

## 2.1 Heredity and Genetics

- Heredity
- Genetics
- Chromosomes
- Autosomes
- Sex cells
- Amniocentesis
- Ultrasound sonography
- Chorionic villus test
- Maternal blood test
- Explain the difference between heredity and genetics.
- How many pairs of chromosomes do people have?
  - What is the difference between the first 22 pairs and the 23<sup>rd</sup>?
  - What is the name for the 23<sup>rd</sup> pair for men and for women?
- How is gender determined?
- What are the types of testing for genetic disorders before birth?
- What are the reasons why someone would go for genetic testing?
- What is one of the ethical questions related to genetic testing?

## 2.2 New Reproductive Technologies

- In Vitro Fertilization (IVF)
- Gamete Intrafallopian Transfer (GIFT)
- Intrauterine Insemination (IUI)
- Zygote Intrafallopian Transfer (ZIFT)
- Intracytoplasmic Sperm Injection (ICSI)
- Ovum Donation / surrogacy
- Gamete
- Zygote
- Blastocyst
- Trophoblast
- What are the names of fertilized eggs in the different cell stages?
- What are the key features doctors will look for at 8 weeks that indicate a good chance of survival?
- Label the parts of a uterus / fallopian tube diagram.
- Describe the process (and location in the body where they are deposited) for fertilization treatments.
- Explain the confusion in trying to determine “when life begins”?
- What is “sperm washing”?

### 2.2.1 The Great Sperm Race

- What are some of the difficulties sperm must overcome in order to fertilize an egg?

### 2.3 Labour and Delivery

- Uterus
- Amniotic sac
- Cervix
- Placenta
- Umbilical cord
- Afterbirth
- Fontanelles
- Leboyer Method of Delivery
- Lamaze Method of Delivery
- Precipitate delivery
- Dystocia
- Anoxia
- Placenta Previa
- Breech
- Meconium Aspiration
- Identify labeled parts of a uterus diagram with fetus.
- Describe the function of internal parts of the womb, related to the fetus: placenta, umbilical cord, amniotic fluid.
- What are the three stages of birth? Which stage takes the longest?
- How does the baby's skull change to fit through the pelvic bones?
- What are the types of birth plans – what are their advantages / disadvantages?
- Describe some of the complications that may occur during delivery.
- What is the difference between "Labour" and "Delivery"?

### 2.4 Documentary Watching (The Business of Being Born) (The Disappearing Male)

- Summarize the main point of the documentary you watched.
- What is the biggest controversy brought up in the video?

### 2.5 Problems of Prenatal Development

- Spontaneous Abortion
- Ectopic Pregnancy
- Low Birth Weight Babies (L.B.W.)
- Preterm Birth
- Cleft Palate
- Spina Bifida
- High Risk Pregnancy
- What is the difference between the term "miscarriage" and "spontaneous abortion"?
- Explain the difference between a "still birth" and "miscarriage"?
- Which period of development is the highest risk for spontaneous abortion?
- Describe some of the causes and contributions of spontaneous abortions?
- What is the danger of an ectopic pregnancy?

- How does an ectopic pregnancy affect any future pregnancies?
- How is an ectopic pregnancy corrected?
- Explain what is meant by of L.B.W. babies?
- Describe some of the possible consequences for L.B.W. babies?
- Explain why a pregnancy of multiples (twins, triplets) are considered “high risk” pregnancies.
- How would the economic needs of a mother influence the baby’s health?
- Describe two genetic conditions that may be detected during pregnancy.

## 2.6 Physical Development

- Germinal period
- Embryonic Period
- Fetal Period
- Endoderm
- Mesoderm
- Ectoderm
- Full term gestation
- Viability
- What are the names and times for the three development stages of pregnancy?
- Why do many conceptions never pass into the embryonic period?
- For what reason is the embryonic period most significant in development?
- Exposure to toxins, chemicals, drugs, and smoking may do what damage during the embryonic period?
- Describe the significant development that occurs during the fetal stage?
- At what age of development does the heartbeat begin?
- What month / week can the external genitalia be seen on scans?
- At what month / week does a mother begin feeling interaction from the fetus?
- What age of development (week) is considered viability?
- What is the most significant change for the fetus in the last four weeks of development?

## 2.7 Cognitive Development

- Gastrulation
- Neurulation
- Central Nervous System (CNS)
- Notochord
- Cell differentiation
- Neural plate
- Somites
- Myelin
- What is the purpose of the Gastrulation phase?
- At what week does Neurulation occur?
- How important is it for the fetus that Neurulation occurs correctly without defects?
- What is the notochord’s role in Neurulation?
- The brain develops in four stages—describe them.

- ~~What is the function of myelination?~~
- ~~Describe how the brain forms and becomes the structure you see in an adult.~~
- ~~What areas of function do the three brain parts control, generally, for an adult.~~
- ~~Describe the ratio of "brain-to-body" size from fetal development to adulthood.~~

## **2.8 Emotional Development**

- Birth Order
- Is the "Birth Order Theory on Personality Development" about nature or nurture? Explain.
- Explain how the Birth Order Theory is able to predict behaviour.
- People can be categorized into what five categories of personality types?
- What evidence is there that newborns have some temperament / personality characteristics?
- List the nine characteristics of infant personality.
- How does recognizing infant personality help a parent?

## **2.9 PSA Assignment**

## **2.10 Systems of Support**

- ~~Microsystem level of support~~
- ~~Exosystem level of support~~
- ~~Macrosystem level of support~~
- ~~Abstinence~~
- ~~Teratogens~~
- ~~Explain how the levels of influence surrounding the mother may have a direct effect on the fetus.~~
- ~~If a woman uses drugs during her pregnancy, is it possible to still protect the fetus from possible damages? How?~~
- ~~What are examples of teratogens that may cause defects to the fetus?~~
- ~~Describe some of the possible congenital defects exposure to teratogens may cause to the fetus.~~
- ~~List three ways the macrosystem level of support may protect the fetus in Canada.~~