TOPIC: INTRODUCTION TO HUMAN DEVELOPMENT

Introduction

Conception	on : The moment when an	is fertilized by a sperm cell; marks the beginn	ing of development.
◆ Conceptu	is : The developing offspring; o	can refer to an embryo or	
Gestation	nal () Period: T	ime during which development of conceptus occurs.	
Extends	s from date of mother's	menstrual period (LMP) until birth (approximatly 40	weeks).
At the n	noment of conception a moth	er is already considered weeks pregnant!	
Date of mother's LMP	Date of conception	Weeks	
		Weeks	
	Week 2		Week 40 (Birth)

▶ This course will be focusing on the 38 weeks of prenatal development, from conception until birth.

EXAMPLE

Judy takes a pregnancy test after realizing her period is one day late. When the test comes back positive, she immediately calls her OBGYN to set up an appointment. On the phone, she tells them the date of her last menstrual period and is confused when the doctor refers to her as being '4 weeks pregnant' already. If you were the doctor, how would you explain this to Judy?

- a) Conception typically takes place within 1-2 days of the menstrual period ending, so using the date of the last period is a pretty accurate marker for pregnancy.
- b) Important prenatal events like placenta development actually take place in the time between a menstrual period and conception.
- c) We often measure pregnancy starting with the date of a woman's last period rather than the date of conception because reporting tends to be more accurate which means for 2 of those 4 weeks you weren't even pregnant yet!
- d) It's impossible to accurately predict the date of conception, so it's best to just ballpark it.

TOPIC: INTRODUCTION TO HUMAN DEVELOPMENT

PRACTICE

True or False (if false, choose the answer that would correct the statement): Conception is the moment an embryo begins to develop.

- a) True.
- b) False: Conception is the moment a person discovers they are pregnant.
- c) False: Conception is the moment an oocyte is fertilized by a sperm cell.
- d) False: Conception is the act of sexual intercourse.

TOPIC: INTRODUCTION TO HUMAN DEVELOPMENT

Timeline of the Prenatal Period

◆ The gestational period is often divided into _____ stages:

	Pre-Em	bryonic	Embryonic					Fetal	
	We	eks	Weeks					Weeks	
	1	2		4	5	6	7		
Conceptus is a(n):	Blast	ocyst							
Fertilization									
Cleavage							$\bigg\langle \begin{array}{c} \varepsilon \\ \end{array} \\$		
Blastocyst Formation									
Implantation									
Extra-Embryonic Membranes									
Gastrulation									
Organogenesis									
Placentation									
Organ Development & Skeletal Growth									

Major development
Some development

EXAMPLE

At 10 weeks a conceptus is commonly referred to as a/an_____

- a) Blastocyst.
- b) Embryo.
- c) Fetus.
- d) Infant.