

**Honors Physiology**  
**Embryonic Development**

Name: \_\_\_\_\_

Directions: Fill in the table with the information presented to you by your group members. Be sure to record major events that occur in development of the fetus during each timeframe.

<b>Trimester</b>	<b>Weeks</b>	<b>Description</b>
<b>First</b>	0-4 weeks	
	5-8 weeks	
	9-12 weeks	
<b>Second</b>	13-17 weeks	
	18-23 weeks	
	24-27 weeks	
<b>Third</b>	28-31 weeks	
	32-36 weeks	
	37 weeks – birth	

## When's That?

Directions: Match the 16 descriptions below to the timeline of prenatal development presented by your classmates. Write the number of weeks on the line next to each answer. Work together!!

- \_\_\_\_\_ 1. This week marks the end of the “embryonic period.” Facial features, like eyelids and ears, take shape.
- \_\_\_\_\_ 2. An inner group and outer group of cells form. Around Day 6, this ball implants itself in the mother’s uterine wall.
- \_\_\_\_\_ 3. Eyes, brows and lashes are well formed by this week. Fingerprints begin to take shape. Internally, the lungs start to form air sacs.
- \_\_\_\_\_ 4. The cells of the embryo continue to multiply and begin to differentiate, or take on specific functions. For example, in this week, certain cells begin to develop into a brain, while others grow into a spinal cord and others into a heart.
- \_\_\_\_\_ 5. By this week, fine hair called lanugo is on the head. Muscle tissue and bones develop. Active movements begin to happen, but the mother cannot feel them yet.
- \_\_\_\_\_ 6. In this period, the fetus increases in size and adds a large amount of body fat. Breathing movements happen, but lungs are still not fully mature.
- \_\_\_\_\_ 7. A sperm cell penetrates the mother’s egg cell, resulting in the zygote. It contains all of the genetic material (DNA) necessary to grow into a child.
- \_\_\_\_\_ 8. By this week, body fat continues to increase. Lanugo starts to disappear. Although not quite full term, a baby born now can usually survive with minimal medical intervention.
- \_\_\_\_\_ 9. By this week, all essential organs have begun to form. Elbows and toes also become visible.
- \_\_\_\_\_ 10. During these weeks, the brain is rapidly developing. The immature respiratory system continues to develop to a point where the exchange of oxygen and carbon dioxide is possible.
- \_\_\_\_\_ 11. Arm and leg buds appear. The developing heart now beats. Eyes and ears also begin to form during this week.
- \_\_\_\_\_ 12. Fine hair called lanugo covers the body. Eyebrows, lashes and fingernails appear. The mother may begin to feel fetal movement around this week.
- \_\_\_\_\_ 13. Considered full term, the baby continues to add weight. Head hair becomes thicker and fingernails grow longer, extending beyond the finger tips.
- \_\_\_\_\_ 14. Cells spend the next few days traveling down the Fallopian tube and dividing to form a ball of cells called a morula.
- \_\_\_\_\_ 15. By this week, the head makes up nearly half of the fetus’ size. Genitals are visible. Eyelids are closed. The fetus can make a fist.
- \_\_\_\_\_ 16. Hands and feet can be seen. Fingers and toes may appear webbed. The lungs also begin to form during this week.