



Pregnancy

B.M.C. Durfee High School

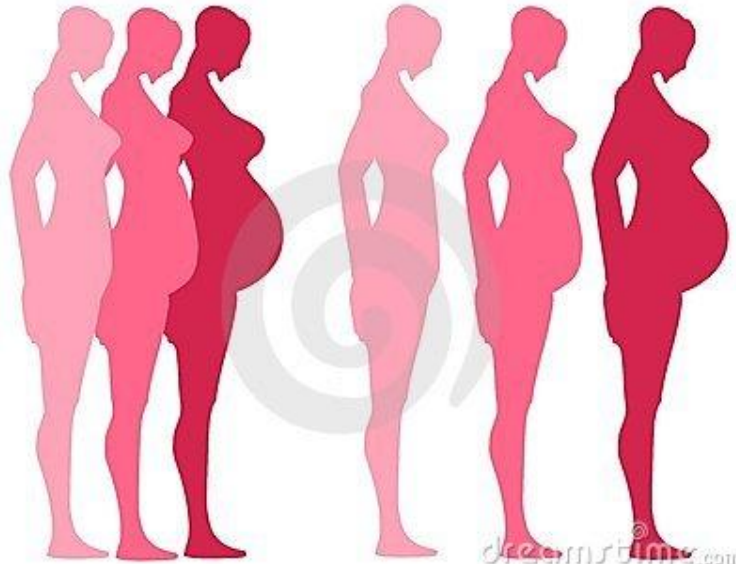
Objectives

- **Describe development in each of the three trimesters**



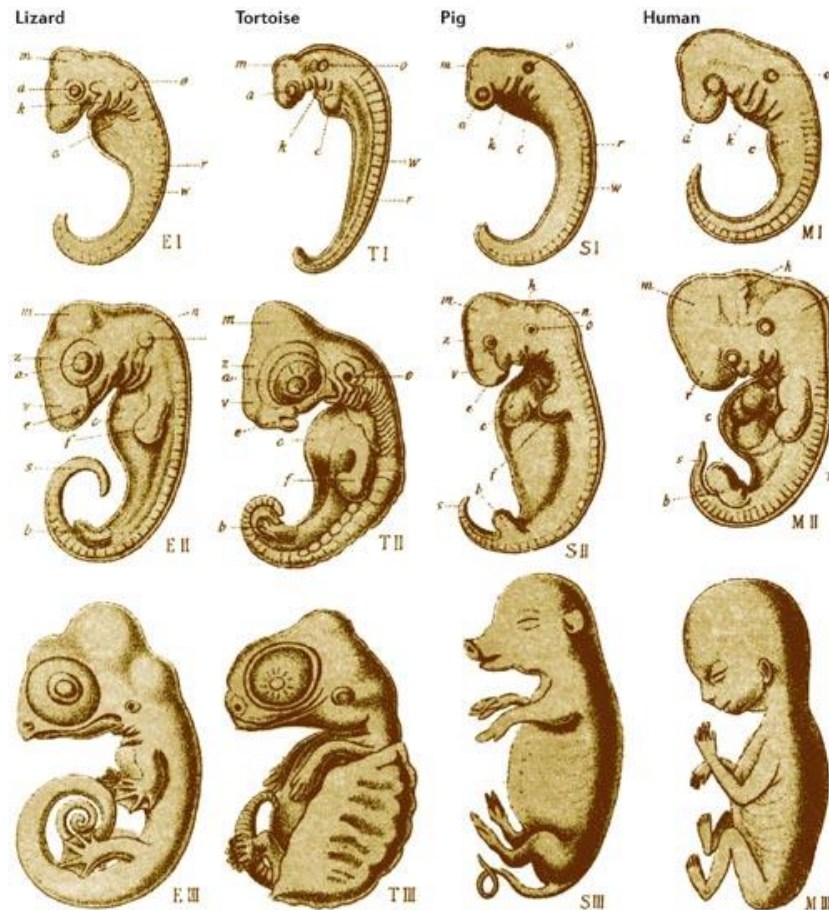
Trimesters

- **Pregnancy is divided into three trimesters:**
 - **1st: Very important part of body organizing**
 - **2nd: Fetus gets bigger and develops**
 - **3rd: Fetus gets ready for birth**



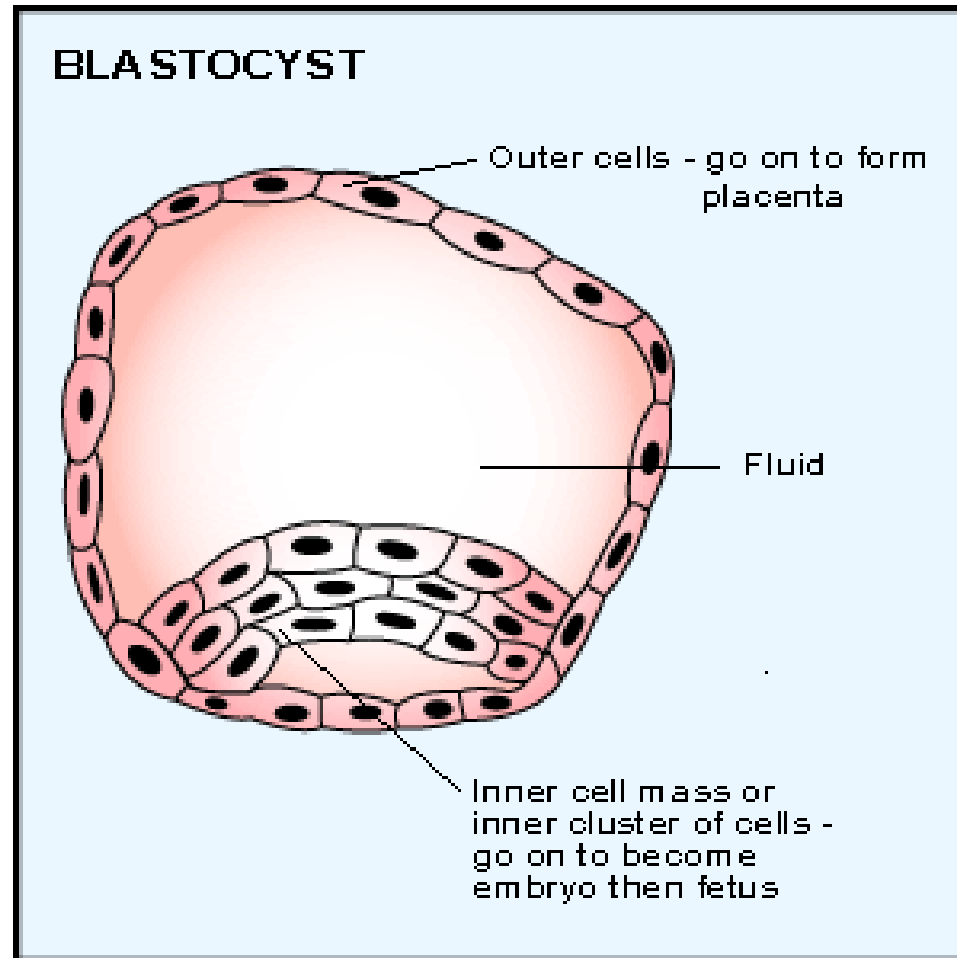
First Trimester

- For first 2-3 weeks, the embryo looks like embryo of other animals



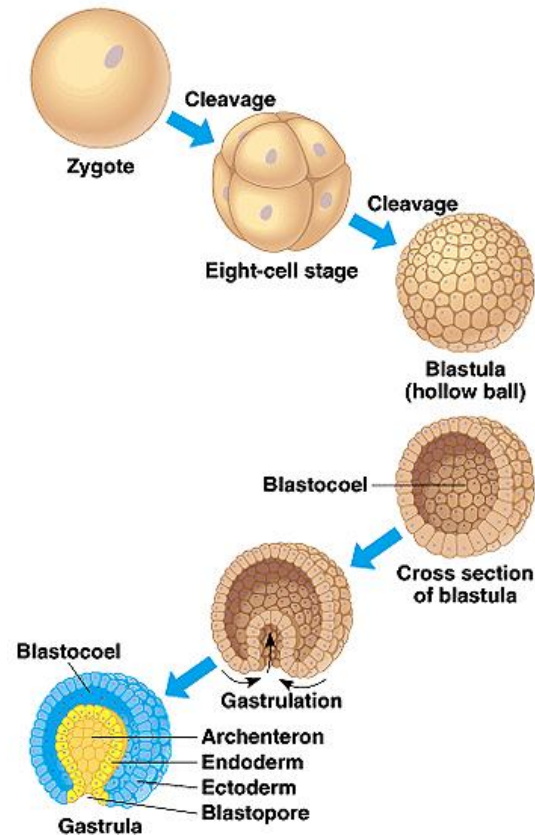
First Trimester...

- The embryo develops from the mass of cells on the inner surface of the blastocyst



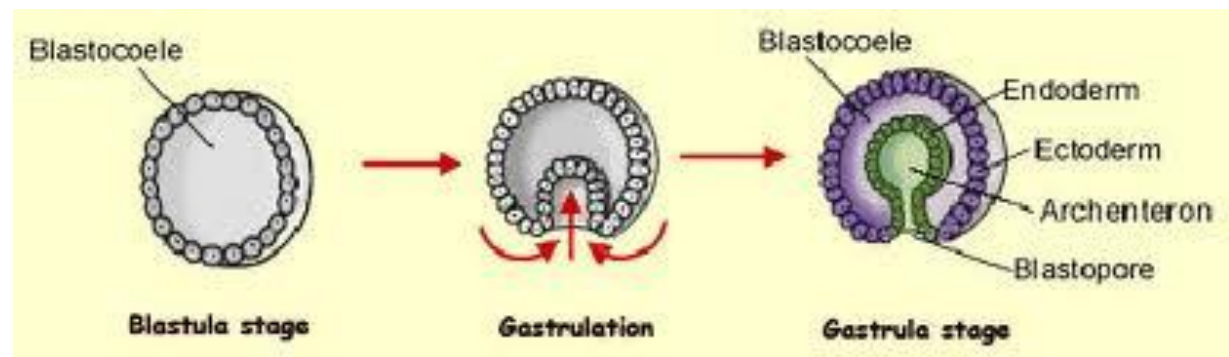
First Trimester...

- At first, all of the cells look alike but then they organize into three major layers: ectoderm, mesoderm and endoderm.



First Trimester...

- Different parts of the body develop from these different layers
 - Ectoderm; nervous tissue and skin
 - Mesoderm: muscle, connective tissue, organs
 - Endoderm: linings of digestive, respiratory and urinary tract; also liver, glands, pancreas, thyroid and thymus



First Trimester...

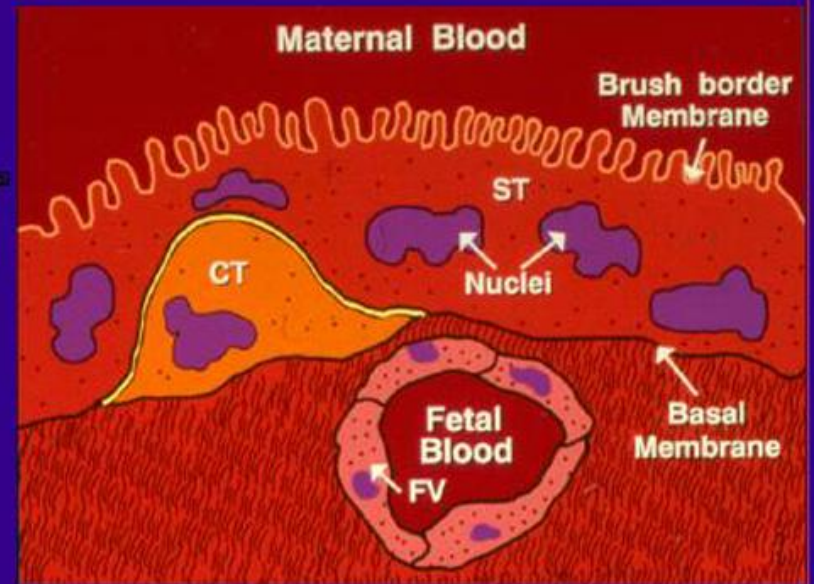
- **Placenta**

- **6-8” in diameter and 1” thick**
- **Nutrients, gasses, pathogens, drugs pass from mother to fetus through placenta**
- **Developing fetus is attached to placenta by umbilical cord which has arteries and veins that carry blood between fetus and placenta**
- **Blood between mother and fetus never mixes; materials are exchanged through diffusion**



First Trimester...

Human Placenta



First Trimester...

- **Brain, nervous system and spinal cord form in third week**



First Trimester...

- Heart beats at 21 days and is smooth beating at 28 days



First Trimester...

- **By fifth week: arms, legs, eyes, ears, and digestive system develop**



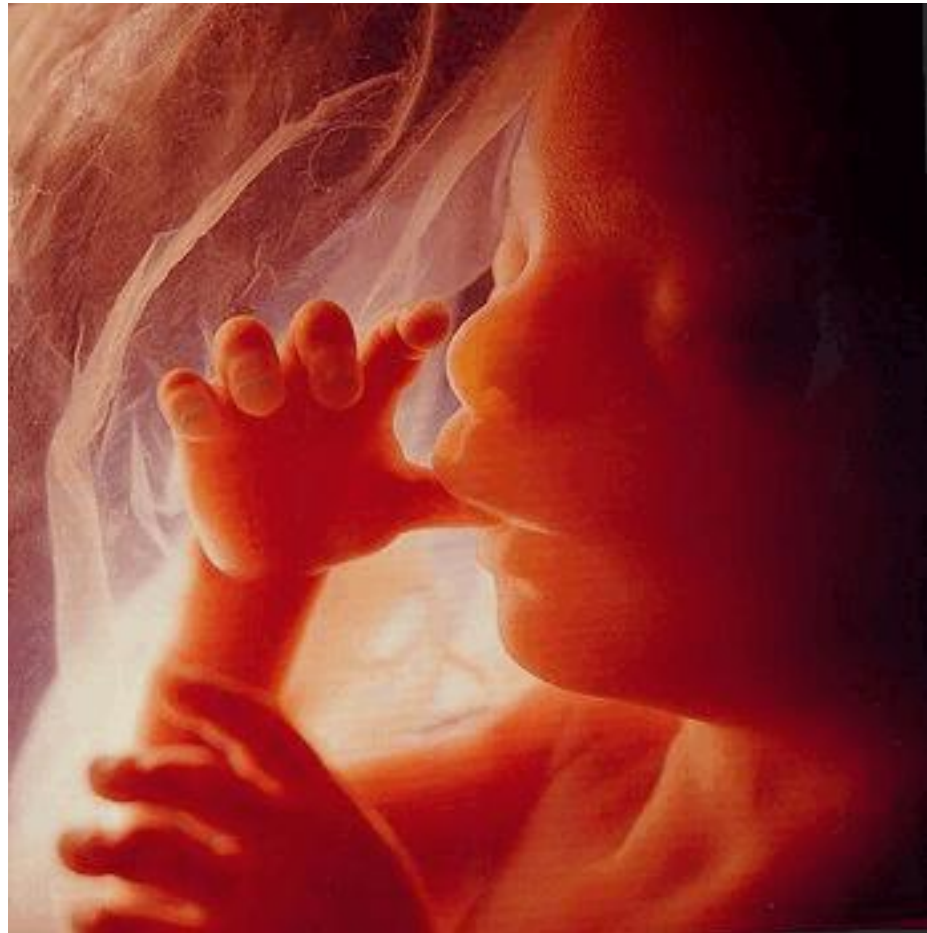
First Trimester...

- **By 6th week: fingers and toes and some brain activity; embryo begins to move**



First Trimester...

- **From 8 weeks to birth: the embryo is called a fetus**



First Trimeste...r

- End of 1st trimester – 2" long



Second Trimester

- **Mother's abdomen begins to swell as uterus enlarges**



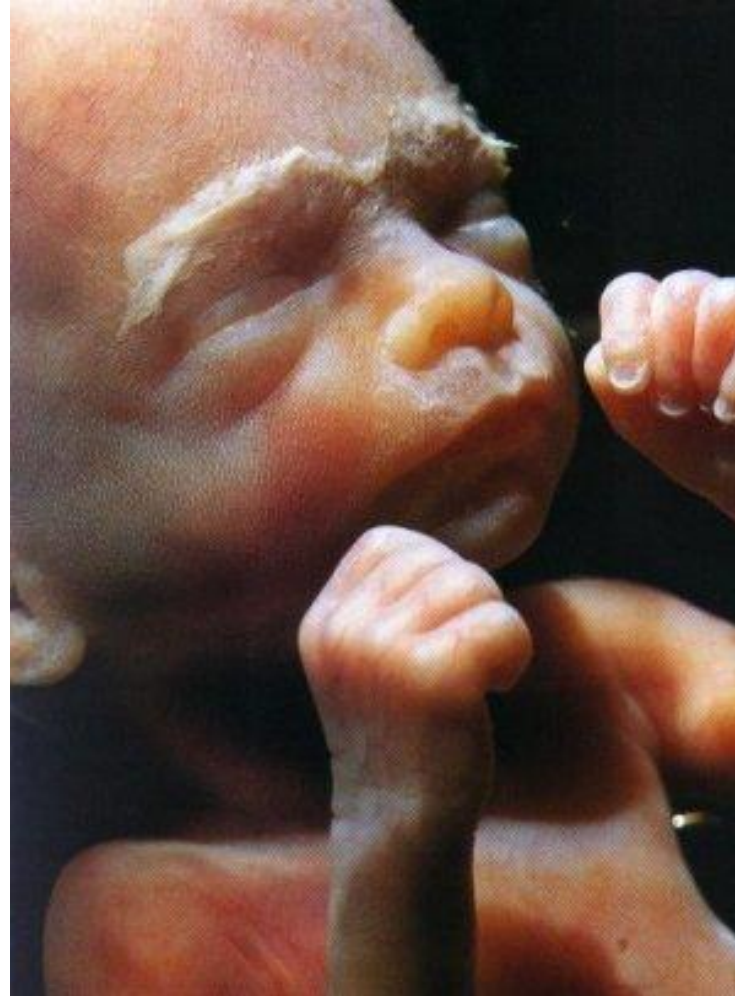
Second Trimester...

- Fetuses heartbeat can be heard and skeleton begins to form



Second Trimester...

- Layer of soft hair grows over skin



Second Trimester...

- Fetus begins to wake and sleep



Second Trimester...

- **Can feel fetus moving around: swallows, hiccups, sucks its thumb and makes a fist; kicks feet and curls toes**



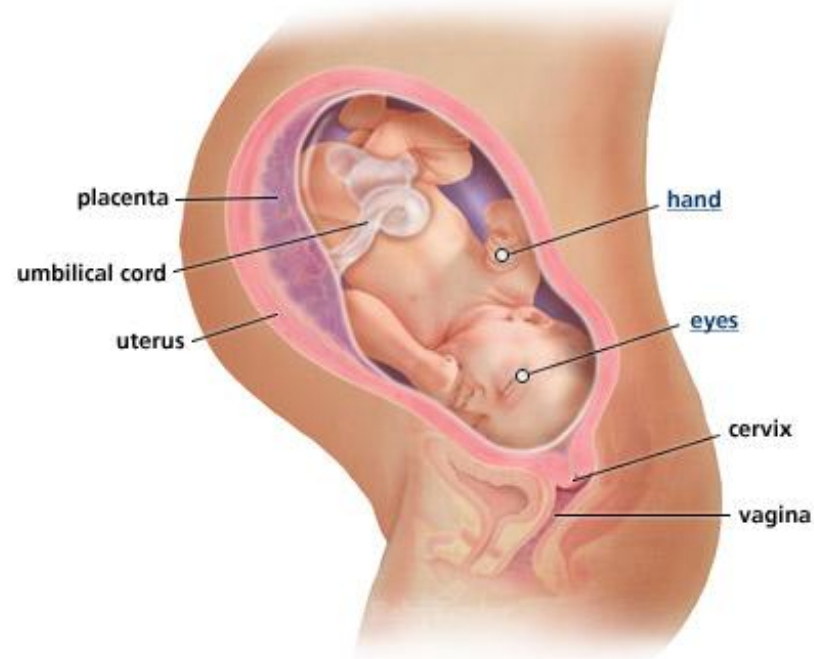
Second Trimester...

- **By end of second trimester, it is about 1 foot long and eyes are open**



Third Trimester

- Fetus grows quickly and undergoes changes so it can survive outside the mother



Roll your cursor over each underlined label to learn more about that area.

Third Trimester...

- Can see light and darkness through abdominal wall, and can react to music and loud sounds



Third Trimester...

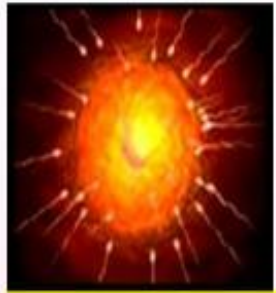
- **During last half of the trimester, the fetus develops fat under its skin to insulate the body for a steady temperature.**



Miracle of Life Video



Baby Evolution - Conception to Birth



Racing to Fertilization



2 WEEKS



4 WEEKS



6 WEEKS



7 WEEKS



8 WEEKS



12 WEEKS



14 WEEKS



16 WEEKS



18 WEEKS



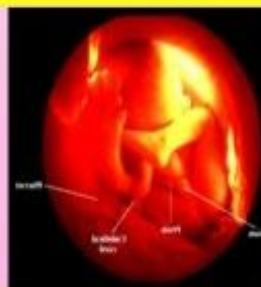
20 WEEKS



21 WEEKS



26 WEEKS



32 WEEKS



36 WEEKS



38 WEEKS



40 WEEKS

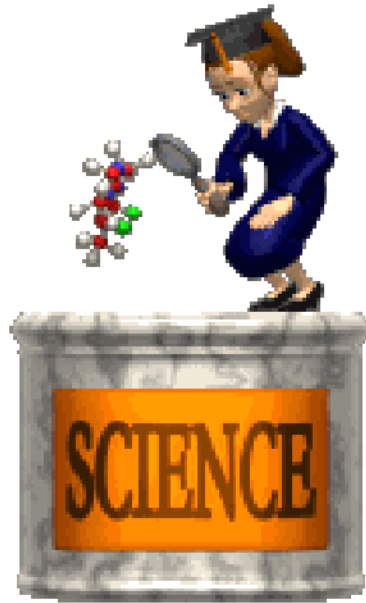


DELIVERY

Review

- Describe development in each of the three trimesters





Learn Long
Live Long