



Fetal Development

This outline is available for download at www.respectlifekcsj.org



Sign-in, get drinks/snacks, and socialize

Welcome & Opening Prayer for Life

Youth Facilitator opens meeting with a “thank you” to all who have attended, introduction of new members, and a prayer. It is important that all participants feel welcomed and participate within their own comfort level.

Opening Prayer

Prayer for Protection of Human Life at its Beginning

God our Father, you lovingly knit us in our mothers' womb. Grant that each human embryo will be respected as a human being, and not dismissed as a product to be manipulated or destroyed. Grant us the courage and conviction to be your voice for our sisters and brothers at the very earliest stages of their development, and for all defenseless unborn children.

Jesus, Divine Healer, foster in those conducting medical research a commitment to finding cures in ways that respect these little ones and all your vulnerable children.

Holy Spirit, grant us the wisdom to develop morally sound treatments for conditions now thought to be incurable. Help us persevere in defending human life while alleviating suffering.

Show mercy to all who have cooperated in killing our tiniest brothers and sisters. Bring them and all who support destructive embryo research to true conversion. Grant them the ability to see the immeasurable dignity of all human beings even in the first days of life.

Father, we ask this in Jesus' name, through the Holy Spirit. Amen.

Icebreaker: A Test of Knowledge

At the end of the agenda below is a Fetal Development quiz. Pass out the quiz to participants so they can see how much they know already. It's a lot harder than you think! The students can form teams of 4, and work together to figure out the right answers. When everyone is finished, read off the answers and the team who gets the most right wins!

Here is the Answer Key: 1. C (1 in 200 million), 2. C (8 weeks after conception), 3. A (8 weeks after conception), 4. C (10,000 times larger), 5. C (12 weeks after conception), 6. A (40 days after conception), 7. B (21 days after conception), 8. A (At conception), 9. B (10 weeks after conception), 10. C (Young One), 11. C. (At conception), 12. A (8 weeks after conception), 13. B (8.6 ounces)

Presentation – Fetal Development

NOTE: The Powerpoint presentation is available online for download.

- ❖ The presentation file has been updated into the same PDF format as this session outline so it should be just as easy to access. If no laptop/projector is available, a printout of individual slides can also be copied/printed and used as both a presentation and as a handout for participant notes.
- ❖ The content in the slide presentation is designed to be straight-forward but also to allow flexibility.
- ❖ The comprehensive nature of the written facilitator notes below has been provided to allow for diversity among groups, for an extended and on-going education, and for later reference on the topic. **Therefore, it is possible that all the content included in the facilitator notes will *not* be covered in a single session. Please review the information below for each slide and then create a presentation that is your own based on the needs of your particular group.**

- ❖ If necessary, the Respect Life Office can answer any questions or provide guidance on any topics in the slide deck. Please contact the Respect Life Office at (816) 756-1850 or francis@dioceskcjsj.org if you cannot access the on-line files.

Slide 1 Introduction Fetal Development

Slide 2 Topics for Discussion

- Learn more about fetal development
- Reflect on how Mary felt throughout her pregnancy with Jesus
- Discuss current fetal development controversy
- Promote life in the womb

Slide 3 Conception

Once the sperm and egg join in the fallopian tube, a unique human being is created. The initial 46 chromosomes, 23 from each parent, pre-determine all of this person's physical characteristics. The chromosomes provide the entire blueprint that will define this person's eye and hair color, adult height, and aptitude for math, art, and sports. Upon moving into the uterus, the developing embryo searches for a place to implant and grow. In the next few weeks, the central nervous system, the circulatory system, and the skeletal systems all start to form. By the third week, the central nervous system, blood vessels, and the vascular system begin to appear. The embryonic blood vessels begin developing fertilization, Although the embryo begins developing immediately after conception, the most visible advances occur during the third to eighth week. **Pray that the Mother will choose life.**

Slide 4 Letter to Jesus from Mary: Annunciation

Slide 5 First Month

The heart, although no larger than a poppy seed, has been beating since Day 18. Blood has been pumping through a closed circulatory system since Day 21. During this time, the eyes ears, nose, teeth, and tongue begin to form and limb buds are visible. The baby is 10,000 times larger than it was last month and is about ¼ inch long already. Pray that the Mother will choose life.

Slide 6 Letter to Jesus from Mary: First Month

Slide 7 Second Month

By the second month, the embryo is 1/2 an inch long. The major muscles systems have developed, and the tiny human is perfectly developed with all external features and internal organs. Fingers and feet have been developed as well. By 6 ½ weeks, baby-teeth buds are present and he or she can suck the thumb and swallow. By 10 weeks, 20 tiny baby teeth are forming in the gums, and the little growing person squints, swallows, yawns, and can even move the tongue. If you touch the palm, a tight fist will be made. You can hear a baby's heart beat and brain waves can be measured too. Usually the mother is finding out about the child. Pray that the mother will choose life.

Slide 8 Letter to Jesus from Mary: Second Month

Slide 9 Third Month

The third month is the start of the second trimester and the baby measures 2 1/2 to 3 inches in length. Although the mother cannot feel it, the baby can kick and flip. The eyes can now move although the eyelids are closed and the baby can experience rapid eye movement (REM) sleep of dreams. The baby can close fingers around an object placed in the hand. Cartilage skeleton begins to change over to real bone. I am starting to react to my environment and can feel pain. Pray that the Mother will choose life.

Slide 10 Letter to Jesus from Mary: Third Month

Slide 11 Fourth Month

The baby weighs about 6 ounces and has fingernails, eyelashes, and his or her unique fingerprints which will remain the same for their lifetime. Their taste buds and sense of hearing are developing. There is a white soft hair all over the baby's body called 'lanugos'. The skin is covered with a vermin or a thick white cream protecting it from the salty amniotic fluid. Whether

the baby is awake or asleep, he or she moves around at least 50 times each hour. Although still very small, he or she is growing rapidly. The heart is able to pump about six gallons of blood every day. Pray that the Mother will choose life.

Slide 12 Letter to Jesus from Mary: Fourth Month

Slide 13 Fifth Month

From 18 weeks, babies can open their eyes and although vision is the last sense to develop, there is just enough light filtered through the mother's tissue that a fetal baby can respond when the mother is in bright light. By twenty weeks a baby will have grown to one pound and although small, can hear and recognize a mother's voice. Using an ultrasound device, the doctor can tell if the child is a girl or a boy. Pray that the Mother will choose life.

Slide 14 Letter to Jesus from Mary: Fifth Month

Slide 15 Sixth Month

The baby continues to practice breathing by inhaling amniotic fluid in preparation for the big day- the first breath of air. Eyes begin to part and open occasionally for short periods of time. Hiccups are not uncommon. The baby learns constantly. After birth, the baby prefers the mother's voice because it has been heard filtered through the amniotic fluid. From 26 weeks, babies exhibit a whole range of typical baby behavior and moods, including scratching, smiling, crying, hiccupping, and sucking. Pray that the Mother will choose life.

Slide 16 Letter to Jesus from Mary: Sixth Month

Slide 17 Seventh Month

By the end of the seventh month, the baby is 14-16 inches long and weighs between 2.5-3.5 pounds. Their eyes have formed completely and the tongue has developed taste buds. Body fat is beginning to form in preparation for life outside the womb. During this time, antibodies are also received from the mother to protect from a wide variety of diseases. Pray that the Mother will choose life.

Slide 18 Letter to Jesus from Mary: Seventh Month

Slide 19 Eighth Month

The baby may weight from 4-6 pounds and is gaining about a half a pound per week. Soon the baby will turn his or her head down in preparation for the coming birth. Tremendous brain growth occurs at this time and most body organs are now developed with the exception of the lungs. If the baby kicks, the mother will not only be able to feel it but also can see it on the outside. Pray that the Mother will choose life.

Slide 20 Letter To Jesus from Mary: Eighth Month

Slide 21 Ninth Month

Most of the baby's bones have hardened, although the skull is still pliable. Soon the baby will settle down lower in the abdomen in preparation for birth and may seem less active. The skin is pink and smooth and the child measures 19-20 inches in length. Lungs are mature and at approximately 8 pounds the baby is ready for life outside the womb.

Slide 22 Letter To Jesus from Mary: Ninth Month

Slide 23 TIME Magazine

TIME Monday, January 11, 1990 - The term "Designer Babies" was first put into the Oxford English Dictionary in 2004. It is described as "a baby whose genetic makeup has been artificially selected by genetic engineering combined with in vitro fertilization to ensure the presence or absence of particular genes or characteristics".

It all began when it was first introduced in 1990. At first, the intention was to find a way to stop life-threatening or serious disorders that may be inherited. Now, parents are changing physical traits for "cosmetic reasons". Today, scientists can change the gender of your child with accuracy. They can also change the genes of the hair and eye color but they are not very successful at it. They plan to be able to do much more in the next year.

The procedure begins after In Vitro Fertilization. On the third day, a single cell (or blastomere) is removed from each embryo and tested for genetic diagnosis. Once the diagnosis is made, the unaffected embryos are transferred back into the uterus.

Slide 24 In the News...Design Your Baby!?

There is a very controversial issue. "If we're going to produce children who are claimed to be superior because of their particular genes, we risk introducing new sources of discrimination" in society, says Marcy Darnovsky, associate executive

director of the Center for Genetics and Society, a nonprofit public interest group. For example, if parents select babies who are more likely to be tall, then short people could be more biased against.

Not everyone is able to afford the procedure either since it is about \$100,000. If this procedure were to become popular, there would be more discrimination amongst the separate classes.

Most people believe changing the genes of babies is okay when the child has a serious disease. However, how far is too far?

Evangelization/Catechesis

Slide 25 The Catechism Tells Us

2270 Human life must be respected and protected absolutely from the moment of conception. From the first moment of his existence, a human being must be recognized as having the rights of a person - among which is the inviolable right of every innocent being to life.

Slide 28 Summary

- Learned about fetal development
- Walked with Mary on her pregnancy journey with her son Jesus
- Informed on “designer babies”
- Inspired to go out and change the world by signing up for the March for Life Pilgrimage and by always educating others!

Closing Prayer

Slide 29 Hail Mary

Hail Mary,
Full of Grace, the Lord is with thee.
Blessed are thou amongst women, and blessed is the fruit of thy womb, Jesus.
Holy Mary, Mother of God
Pray for us sinners, now and at the hour of our death.
Amen



Agenda - Fetal Development



- I. Sign-in and drinks/snacks
- II. Welcome
- III. Opening Prayer for Protection of Human Life at its Beginning

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Father, we ask this in Jesus' name, through the Holy Spirit. Amen.

- IV. Icebreaker: A Test of Knowledge
- V. Presentation: Fetal Development
- VI. Outreach Planning: Opportunity to design items for Spiritual Adoption program, March For Life (For more information, visit : www.respectlifemissouri.org)
- VII. Evangelization/Catechesis:
- VIII. Closing Prayer: Hail Mary

*Hail Mary,
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Blessed are thou amongst women, and blessed is the fruit of thy womb, Jesus.
Holy Mary, Mother of God
Pray for us sinners, now and at the hour of our death.
Amen*

- IX. Next meeting date / time / location is: _____

Fetal Development Quiz: Test Your Knowledge of Life in the Womb and Life Issues

1. What was the chance of your being born?
 - A. 1 in 1,000
 - B. 1 in a million
 - C. 1 in 200 million
2. How long after conception is it before the kidneys of the fetus begin to function?
 - A. 7 months after conception
 - B. 40 days after conception
 - C. 8 weeks after conception
3. When does the body of the fetus begin to respond to touch?
 - A. 8 weeks after conception
 - B. 3 1/2 months after conception
 - C. 21 days after conception
4. 30 days after conception, the embryo of the developing child is how much larger than the original fertilized egg?
 - A. Twice as large
 - B. 100 times larger
 - C. 10,000 times larger
5. How soon after conception can the unborn child curl its toes and make a fist?
 - A. 33 days after conception
 - B. 6 1/2 weeks after conception
 - C. 12 weeks after conception
6. When can brain waves be detected and recorded in an unborn child?
 - A. 40 days after conception
 - B. 6 months after conception
 - C. Just prior to birth
7. How soon after conception does the unborn child's heart begin to beat?
 - A. 1 month after conception
 - B. 21 days after conception
 - C. 3 months after conception
8. DNA, the genetic blueprint which will determine every detail of human development such as the child's sex, height and eye color exists at what stage of development?
 - A. At conception
 - B. 1 week after conception
 - C. 1 day after conception
9. How many weeks after conception can the fetus squint, swallow and wrinkle its forehead?
 - A. 24 weeks after conception
 - B. 10 weeks after conception
 - C. 32 weeks after conception
10. What is "fetus" the Latin word for?
 - A. Unborn baby
 - B. Embryo
 - C. Young one
11. When does new life begin?
 - A. At birth
 - B. When the fertilized egg is implanted in the uterus
 - C. At conception
12. When does the unborn baby start sucking its thumb?
 - A. 8 weeks after conception
 - B. 12 weeks after conception
 - C. 20 weeks after conception
13. What is lightest weight that a baby has been born at and survived?
 - A. 1 pound 3.6 ounces
 - B. 8.6 ounces
 - C. 2 pounds 1.3 ounces

Truth Illuminated New Chapter Members

Name of Chapter: _____

Name:		T-shirt size:
Phone:	Cell phone:	
Email:	Home address:	
School I attend:	Parish I attend:	
Grade (9 th , 10 th , 11 th , or 12 th):	Age:	
Parents'/Guardians' Names:	How I heard about Truth Illuminated:	

Name:		T-shirt size:
Phone:	Cell phone:	
Email:	Home address:	
School I attend:	Parish I attend:	
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