

Understanding Fetal Development



For use with the RealCare™
Fetal Development Kit and
Pregnancy Torso

Realityworks®
Live it. Learn it.™
...an employee-owned company

Every effort has been made to trace the ownership of copyrighted material and to make full acknowledgement of its use. If errors or omissions have occurred, they will be corrected in subsequent editions, provided that notification is submitted in writing to the publisher.



© 2016, Realityworks, Inc. All rights reserved.
RealCare® is a registered trademark of Realityworks, Inc.

2709 Mondovi Road
Eau Claire, WI 54701 USA

800.830.1416

+1.715.830.2040

www.realityworks.com

Table of Contents

Lesson Structure 4

Curriculum Structure 5

Lesson One – Fetal Development..... 6

Lesson Two – Pregnancy Symptoms and Discomforts Lesson Objectives 34

Lesson Three – Exploration of Pregnancy and Childbirth-Related Careers 39

The accompanying curriculum helps students learn about the many life-changing consequences of pregnancy, and their readiness or non-readiness for it.

Lesson Structure

Each lesson begins with an overview, lesson objectives, and a Lesson at a Glance table that lists the lesson activities, materials required, suggested preparation steps, and approximate class time.

Lesson Sections

The overview is followed by the actual lesson, which will contain some of the sections described below. Most lessons are designed to be completed within 45 minutes.

FOCUS

Every lesson begins with a FOCUS activity intended to capture participants' attention. This may be in the form of a small or large class discussion, game, review of previous lesson information, or demonstration. During this activity, participants are introduced to the topic of the lesson.

LEARN

The LEARN activity in each lesson varies in its presentation mode. It may be a slide presentation, group activity, or demonstration.

REVIEW

The majority of lessons end with a REVIEW activity intended to briefly review each lesson's key messages or main points.

Curriculum Structure

The *Understanding Fetal Development* curriculum is composed of the following lessons. Approximate lesson times are included.

Lesson	Title	Approximate Time
1	Fetal Development	5-7 hours
	Introduction and Activity 1 – Monthly Fetal Development and Trimester Characteristics	65 minutes
	Activity 2 – Oral Pop Quiz and Discussion	10 minutes
	Activity 3 – Infant Development Milestones Roleplay	30 minutes
	Activity 4 – Brain Development Research Day	45 minutes
	Activity 5 – Create a Game	45-90 minutes
	Activity 6 – I Have... Who Has? Game on Fetal Development	10 minutes
	Activity 7 – Healthy Eating During Pregnancy	45-90 minutes
	Activity 8 – Timeline of Changes Scrapbook	45 minutes
	Activity 9 – Disease Detective	15 minutes
	Activity 10 – Infant Development Quiz	10 minutes
2	Pregnancy Symptoms and Discomforts	1 hour
3	Exploration of Pregnancy and Childbirth-related Careers	1 hour
	Total	7-9 hours

Lesson One – Fetal Development



Lesson Overview

In this lesson, participants will learn about fetal development in the womb. An infant is in its mother's womb, or uterus, for about nine months from the time it is conceived. That nine-month period of time is divided into three sections called "trimesters." Different stages of development take place during each trimester. Participants will follow the physical growth that occurs during each trimester.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify the stages of fetal development in the three trimesters of pregnancy.
- Analyze healthy and unhealthy habits and their effects on the unborn child.

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	Presentation slides 2-11 <i>Fetal Development Stages and Fetal Development by Month</i> <i>Fetus Monthly Development</i> handout (one per participant) Everyday objects the size of the fetus Fetal Development Kit Pregnancy Torso	1. Find everyday objects listed in the Focus section. 2. Print/photocopy the <i>Fetus Monthly Development</i> handout 3. Prepare to display presentation slides 2-11, <i>Fetal Development Stages and Fetal Development by Month</i> 4. Read instructor information.	45 minutes
LEARN Activity 1 – Trimester Development Mix-up	<i>Trimester Characteristics</i> handout <i>Trimester Development</i> handout (one per participant) Scissors Hat or container	1. Print/photocopy the <i>Trimester Characteristics</i> handout 2. Cut each characteristic out on the dotted lines on the handout 3. Print/photocopy <i>Trimester Development</i> handout	20 minutes

Activity 2 – Oral Pop Quiz and Discussion	Blank piece of paper for participant answers	None	10 minutes
Activity 3 – Infant Milestones Roleplay	<i>Infant Development Milestones</i> (one for each pair) <i>Infant Development Milestones Answer Key</i> (one for each pair) <i>Infant Development Milestones Fact Sheet</i> (one per participant)	1. Print/photocopy <i>Infant Development Milestones</i> 2. Print/photocopy <i>Infant Development Milestones Answer Key</i> 3. Print/photocopy <i>Infant Development Milestones Fact Sheet</i>	30 minutes
Activity 4 – Research Day	Internet access or library books on brain development	None	45 minutes
Activity 5 – Create a Game	Game materials – markers, index cards, construction paper, scissors, glue	1. Gather game materials – markers, index cards, construction paper, scissors, and glue	45-90 minutes
Activity 6 – I Have... Who Has? Game	<i>I Have... Who Has?</i> Sheet (one) cut into pieces <i>Fetal Development Stages</i> (for instructor) (see slides 3 & 4) <i>Fetal Development by Month</i> (for instructor) (see slides 5-11)	1. Print/photocopy <i>I Have... Who Has?</i> sheet 2. Cut the <i>I Have... Who Has?</i> sheet into pieces 3. Prepare to display presentation slides	10 minutes
Activity 7 – Menu for Pregnancy	<i>Healthy Eating During Pregnancy</i> (one per participant) <i>Healthy Menu</i> (one per participant) <i>Things to Avoid During Pregnancy</i> (one per participant)	1. Print/photocopy <i>Healthy Eating During Pregnancy</i> 2. Print/photocopy <i>Healthy Menu</i> 3. Print/photocopy <i>Things to Avoid During Pregnancy</i>	45-90 minutes
Activity 8 – Timeline of Changes Scrapbook	Blank piece of paper	None	45 minutes
Activity 9 – Transparency Talk and Disease Detective	Presentation slides 12 and 13 <i>Disease Detective</i> (one per participant)	1. Print/photocopy <i>Disease Detective</i> 2. Prepare to display slides 12 and 13	15 minutes
REVIEW	<i>Infant Development Quiz</i> (one per participant)	1. Print/photocopy the <i>Infant Development Quiz</i>	10 minutes

Lesson One – Fetal Development

FOCUS: The Size of the Fetus at Each Month

45 minutes

Purpose:

Try to find everyday objects that are the same size as an unborn infant at each month of development (approximate sizes listed below). Bring in one of each of the smallest items and place them in a plastic bag, one for each participant. If you have a fetal size model, display that along with the items. The hands-on, everyday objects will help students understand fetal development by month.

Materials:

- Presentation slides 3 and 4– *Fetal Development Stages*
- *Fetus Monthly Development* handout
- Presentation slides 5-11– *Fetus Development by Month*
- Everyday objects the size of the fetus (see list below)
- Instructor Information sheet in this lesson (read prior to teaching this lesson)
- Fetal Development Kit
- Pregnancy Torso

Facilitation Steps:

1. Try to find everyday objects that are the same size as an unborn infant at each month (approximate sizes listed below). Bring in one of each of the smallest items and place them in a plastic bag, one for each participant. If you have the Fetal Development Kit, display it along with the items.

Sizes are approximate; 1-5 month measurements are from crown (top of head) to rump (bottom), and 6-9 month measurements are from crown to heel.

- Month 1: ¼ inch (pea, one Red Hots candy, one round aspirin)

- Month 2: almost 1 inch (large jelly bean, quarter, large grape)
 - Month 3: A little over 2 inches (car key, a ¼ of a Graham Cracker)
 - Month 4: 4 ½ inches (toilet paper tube)
 - Month 5: 6 ½ inches (standard stapler, tape dispenser)
 - Month 6: Almost 12 inches (1-foot ruler)
 - Month 7: Almost 15 inches (loaf of standard, store-bought bread)
 - Month 8: A little over 16 ½ inches (toy doll)
 - Month 9: 19-13 inches (RealCare Baby or similarly sized doll)
2. Show presentation slides 3 and 4– *Fetal Development Stages*. Review the zygote stage and embryo stage.
 3. Have participants find and observe the objects that represent the embryo in months one and two.
 4. Review the terms on presentation slide 4: Placenta, Amniotic Sac, and Umbilical Cord.
 5. Have participants find and observe the objects that represent the embryo in months three through six.
 6. Show presentation slides 5-11 and review what is happening in the Fetus Stage.
 7. Have participants find and observe the objects that represent the fetus in months seven through nine.
 8. Give participants the *Fetus Monthly Development* handout. Go through what is happening in each month, referring back to the size of the everyday objects to get an idea of what size it is when these developments are happening.

9. Pass around each Fetal Development model in the kit by month. If you have the Pregnancy Torso, display it to show what a full-term pregnancy looks like.

Instructor Information

Newborns need a lot of care, and most do not respond to the parent with big smiles and giggles until they are a couple of months old. Many young and especially teenage parents believe that an infant will love them back right away. An infant does bond with his or her parent, but a newborn is going to take much more than it gives back.

Brain development in infants: Most brain development happens after an infant is born. An infant has 100 billion brain cells at birth. Some of those cells already have pathways to each other to regulate breathing, heartbeat, and other life-sustaining functions. Other pathways that determine behavior, mental capacity, and emotional development must be made after birth. A small child's brain is twice as active as an adult's. The pathways the young brain cells make with each other are formed primarily during the first three years of life. The experiences that an infant has every day help develop these pathways. The brain keeps track of which pathways are used most. If certain experiences are repeated many times, those pathways are more likely to remain strong throughout life. If a pathway is not used regularly, the brain cells not used will deteriorate and disappear. This process is called "pruning."

Communication and language: To learn language, an infant must hear language. Many people think that talking to infants is not important since the infants cannot understand the words. Words and sounds heard during the first three years of life largely determine the adult vocabulary. Parents who read and talk to their infants are helping to develop very important language pathways in the brain. After a while, the child will start to participate in the sharing of language – these initial "conversations" are very important. Even when infants are "babbling," they are repeating the sounds and syllables of words they hear. A caregiver's verbal response to babbling helps establish brain pathways about conversation and language.

Routines and security: An infant needs a safe, secure environment filled with loving care. Infants who have their needs met develop feelings of trust and security. Parents who respond in a sensitive way to their child's needs are building security. A positive relationship with a parent makes the infant feel safe and secure. Consistency in routines for eating and sleeping are good ways to help an infant feel trust and security. Positive and loving responses to each instance of crying makes an infant feel safe. The infant learns that his or her world is predictable.

Enriching experiences: Parents do not need expensive, trendy educational toys and activities to help their infants' brain development. Any activity that taps into one or more of the five senses will help build brain pathways. For example, simply focusing on his or her mother's face helps an infant build visual pathways between brain cells. Taking an infant for a walk while the infant is active and alert provides a new experience he or she will use to build pathways. Variety keeps the brain stimulated, and repetition of activities helps the infant learn.

Many infants can tolerate only brief periods of active stimulation, whether it be visual, auditory, etc. Infants will communicate when they have lost interest by fussing or turning their faces away.

Fetal Development Stages

Zygote Stage – two weeks

- Sperm unites with the ovum (egg).

Embryo Stage – six weeks

All major body systems begin to develop.

- Central nervous system, brain, blood vessels, stomach, and heart.
- Eyes, lungs, arms, legs, hands, and feet.

Terms:

Placenta – tissues that connect the umbilical cord of the embryo or fetus to the uterine wall.

Amniotic sac – fluid-filled pouch that cushions the embryo.

Umbilical cord – nutrients and oxygen from the mother's bloodstream pass to the embryo.

Fetus Stage – seven months

- The fetus grows and matures during this time.
- The body, head, arms, and legs grow rapidly.
- Organs develop for blood circulation, breathing, and digestion.
- Nerves and muscles develop.
- Heart pumps blood through the veins and arteries.

Fetus Monthly Development

3rd Month

- Nostrils, mouth, lips, teeth buds, and eyelids form.
- Fingers and toes are almost complete.
- Biological gender is evident.
- Heartbeat can be heard with a stethoscope.
- All organs are present, though immature.

4th Month

- Skin is less transparent.
- Fine hair covers the entire body.
- The fetus can suck its thumb, swallow, hiccup, and move around.
- Facial features become clearer.

5th Month

- Hair, eyelashes, and eyebrows appear.
- Teeth continue to develop.
- Organs are maturing.
- Hands are able to grip.
- The fetus becomes more active.

6th Month

- Eyes open and close.
- Muscles in the arms and legs strengthen.
- Fat deposits begin to appear beneath wrinkly skin.
- Breath movement begins.

7th Month

- A thick, white, protective coating called vernix covers the fetus.
- Nervous, circulatory, and other systems mature.
- Periods of fetal activities are followed by periods of rest and quiet.

8th Month

- The fetus hears sounds and may be startled by sudden noise.
- The fetus usually moves into a head-down position.

9th Month

- Increase of fat under the skin makes the fetus look less wrinkled.
- Fetal movement decreases with less room to move.
- The fetus gains disease-fighting antibodies from the mother's blood.
- The fetus descends lower into the pelvis, ready for birth.

Lesson Five – Fetal Development

LEARN: Infant Development by Trimester

Purpose:

These activities make participants be more realistic about physical and mental development after birth. After birth, an infant grows and starts to learn how to use its arms, legs, and other parts of the body. An infant reaches many physical milestones during the first three years. Not all infants reach all milestones at the same time. Every infant is different. Many young people have unrealistic expectations about what very young infants are able to do. For example, many think that a newborn infant is able to smile, coo, and laugh right away. It takes one or two months for these behaviors to emerge. Unrealistic expectations about infant behavior have led to frustrated parents and child abuse in some cases. The infant development milestone activities listed in this section can help participants gain a more realistic outlook on the development of infants and young children.

Activity 1 – Trimester Development Mix-up

20 minutes

Materials:

- *Trimester Characteristics* handout
- *Trimester Development* handout
- Scissors
- Fetal Development Kit models for months 3, 6 and 9
- Pregnancy Torso

Facilitation Steps:

1. Display the Fetal Development Kit models for the third, sixth, and ninth months. Then display the Pregnancy Torso so students can use each of these as a good visual aid as you discuss each trimester.
2. Print/photocopy and cut out each developmental characteristic on the dotted lines on the *Trimester Characteristics* sheet.
3. Write the words First Trimester, Second Trimester, and Third Trimester on a marker board or chalk board.
4. Mix up the developmental characteristics in a hat or other container and have each participant take turns drawing one and deciding which trimester it belongs in.
5. Write the characteristic on the board under the trimester the participant chose, or tape the papers on the board and move as needed.
6. After all the characteristics have been assigned, hand out the Trimester Development sheet and discuss each trimester. Change the lists so they are correct as you discuss each characteristic.
7. Discussion: Does one trimester have more characteristics than another? Which one? Which trimester is the most important? All three are equally important, but major organs and systems form mostly in the first trimester.

Trimester Characteristics

The sperm joins the egg in the fallopian tube.	Able to feel pain.
Cells rapidly divide. The embryo floats toward the uterus.	Vocal cords are used to cry silently.
Embryo implants itself in the wall of the uterus.	Muscles get longer and are easier to move.
Backbone, spine, spinal cord, brain and nervous system form.	Mother feels kicking and movement inside her. Fetus is cushioned in liquid called amniotic fluid.
Lungs, intestines, and beginnings of urinary system start to develop.	Adult taste buds are formed.
Heart starts beating.	Eyebrows, eyelashes, and hair start to grow.
Placenta starts working.	Fetus is able to grasp things with hands. Kicking continues.
Spine and spinal cord grow quickly.	Fetus can hear voices and recognizes mother's voice.
Facial features become visible.	Fingernails and fingerprints appear.
Muscle system is formed.	Sex organs are formed.
Movement begins.	Fetus starts growing quickly in size.
Embryo is about a ½ inch long.	Fetus is covered with downy hair called lanugo.
Arms, legs, fingers and toes form.	Fetus inhales amniotic fluid to practice breathing.
Brain waves can be measured.	Skin is covered by a waxy substance called vernix.
Heart is almost completely developed.	Nourishment from the mother through the umbilical cord continues.
Baby teeth form in the gums.	Fetus sleeps most of the day.
Brain is physically fully formed.	Fetus gains the most weight and grows longer.

Trimester Development

First Trimester (conception to 12 weeks)	Second Trimester (13 to 24 weeks)	Third Trimester (25 weeks to birth)
The sperm joins the egg in the fallopian tube. Cells rapidly divide. The embryo floats toward the uterus. Embryo implants itself in the wall of the uterus. Backbone, spine, spinal cord, brain and nervous system form. Lungs, intestines, and beginnings of urinary system start to develop. Heart starts beating. Intestines are developing and the appendix is in place. Placenta starts working. Spine and spinal cord grow quickly. Facial features become visible. Muscle system is formed. Movement begins. Embryo is about 1 half-inch long. Arms, legs, fingers and toes form. Brain waves can be measured. Heart is almost completely developed. Baby teeth form in the gums. Brain is physically fully formed. Able to feel pain. Vocal cords are used to cry silently.	Muscles get longer and are easier to move. Mother feels kicking and movement inside her. Fetus is cushioned in liquid called amniotic fluid. Adult taste buds are formed. Eyebrows, eyelashes, and hair start to grow. Fetus is able to grasp things with hands. Kicking continues. Fetus can hear voices and recognizes mother's voice. Fingernails and fingerprints appear. Sex organs are formed. Fetus starts growing quickly in size.	Fetus is covered with downy hair called lanugo. Fetus inhales amniotic fluid to practice breathing. Skin is covered by a waxy substance called vernix. Nourishment from the mother through the umbilical cord continues. Fetus sleeps most of the day. Fetus gains the most weight ($\frac{1}{2}$ pound per week) and grows longer.

Activity 2 – Oral Pop Quiz and Discussion

10 minutes

Materials:

- Blank piece of paper for participant answers

Facilitation Steps:

1. Have a short pop quiz with these four questions to jumpstart a discussion about infants' mental development. Have participants write their answers on a sheet of paper while you ask questions orally.
2. Oral quiz questions:
 - Which is more active: an adult's brain or an infant's brain? (An infant's)
 - Which is more developed at birth, the brain or the heart? (The heart)
 - True or false: brain development depends totally on heredity. (False)

Activity 3 – Infant Milestone Roleplay

30 minutes

Materials:

- *Infant Development Milestones* (one for each pair)
- *Infant Development Milestones Answer Key* (one for each pair)
- *Infant Development Milestones Fact Sheet* (one per participant)

Facilitation Steps:

1. Divide participants into pairs. Give each pair a copy of the *Infant Development Milestones* sheet with a different milestone (or milestones) highlighted for each pair.
2. Participants must choose which person will portray the parent and which will portray the infant. Combine two pairs of participants together to form a group of four.
- During which trimester is brain development the most critical? (First trimester) Two-thirds of birth defects occur during the first trimester. Teratogens (things that cause harm to the fetus) such as alcohol, illegal drugs, pesticides, etc. can cause irreversible brain damage. Many women don't realize they are pregnant for several weeks. They may use alcohol or drugs during this time. (Stress importance of not using alcohol or drugs if sexually active.)
3. For their highlighted milestone(s), the pair must do a short roleplay in front of their group displaying their milestone(s) and have the group guess what it is.
4. Then distribute the *Infant Development Milestones Answer Key* sheet and discuss as a class which age level each milestone fits with.
5. Give each participant an *Infant Development Milestones Fact Sheet* and have them take turns reading a few sentences out loud to the class.

Infant Development Milestones

Your instructor will divide your class into groups of two. One development milestone should be highlighted on this worksheet. You and your partner must roleplay as an infant who is achieving the highlighted milestone and the infant's parent as he or she watches the infant do this. Choose which person in your pair will roleplay the parent, and which will roleplay the infant. Practice your roleplay. Your teacher will then combine two pairs of participants together to form a group of four. You and your partner must perform your roleplay in front of the group, displaying your highlighted milestone, and have the group guess what it is.

Move both arms well and coordinate movements.

Make gurgling, cooing, babbling, or other sounds.

Respond to parents' voices.

Hold head up for short periods of time.

Follow objects with eyes.

Recognize parents' faces.

Turn head to locate a sound.

Roll over from stomach to back or from back to stomach.

Push up with arms while lying on stomach.

Put some weight on legs when held in standing position.

Play with own hands and feet.

Imitate sounds.

Turn head to locate even soft sounds.

Sit up without support.

Begin to crawl or creep.

Hold own bottle.

Reach for objects.

Stand while holding onto something.

Say "dada" or "mama" or other word.

Pull up on something to stand.

Anticipate parent coming back into view.

Walk while holding onto furniture.

Make hand movements to indicate wanting something.

Stand alone for a second or two.

Infant Development Milestones

ANSWER KEY

No two children are alike. Each child will be able to do the things listed below at different times. These are simply guidelines that parents could use to judge how their child is developing. If a child does not do some of these things according to the timeframe listed, it probably does not mean there is something wrong.

By 3 months of age, many infants can:



- Move both arms well and coordinate movements.
- Make gurgling, cooing, babbling, or other sounds.
- Respond to parents' voices.
- Hold their head up for short periods of time.
- Follow objects with their eyes.
- Recognize parents' faces.

By 6 months of age, many infants can:



- Turn their head to locate a sound.
- Roll over from stomach to back or from back to stomach.
- Push up with their arms while lying on their stomach.
- Put some weight on their legs when held in standing position.
- Play with their own hands and feet.
- Imitate sounds.

By 9 months of age, many infants can:



- Turn their head to locate even soft sounds.
- Sit up without support.
- Begin to crawl or creep.
- Hold their own bottle.
- Reach for objects.
- Stand while holding onto something.

By 12 months (1 year) of age, many children can:



- Say "dada" or "mama" or other words.
- Pull up on something to stand.
- Anticipate parent coming back into view.
- Walk while holding onto furniture.
- Make hand movements to indicate wanting something.
- Stand alone for a second or two.



Infant Development Milestones

FACT SHEET

Nine months, three trimesters: A baby is in its mother’s womb, or uterus, for about nine months from the time it is conceived. That nine-month period of time is divided into three sections called trimesters. Different development takes place during each trimester.

Be realistic about a baby’s development: After birth, a baby grows and starts to learn how to use its arms, legs and other parts of the body. A baby reaches many physical milestones during the first three years. Not all babies reach all milestones at the same time. Every baby is different.

Many people think that a newborn baby is able to smile, coo, and laugh right away. Actually, it takes one or two months before a baby may smile and coo. Many young and especially teenage parents believe that a baby will love them back right away. A baby does bond with his or her parent, but a newborn is going to take much more than it gives back. A caregiver may get frustrated with a baby unless he or she knows what a baby can realistically do and at what age.

Helping babies’ brains develop: Most brain development happens after a baby is born. An infant has 100 billion brain cells at birth, and a small child’s brain is twice as active as an adult’s. Some brain cells already have pathways to each other to help with breathing, heartbeat, and other life-sustaining functions. Other pathways that determine behavior, mental capacity, and emotional development must be made after birth.

The pathways the young brain cells make with each other are formed mostly during the first three years of life. The brain keeps track of which pathways are used most. If certain experiences are repeated many times, those pathways are more likely to remain strong throughout life. If a pathway is not used regularly, the brain gets rid of it.

Communication and language: To learn to talk, a baby must hear language. Many people think that talking to a baby is not important since the infant cannot understand the words. This is not true! Words and sounds heard during the first three years of life help the child learn to speak. Parents and caregivers who read and talk to their babies are helping to develop very important language pathways in the brain. After a while, the child will start to participate and “talk” back. Even babbling is repeating the sounds and syllables of words they hear.

Routines and security: A baby needs a safe, secure environment filled with loving care. Loving responses to each instance of crying makes a baby feel safe. The baby learns that his or her world is predictable. A positive relationship with a parent makes the baby feel safe and secure. Consistency is key. Predictable routines for eating and sleeping are good ways to establish security.

Enriching experiences: Parents do not need expensive, trendy educational toys and activities to help their babies’ brain development. Any activity that stimulates one or more of the five senses will help build pathways.

5 senses	Activity
Sight	Watching and focusing on mom or dad’s face, picture books
Sound	Listening to music
Touch	Feeling new textures (soft, hard, rough, smooth, fuzzy, etc.) or feeling fabrics
Smell	Cooking smells, flowers, fresh air, etc.
Taste	After a few months, tasting new foods every few days

Taking a baby for a walk while the baby is active and alert is a great way to provide a new experience for building pathways. Variety is important, and so is the repeating of activities. Many babies can tolerate only brief periods of active stimulation, whether it be for the eyes, ears, etc. Infants will communicate when they have lost interest by fussing or turning their face away.



Activity 4 – Research Day

45 minutes

Materials:

- Internet access or library books on brain development

Facilitation Steps:

1. Take participants to the library or computer lab and have them research the physical and scientific aspects of brain development. Have participants share their findings in class the next day.

Activity 5 – Create a Game

45 – 90 minutes

Materials:

- Game materials – markers, index cards, construction paper, scissors, glue, etc.

Facilitation Steps:

1. Have participants get into groups and create a game they will present to the class. The game needs to be able to help others understand the stages of fetal development. Possible types of games might include memory (matching) games or flash cards, or participants can get creative and create their own type of game.

2. The following is what each group will need to know or have access to for this activity: Each fetal development stage (zygote, embryo, and fetus) and each month (3rd, 4th, 5th, 6th, 7th, 8th, and 9th). Participants should state two development characteristics for each stage and each month.
3. Participants should get creative and use markers, index cards, construction paper, scissors, glue, etc.
4. Here is the grading rubric for this activity for the instructor:

Stages Explained:	10	8	6	4	2	0
Months Explained:	10	8	6	4	2	0
Organization:	10	8	6	4	2	0
Depth of Understanding:	10	8	6	4	2	0
Grammar:	10	8	6	4	2	0
Neatness:	10	8	6	4	2	0

5. Spend the next class period playing the games that the participants have created.

Activity 6 – I Have...Who Has? Game

10 minutes

Materials:

- *I Have...Who Has?* sheet (one) cut into pieces
- *Fetal Development Stages* (for instructor, see presentation slides 3 and 4)
- *Fetus Monthly Development* (for instructor) (see presentation slides 5-11)
- Fetal Development Kit

Facilitation Steps:

1. Cut up the *I Have...Who Has?* sheet into pieces along the dotted lines. Mix up the pieces and have each participant draw one slip of paper. Have the participant who has the slip with the smiley face on it come up to the front of the class.
2. Ask that participant to read the slip of paper out loud.
“I HAVE: Third month
WHO HAS: The month when eyes open and close, muscles in the arms and legs strengthen, and fat deposits begin to appear beneath wrinkled skin.”
3. The goal is for the participant who has the correct month listed on their slip of paper that matches the “WHO HAS” statement the first participant read to come up to the front and continue the game. So, the person who has the piece of paper stating “I HAVE: Sixth month” should come up and stand next to the first participant, because the sixth month of fetal development is when the first participant’s “WHO HAS” statement occurs.
4. The second participant reads his or her slip of paper out loud, and the matching continues. The key for this game is on the *Fetal Development Stages* and the *Fetus Monthly Development* sheets. You can also reference the slides 3-11.
5. If there are more participants in the class than slips of paper, after the first group is finished you can repeat the game with the next group
6. Display the Fetal Development Kit models, if available, for students to reference.

I Have...Who Has...? Game

I HAVE: Third month

WHO HAS: The month when eyes open and close, muscles in the arms and legs strengthen, fat deposits begin to appear beneath wrinkled skin.

I HAVE: Sixth month

WHO HAS: The month the fetus gains disease-fighting antibodies from the mother's blood.

I HAVE: Ninth month

WHO HAS: The month when hair, eyelashes, and eyebrows appear. Hands develop, fetus becomes more active.

I HAVE: Fifth month

WHO HAS: The month the fetus hears sounds and may be startled by sudden noises.

I HAVE: Eighth month

WHO HAS: The stage when all major body systems begin to develop. Examples: Central nervous system, blood vessels, stomach, and heart.

I HAVE: Embryo

WHO HAS: The month when skin is less transparent, fine hair covers the entire body, fetus can suck its thumb.

I HAVE: Fourth month

WHO HAS: The month when a thick white protective coating called vernix covers the fetus.

I HAVE: Seventh month

WHO HAS: After the sperm unites with the ovum.

I HAVE: Zygote Stage

WHO HAS: The month the nostrils, mouth, fingers, and toes develop, biological gender is evident, and all organs are present.

ANSWERS:

3rd month card = 6th month up next
 9th month card = 5th month up next
 8th month card = Embryo up next
 Zygote stage card = 3rd month up next
 6th month card = 9th month up next
 5th month card = 8th month up next
 Embryo card = 4th month up next
 7th month = Zygote stage up last

Activity 7 – Menu for Pregnancy

45 - 90 minutes

Materials:

- *Healthy Eating During Pregnancy* (one per participant)
- *Healthy Menu* (one per participant)
- *Things to Avoid During Pregnancy* (one per participant)

Facilitation Steps:

1. Heartburn and constipation are both physical discomforts of pregnancy. Some women also have a problem with unstable blood sugar during pregnancy. With this in mind, to relieve problems, many doctors recommend that mothers eat frequent, small meals throughout the day. This diet should include an increase in fiber, folic acid and be high in protein, calcium, vitamin C, and iron. Beware of sugary, salty, and high-processed foods as they can cause

problems such as swelling and diabetes, and remember the goal is not to gain an excessive amount of weight while pregnant. Using the *Healthy Eating During Pregnancy* worksheet as a guide, have participants develop a menu using the *Healthy Menu* sheet.

2. Give each participant a *Things to Avoid During Pregnancy* sheet. In addition to eating healthy, there are other considerations that pregnant women need to be aware of to ensure a healthy outcome. Review each of the items to avoid and talk about why each is important.
3. Assign participants different types of diets (lactose-intolerant, vegetarian, limited budget income, etc.) A computer presentation can be created to educate and inform the class of the importance of nutrients to the mother and unborn child.
4. Have each participant present their project to the group.

Healthy Eating During Pregnancy

A variety of foods are important during pregnancy for the mother and baby.

Protein

Amino acids help build the brain, muscles, hair, skin, nails, and immune system.

Foods: meat, poultry, fish, eggs, beans, and milk. **Note:** Stay away from high-protein supplements.

Carbohydrates

Provides energy for the expectant mother. More than half of daily calories should come from this.

Foods: grains, cereals, pasta, whole grain bread, rice, potatoes, and corn. **Note:** Stay away from candy, soda, and desserts.

Fats

Can contribute to good health and energy, and help the body to use vitamins like A, D, E, and K.

Foods: boiled, steamed, roasted, and baked goods are better choices. **Note:** Limit foods in fat.

Fiber

Can help regulate the bowels, aid in the prevention of heart disease, and protect against some cancers.

Foods: whole grain bread products, pastas or cereals, brown rice, dried fruits (apricots, dates, prunes, raisins), blackberries, blueberries, raspberries, strawberries, oranges, broccoli, beans (e.g. kidney, lima, chick peas, lentils and soy beans).

Folic Acid

Helps produce extra blood and prevent birth defects of the nervous system.

Foods: broccoli, green leafy vegetables, and orange juice; fortified foods – breads, pasta, and grains.

Vitamin A

Vital for developing cells, bones, and vision.

Foods: dairy products, fruits and vegetables that are orange, dark green, and deep yellow.

TOO MUCH OF THESE CAN CAUSE BIRTH DEFECTS.

Vitamin B

Nerve cells and formation of red blood cells.

Foods: meats, grains, and dairy products.

Vitamin C

Helps produce collagen, which gives structure to bones, muscles, and blood vessels. Helps the body absorb iron. Boosts the immune system.

Foods: orange juice, melon, tomatoes, and green peppers.

Vitamin D

Develops bones and tissues.

Foods: whole vitamin D milk, egg yolks, and sunlight.

Calcium

Builds strong bones and teeth.

Foods: milk, yogurt, broccoli, and leafy green vegetables like spinach, kale, and collard greens.

Iron

Contributes to renewal of mother's red blood cells, which supply oxygen to the fetus.

Foods: dried fruits, red meats, green vegetables.



Healthy Menu

Meals	Foods	Key Nutrients
Breakfast		
Lunch		
Snack		
Dinner		

Things to Avoid During Pregnancy

Smoking

Smoking can cause premature births and low birth weight. Smoking reduces the amount of oxygen the fetus receives. Secondhand smoke can also be damaging.

Alcohol

No amount of alcohol has been determined safe for an unborn baby. Brain damage and miscarriage can occur with even a small amount of alcohol consumption. The safest route is to drink NO alcohol if you are pregnant or may become pregnant.

Lead

EVERYONE should avoid exposure to lead, especially pregnant women.

Work-Related Hazards

Women who work with or have some contact with chemicals or do strenuous work should talk with their manager or supervisor about cutting back hours or perhaps do different work while they are pregnant.

Paint

A pregnant woman should not paint the nursery, because the fumes could harm the fetus.

Household Cleansers

Expectant mothers CAN use cleaning supplies, but with a few precautions. Strong cleansers with overwhelming fumes should be avoided. Chlorine-based products should never be mixed with ammonia. Rubber gloves should always be worn.

Hair Products

There is no evidence that proves coloring your hair or getting a permanent while pregnant could cause harm to the fetus. However, they are not recommended during pregnancy.

Caffeine

Caffeine has been linked to an increase in miscarriages, so large amounts should be avoided. One cup of caffeinated beverages per day is considered safe. Coffee and certain soft drinks have caffeine in them.

Medications

Pregnant women should consult a doctor before taking any type of medication.

Undercooked meat, cat litter (risk of toxoplasmosis)

Toxoplasmosis is an infection that could harm the fetus. The eyes and brain of a fetus can be damaged by toxoplasmosis, which can be contracted from eating undercooked meat or from contact with cat feces. A woman can be given a blood test to see if she has or has had this disease.

Prevention:

- Expectant mothers should have someone else change cat litter boxes.
- Cook meat and poultry thoroughly.
- Wash utensils that have touched raw meat with hot soapy water.
- Do not cross-contaminate.

Activity 8 – Timeline of Changes

45 minutes

Materials:

- Blank piece of paper

Facilitation Steps:

1. Using the Internet and other reference materials, have participants develop a list of physical changes that occur in the fetus during each of the three trimesters. This can be completed as a group or an individual project.
2. Participants should chart the milestones or benchmarks of fetal development from conception through delivery. You can also use a poster or booklet approach with visuals and facts about each of the trimesters.

Activity 9 – Slide Show and Disease Detective

15 minutes

Materials:

- Presentation Slide 12 – *Heredity and Genetic Diseases*
- Presentation Slide 13 – *Examples of Genetic Diseases*
- *Disease Detective* (one per participant)

Facilitation Steps:

1. Using the *Heredity and Genetic Diseases* and *Examples of Genetic Diseases* slides. Share information about prenatal development and genetics.
2. The *Disease Detective* worksheet can be given as homework or completed in class. These activities can be combined with various handouts and worksheets according to your discretion.

Disease Detective

Directions: Use the Internet or the library to look for information on a genetic disease. You will need to type a one-page report on the information that you have found (one page, no headings, Times New Roman or similar, 12 pt. font size, double spaced). You will share the information with the class.

1. (10 points) What is the genetic disease? Clearly describe the disease.
2. (5 points) Who does this genetic disease most commonly affect? Could be a nationality or age.
3. (7 points) How is this disease detected while in the womb and after the birth?
4. (8 points) Name a support group for this genetic disease. Describe the support group. How does the support group help families?

Total: 30 points

Heredity and Genetic Diseases

Heredity

- The transfer of traits from parent to child.
- Most children have apparent traits from both of their parents and their related families.
- An ovum (egg) and a sperm both contain 23 chromosomes: long, threadlike particles in the cell nucleus.
- When a sperm and ovum unite, they create a single cell with 23 pairs of chromosomes (46 total).

Genes

- Each chromosome contains thousands of genes.
- A gene is a hereditary unit that determines a particular physical or mental trait.
- Genes are from parents, grandparents, and earlier ancestors.
- Everyone is unique and has many random combinations.
- Over 64 trillion different genetic combinations are possible.

Genetic Diseases

Genetic disease occurs when certain genes are abnormal, causing disease or disabilities. Some people are carriers of an abnormal gene because they have family members who have a certain condition.

Everyone has defective genes. In most people it is not noticeable. There are more than 200 genetic disorders.

Examples of Genetic Diseases

There are more than 200 genetic diseases. Listed below is some information about two of the most well-known genetic diseases.

Down Syndrome

- A child with this disorder has an extra, critical portion of the number 21 chromosome present in all or some of their cells.
- Women age 35 and older have a significantly increased risk of having a child with Down syndrome.
- Down syndrome is the most commonly occurring genetic condition.
- Up to 50 percent of individuals with Down syndrome are born with congenital heart defects.
- Most people with Down syndrome have IQs that fall in the mild to moderate range of retardation.
- Most individuals with Down syndrome lead productive, happy lives.
- There is no cure, but research is ongoing.

Neuromuscular Diseases

- Most well-known are muscular dystrophy and Amyotrophic Lateral Sclerosis (ALS) or Lou Gehrig's Disease.
- There are nine different types of muscular dystrophy.
- Can be inherited from one or both parents.
- Skeletal muscles of children with any form of these disorders gradually weaken and cause permanent disability.
- Muscle weakness can also cause respiratory (breathing) problems.
- Some signs appear as early as birth; other forms appear later in childhood, adolescence, and early adulthood.
- Intense physical therapies are given.
- Individuals with muscular dystrophy experience varying degrees of independence.

Lesson One – Fetal Development

REVIEW: Infant Development Quiz

10 minutes

Purpose:

The purpose of the quiz is to review the main points from the lesson and give participants the opportunity to think about what they have learned.

Materials:

- *Infant Development Quiz* (one per participant)

Facilitation Steps:

1. Have participants complete the *Infant Development Quiz*. Participants can use the *Infant Development Milestones* sheet, the *Trimester Development* activity, and the class discussion as references as they complete the quiz.
2. Answers
 1. Trimesters
 2. 100 billion
 3. Amniotic fluid
 4. First
 5. Brain, spinal cord
 6. False
 7. False
 8. False
 9. True
 10. False

Infant Development Quiz

Fill in the blank.

1. An infant is in the womb for three, three-month periods of time called _____.
2. An infant has about _____ brain cells when it is born.
3. The fluid surrounding a fetus in the womb is called _____.
4. The heart starts beating during the _____ trimester.
5. The _____ and _____ cord are two of the first things to develop in an embryo.

Write true or false.

6. _____ Every child is able to do the same things at the same time.
7. _____ Most brain development occurs before an infant is born.
8. _____ Once a brain connection is made, it stays in the brain for the rest of the child's life.
9. _____ Talking to an infant helps him make language connections in his brain.
10. _____ Never doing the same activity twice is a good way to build brain connections.

Lesson Two – Pregnancy Symptoms and Discomforts



Lesson Overview

Adolescents are seldom fully aware of what changes, general or specific, occur during pregnancy physically, socially, emotionally, and visually. When a woman's body reaches full development during a nine-month pregnancy, major changes have occurred from the pre-pregnancy state. Often these changes affect one's self esteem, which affects one's emotional state of mind.

Lesson Objectives

After completing this lesson, participants will be able to:

- Describe the physical and emotional changes that occur during pregnancy

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	• <i>Pregnancy Symptoms and Discomforts</i> worksheet (one per participant) • Presentation Slide 2 - <i>Physical Changes Month-by-Month</i> • Pregnancy Torso	1. Print/photocopy <i>Pregnancy Symptoms and Discomforts</i> worksheet 2. Prepare to display Presentation Slide 2 - <i>Physical Changes Month-by-Month</i>	10 minutes
LEARN	• None	1. Invite guest speakers to class if desired	15-30 minutes
REVIEW	• <i>Pregnancy Symptoms and Discomforts</i> worksheet (one per participant)		10 minutes

Lesson Four – Pregnancy Symptoms and Discomforts

FOCUS: Pregnancy Symptoms – Positive or Negative?

10-15 minutes

Purpose:

Participants will have the opportunity to identify pregnancy symptoms and consider the impact that each would have on the participant's life.

Materials:

- *Pregnancy Symptoms and Discomforts* worksheet
- Presentation Slide 2 - *Physical Changes Month-by-Month*
- Pregnancy Torso

Facilitation Steps:

1. Have participants brainstorm symptoms or changes that a pregnant woman may experience.
2. Display the Pregnancy Torso, if available, for students to use as a visual reference for what a full-term fetus and uterus look like.
3. Give them the *Pregnancy Symptoms and Discomforts* worksheet and have them add any that are not already listed on the sheet.
4. Have participants personally evaluate whether each of these would be a positive or a negative effect in their life right now.
5. Have participants identify which symptoms or discomforts would be most upsetting, pleasant, or hardest to deal with at their age and why.
6. Call on a participant and ask them to choose one of the symptoms or discomforts on the worksheet. Ask them to identify which month they believe that symptom would be present.
7. Display Presentation Slide 2 - *Physical Changes Month by Month* and discuss the physical changes that occur month by month to the pregnant woman.

Pregnancy Symptoms and Discomforts

The following are physical and emotional conditions that can occur during pregnancy. Most women experience these in varying degrees at different stages throughout the pregnancy.

Directions: For each symptom or discomfort listed below, write your feelings or thoughts as to why it might be a positive or negative factor in your life right now. Be prepared to give reasons for your response.

Symptom/Discomfort	Reactions: Feelings or thoughts, positive or negative
Monthly period stops	
New wardrobe due to increased size	
Sweating due to higher body temperature	
Frequent urination or leaking urine	
Gain of 20-30 pounds	
Blemishes may disappear or become noticeable	
Hair becomes thick and healthy	
Breasts get larger and may be sore	
Appetite increases	
Craving strange foods or combinations of foods	
Constipation	
Stretch marks	
Varicose veins	
Navel flattens or pops out as belly grows	
Increased tiredness	
People make a fuss and try to be more helpful	
Crying for no reason	
Lower back pain	
Trouble sleeping	
Can feel the baby move	
Worrying about the baby	
Worrying about your parenting abilities	
Swelling feet and hands	
Reliance on others increases	
Braxton-Hicks contractions	
Center of gravity shifts, causing unsteadiness	
Fainting or light-headedness	
Nausea and possible throwing up	

Lesson Two – Pregnancy Symptoms and Discomforts

LEARN: How Would I Feel if.....

15-30 minutes

Purpose:

Guest/parent speakers may be invited into the classroom to address physical and emotional challenges of being pregnant.

Materials:

- *None*

Facilitation Steps:

1. Pregnancy/Parent Speaker - Invite someone who is in her third trimester of pregnancy to visit the class. Have her share her physical experiences and how these have changed throughout her pregnancy. Address the physical and emotional challenges she has personally experienced while being pregnant. Have her include the reactions of others to her physical body changes.
2. Invite parents who already have children to share their pregnancy experiences with the class. Couples make it interesting when both mom and dad share their perspectives.
3. The guests could share the following topics with the class:
 - What were their first reactions upon learning of the pregnancy?
 - Was this a planned pregnancy?
 - Who did they tell first? What were the reactions of these people?
 - What physical and emotional changes did they experience? Any challenges or difficulties?
 - As the pregnancy progressed, what changes did they notice?
 - Are there any fears about the birth or delivery?
 - How do they feel they will do as parents of a newborn?
 - Do they feel they are physically, mentally and financially ready to be parents?
 - How do they view their role(s) as a parent?
 - What advice would they give to someone considering becoming a parent? Would this advice differ if it were someone in their twenties or thirties versus someone in their teens?
4. Invite the speakers to class with their newborn to talk about the birth process and new parent experiences if the schedule and delivery dates coordinate.

Lesson Two – Pregnancy Symptoms and Discomforts

REVIEW: Symptoms and Discomforts – Physical vs. Emotional

10 minutes

Purpose:

The purpose of this activity is to review the main pregnancy symptoms and discomforts and give participants an opportunity to reflect on how one symptom might impact or cause another symptom, either physically or emotionally.

Materials:

- *Pregnancy Symptoms and Discomforts* worksheet

Facilitation Steps:

1. Have participants use the Pregnancy Symptoms and Discomforts worksheet to determine which of the symptoms/discomforts are physical and which ones are emotional. Write P for physical and E for emotional.
2. Discuss how one might affect or be a cause for another in terms of the overall health of the pregnant mother.

3. Supplemental Activity (Optional): Reaction Stories

Have participants write a fictitious story of their personal reaction upon getting a positive pregnancy test. This should be written from the male point of view as well.

- What would be your honest reaction? (Note that some participants may indicate happiness with the positive results.)
 - Who would you tell first?
 - Where or when would you tell them?
 - What would you say before and after telling someone you tested positive for pregnancy?
 - How do you think they would feel?
 - What would be your next plan of action?
4. Have participants share their responses.

Lesson Three – Exploration of Pregnancy and Childbirth-Related Careers



Lesson Overview

In this lesson, participants will be introduced to various childbirth and pregnancy-related careers. Participants will research and explore healthcare career pathways in related occupations.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify several professions in the healthcare field related to pregnancy and childbirth
- Consider if any of the occupations covered in class are appropriate for them

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	• <i>Career Exploration Brainstorming Web</i> handout	1. Print/photocopy <i>Career Exploration Brainstorming Web</i> handout (one for each group)	10 minutes
LEARN	• List of pregnancy and childbirth-related careers from brainstorming activity • <i>Career Exploration Research Summary</i> handout	1. Have the list of careers available from the brainstorming activity as well as the list in this lesson. 2. Print/photocopy the <i>Career Exploration Research Summary</i> handout – one for each participant	30-90 minutes
REVIEW	• Questions for panel - optional	1. Contact 3-5 local childbirth or pregnancy-related professionals, inviting them to participate in the panel discussion.	45 minutes

		2. Set up the room with panel seating in the front with audience facing the panel.	
--	--	--	--

Lesson Three – Exploration of Childbirth-Related Careers

FOCUS: Brainstorming Activity

10 minutes

Purpose:

There are many occupations that relate to childbirth and pregnancy. Participants may be unaware of the many career opportunities that exist. This activity will get participants to begin thinking about careers surrounding childbirth and pregnancy.

Materials:

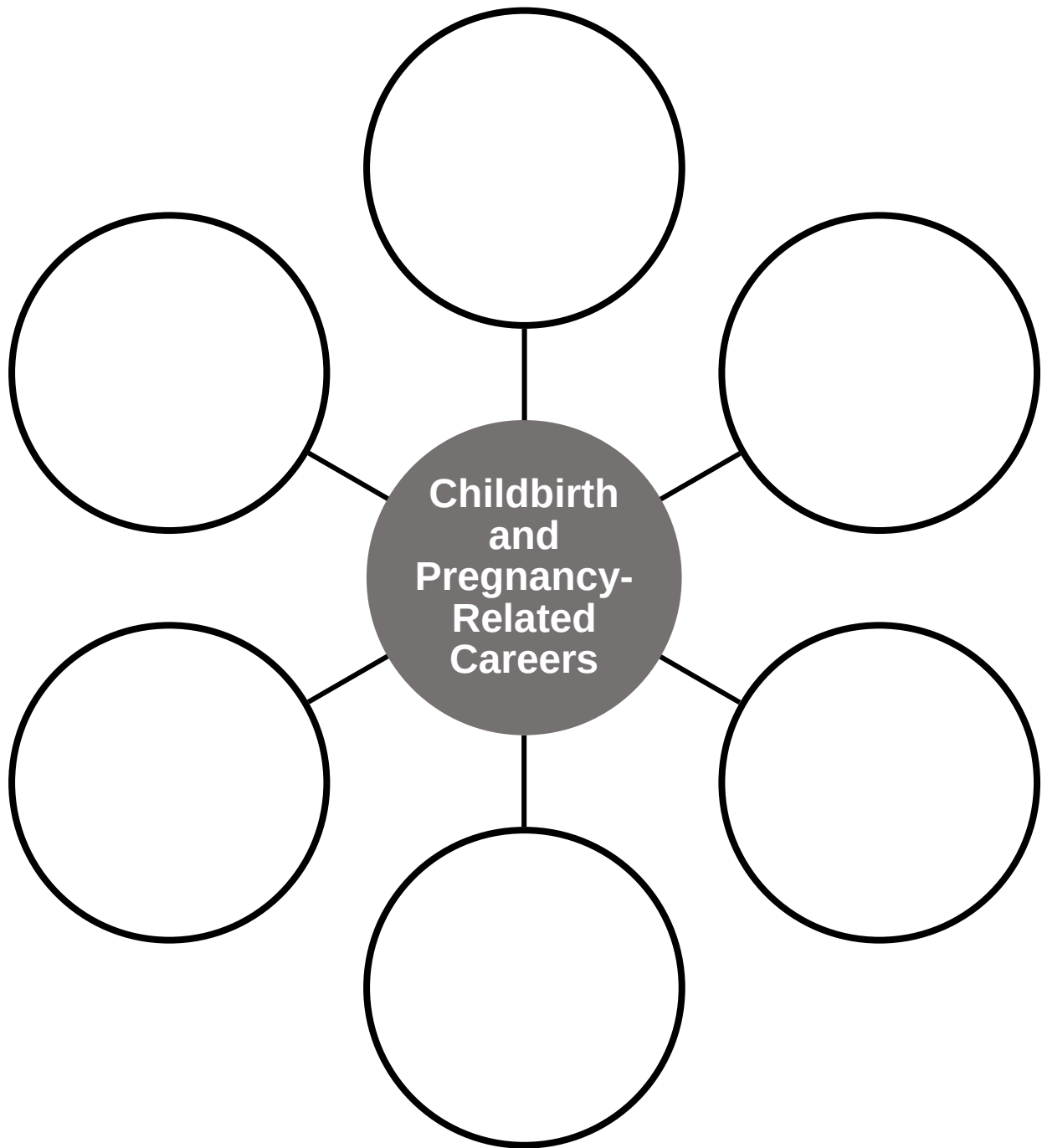
- *Career Exploration Brainstorming Web* handout

Facilitation Steps:

1. The Bureau of Labor Statistics says that healthcare employment growth is predicted to skyrocket through 2020. Healthcare and social assistance should see the most gain with 5.6 million jobs. Participants need to be aware of the many opportunities available to choose from in healthcare. Some of these careers relate to childbirth and pregnancy.
2. Divide the class into 5 groups. Make a photocopy for each group of the *Career Exploration Brainstorming Web* handout. After welcoming participants to the class, explain the purpose of the activity, distribute it, and give participants 5 minutes to complete it.
3. After 5 minutes, call the groups back together. Ask each group to share one of the careers they identified as relating to pregnancy and childbirth in their brainstorming session. Write these on a master list on a white board or similar item. Continue calling upon each group until all careers that were brainstormed are written down on the master list.

Career Exploration Brainstorming Web

Directions: With your group, brainstorm as many careers relating to childbirth and pregnancy as you can in 5 minutes. Write each career identified in a circle. Draw additional circles as needed.



Lesson Three – Exploration of Childbirth-Related Careers

LEARN: Research Project

30-90 minutes

Purpose:

The purpose of this activity is to have participants take a closer look at childbirth and pregnancy related career options. Participants will research one career of interest identified from the original brainstorming session. Information learned from the research will be shared with the group via a brief presentation.

Materials:

- List of pregnancy and childbirth-related careers from the brainstorming session
- Library and Internet resources
- *Career Exploration Research Summary* handout

Facilitation Steps:

1. Review the list of childbirth and pregnancy-related careers from the Focus activity. Have students choose one of the careers to explore further. Depending on how many participants are in your class, you can decide whether or not to allow multiple students to research the same career.
2. Give students the *Career Exploration Research Summary* handout. Tell them that they can use the Internet or other sources in the library for their research. Here are a few helpful websites:

www.bls.gov
<http://www.bls.gov/ooh/>
www.careerinfonet.org
www.careervoyages.gov
<http://careerplanning.about.com/od/occupations/a/car>
<http://www.myplan.com/careers/index.php>
[eer_briefs.htm](http://www.myplan.com/careers/index.php)

3. Give students one or two class periods to complete their research. You can also assign this as homework. Students should prepare a short 5-minute presentation about this career, including the information on the summary sheet.
4. Have each student present their chosen childbirth or pregnancy-related career to the group.
5. Here is a suggested grading rubric for the class presentation:

30 points – Completed all information on the *Career Exploration Research Summary* handout

20 points – Prepared for the presentation

20 points – The presentation content was clear, concise, and gave a good understanding of the chosen career

20 points – Demonstrated the ability to think critically, taking information from other sources to create something new

10 points – Demonstrated time management skills by delivering a well-planned 5-minute presentation

Career Exploration Research Summary

Name: _____ Date: _____

Identify and research one career relating to childbirth or pregnancy. Complete this worksheet for your career choice. Possible sources for information include your school library, public library, Bureau of Labor Statistics website, Occupational Outlook Handbook website, and other career-related websites on the Internet.

Career name: _____

Degree or licenses required: _____

Length of time to complete training or earn degrees: _____

Average starting salary: _____

Job outlook: _____

Short job description:

Skills a person should have to be successful in this career:

Sources used for this project:



List of Childbirth and Pregnancy-Related Careers

This is a list of potential careers relating to childbirth and pregnancy. Add any additional careers that participants may have brainstormed during the Focus Activity that are not on the list.

- Childbirth educator
- Labor doula
- Postpartum doula
- Lactation consultant
- Obstetrician
- Gynecologist
- Midwife
- Prenatal fitness instructor
- Labor and delivery nurse
- Ultrasound technician / sonographer
- Counselor, psychologist or psychiatrist at a pregnancy center or clinic
- Pediatrician
- Dietitian for expectant mothers
- Prenatal/Parenting educator

Lesson Three – Exploration of Childbirth-Related Careers

REVIEW: Career Panel Discussion

45-60 minutes

Purpose:

To hear from real professionals who work in childbirth and pregnancy-related careers.

Materials:

- Panel of local professionals who work in a variety of related careers (3-5)

Facilitation Steps:

1. Contact local childbirth or pregnancy-related professionals from a variety of settings such as hospital, clinic, social service organizations or associations and invite them to attend a panel discussion in your class.
2. The day of the panel discussion, set up your space so that there is a table with seating for all panel members at the front of the room. If sound is an issue, have a microphone available.
3. Invite participants in the audience to ask questions to panel members. Remind participants ahead of time to keep questions relevant to work. You may ask participants to submit questions in advance if desired.





www.realityworks.com

©2015 Realityworks, Inc. All rights reserved
RealCareer® is a trademark of Realityworks, Inc.

1036130-01A | 12/2015

