to 30 pounds
 - if pre-pregnancy weight is **underweight**, the recommended weight gain is **28** to 40 pounds
 - if pre-pregnancy weight is **overweight**, the recommended weight gain is **15** to 25 pounds
 - if pre-pregnancy weight is **obese**, the recommended weight gain is **11** to 20 pounds

Healthy Weight Gain (Part 2)

- Pregnancy **weight** is distributed as follows:
 - fetus: **six** to eight pounds
 - **placenta**: one to one- and one-half pounds
 - amniotic fluid: two pounds
 - **uterus** growth: two pounds
 - breast **growth**: two pounds
 - blood and bodily **fluids**: eight pounds
 - woman's body **protein** and fat: seven pounds



Pregnancy: Third Trimester

Lesson Overview

Media: Hybrid (5 minutes/32 slides)

Seat Time: 4 Classes | 200 minutes teaching

Goal:

To identify the signs and stages of pregnancy and explore the effects of various factors on pregnancy and fetal development.

Description:

This lesson guides students through the third trimester of pregnancy. Students will investigate topics, such as the stages of prenatal development, physical signs and symptoms of pregnancy, the significance of proper nutrition for both the pregnant woman and the growing fetus, the importance of maintaining a healthy environment, the impact of proper health care and good health practices during the third trimester.

Objectives:

1. To describe nutritional needs during pregnancy.
2. To analyze appropriate medical care and good health practices during pregnancy.

Lesson Plan

Class 1

Class Overview:

Prenatal Development Video Segment

Action Plan

Vocabulary Handout

Key Concepts

Prenatal Development Check for Understanding

Pregnancy Timeline: Third Trimester Project

Essential Questions:

1. What fetal developmental milestones take place during the third trimester?
2. What are the signs and symptoms of pregnancy in the third trimester?

Step 1: Bell Ringer:

- Display the term, “vernix caseosa” and have students explain the significance of vernix caseosa during prenatal development.

Step 2: Distribute the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for students to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which students can fill in to aid in note taking during the lesson.

Step 3: Show the *Prenatal Development* video segment.

- This video is five minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Administer the **Prenatal Development Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 5: Students should begin the **Pregnancy Timeline: Third Trimester Project**.

- Students will research third trimester prenatal development and create a timeline.

Step 6: Exit Ticket:

- Students should provide a progress report on their project.

Class 2

Class Overview:

Factors Impacting Pregnancy: Nutritional Microsoft® PowerPoint® Segment

Factors Impacting Pregnancy: Healthcare Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Nutritional Check for Understanding

Factors Impacting Pregnancy: Healthcare Check for Understanding

Pregnancy Timeline: Third Trimester Project

Essential Questions:

1. What nutritional needs do pregnant women have during the third trimester?
2. What healthcare practices are important for pregnant women during the third trimester?

Step 1: Bell Ringer:

- Post the question, “why is nutrition important during the third trimester of pregnancy” and have students share their answers with the class.

Step 2: Show the *Factors Impacting Pregnancy: Nutrition* PowerPoint® segment.

- This segment is four slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Nutrition Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Show the *Factors Impacting Pregnancy: Healthcare* PowerPoint® segment.

- This segment is 11 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 5: Administer the **Factors Impacting Pregnancy: Healthcare Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 6: Students should complete the **Pregnancy Timeline: Third Trimester Project**.

- Students will research third trimester prenatal development and create a timeline.

Step 7: Exit Ticket:

- Have students turn in their projects.

Class 3

Class Overview:

Factors Impacting Pregnancy: Good Health Practices Microsoft® PowerPoint® Segment

Action Plan

Key Concepts

Factors Impacting Pregnancy: Good Health Practices Check for Understanding

Environmental Hazards During Pregnancy Project

Essential Question:

1. What are good health practices for pregnant women during the third trimester?

Step 1: Bell Ringer:

- Using the weight gain information from slides 31 and 32, write the locations (fetus, placenta, breast growth, etc.) on the board and have students brainstorm to determine an object they think might weigh the same amount. Objects might include a gallon jug of water for the fetus, a one pound bag of sugar for the placenta or a two pound hand weight for the amniotic fluid.

Step 2: Show the *Factors Impacting Pregnancy: Good Health Practices* PowerPoint® segment.

- This segment is 13 slides long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Factors Impacting Pregnancy: Good Health Practices Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should begin the **Environmental Hazards During Pregnancy Project**.

- Students will investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Step 5: Exit Ticket:

- Students should provide which hazard their group will be researching for the project.

Class 4

Class Overview:

Action Plan

Pregnancy: Third Trimester Final Assessment

Environmental Hazards During Pregnancy Project

Step 1: Bell Ringer:

- Students should review for the final assessment.

Step 2: Administer the **Pregnancy: Third Trimester Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Students should complete the **Environmental Hazards During Pregnancy Project**.

- Students will investigate environmental hazards during pregnancy and create a public service announcement (PSA).

Step 4: Exit Ticket:

- Have students turn in their projects.

Project Overview

Pregnancy Timeline: Third Trimester

Students will research third trimester prenatal development and create a timeline.

Accommodations:

Provide students with a list of resources. Also allow additional time for the project to be completed.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students take the information gathered and create a short video to further illustrate their timeline.

Environmental Hazards During Pregnancy

Students will investigate environmental hazards which are harmful during pregnancy and create a public service announcement (PSA).

Accommodations:

Provide students with a list of resources and allow extra time as needed for individual student needs.

Modifications:

Adjust the amount of information required according to the individual needs of students.

Extension:

Have students prepare a script and record their PSA. If possible, have students send their recordings to a radio station for public broadcast.

Career & Technical Student Organizations

FCCLA

Focus on Children
Nutrition & Wellness Event

Career Connections

Using the **Career Connections Activity** allows students to explore careers associated with this lesson by viewing career interviews with various industry professionals. The career interviews are located on the Select Playlist drop down menu on the lesson page. See the **Career Connections Activity** for more details.

Eric Hentges, Ph.D., Executive Director, USDA Center for Nutrition Policy & Promotion

Gary A. Taubes, Author, Co-founder of Nutrition Science Initiative

Jennifer Gorman, MS, RD, LD, Wellness Manager, United Supermarkets

Environmental Hazards During Pregnancy

Project Overview:

You will select and investigate an environmental hazards which can be harmful during pregnancy and create a public service announcement (PSA).

Directions:

1. Your instructor will divide the class into groups of three or four.
2. In your group, select a specific substance or hazard to investigate.
3. Using all available resources, research your assigned topic and gather the following information:
 - Name or title of the substance
 - Possible health consequences for the pregnant woman
 - Possible health consequence to the developing fetus
 - Relevant statistics
 - Expected implications or consequences to the family
 - Treatment and care options
 - Community resources which provide help and support to families affected by the environmental hazard or substance
 - At least three graphics or pictures
 - A list of references
4. Using your findings, create a PSA to inform members of the community about the consequences of contact with environmental hazards during pregnancy. Your PSA may be in the form of a poster, billboard, social media advertisement or audio/video script to be used on radio or television.
5. Be prepared to share your PSA with the class.
6. Submit your completed project as directed.

Examples of substances:

- Alcohol
- Heavy metals
- Home and garden maintenance products
- Illicit drugs
 - cocaine
 - heroine
 - methamphetamines
- Nicotine (Tobacco Products and e-Cigarettes)

- Marijuana
- Organic Solvents
- Over-the-Counter Drugs
- Pesticides
- Prescription Drugs

Rubric

Description	Possible Points	Your Score
Research & Organization: <ul style="list-style-type: none"> • Proper research was conducted to complete the assignment • Sources were cited appropriately based on instructions provided • Information was presented in a logical organized manner 	35	
Concept & Understanding: <ul style="list-style-type: none"> • Understanding of the concept is clearly evident • Effective strategies were used to achieve the end product • Logical thinking was utilized to arrive at the conclusion 	35	
Creativity/Craftmanship: <ul style="list-style-type: none"> • End product is unique and reflects the student's or group's individuality • End product is clearly high quality 	15	
Production/Effort: <ul style="list-style-type: none"> • Class time provided for the project was used efficiently • Time and effort are evident in the execution of the end product 	15	
Total Points	100	

Labor & Delivery Methods

Lesson Overview

Objectives:

1. To investigate methods of care surrounding labor and delivery.
2. To analyze the process of labor and delivery.

Class 1

Essential Questions:

1. Why is self-education important when choosing a labor and delivery method?
2. What influences childbirth methods?

Step 1: Review the **Birth Options: Clara's Story Student Handout**. Participate in a class discussion about the birth options described in the story.

Step 2: Access the **Action Plan, Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for you to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which you can fill in to aid in note taking during the lesson.

Step 3: View the **Birth Options** video segment.

- This video is 11 minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Complete the **Birth Options Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 5: Begin the **Birth Methods Project**.

- Compare methods of childbirth and create a graphic to determine the best method of childbirth.

Step 6: Provide a progress report on the project.

Class 2

Essential Questions:

1. What types of practitioners care for pregnant women using the natural model of care?
2. What are natural ways to cope with labor?

Step 1: Brainstorm and note the benefits and drawbacks of the natural models of childbirth care.

Step 2: View the **Models of Care: Natural** video segment.

- This video is 13 minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Models of Care: Natural Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: Continue working on the **Birth Methods Project**.

- Compare methods of childbirth and create a graphic to determine the best method of childbirth.

Step 5: Write down one new concept you learned during class and turn it in.

Class 3

Essential Questions:

1. What types of practitioners care for pregnant women using the medical model of care?
2. What types of medical interventions are available to assist with labor and delivery?

Step 1: Brainstorm and note the benefits and drawbacks of the medical model of childbirth care.

Step 2: View the ***Models of Care: Medical*** video segment.

- This video is 14 minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Models of Care: Medical Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: Complete the **Birth Methods Project**.

- Compare methods of childbirth and create a graphic to determine the best method of childbirth.

Step 5: Begin the **History of Childbirth in the United States Project**.

- Research the history of childbirth in the United States and develop a timeline, based on a 50-year increment.

Step 6: Write a statement to explain how your ideas about the benefits and drawbacks of the medical model might have changed after viewing the segment.

Class 4

Essential Questions:

1. What are the signs of labor?
2. What are the stages of labor?

Step 1: Write down the answer to the question, “how will someone know when they are in labor” and turn in.

Step 2: View the ***Stages of Labor*** video segment.

- This video is seven minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Complete the **Stages of Labor Check for Understanding**.

- This Check for Understanding is a short review of the content presented in the segment.

Step 4: Continue the **History of Childbirth in the United States Project**.

- Research the history of childbirth in the United States and develop a timeline, based on a 50-year increment.

Step 5: Provide a progress report on your project.

Class 5

Step 1: Review for the assessment.

Step 2: Complete the **Labor & Delivery Methods Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Complete the **History of Childbirth in the United States Project**.

- Research the history of childbirth in the United States and develop a timeline, based on a 50-year increment.

Step 4: Submit your project.

Labor & Delivery Methods

Lesson Overview

Media: Video (46 minutes)

Seat Time: 5 Classes | 250 minutes teaching

Goal:

To investigate labor and delivery methods.

Description:

This lesson introduces students to the methods of care surrounding childbirth. Topics address the options for choosing an environment in which to give birth. Both the medical and the natural model are discussed. Students will also be presented with information about the stages of labor and delivery.

Objectives:

1. To investigate methods of care surrounding labor and delivery.
2. To analyze the process of labor and delivery.

Lesson Plan

Class 1

Class Overview:

Birth Options Video Segment

Action Plan

Vocabulary Handout

Key Concepts

Birth Options: Clara's Story Student Handout

Birth Options Check for Understanding

Birth Methods Project

Essential Questions:

1. Why is self-education important when choosing a labor and delivery method?
2. What influences childbirth methods?

Step 1: Bell Ringer:

- Distribute the **Birth Options: Clara's Story Student Handout**. Instruct students to read the story either quietly or take turns reading out loud. Lead students to discuss the birth options described in the story.

Step 2: Distribute the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.

- The **Action Plan** lays out a list of tasks for students to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which students can fill in to aid in note taking during the lesson.

Step 3: Show the **Birth Options** video segment.

- This video is 11 minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 4: Administer the **Birth Options Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 5: Students should begin the **Birth methods Project**.

- Students will compare methods of childbirth and create a graphic to determine the best method of childbirth.

Step 6: Exit Ticket:

- Have students provide a progress report on their project.

Class 2

Class Overview:

Models of Care: Natural Video Segment

Action Plan

Key Concepts

Models of Care: Natural Check for Understanding

Birth Methods Project

Essential Questions:

1. What types of practitioners care for pregnant women using the natural model of care?
2. What are natural ways to cope with labor?

Step 1: Bell Ringer:

- Have students brainstorm and note the benefits and drawbacks of the natural models of childbirth care.

Step 2: Show the *Models of Care: Natural* video segment.

- This video is 13 minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Models of Care: Natural Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should continue working on the **Birth Methods Project**.

- Students will compare methods of childbirth and create a graphic to determine the best method of childbirth.

Step 5: Exit Ticket:

- Have students write down one new concept they learned during class. Students should turn it in prior to leaving class.

Class 3

Class Overview:

Models of Care: Medical Video Segment

Action Plan

Key Concepts

Models of Care: Medical Check for Understanding

Birth Methods Project

History of Childbirth in the United States Project

Essential Questions:

1. What types of practitioners care for pregnant women using the medical model of care?
2. What types of medical interventions are available to assist with labor and delivery?

Step 1: Bell Ringer:

- Have students brainstorm and note the benefits and drawbacks of the medical models of childbirth care.

Step 2: Show the *Models of Care: Medical* video segment.

- This video is 14 minutes long.

- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Models of Care: Medical Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should complete the **Birth Methods Project**.

- Students will compare methods of childbirth and create a graphic to determine the best method of childbirth.

Step 5: Students should begin the **History of Childbirth in the United States Project**.

- Students will research the history of childbirth in the United States and develop a timeline, based on a 50-year increment.

Step 6: Exit Ticket:

- Have students write a statement to explain how their ideas about the benefits and drawbacks of the medical model might have changed after viewing the segment.

Class 4

Class Overview:

Stages of Labor Video Segment

Action Plan

Key Concepts

Stages of Labor Check for Understanding

History of Childbirth in the United States Project

Essential Questions:

1. What are the signs of labor?
2. What are the stages of labor?

Step 1: Bell Ringer:

- Post the question, “how will someone know when they are in labor” and have students write down and turn in their answers.

Step 2: Show the ***Stages of Labor*** video segment.

- This video is seven minutes long.
- Be sure to utilize the **Key Concepts** for this segment of the lesson.

Step 3: Administer the **Stages of Labor Check for Understanding**.

- The Check for Understanding is a short review of the content presented in the segment.

Step 4: Students should begin the **History of Childbirth in the United States Project**.

- Students will research the history of childbirth in the United States and develop a timeline, based on a 50-year increment.

Step 5: Exit Ticket:

- Students should provide a progress report on their project.

Class 4

Class Overview:

Action Plan

Labor & Delivery Methods Final Assessment

History of Childbirth in the United States Project

Step 1: Bell Ringer:

- Students should review for the assessment.

Step 2: Administer the **Labor & Delivery Methods Final Assessment**.

- The Final Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Students should complete the **History of Childbirth in the United States Project**.

- Students will research the history of childbirth in the United States and develop a timeline, based on a 50-year increment.

Step 4: Exit Ticket:

- Have students submit their projects.

Project Overview

History of Childbirth in the United States

Students will research the history of childbirth in the United States and develop a timeline, based on a 50-year increment.

Accommodations:

Provide students with a list of resources to assist in their investigation of information. Provide students additional time as needed.

Modifications:

Provide students with a list of videos they can watch for their assigned time period. Have students bring in an object or find images which represent a method of childbirth. An example might be an image of a bath tub. Allow students to orally explain what their item represents and how the item was used during labor and delivery.

Extension:

Instruct students to research a family member or famous person to find out information on their birth story. Have students create a presentation using their findings.

Career & Technical Student Organizations

FCCLA

Focus on Children

Nutrition & Wellness Event

Career Connections

Using the **Career Connections Activity** allows students to explore careers associated with this lesson by viewing career interviews with various industry professionals. The career interviews are located on the Select Playlist drop down menu on the lesson page. See the **Career Connections Activity** for more details.

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Birth Options Check for Understanding

Directions:

Answer the following questions.

1. A significant part of the preparation for childbirth is education.
 - A. True
 - B. False
2. In addition to care, the environment in which the birth takes place greatly affects birth outcomes.
 - A. True
 - B. False
3. What is currently the most common place to give birth in the United States?
 - A. Hospital
 - B. Freestanding birthing center
 - C. At home
 - D. In the home of a loved one
4. Approximately _____ of births in the United States occur in the hospital.
 - A. 75 percent
 - B. 65 percent
 - C. 98 percent
 - D. 90 percent
5. Fill in the blanks using the word bank provided below.

Practitioners who have the _____ mindset employ _____ and practices which enable females to move through the _____ of labor according to _____ processes. These professionals specialize in working with _____ pregnancies and often hold the title of _____.

healthy methods	midwife natural	physiological stages
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Models of Care: Natural Check for Understanding

Directions:

Answer the following questions.

1. The natural model of pregnancy care promotes the idea of childbirth as a _____ process of life.
 - A. Physiological
 - B. Psychological
 - C. Physical
 - D. Emotional
2. Midwives specialize in working with high-risk pregnancies.
 - A. True
 - B. False
3. Select all of the following natural ways to cope with labor.
 - Anesthesia
 - Epidurals
 - Inductions
 - Massages
 - Medications
 - Movement and various positioning
 - Relaxation techniques
 - Responding to pain and comfort cues
 - Water
 - Words of encouragement from significant others
4. Movement during labor prevents the contractions to accomplish the goal of moving the fetus through the body.
 - A. True
 - B. False
5. The role of a doula during labor and delivery is to support the laboring mother in the following ways.
 - A. Emotionally and mentally
 - B. Physically
 - C. Educationally
 - D. All of the choices are correct

Birth Options Check for Understanding Answer Key

Directions:

Answer the following questions.

1. A significant part of the preparation for childbirth is education.
A. True
B. False
2. In addition to care, the environment in which the birth takes place greatly affects birth outcomes.
A. True
B. False
3. What is currently the most common place to give birth in the United States?
A. Hospital
B. Freestanding birthing center
C. At home
D. In the home of a loved one
4. Approximately _____ of births in the United States occur in the hospital.
A. 75 percent
B. 65 percent
C. 98 percent
D. 90 percent
5. Fill in the blanks using the word bank provided below.
Practitioners who have the **natural** mindset employ **methods** and practices which enable females to move through the **stages** of labor according to **physiological** processes. These professionals specialize in working with **healthy** pregnancies and often hold the title of **midwife**.

healthy methods	midwife natural	physiological stages
--------------------	--------------------	-------------------------



Models of Care: Natural Check for Understanding Answer Key

Directions:

Answer the following questions.

1. The natural model of pregnancy care promotes the idea of childbirth as a _____ process of life.
 - A. Physiological**
 - B. Psychological
 - C. Physical
 - D. Emotional
2. Midwives specialize in working with high-risk pregnancies.
 - A. True
 - B. False**
3. Select all of the following natural ways to cope with labor.
 - Anesthesia
 - Epidurals
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 - Massages**
 - Medications
 - Movement and various positioning**
 - Relaxation techniques**
 - Responding to pain and comfort cues**
 - Water**
 - Words of encouragement from significant others**
4. Movement during labor prevents the contractions to accomplish the goal of moving the fetus through the body.
 - A. True
 - B. False**
5. The role of a doula during labor and delivery is to support the laboring mother in the following ways.
 - A. Emotionally and mentally
 - B. Physically
 - C. Educationally
 - D. All of the choices are correct**

Models of Care: Medical Check for Understanding

Directions:

Answer the following questions.

1. C-sections currently account for approximately 25 percent of births in the United States.

- A. True
- B. False

2. The medical model of pregnancy care uses _____ as needed to assist the labor and delivery of a baby.

- A. Interceptions
- B. Interventions
- C. Manipulations
- D. Practicums

3. Select all of the following medical ways to cope with labor.

- Anesthesia
- Epidurals
- Inductions
- Massages
- Medications
- Movement and various positioning
- Relaxation techniques
- Water

4. Fill in the blanks using the word bank provided below.

Healthcare _____ can often identify _____ situations in the _____ stages of pregnancy. In these cases, medical _____ may be needed and can be _____ in bringing a baby _____ into the world.

early high-risk	instrumental interventions	practitioners safely
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5. A birth plan helps accomplish the following _____.

- A. Helps provide a means for pregnant females to express needs, desires and expectations to the attending healthcare practitioner
- B. Allows for open communication between practitioners and pregnant patients
- C. May help alerts pregnant patients if desired services are unavailable
- D. All of the choices are correct

Models of Care: Medical Check for Understanding Answer Key

Directions:

Answer the following questions.

1. C-sections currently account for approximately 25 percent of births in the United States.

A. True

B. False

2. The medical model of pregnancy care uses _____ as needed to assist the labor and delivery of a baby.

A. Interceptions

B. Interventions

C. Manipulations

D. Practicums

3. Select all of the following medical ways to cope with labor.

Anesthesia

Epidurals

Inductions

Massages

Medications

Movement and various positioning

Relaxation techniques

Water

4. Fill in the blanks using the word bank provided below.

Healthcare **practitioners** can often identify **high-risk** situations in the **early** stages of pregnancy. In these cases, medical **interventions** may be needed and can be **instrumental** in bringing a baby **safely** into the world.

early high-risk	instrumental interventions	practitioners safely
--------------------	-------------------------------	-------------------------

5. A birth plan helps accomplish the following _____.

A. Helps provide a means for pregnant females to express needs, desires and expectations to the attending healthcare practitioner

B. Allows for open communication between practitioners and pregnant patients

C. May help alerts pregnant patients if desired services are unavailable

D. All of the choices are correct

Stages of Labor Check for Understanding

Directions:

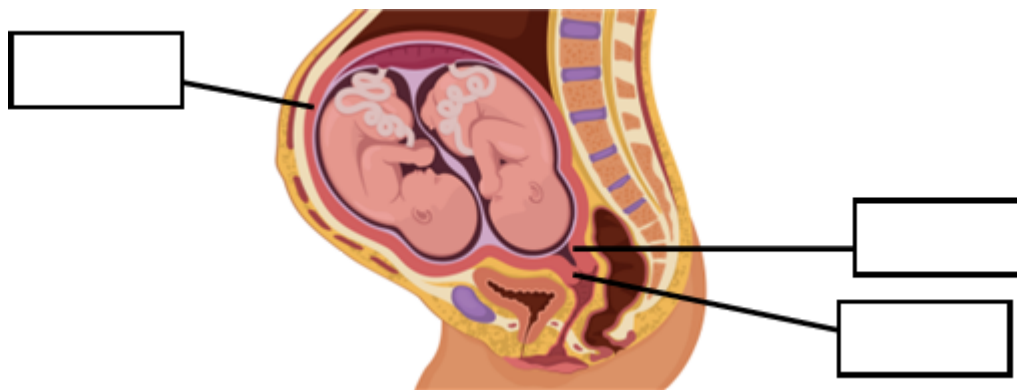
Answer the following questions.

1. Match the following terms to their descriptions.

Description	Term
Opening and expanding of the cervix during labor	
When the head of the fetus becomes and stays visible through the opening of the vagina	
When the cervix stretches and thins	
When the fetus descends from the uterus to the birth canal	

Crowning	Dilation	Effacement	Transition
----------	----------	------------	------------

2. Using the word bank provided, label the following diagram of the female anatomy.



cervix	uterus	vagina
--------	--------	--------

3. The stage in which the fetus begins to descend into the birth canal is known as which of the following?

- A. Perineum
- B. Translation
- C. Transition
- D. Effacement

4. The last stage of labor is the delivery of the baby.

- A. True
- B. False

5. Fill in the blanks using the word bank provided below.

The _____ is the _____ developed by the body to _____ and protect a new life. Once the job of the placenta is complete, it is no longer

needed. After birth, the placenta is also _____ to be sure it is fully intact. If _____ of placenta tissue are left in the _____, infection and bleeding result.

fragments inspected	nourish organ	placenta uterus
------------------------	------------------	--------------------

Stages of Labor Check for Understanding Answer Key

Directions:

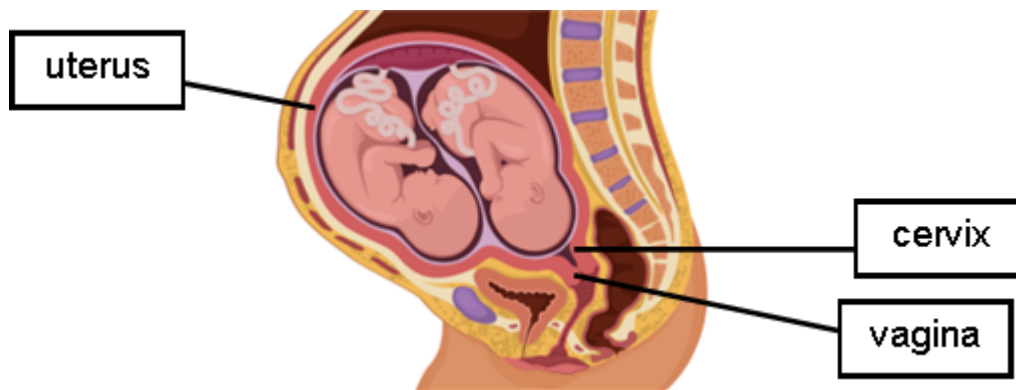
Answer the following questions.

1. Match the following terms to their descriptions.

Description	Term
Opening and expanding of the cervix during labor	Dilation
When the head of the fetus becomes and stays visible through the opening of the vagina	Crowning
When the cervix stretches and thins	Effacement
When the fetus descends from the uterus to the birth canal	Transition

Crowning	Dilation	Effacement	Transition
----------	----------	------------	------------

2. Using the word bank provided, label the following diagram of the female anatomy.



cervix	uterus	vagina
--------	--------	--------

3. The stage in which the fetus begins to descend into the birth canal is known as which of the following?

- A. Perineum
- B. Translation
- C. Transition**
- D. Effacement

4. The last stage of labor is the delivery of the baby.

- A. True
- B. False**

5. Fill in the blanks using the word bank provided below.

The **placenta** is the **organ** developed by the body to **nourish** and protect a new life. Once the job of the placenta is complete, it is no longer needed. After birth, the placenta is also **inspected** to be sure it is fully intact. If **fragments** of placenta tissue are left in the **uterus**, infection and bleeding result.

fragments inspected	nourish organ	placenta uterus
------------------------	------------------	--------------------

Labor & Delivery Methods Final Assessment

Directions:

Answer the following questions.

1. Fill in the blanks using the word bank provided below.

Trends surrounding _____ come in and out of _____. Practices such as pain _____, assisted delivery, _____ section and _____ childbirth gain and lose ground based on current _____ and personal _____ of those giving birth.

cesarean childbirth experiences	medication natural popularity	research
---------------------------------------	-------------------------------------	----------

2. Angelica is pregnant with her first baby. She is excited, but also nervous. According to the presentation, what should Angelica do before making a decision on where to birth her baby?

- A. Look up local obstetrical offices and ask for an appointment
- B. Research labor and delivery methods, models of prenatal care, personal stories of labor and delivery experiences and compare the positives and negatives of each
- C. Check the statistics and approval ratings of local obstetricians
- D. Check her insurance coverage

3. Fill in the blanks using the word bank provided below.

Movement during labor allows _____ blood flow to the fetus and the mother, promotes _____ and allows the _____ to _____ the goal of moving the fetus through the _____.

accomplish body	contractions gravity	normal
--------------------	-------------------------	--------

4. A _____ is a trained birthing companion who provides informational, physical and emotional support to the laboring mother throughout the duration of labor and delivery.

- A. Midwife
- B. Gynecologist
- C. Doula
- D. Obstetrician

5. When a laboring mother has continuous support and is permitted to respond to personal pain and comfort cues, the labor is allowed to progress normally and often without complication.

- A. True
- B. False

6. Select all of the following items or activities commonly found during a natural birthing situation.

- Alternative birthing positions
- Birthing ball
- Cesarean section
- Induced labor
- Movement during labor
- Water tub

7. Using the word bank, label the following items or procedures.



bed rest cesarean section	continuous fetal monitoring I.V. medication
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8. Cesarean sections currently account for approximately _____ percent of births in the United States.

- A. 50
- B. 20
- C. 30
- D. 15

9. Muscle contractions of the uterus cause the cervix to open and thicken and the fetus to remain in the uterus.

- A. True
- B. False

10. Restricting _____ during labor is often practiced at hospitals in case the laboring mother needs emergency procedures.

- A. Movement
- B. Visitors
- C. Medications
- D. Nutrition/food

11. _____ is currently the most common place to give birth in the United States.

- A. The hospital

- B. A freestanding birthing center
- C. At home
- D. In the home of a loved one

12. When healthy pregnant women go into labor naturally and are allowed to progress normally, medical interventions may not be needed.
- A. True
 - B. False
13. What is the hormone which naturally causes increased labor contractions.
- A. Myoglobin
 - B. Estrogen
 - C. Oxytocin
 - D. Prolactin
14. All states have the same licensing regulations and stipulations concerning the types of midwives who are able to practice.
- A. True
 - B. False
15. The cervix forms a passageway between the _____.
- A. Uterus and vagina
 - B. Placenta and the umbilical cord
 - C. Bladder and the pelvis
 - D. Perinium and the urethra
16. Birth is the last stage of labor.
- A. True
 - B. False
17. What event signifies the beginning of birth?
- A. Crowning
 - B. Transition
 - C. Effacement
 - D. Dilation
18. The time period of early labor is the same for every pregnancy.
- A. True
 - B. False
19. _____ is when the head of the baby becomes visible through the opening of the vagina and stays visible rather than moving back inside.
- A. Arrival
 - B. Destination

- C. Crowning
- D. Expulsion

20. The _____ is located at the base of the uterus and is circular in shape.

- A. Cervix
- B. Uterus
- C. Vagina
- D. Urethra

Labor & Delivery Methods Final Assessment

Answer Key

Directions:

Answer the following questions.

1. Fill in the blanks using the word bank provided below.

Trends surrounding **childbirth** come in and out of **popularity**. Practices such as pain **medication**, assisted delivery, **cesarean** section and **natural** childbirth gain and lose ground based on current **research** and personal **experiences** of those giving birth.

cesarean childbirth experiences	medication natural popularity	research
---------------------------------------	-------------------------------------	----------

2. Angelica is pregnant with her first baby. She is excited, but also nervous. According to the presentation, what should Angelica do before making a decision on where to birth her baby?

A. Look up local obstetrical offices and ask for an appointment

B. Research labor and delivery methods, models of prenatal care, personal stories of labor and delivery experiences and compare the positives and negatives of each

C. Check the statistics and approval ratings of local obstetricians

D. Check her insurance coverage

3. Fill in the blanks using the word bank provided below.

Movement during labor allows **normal** blood flow to the fetus and the mother, promotes **gravity** and allows the **contractions** to **accomplish** the goal of moving the fetus through the **body**.

accomplish body	contractions gravity	normal
--------------------	-------------------------	--------

4. A _____ is a trained birthing companion who provides informational, physical and emotional support to the laboring mother throughout the duration of labor and delivery.

A. Midwife

B. Gynecologist

C. Doula

D. Obstetrician

5. When a laboring mother has continuous support and is permitted to respond to personal pain and comfort cues, the labor is allowed to progress normally and often without complication.

- A. True
- B. False

6. Select all of the following items or activities commonly found during a natural birthing situation.

Alternative birthing positions

Birthing ball

Cesarean section

Induced labor

Movement during labor

Water tub

7. Using the word bank, label the following items or procedures.



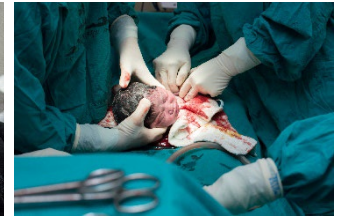
I.V medication



bed rest



continuous fetal monitoring



cesarean section

bed rest cesarean section	continuous fetal monitoring I.V. medication
------------------------------	--

8. Cesarean sections currently account for approximately _____ percent of births in the United States.

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- C. 30**
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9. Muscle contractions of the uterus cause the cervix to open and thicken and the fetus to remain in the uterus.

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10. Restricting _____ during labor is often practiced at hospitals in case the laboring mother needs emergency procedures.

- A. Movement
- B. Visitors

C. Medications

D. Nutrition/food

11. _____ is currently the most common place to give birth in the United States.

A. The hospital

B. A freestanding birthing center

C. At home

D. In the home of a loved one

12. When healthy pregnant women go into labor naturally and are allowed to progress normally, medical interventions may not be needed.

A. True

B. False

13. What is the hormone which naturally causes increased labor contractions.

A. Myoglobin

B. Estrogen

C. Oxytocin

D. Prolactin

14. All states have the same licensing regulations and stipulations concerning the types of midwives who are able to practice.

A. True

B. False

15. The cervix forms a passageway between the _____.

A. Uterus and vagina

B. Placenta and the umbilical cord

C. Bladder and the pelvis

D. Perinium and the urethra

16. Birth is the last stage of labor.

A. True

B. False

17. What event signifies the beginning of birth?

A. Crowning

B. Transition

C. Effacement

D. Dilation

18. The time period of early labor is the same for every pregnancy.

A. True

B. False

19. _____ is when the head of the baby becomes visible through the opening of the vagina and stays visible rather than moving back inside.

- A. Arrival
- B. Destination
- C. Crowning**
- D. Expulsion

20. The _____ is located at the base of the uterus and is circular in shape.

- A. Cervix**
- B. Uterus
- C. Vagina
- D. Urethra



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Labor & Delivery Methods Key Concepts

Birth Options

Essential Questions

1. Why is self-education important when choosing a labor and delivery method?
2. What influences childbirth methods?

Self-Educated

- A significant part of preparing for childbirth is _____ oneself
- _____ exist when choosing the type of care one will receive during labor and delivery
- When making _____ regarding labor and delivery it is important to
 - ask _____
 - seek out quality sources of _____

Methods of Childbirth Care (Part 1)

- Multiple methods of _____ exist
 - methods are influenced by _____ and trusted approaches
 - the three main options are:
 - _____
 - freestanding _____ centers
 - home _____
- Each option has benefits and _____
 - some aspects will seem like _____ to some and drawbacks to others
- The selected _____ should bring _____ and peace of mind

Methods of Childbirth Care (Part 2)

- Hospital births have become the most _____ in the United States
 - this was not _____ the case
 - trends and practices surrounding childbirth come in and out of _____ and include:
 - _____ medication
 - assisted _____
 - cesarean _____
 - _____ birth
 - trends gain and lose ground based on current _____ and personal experiences of those giving birth

Methods of Childbirth Care (Part 3)

- Current statistics indicate approximately _____ percent of births take place in hospitals
- Although the hospital birth rate is the highest, experiences _____ greatly from hospital to hospital
 - some hospitals offer home-like _____ rooms and employ _____ who attend births
 - other hospitals practice using more _____ medical models

Models of Care: Natural

Essential Questions

1. What types of practitioners care for pregnant women using the natural model of care?
2. What are natural ways to cope with labor?

Models of Care

- Include
 - the _____ model
 - promotes the idea of childbirth as a _____ process of life
 - the medical _____
 - _____ might be used according to the needs and desires of the pregnant mother
- Practices surrounding _____ differ based on the chosen model or perspective

The Natural Model (Part 1)

- Methods are used to _____ to move through the stages of labor according to physiological processes
- Professionals who specialize in using the _____ model of care include _____ and doulas
 - midwives care for _____ pregnant females
 - there are various types of midwives, including
 - Certified _____ Midwives
 - Direct-_____ Midwives
 - Certified Midwives
 - Certified Professional Midwives

The Natural Model (Part 2)

- Professionals who specialize in using the _____ model of care include _____ and doulas
 - the ability to practice midwifery is based on _____ licensing regulations and stipulations
 - the American College of Obstetricians and Gynecologists or _____ supports pregnant mothers having options for childbirth

- ACOG specifically supports the care provided by midwives who are _____ under ACOG recognized educational and professional standards
- a doula is a trained birthing _____ who provides informational, physical and emotional _____ to the laboring mothers throughout the duration of labor, delivery and even after the baby is born

Natural Ways to Cope with Labor

- Include
 - _____ during labor in response to pain cues
 - use of _____ to progress labor
 - encouragement and _____
 - _____ therapy
 - massage
 - relaxation
 - walking
 - sitting on a _____ ball

Doulas

- Are trained birthing _____
- Provide the following types of support during labor and delivery and even _____ the baby is born:
 - informational
 - _____
 - emotional
 - mental

Models of Care: Medical

Essential Questions

1. What types of practitioners care for pregnant women using the medical model of care?
2. What types of medical interventions are available to assist with labor and delivery?

Medical Practitioners

- Who care for pregnant women include:
 - family _____
 - _____
 - family physicians are often considered _____ while obstetricians specialize in pregnancy and childbirth
 - some physicians _____ in both family medicine and obstetrics
- Employ methods and routines tailored to the needs and wants of individual patients

- Some physicians _____ more toward natural care practices while others may choose more _____ medical procedures

The Medical Model

- Of _____ involves
 - building a _____ with the personal practitioner
 - _____ needs and wants
 - continuing the _____ throughout the pregnancy and birthing process

Hospital Labor & Delivery Routines

- Often include:
 - bed _____
 - restriction of _____ in case of emergency procedures
 - continuous _____ fetal monitoring
 - pain _____
 - _____ vaginal delivery
 - cesarean _____

Optional Medical Interventions

- Might include:
 - I.V. fluids
 - internal fetal _____
 - I.V. _____
 - manual _____ of the water sack (artificial rupture of membranes)
 - I.V. Pitocin to increase _____
 - use of a _____
 - forceps _____
 - cesarean _____

Birth Plans

- Enable pregnant females to _____ their needs and _____ for labor and delivery to their health care practitioner
- Openly _____ and discussing needs and desires through birth plans during prenatal appointments is a part of building a healthy practitioner-patient _____
- Some requests may be _____ to fulfill or may not be available at the chosen birthing location
 - in these cases, practitioners may be able to offer _____
 - discovering information about _____ services may also help in making the decision on where to _____

Stages of Labor

Essential Questions

1. What are the signs of labor?
2. What are the stages of labor?

Female Anatomy

- A review of the female _____ is helpful when discussing the steps and processes of labor and delivery
- The _____, or uterus is a hollow, pear-shaped organ located in the pelvis
 - the _____ is where the fetus develops and grows throughout pregnancy
- The _____ is circular in shape and is located at the base of the uterus and at the top of the vagina
- The vagina is also known as the _____
 - the birth canal is a muscular _____ from the uterus to the outside of the body

The Process of Labor

- The _____ of the cervix leads to effacement
 - _____ means the cervix stretches and thins
- _____ means the cervix must open and expand to ten centimeters in order for the baby to successfully pass through the uterus and into the birth canal
 - muscle _____ of the uterus are designed to facilitate this process
 - contractions during early labor are usually mild and _____
 - during a contraction, the muscles of the uterus _____ and then relax

Early Labor

- During early labor the cervix will _____ to about six centimeters
 - signs of early labor include _____ in bowel movements and strong urges to clean and _____ the home
 - the time period of early labor is _____ for each pregnancy

Active Labor (Part 1)

- As labor _____ from early to active, the contractions begin to speed up and become more _____
- Instead of a gradual _____ of the cervix, the dilation process happens more rapidly
- During active labor:
 - the contractions become longer, _____ and closer together

- the cervix will _____ to a full ten centimeters
- the cervix typically dilates about one _____ per hour

Active Labor (Part 2)

- Active labor often lasts four to _____ or more
- _____ takes place during active labor
 - transition is when the fetus begins to _____ into the birth canal
 - transition happens when the cervix is dilated between _____ and ten centimeters and lasts between 15 minutes to an hour
- The contractions at this time are also very _____ and may last from 60 to 90 seconds

Birth

- Is considered the _____ of labor
- Begins with _____
 - crowning is when is when the head of the baby becomes _____ through the opening of the vagina
 - crowning also means the baby's head will stay visible rather than _____ inside
- Some deliveries come _____ in as little as a few minutes while others take much longer
- _____ the length of the delivery process often include:
 - pain _____
 - birthing _____
 - if the mother has _____ given birth

Final Stage of Labor

- Is the delivery of the _____
 - the _____ will continue to contract
 - these contractions are _____ and less painful
- Once the placenta is delivered it is _____ to be sure it is fully intact
- If fragments of placenta tissue are left in the uterus, _____ and bleeding result



Labor & Delivery Methods Key Concepts

Answer Key

Birth Options

Essential Questions

1. Why is self-education important when choosing a labor and delivery method?
2. What influences childbirth methods?

Self-Educated

- A significant part of preparing for childbirth is **educating** oneself
- **Options** exist when choosing the type of care one will receive during labor and delivery
- When making **decisions** regarding labor and delivery it is important to
 - ask **questions**
 - seek out quality sources of **information**

Methods of Childbirth Care (Part 1)

- Multiple methods of **childbirth care** exist
 - methods are influenced by **philosophies** and trusted approaches
 - the three main options are:
 - **hospitals**
 - freestanding **birthing** centers
 - home **births**
- Each option has benefits and **drawbacks**
 - some aspects will seem like **benefits** to some and drawbacks to others
- The selected **method** should bring **confidence** and peace of mind

Methods of Childbirth Care (Part 2)

- Hospital births have become the most **traditional** in the United States
 - this was not **always** the case
 - trends and practices surrounding childbirth come in and out of **popularity** and include:
 - **pain** medication
 - assisted **delivery**
 - cesarean **section**
 - **natural** birth
 - trends gain and lose ground based on current **research** and personal experiences of those giving birth

Methods of Childbirth Care (Part 3)

- Current statistics indicate approximately **98** percent of births take place in hospitals
- Although the hospital birth rate is the highest, experiences **vary** greatly from hospital to hospital
 - some hospitals offer home-like **birthing** rooms and employ **midwives** who attend births
 - other hospitals practice using more **traditional** medical models

Models of Care: Natural

Essential Questions

1. What types of practitioners care for pregnant women using the natural model of care?
2. What are natural ways to cope with labor?

Models of Care

- Include
 - the **natural** model
 - promotes the idea of childbirth as a **physiological** process of life
 - the medical **model**
 - **interventions** might be used according to the needs and desires of the pregnant mother
- Practices surrounding **prenatal care** differ based on the chosen model or perspective

The Natural Model (Part 1)

- Methods are used to **enable females** to move through the stages of labor according to physiological processes
- Professionals who specialize in using the **natural** model of care include **midwives** and doulas
 - midwives care for **healthy** pregnant females
 - there are various types of midwives, including
 - Certified **Nurse** Midwives
 - Direct-**Entry** Midwives
 - Certified Midwives
 - Certified Professional Midwives

The Natural Model (Part 2)

- Professionals who specialize in using the **natural** model of care include **midwives** and doulas
 - the ability to practice midwifery is based on **state specific** licensing regulations and stipulations
 - the American College of Obstetricians and Gynecologists or **ACOG** supports pregnant mothers having options for childbirth

- ACOG specifically supports the care provided by midwives who are **certified** under ACOG recognized educational and professional standards
- a doula is a trained birthing **companion** who provides informational, physical and emotional **support** to the laboring mother throughout the duration of labor, delivery and even after the baby is born

Natural Ways to Cope with Labor

- Include
 - **movement** during labor in response to pain cues
 - use of **gravity** to progress labor
 - encouragement and **coaching**
 - **water** therapy
 - massage
 - relaxation
 - walking
 - sitting on a **birthing** ball

Doulas

- Are trained birthing **companions**
- Provide the following types of support during labor and delivery and even **after** the baby is born:
 - informational
 - **physical**
 - emotional
 - mental

Models of Care: Medical

Essential Questions

1. What types of practitioners care for pregnant women using the medical model of care?
2. What types of medical interventions are available to assist with labor and delivery?

Medical Practitioners

- Who care for pregnant women include:
 - family **physicians**
 - **obstetricians**
 - family physicians are often considered **generalists** while obstetricians specialize in pregnancy and childbirth
 - some physicians **specialize** in both family medicine and obstetrics
- Employ methods and routines tailored to the needs and wants of individual patients
- Some physicians **lean** more toward natural care practices while others may choose more **traditional** medical procedures

The Medical Model

- Of **childbirth care** involves
 - building a **relationship** with the personal practitioner
 - **communicating** needs and wants
 - continuing the **conversation** throughout the pregnancy and birthing process

Hospital Labor & Delivery Routines

- Often include:
 - bed **rest**
 - restriction of **nutrition** in case of emergency procedures
 - continuous **electronic** fetal monitoring
 - pain **medication**
 - **assisted** vaginal delivery
 - cesarean **sections**

Optional Medical Interventions

- Might include:
 - I.V. fluids
 - internal fetal **monitors**
 - I.V. **antibiotics**
 - manual **breaking** of the water sack (artificial rupture of membranes)
 - I.V. Pitocin to increase **contractions**
 - use of a **vacuum**
 - forceps
 - cesarean **sections**

Birth Plans

- Enable pregnant females to **express** their needs and **desires** for labor and delivery to their health care practitioner
- Openly **sharing** and discussing needs and desires through birth plans during prenatal appointments is a part of building a healthy practitioner-patient **relationship**
- Some requests may be **difficult** to fulfill or may not be available at the chosen birthing location
 - in these cases, practitioners may be able to offer **acceptable alternatives**
 - discovering information about **available** services may also help in making the decision on where to **deliver**

Stages of Labor

Essential Questions

1. What are the signs of labor?
2. What are the stages of labor?

Female Anatomy

- A review of the female **anatomy** is helpful when discussing the steps and processes of labor and delivery
- The **womb**, or uterus is a hollow, pear-shaped organ located in the pelvis
 - the **uterus** is where the fetus develops and grows throughout pregnancy
- The **cervix** is circular in shape and is located at the base of the uterus and at the top of the vagina
- The vagina is also known as the **birth canal**
 - the birth canal is a muscular **passageway** from the uterus to the outside of the body

The Process of Labor

- The **softening** of the cervix leads to effacement
 - **effacement** means the cervix stretches and thins
- **Dilation** means the cervix must open and expand to ten centimeters in order for the baby to successfully pass through the uterus and into the birth canal
 - muscle **contractions** of the uterus are designed to facilitate this process
 - contractions during early labor are usually mild and **irregular**
 - during a contraction, the muscles of the uterus **tighten** and then relax

Early Labor

- During early labor the cervix will **gradually dilate** to about six centimeters
 - signs of early labor include **changes** in bowel movements and strong urges to clean and **organize** the home
 - the time period of early labor is **different** for each pregnancy

Active Labor (Part 1)

- As labor **transitions** from early to active, the contractions begin to speed up and become more **regular**
- Instead of a gradual **dilation** of the cervix, the dilation process happens more rapidly
- During active labor:
 - the contractions become longer, **stronger** and closer together
 - the cervix will **completely dilate** to a full ten centimeters
 - the cervix typically dilates about one **centimeter** per hour

Active Labor (Part 2)

- Active labor often lasts four to **eight hours** or more
- **Transition** takes place during active labor

- transition is when the fetus begins to **descend** into the birth canal
- transition happens when the cervix is dilated between **seven** and ten centimeters and lasts between 15 minutes to an hour
- The contractions at this time are also very **close together** and may last from 60 to 90 seconds

Birth

- Is considered the **second stage** of labor
- Begins with **crowning**
 - crowning is when is when the head of the baby becomes **visible** through the opening of the vagina
 - crowning also means the baby's head will stay visible rather than **moving back** inside
- Some deliveries come **quickly** in as little as a few minutes while others take much longer
- **Factors affecting** the length of the delivery process often include:
 - pain **medication**
 - birthing **position**
 - if the mother has **previously** given birth

Final Stage of Labor

- Is the delivery of the **placenta**
 - the **uterus** will continue to contract
 - these contractions are **mild** and less painful
- Once the placenta is delivered it is **inspected** to be sure it is fully intact
- If fragments of placenta tissue are left in the uterus, **infection** and bleeding result

Birth Options – Clara’s Story

Clara found out she was pregnant with her first child. She took the home pregnancy test and then visited a local clinic to have the test confirmed by a medical practitioner. In the midst of the joy and excitement Clara felt, she also had decisions to make. Who will take care of me during my pregnancy? How will I choose? Who can I talk to for guidance on this decision?

Clara was visiting with a friend who mentioned the idea of a birth center. This was new information to Clara because it was her first pregnancy, and she had no prior experience with birth. The friend gave Clara the name of the center and she made an appointment to visit.

When Clara arrived, she was greeted and welcomed. She was also given a tour of the center. Clara walked through each room of the house which had been converted into a birthing center. In the living room, there was a waiting room for pregnant patients and their families and a place for childbirth classes. The room had a warm and homelike atmosphere with comfortable seating. Three bedrooms were set up as birthing rooms with beds and other needed equipment for labor and delivery. Other rooms were arranged with equipment for prenatal exams, such as examination tables, scales, blood pressure monitors and seating. The bathroom had a bathtub and Clara was informed some laboring mothers like to take warm baths during labor to ease the pain. The center also had a kitchen where midwives would prepare food and beverages for laboring mothers to help them through the process.

Clara was impressed with the center. She was unaware of this option. She had never been exposed to the idea of natural childbirth before. In fact, she had no experience with childbirth at all. She had never attended the birth of a friend or family member and did not know what to expect. She enjoyed asking questions. One of her questions was about the pain. The midwives explained to her they did not provide medication to take the pain away but would teach her how to cope with it. This was surprising, and Clara did not know what to think of the answer at first. “What is the difference between a hospital birth and a natural birth,” she asked as her final question. The midwife smiled and said, “it is time for you to find out for yourself.”

The next step in Clara’s journey of discovery was to do some investigating. She searched the internet for information on labor and delivery and the history of medicine. She read articles, blog posts, watched videos and even found books.

As she read, she learned about how the body was designed and the ways in which it would change and grow to accommodate the growing fetus. One item of particular interest was a book called, *Birth Stories*. In this book, mothers from all walks of life shared their personal experiences of labor and delivery. Each person shared the honest story of where their birth took place, details of the events surrounding the birth and how they were treated. Some stories included mothers who had one birth at a

hospital and one at a birthing center.

These stories explained the difference between the two locations and the care they received at each.

Clara was soon convinced the choice for her was the birthing center. As the months went by, Clara looked forward to her prenatal visits. She built relationships with the midwives who cared for her. As her belly grew, she was shown pictures of what the fetus looked like at each stage. She attended childbirth classes and learned more and more about the body's ability to give birth.

Clara's sister, Constance, who was a few years older than Clara, was not convinced. Constance had a very different idea about pregnancy and childbirth. Constance believed the hospital was the only place to give birth. Constance could not believe Clara was going to have a baby without pain medication. Others in Clara's life had the same idea. When she shared her excitement and experiences with the midwives at the birthing center with her friend, her eyes grew big and she cautioned Clara against her decision. Clara did not let these differing opinions sway her decision because she had educated herself and came to her own conclusions. She had full confidence in her plans.

When the time came, Clara was woken in the middle of the night with contractions. She was able to work through them with the support of her husband and her mother in the comfort of her home. On the instruction of her midwife, her husband drove her to the center to complete her delivery. She was comforted and coached through the rest of the process. Although there was pain, she worked through it and before she knew what was happening, the midwife was guiding her through the final stage of delivery.

Clara's story is just one. Every pregnancy and delivery is unique. Each mother must decide where to give birth and who will attend to the needs of their labor and delivery. However, the important step Clara took was to educate herself. When pregnant mothers are educated, much of the apprehension of what to expect is relieved.

Labor & Delivery Methods Vocabulary Handout

Birth Plan

written plan created by the pregnant mother to voice expectations and preferences during the labor and delivery process

Cervix

lower, circular, narrow end of the uterus

Cesarean Section (C-Section)

incision made in the abdomen and uterus of a pregnant female used to deliver a fetus

Contractions

tightening and relaxing of the muscles surrounding the uterus during labor

Crowning

when the head of the fetus becomes and remains visible through the opening of the vagina

Doula

trained birthing companion who provides informational, physical and emotional support to a laboring mothers throughout the duration of labor and delivery

Dilation

process of opening and expanding the cervix to ten centimeters during labor

Effacement

stretching and thinning of the cervix during labor

Family Practitioner

physician trained in general medicine

Midwife

practitioner trained to assist pregnant mothers in childbirth

Obstetrician

medical practitioner specializing in pregnancy and childbirth

Transition

time when the fetus moves from the uterus through the cervix and into the birth canal during labor

Uterus

also referred to as womb; hollow, pear-shaped organ located in the pelvis

Vagina

also known as the birth canal; muscular passageway from the uterus to the outside of the body



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