

REPRODUCTION, PREGNANCY AND BIRTH

Lesson 13

DIFFERING
ABILITIES

LEARNER OUTCOME

Identify and describe the stages and factors that can affect human development from conception through birth¹



MATERIALS

- Female Reproductive Parts Diagram
- Male Reproductive Parts Diagram
- Fertilization Diagram
- Identical Twins Diagram
- Fraternal Twins Diagram
- Implantation Diagram
- Pregnancy and Birth Match Up
- My Birth Story Handout
- First Trimester Diagram
- Second Trimester Diagram
- Third Trimester Diagram



INTRODUCTION

Many students are curious about reproduction and the birth process. This lesson will help students understand how a pregnancy starts, how the baby grows inside the mother and the birth process.



Some students will find the concept of reproduction and birth interesting and this lesson is intended to answer questions they have about the process. It can be a fun and exciting topic to explore and can help to “debunk” common myths about where babies come from! Use your judgement to decide if your students will benefit from this material.



APPROACHES/STRATEGIES

A. GROUND RULES

- Ensure that ground rules are established before starting your classes. For classes that have already established ground rules, quickly reviewing them can promote a successful lesson.
- You should be prepared for giggles in your class. Try to acknowledge students’ reactions to the subject by saying that reproduction and birth can be difficult to talk about and it’s ok to feel a bit uncomfortable.



Sexual health education occurs most effectively in a classroom where there is a mutual feeling of trust, safety and comfort. Having Ground Rules in place can be a very successful way to facilitate a positive classroom environment. Click [here](#) for more information on how to set up Ground Rules.

B. DISCUSSION- WHERE DO BABIES COME FROM?

Explain to students that we are going to be talking about private parts of our body. These are called our sexual and reproductive organs, the parts of our body that help to make babies. You may want to refer back to Lesson 2 Puberty: My Changing Body, Activity C in which students worked on identifying internal body parts. This section may be challenging for some students as learning biological terminology is a complex skill. Please refer to the Male and Female Reproductive Parts handouts to use as a visual aid.



Some families and cultures share traditional stories with children about how babies are made. Some examples include the stork bringing a baby (as reflected in the Disney movie ‘Dumbo’) or “you came from the cabbage patch”.

1. Ask students how babies are made.
They may be embarrassed to talk but asking this question gives them the opportunity to share what they know, some of which may include myths that will need clarification.
 - Babies are made when the egg from a female and a sperm from a male join together. This is called fertilization. Show the Fertilization diagram.
 - This usually happens when a man and woman have sexual intercourse. The man releases sperm in to the woman's vagina and the sperm swim to the egg.
2. How many sperm are ejaculated during each ejaculation?
 - As many as two million sperm can be released during each ejaculation. Only one sperm gets inside the egg.
3. How many eggs are usually released during a menstrual cycle?
 - Usually one egg is released. The egg is the size of this dot!
4. What can happen if more than one egg is released?
 - If both eggs are fertilized, it means a woman may have fraternal twins. Identical twins happen when the fertilized egg splits into two before cells begin dividing. Show the Identical and Fraternal twins diagrams.
 - Does anyone know twins? Are they identical or fraternal?
5. How long does an egg "live" inside a woman's body?
 - 12-24 hours from the time it is released.
6. How long do sperm "live" inside a woman's body once ejaculated?
 - 3 to 5 days from the time of ejaculation.
7. Will a pregnancy occur every time sexual intercourse occurs?
 - No. Pregnancy only happens if sperm can fertilize an egg and implant into the wall of the uterus. Show the diagram Implantation.



This topic can provide extra learning opportunities if a staff member is pregnant and is willing to share her experience. Photos of ultrasounds can be shared with students, as can anecdotal material e.g., what it feels like when the baby kicks. If someone is willing to share be sure to set clear ground rules with your students. A question box or list of questions could be used to give to the pregnant woman ahead of time so that she gets to decide what she feels comfortable answering.

C. PREGNANCY AND BIRTH

The following information can be shared with your students in a variety of ways:

- Use the Pregnancy and Birth Match Up activity and the discussion points.
- Use books, online photos or teaching tools e.g., birth kit, DVDs (some may be available to you through your community health centre). Be sure to practice using these tools ahead of time and to choose materials that work best with your group.
- Use the discussion questions only.

Discussion questions:

1. What are the first signs for a woman that she is pregnant? Stress that not all women experience these signs.
 - Missing a period
 - Breast tenderness
 - Nausea and sickness, especially in the morning
 - Tiredness
2. How does a woman usually find out that she is pregnant?
 - She can take a pregnancy test bought at the pharmacist or drug store or she can do a test at the doctor's office.
3. How can a woman take care of herself and the baby while she is pregnant?
 - Avoid alcohol and drugs (including prescription medication unless told to use it by a doctor)
 - Avoid smoking and being around people who smoke
 - See her doctor for checkups
 - Eat a well balanced diet; take prenatal vitamins including folic acid
 - Get lots of rest and exercise
4. What is the name of the place where the baby grows inside the woman?
 - The uterus (sometimes called the womb)
5. How long does a pregnancy last?
 - A pregnancy normally lasts for 9 months or 40 weeks. So if the pregnancy starts in January the baby will be ready to be born in September
 - If a baby is born before 37 weeks of pregnancy it is premature or early.
 - Doctors divide a pregnancy into 3 stages called trimesters.
Trimester one includes the first three months. Trimester two includes months 4-6.
Trimester three includes months 7-9.
 - The baby goes through different types of development in each trimester. In trimester one all of the baby's organs develop. The baby moves around but the mother can not feel the movements yet. Teeth and nails are growing also.
 - In trimester two the brain develops a lot. The baby grows eyelashes and eyebrows, can open the eyes and looks more like a human baby.
 - In trimester three the baby can hear and is growing quickly as it gets ready to be born.
 - Use the trimester diagram handouts to show students how the baby grows and develops.

6. What is the process called when the woman has the baby/gives birth?
 - Labour. This process can last for a couple of hours or a couple of days!
7. How does the baby come out?
 - Most babies are pushed out of the woman's vagina. If the baby cannot come out that way for medical reasons, doctors will bring the baby out by giving the woman an operation called a Cesarean Section or a C-section, where they cut through the woman's abdomen into the uterus.

D. OPTIONAL ACTIVITY- MY BIRTH STORY

This activity can be used with students who you believe would benefit from the experience of sharing their learning with trusted adults. Some students may not live with their birth parents so may not be able to ask about their birth story. However, they can ask about the experience of when they were first introduced to their family.

1. Distribute the handout My Birth Story and explain that this is an activity to do at home with parents or other trusted adults.
2. Use the following questions to debrief the handout My Birth Story at a later time.
 - What did you learn about your birth story that you thought was exciting or that made you happy?
 - What did you learn about your birth story that surprised you?



Some questions about pregnancy and birth can be uncomfortable to answer (see discussion questions below). Students may have questions about why babies die or why they are born with disabilities. They may even have questions about why they themselves were born with a disability, a question they may not have felt comfortable asking until now. Acknowledging that these are difficult questions and preparing ahead of time will allow you to be honest and open with your students and meet their needs. Be aware of your own feelings about these difficult topics and talk to an adult close to you, a colleague or a counsellor if you are experiencing distress.

E. OPTIONAL DISCUSSION QUESTIONS

1. What does it mean when a woman loses a baby?
 - Sometimes a pregnancy ends before the baby is fully developed. You may have heard the term "losing a baby". This means that the woman had a miscarriage and the pregnancy ended. This usually happens in the first weeks of a pregnancy. Women and their families will probably be very upset and their sadness may continue for some time. They may think that they did something wrong but miscarriages are usually not the fault of the woman, they happen naturally.

2. Why are some babies born dead?
 - A baby that is born dead is called a stillborn baby. This happens when the baby dies inside the mother before it is born. Sometimes babies die before they are born because they are sick and would not be able to survive outside of their mother. Sometimes the doctors can not find a reason why the baby died. This is a very difficult and emotional time for the mother and her family. There is lots of support for woman and their families while they grieve.
3. Why are some babies born with disabilities?
 - Some disabilities are discovered in babies before they are born when the doctors look at ultrasound pictures or do blood tests on the mother. Some babies are born and the disabilities are not found out for some time. Disabilities can be caused by
 - the environment of the mother and baby e.g., the mother had a disease while pregnant;
 - hereditary factors – the parents carried a condition in their genes that was passed on to the baby;
 - chromosome defects.
 - Many people have disabilities or differing abilities. Some disabilities people can see and many others people cannot. Diversity makes us all such interesting people!



QUESTION BOX

Have students fill out questions and address them next class.



The process of asking questions is an important learning activity that helps students clarify and validate information being presented. Question Box is a method of individualized instruction which has been proven to enhance learning. Click [here](#) for more information on how to use the question box.



SELF RELECTION

During the lesson, were:

- Ground rules being followed?
- Good practices established regarding group work and discussion?

What will you change for future classes with this group?

What will you change for future use of this lesson?



STUDENT ASSESSMENT

During the lesson, did students:

Knowledge:

- Identify the components of the male and female reproductive anatomy?
- Review the function of each component?
- Identify factors that can affect fetal development?
- Outline the birth process?

Skills:

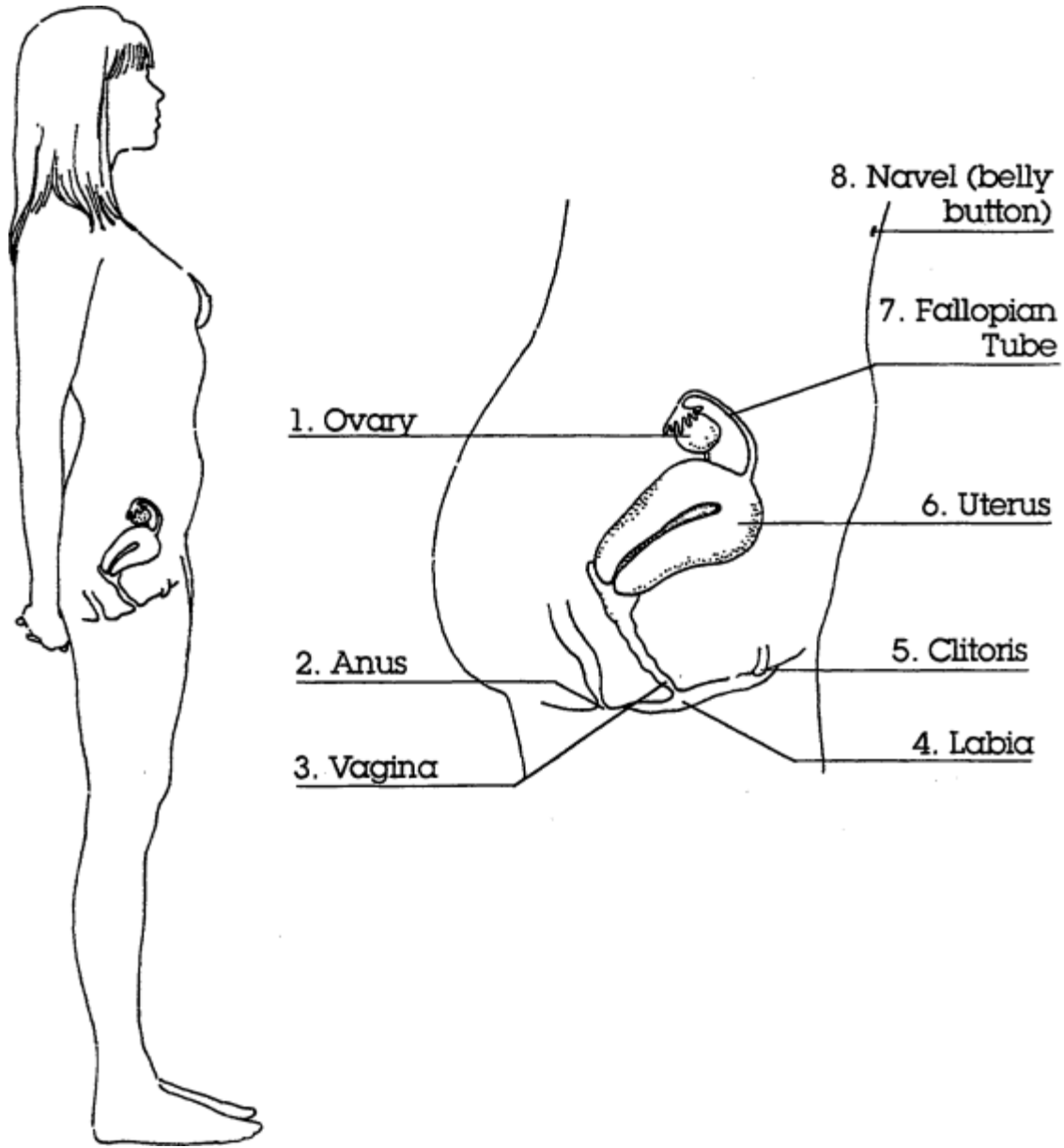
- Demonstrate appropriate listening and speaking skills during class discussion?

Attitudes:

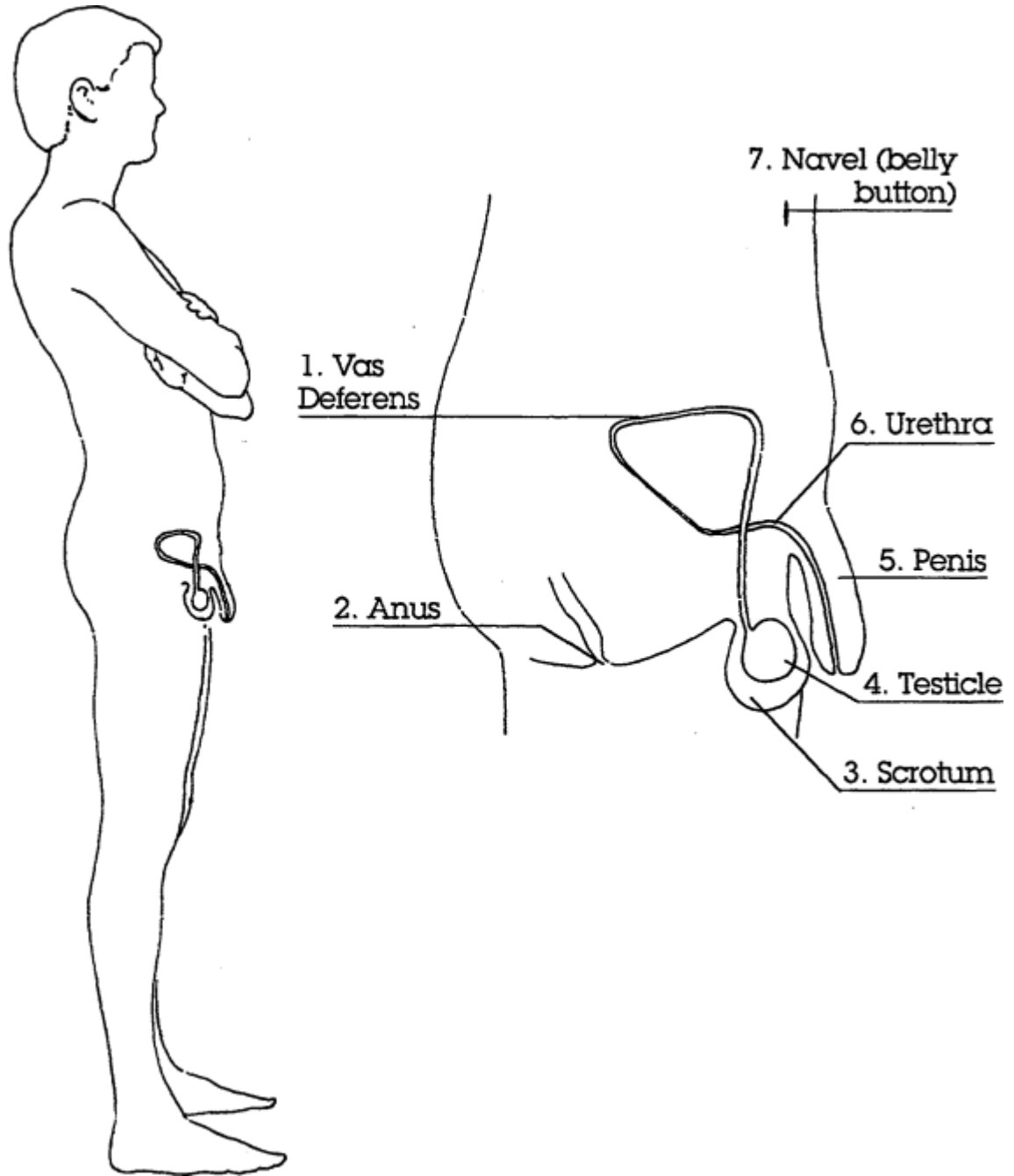
- Acknowledge that menstruation and sperm production can result in pregnancy?
- Acknowledge that fetal development is reliant on time?

ⁱAlberta Education. (2002). *Health and life skills guide to implementation: Kindergarten to grade 9*. Retrieved from <http://education.alberta.ca/media/352993/pos.pdf>

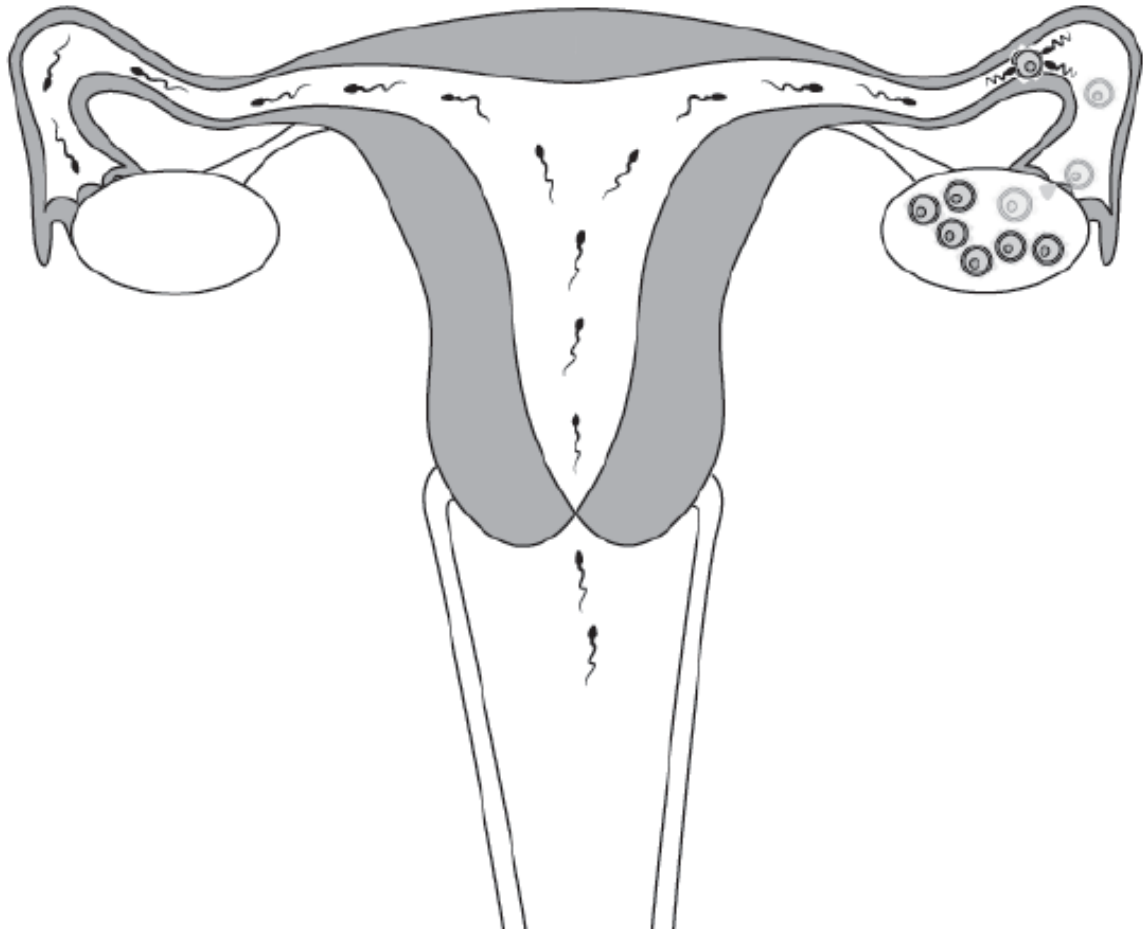
Female Reproductive Parts (labelled)



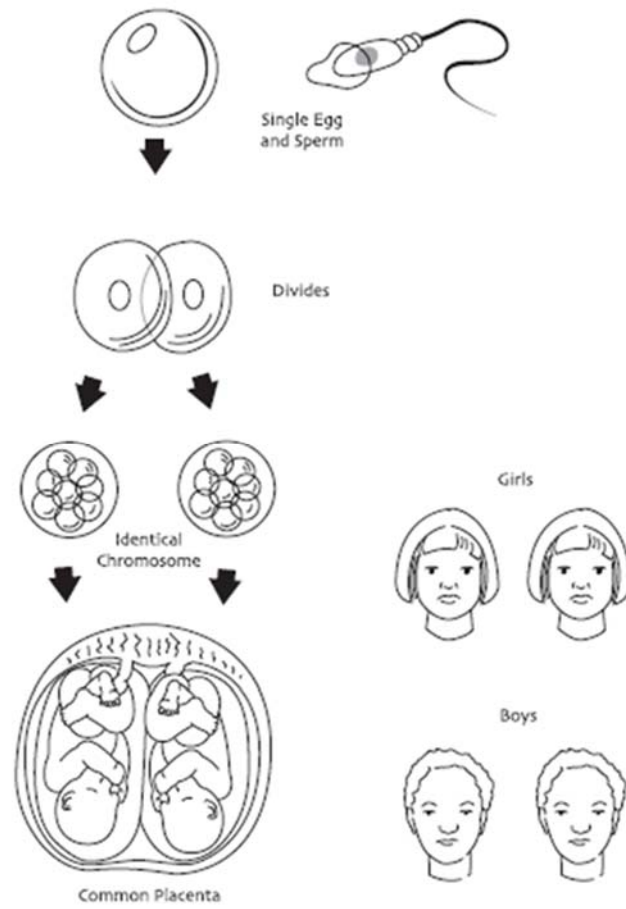
Male Reproductive Parts (labelled)



Fertilization

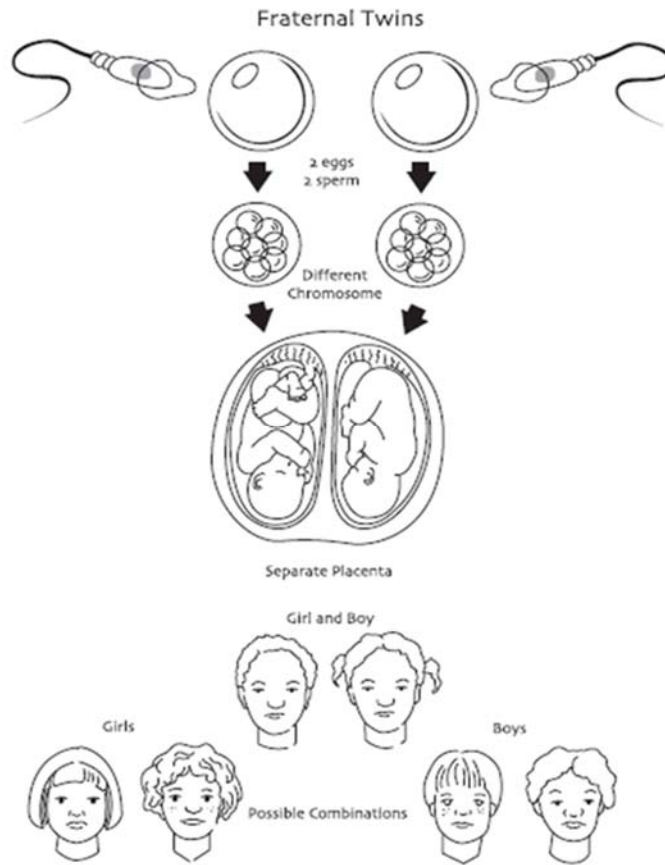


Identical Twins



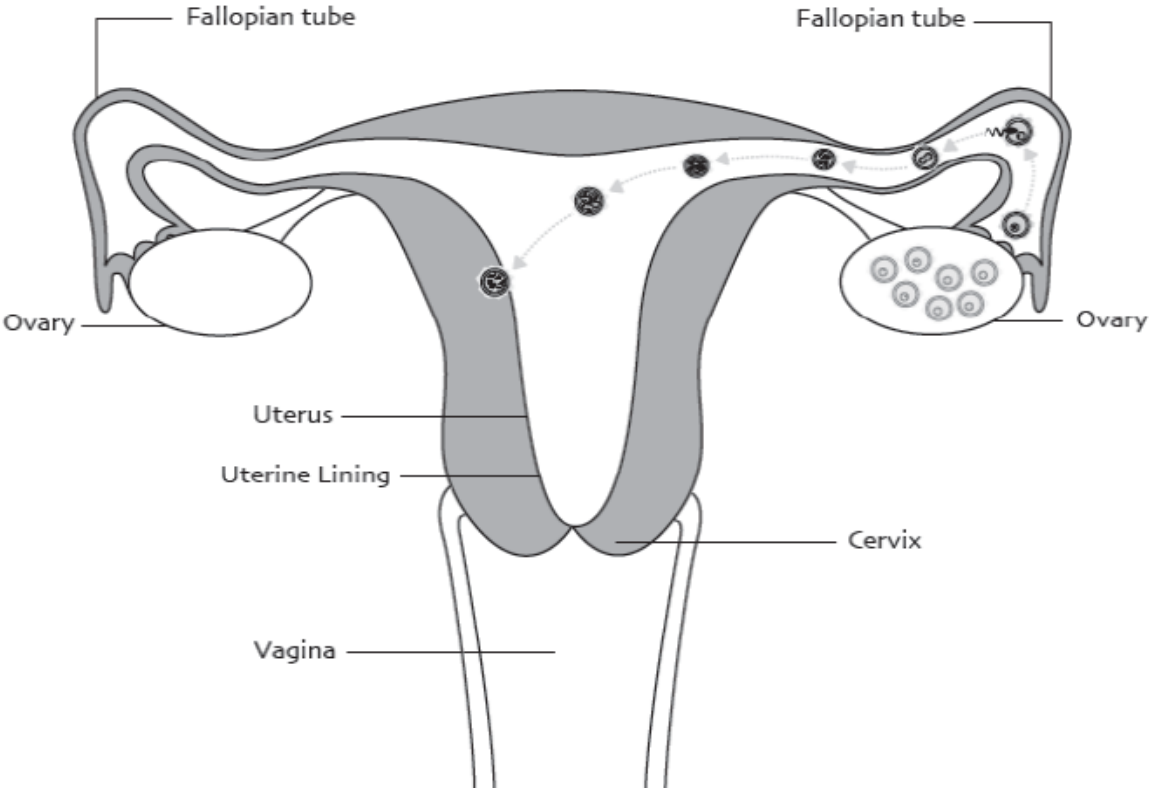
Adapted from *Sexuality: An Education Resource Book*, Canada: Globe/Modem Curriculum Press.

Fraternal Twins



Adapted from *Sexuality: An Education Resource Book*, Canada: Globe/Modem Curriculum Press.

Implantation



Pregnancy and Birth Match Up Activity

Print and distribute the cards randomly, lay the cards out on a table or read aloud to the group.

<p>The first signs for a woman that a woman is pregnant</p>	<p>Missing a period Breast tenderness Nausea and sickness, especially in the morning Tiredness</p>
<p>How a woman usually finds out that she is pregnant</p>	<p>a pregnancy test bought at the pharmacist or drug store or a test at the doctor's office</p>
<p>How a woman can take care of herself and the baby while she is pregnant</p>	<p>Avoid alcohol and drugs (including prescription medication unless told to use it by a doctor Avoid smoking and being around people who smoke See her doctor for checkups Eat a well balanced diet; take pre-natal vitamins including folic acid Get lots of rest and exercise</p>
<p>The name of the place where the baby grows inside the woman?</p>	<p>The uterus (sometimes called the womb)</p>
<p>How long a pregnancy lasts</p>	<p>A pregnancy normally lasts for 9 months or 40 weeks.</p>
<p>The name of the process when the woman gives birth to the baby</p>	<p>Labour. This process can last for a couple of hours or a couple of days!</p>
<p>How the baby comes out/is born</p>	<p>Most babies are pushed out of the woman's vagina. If the baby cannot come out that way for medical reasons, doctors will bring the baby out by giving the woman an operation called a Cesarean Section or a C-section, where they cut through the woman's abdomen into the uterus.</p>

My Birth Story

This activity involves talking about when you were born or when you first joined your family.

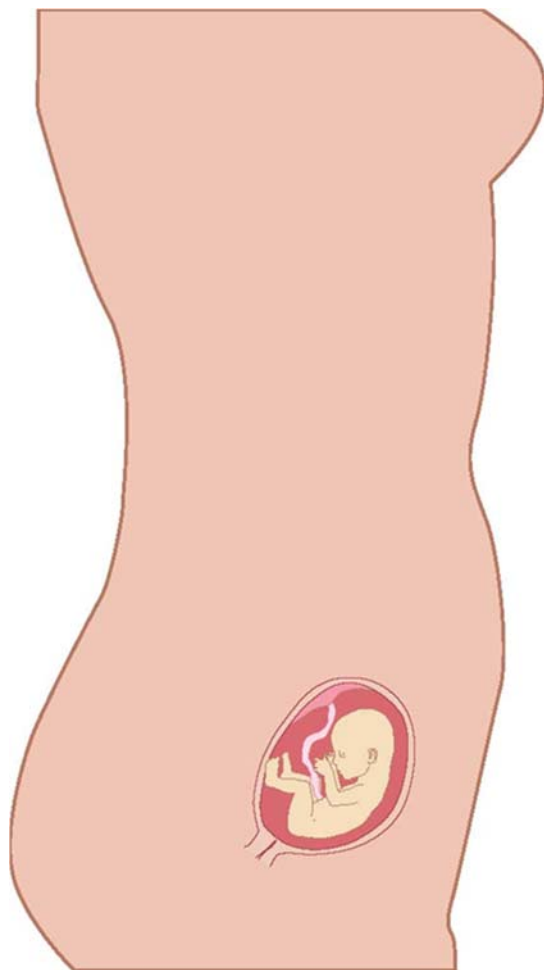
Parents/carers – Read the questions below and enjoy sharing your stories and memories about when your student came into your life.

Here are some questions that you can ask your family. For those of you who live with one of both of your birth parents, this could mean learning about your life before you were born. Those of you who were adopted or who live with other families could find out some stories about the time you were first introduced to each other.

1. What can you tell me about my life before I was born?
2. Do you have any pictures of my mother when she was pregnant
3. Do you have ultrasound pictures of when I was in the uterus?
4. How long did it take for me to be born?
5. How much did I weigh? How long was I?
6. What was it like when you first met me?
7. What are some of the best memories you have of me either before I was born or when I first became a part of this family?

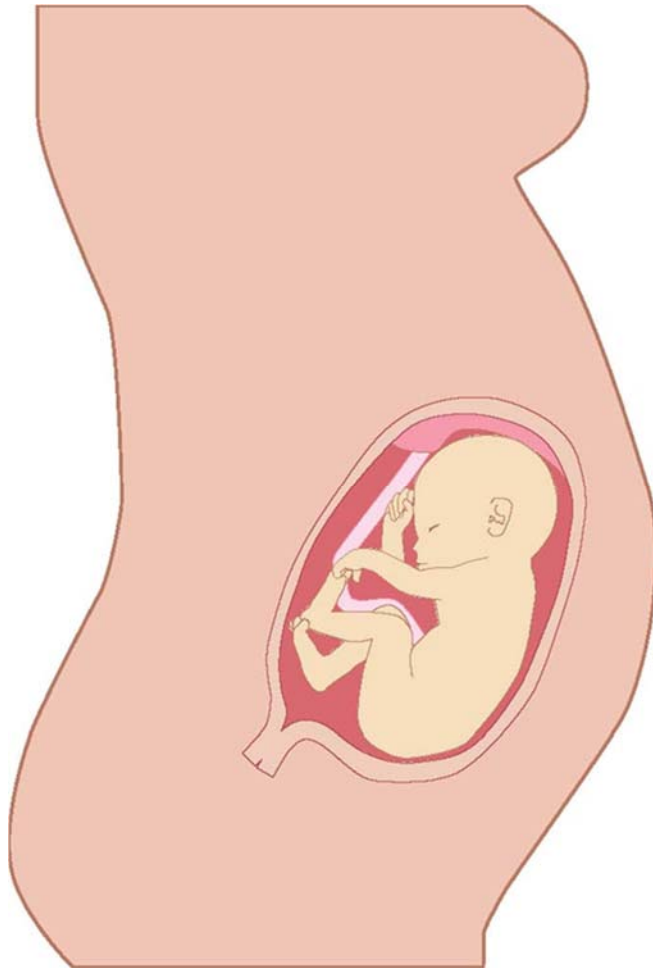
First Trimester

(0-13 weeks)



Second Trimester

(13-26 weeks)



Third Trimester

(26-40 weeks)

