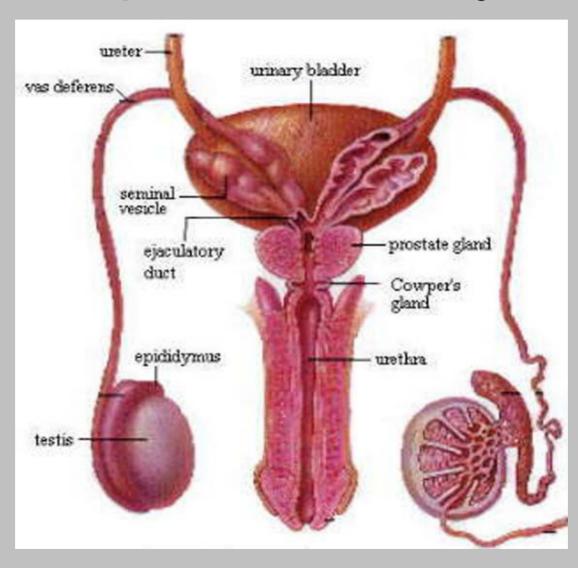
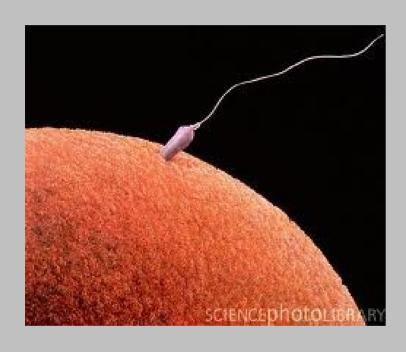
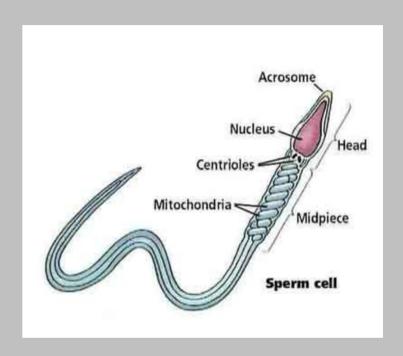
## Male Reproductive System

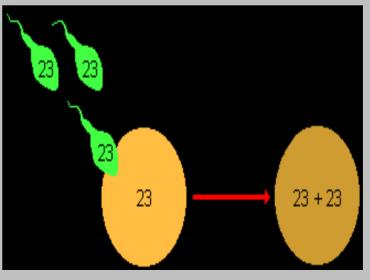


#### A. Functions of the Male Reproductive System

- 1. Produce and store sperm (male gametes or reproductive cells)
- 2. Transfer sperm to the female body

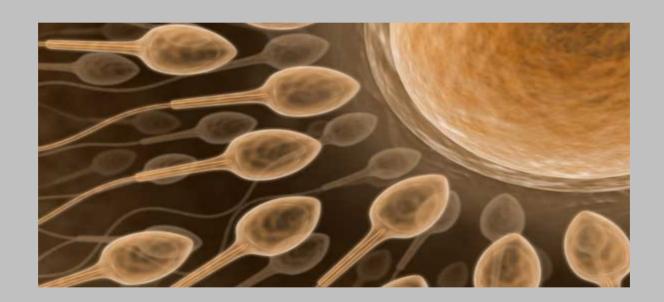






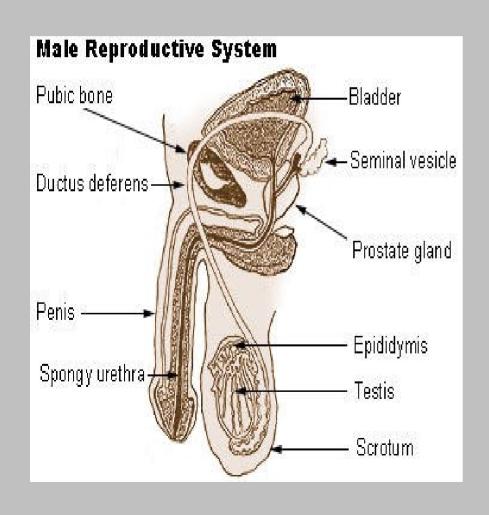
#### B. Male Reproductive Organs

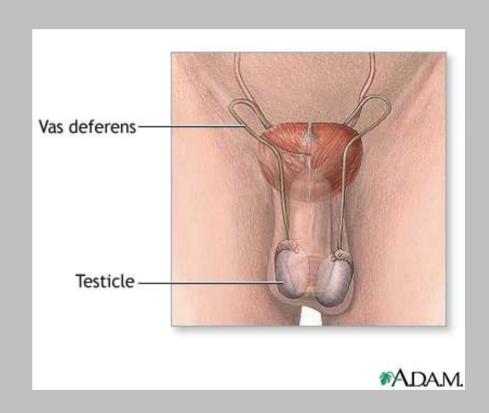
- 1. Testes
  - a. produce sperm
  - b. produce testosterone (male sex hormone)
  - c. rest in <u>scrotum</u>, a sac that regulates sperm temperature; sperm should be just below body temp.



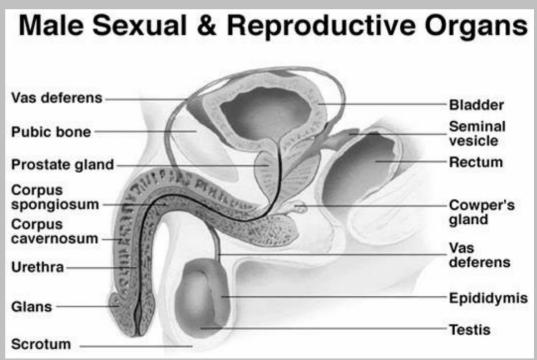
- 2. Penis- organ that extends from the trunk of the body just above the testes
  - a. semen-fluid containing sperm and other secretions

- 3. Epididymis- tubes where sperm mature and are stored
- 4. Vas deferens- tubes that extend from each epididymis to the urethra





- 5. Seminal vesicles- produce a fluid to nourish sperm and help sperm move
- 6. Prostate gland- produce fluid to protect sperm from female fluids
- 7. Cowper's gland- produce fluid to protect sperm from acids in male <u>urethra</u> (urethra carries urine out of body in both sexes)



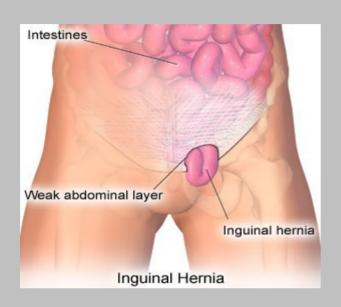
### C. Male Reproductive problems

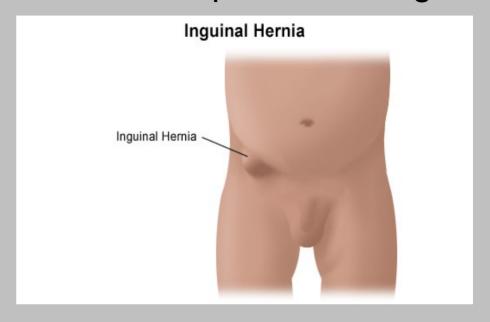
1. Jock itch- irritation in groin; caused by a fungus



2. Inguinal hernia- part of the intestine pushes through a

tear in the abdominal wall





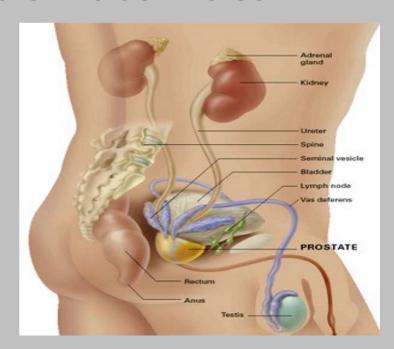
3. Sterility- the inability to reproduce, as a result of too few sperm or sperm of poor quality



4. Testicular cancer- most often occurs in males aged 14-40



5. Prostate cancer- most often occurs in older males



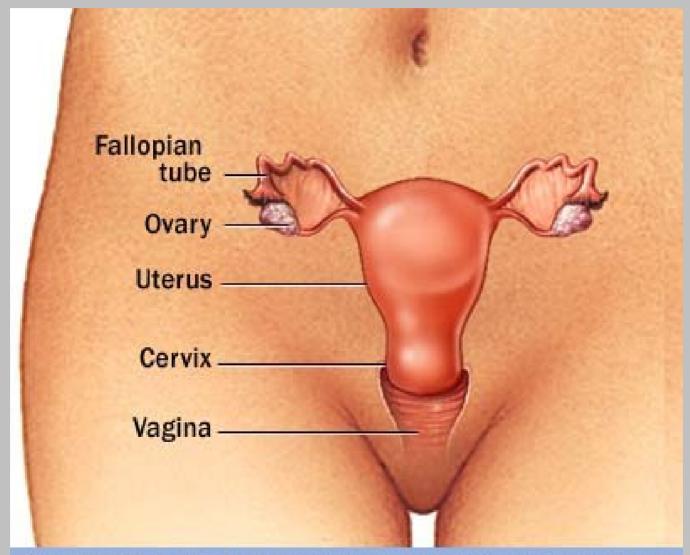
### D. Maintaining Reproductive Health

- 1. Bathe regularly
- 2. Wear protective equipment
- 3. Practice abstinence
- 4. Perform regular self-examinations
- 5. Get regular checkups





## Female Reproductive System



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### E. Female Reproductive Functions

1. Producing female sex hormones- estrogen & progesterone

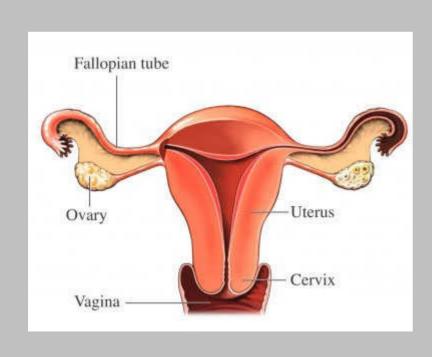


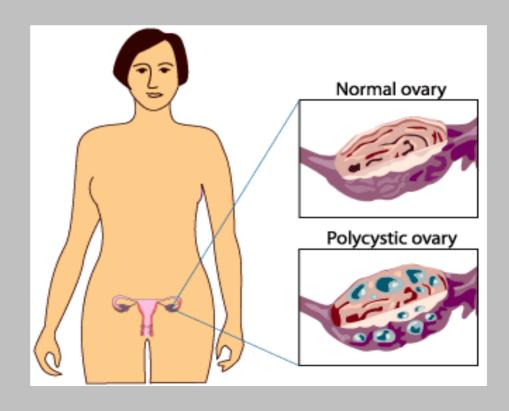


2. Storing the ova (female gametes or eggs); at puberty, females have ~ 400,000 immature ova; 400 will mature in a lifetime

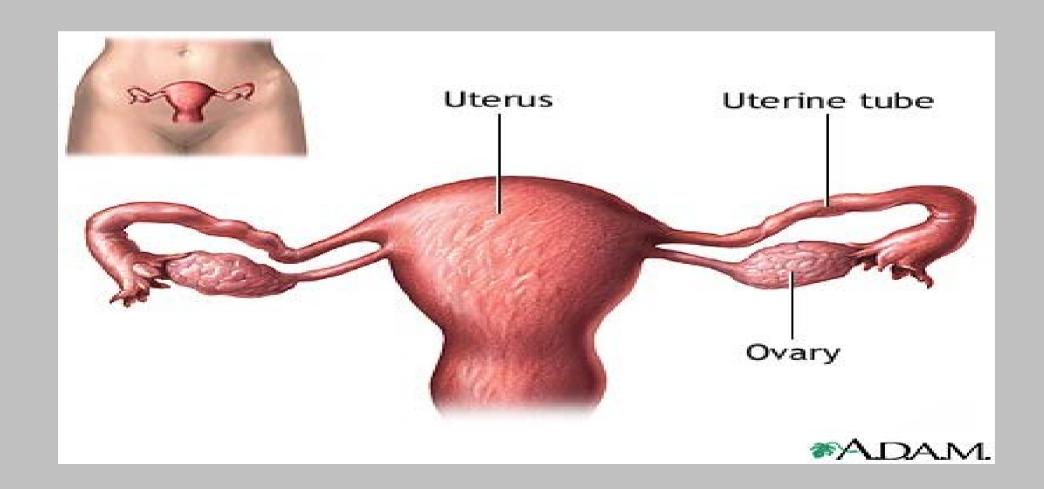
### F. Female Reproductive Glands & Organs

- 1. Ovaries- sex glands that produce and store the ova-
- 2. Uterus- pear-shaped organ that nourishes and protects a baby until birth; also called the womb

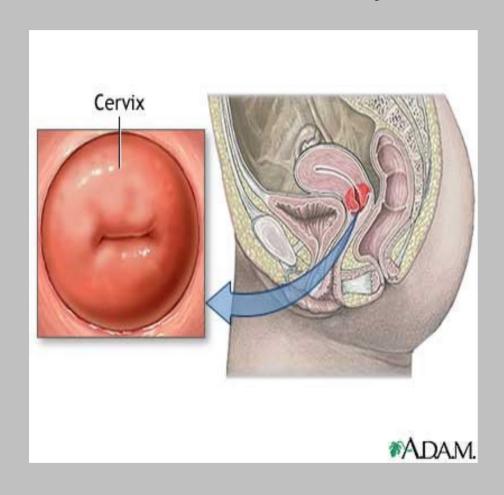


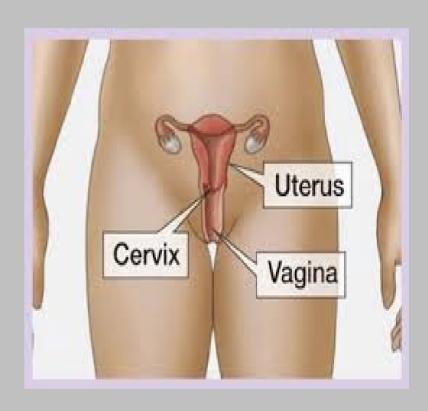


- 3. Fallopian tubes- a pair of tubes with finger-like projections that draw in the ovum (egg); site of fertilization
- 4. Vagina- passageway that extends from the uterus to the outside of the body Fertilization



## 5. Cervix- opening to the uterus; dilates (opens) to 10 cm during the birth of the baby



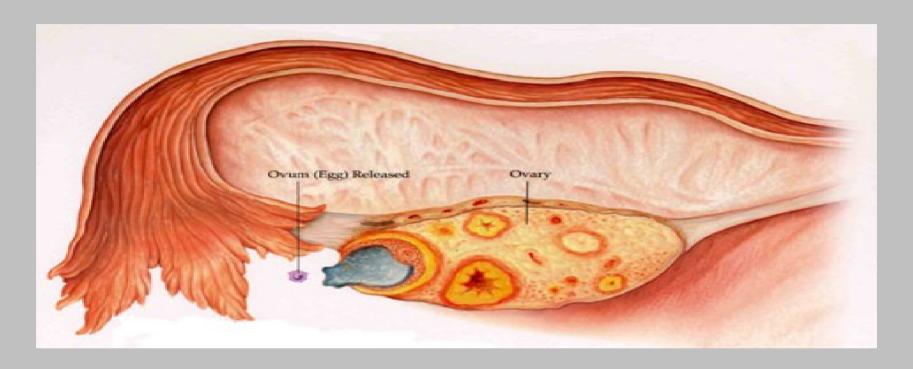


#### **Menstrual Period Animation**

- 1. monthly changes to prepare lining of the uterus for pregnancy
- 2. average of 28 days long
- 3. endometrium (uterine lining) thickens to prepare for pregnancy



4. ovulation- release of a mature ovum; occurs around day 14 of the cycle



5. menstruation- shedding of the uterine lining; 3-7 days long

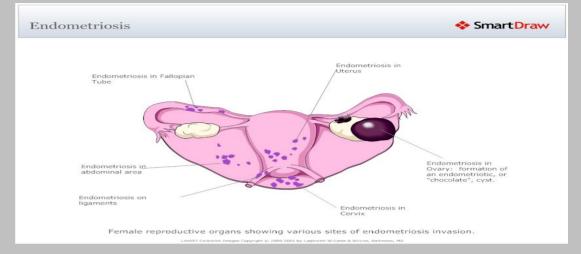
### H. Female Reproductive Problems

- 1. menstrual cramps- occur at the beginning of menstruation
- 2. premenstrual syndrome- caused by hormonal changes; can include anxiety, irritability, bloating, weight gain
- 3. Toxic Shock Syndrome- bacterial infection that affects the liver & immune system; related to tampon use

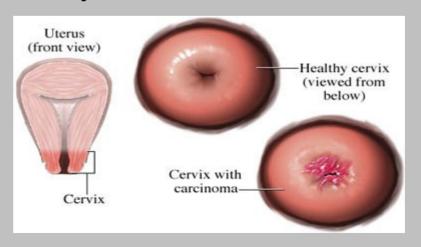


4. endometriosis- occurs when uterine tissue grows outside of the

uterus



- 5. vaginitis- results in discharge, pain, itching, burning; can be caused by fungi or bacteria
- 6. cervical cancer- often caused by HPV, an STD



### I. Maintaining Female Reproductive Health

- 1. Bathe regularly
- 2. Get regular medical exams
- 3. Practice abstinence
- 4. Breast self-exams- monthly

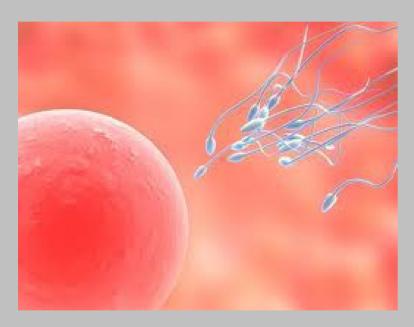






### J. Beginning of the Life Cycle

1. Fertilization- union of a sperm & ovum; ova and sperm have 23 chromosomes; other body cells have 46 chromosomes

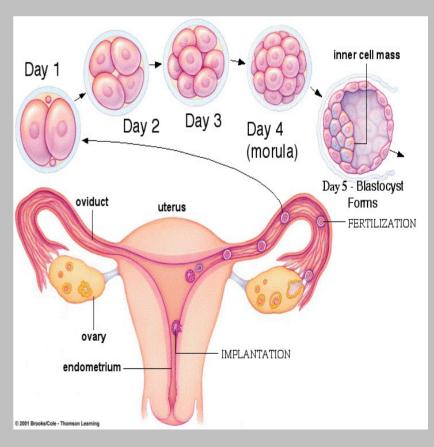


I'm Pregnant and I Know It

- a. 100-500 million sperm released
- b. Only ONE sperm enters ovum
- c. XX chromosome combination is a girl
- d. XY chromosome combination is a boy

- 2. Unborn baby names
  - a. Zygote- new fertilized ovum
  - b. Blastocyst- cluster of cells near uterus
  - c. Embryo- implanted cluster of cells; after 3-8 weeks
  - d. Fetus- starting nine weeks after conception





### 3. The trimesters of pregnancy

- prenatal care ASAP (visit doctor); good diet, no drugs, take prenatal vitamins, stay active

From Bump to Buzz

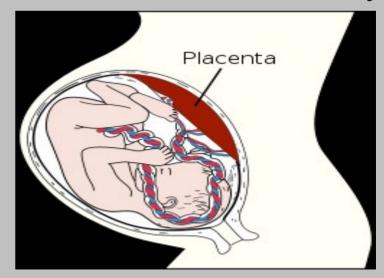
Development of the Baby

a. First trimester- months 1-3

Actual Footage In The Uterus

1. placenta- provides oxygen and nutrients to the baby

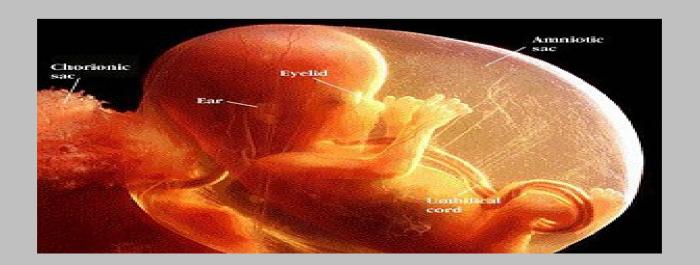




2. umbilical cord- ropelike structure that connects the baby to the mother's placenta



3. amniotic sac- thin, fluid-filled membrane that surrounds and protects the developing embryo; holds the "water"



#### 4. heart beats at four weeks



5. major body parts form- 3" long & approx. 1.5 oz.

b. Second trimester- months 4-6; >50% chance of surviving if born at the end of 2<sup>nd</sup> trimester

1. baby kicks, blinks, & moves around more



- 2. reproductive organs are recognized
- Reading To Babies- 3:05

- 3. baby recognizes voices
  - \*1.5 2.5 lbs. And 11- 15" long by end of 2<sup>nd</sup> trimester

#### c. Third trimester- months 7-9

- 1. weight of baby may triple- 7-8 pounds at birth
- mother gains much of her 20-30 pounds total
   baby may dream
- 4. baby uses all five senses

Life in the Womb

Where you'll gain the weight:

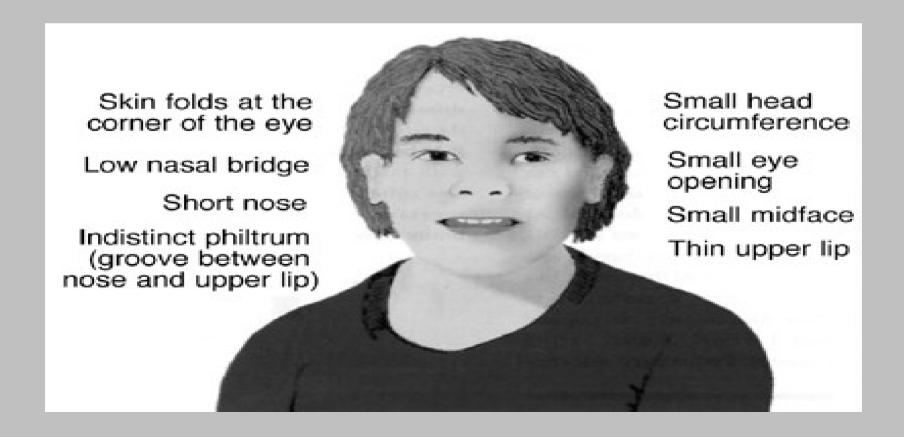
Baby	6.5-9 pounds
Placenta	1.5 pounds
Amniotic fluid	2 pounds
Breast enlargement	1-3 pounds
Uterus enlargement	2 pounds
Fat stores/muscle	4-8 pounds
Increased blood volume	3-4 pounds
Increased fluid volume	2-3 pounds

Third trimester ultrasound→



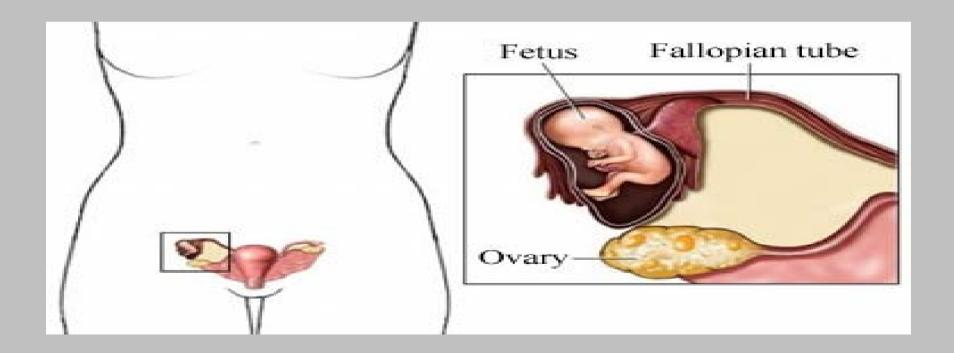
### 4. Pregnancy Problems

 a. Fetal Alcohol Syndrome (FAS)- set of birth defects found in a baby exposed to alcohol



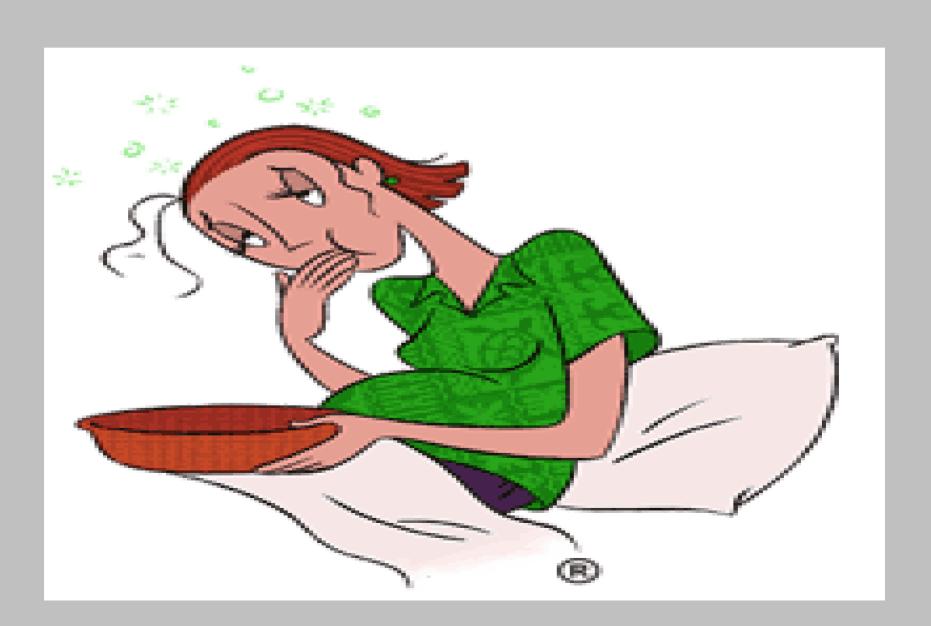
b. Miscarriage- death of unborn baby from natural causes before 20<sup>th</sup> week of pregnancy

c. Ectopic pregnancy- baby is in the fallopian tube



# d. Morning sickness- the feeling of nausea you get during a pregnancy

Morning Sickness



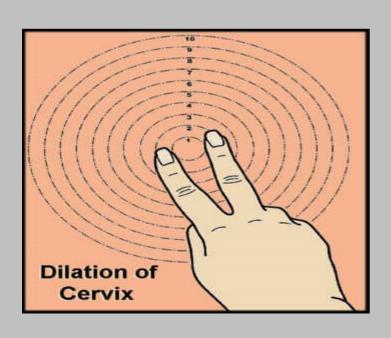
### 5. Three Stages of Childbirth

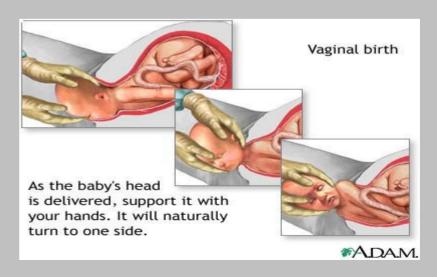
- a. Dilation- cervix opens to 10 cm; often the longest stage; contractions of the uterus (labor) also occurs
- b. Expulsion- baby is born
- c. Placental- afterbirth, another name for the placenta, will emerge with remaining umbilical cord

Mr. Universe- 4 kids

Cosby 2

C-section birth

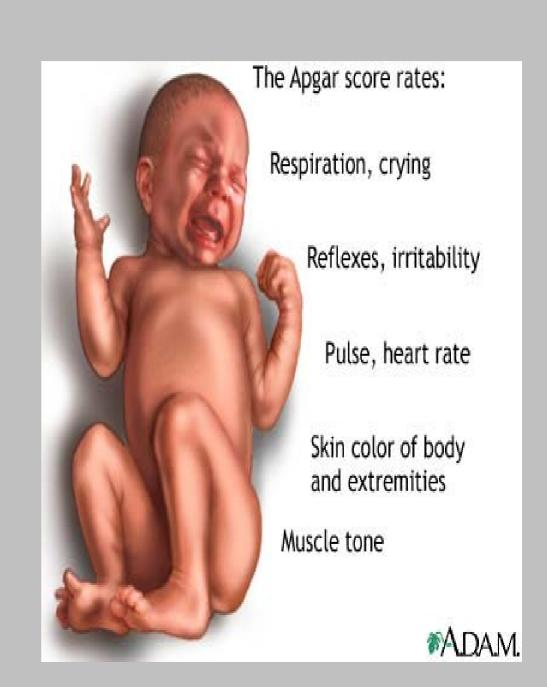




### 6. Apgar test- given to newborns; total high score of ten points

- a. Appearance
- b. Pulse
- c. Grimace
- d. Activity
- e. Respiration

One Picture At a Time



### 7. Types of twins

a. Fraternal- two ova fertilized by two sperm; can be both male, both female, or one of each





# b. Identical- one ovum fertilized by one sperm; contain same genetic information; must be same gender





#### Relationship Values

Directions: pick five factors you would most want from a relationship & pick five factors you least desire from a relationship

Near same age	Nonsmoker	Pressure
Attraction	At ease with self	Religion
Commitment	Financial security	Respect
Communicates well	Likes my friends	Same gender
Companionship	Honesty	Security
Uses birth control	Intelligence	Sense of humor
Dependent on me	Love	Sexually experienced
Dominates	Openness	Trust
Equality	Physical appearance	Good parents
Keeps things casual	Possessiveness	Career oriented
Same interests	Has a nice car	Good grades
Totally free of illegal drugs	Intimidating	Tough home life
Tall	Has debt	Has dated others

No sexual experience

Chivalry

Respects his/her parents

#### Questions from Conception to Birth Video- see separate slideshow

#### 1. When do the baby's eyes open?

-between weeks 26-28 while in the uterus

#### 2. How long, on average, does labor last?

-difficult to predict; perhaps 12-20 hours on average

#### 3. When do toes and fingers develop?

-about week eight

#### 4. How long does it take the brain to develop?

-continues developing into the third trimester

#### 5. What is in an epidural?

-local anesthesia that produces pain relief, but not a total lack of feeling; often combine opiates and narcotics along with other meds to block nerve impulses from lower spinal segments

#### 6. How many women get an epidural?

-more than 50% of women use an epidural

#### 7. How long, on average, does birth last?

-depends on many factors; first time moms can be 6-12 hours

#### 8. Why do women have cravings?

-it may have something to do with nutrients the mom is lacking

#### 9. What causes a baby to be stillborn?

-genetic defect, bleeding from placenta, not growing in uterus, sickness with mom

#### 10. Why do hormones change emotions?

-hormone levels can change or hormones may not be metabolized as well; it can take the body time to adapt to these changes

#### 11. Why do miscarriages usually happen?

-chromosome defect, such as too many or missing chromosomes

#### 12. How many births per day in the United States?

-over 4 million per year

#### 13. How common are multiples?

-1 in 30 births are twins; 1 in 726 are triplets or higher

#### 14. How many teen pregnancies occur each year?

-nearly 750,000 girls between the ages of 15-19; number of live births for that age group is a little over 300,000

#### 15. How common are C-sections?

-they represent about 32% of births in the United States

#### 16. How much does it cost to give birth?

-a minimum of \$3500 on average; prenatal care can be another \$2000

#### 17. What is the umbilical cord made of?

-made mostly of connective tissue called Wharton's Jelly and has very few cells; it also has one large vein and two large arteries

#### 18. What is the heaviest baby ever born?

-Giantess Anna Bates gave birth to a baby weighing 23 lbs. 12oz.

#### 19. What is the lightest birth weight of a baby that survived?

-275 grams or .6 pounds

#### 20. How early can you find out you are pregnant?

-as early as 1-2 weeks after conception

#### 21. How long do you normally stay at the hospital?

-two days is the normal stay

#### 22. Why do you get morning sickness?

-unknown, but perhaps hormone changes or low sugar levels

#### 23. How often do women die during childbirth?

-about 650 per year in the United States

#### 24. How long does an epidural work?

-it is a steady drip, so its effects continue until long after turned off

#### 25. What is the earliest a baby can be born and survive?

-the earliest baby to survive was born at just under 22 weeks

#### 26. How does an ultrasound work?

-ultrasound images come from sound waves that cannot be heard. They travel through the skin and focus on a certain part of the body. A transducer picks up the waves as they bounce back from organs. No radiation is used.

#### 27. Where does the word "Fetus" come from?

-it comes from Latin meaning, "Offspring" or "Hatching of young" or "Young one"

#### 28. When is the best age to become pregnant and give birth?

-every situation is different, but the best time is generally mid '20's to mid '30's

#### 29. Is exercise safe during pregnancy?

-exercise during pregnancy is safe and will probably make you feel better. You may need to make some adjustments to your routine and start slowly

#### 30. Which are more common, male or female babies?

-worldwide, there are 107 male births for every 100 female births; ratio of 1.07

#### 31. How long does dilation take?

-there is no way to predict with any certainty how long it will take. A woman can be dilating and stop for several days. There is no pattern. On average, it takes about one hour for every centimeter

#### 32. How long do contractions last?

-one can last 30-60 seconds and may come approximately every 3-5 minutes

#### 33. What causes the water to break?

-pressure from the baby's head presses against the amniotic sac

#### 34. How long does it take to recover from pregnancy and childbirth?

-it takes about 4-6 weeks to fully recover; 8 weeks for a C-section

#### 35. Can you select the gender of your baby?

-there is no way to guarantee the gender of your baby

#### 36. How many babies die from premature birth each year?

-Nearly 5000 babies die per year from premature birth complications

#### 37. What causes an "innie" or "outie" belly button?

-a belly button is a scar left from the umbilical cord; the "innie" or "outie" has nothing to do with the cutting of the cord but likely a tiny hernia or minor infection that causes the tissue to form in an "outie"

#### 38. Why do babies often have blue eyes?

-it takes a while before melanin is distributed fully through the eyes

#### 39. Can smoke harm the baby?

-exposure to any smoke increases the chance of miscarriage, premature birth, low birth weight, or SIDS

#### 40. What is an abortion?

-the deliberate termination of a human pregnancy

#### 41. What happens if baby is coming out feet first?

-this is called a breech birth; when this happens after 37 weeks, the doctor may attempt to manipulate the abdomen to get the baby in the right position

#### 42. What are the most unusual cravings for a pregnant woman?

-ice, coal, toothpaste, sponges, mud, chalk, laundry soap, matches, starch, rubber

#### 43. What are the youngest and oldest to give birth?

-Lina Medina was born in 1933 to her mother, age five; Rajo Devi Lohan became the oldest person to give birth at age 70

#### 44. Why is the umbilical cord cut?

-to cut off the baby's supply of blood to the placenta

#### 45. How long is the umbilical cord?

-the average cord is 20 inches long at birth

#### 46. What is the white stuff on a baby when it's born?

-this is called the vernix; it acts as a waterproof barrier for the baby in amniotic fluid and may have antibacterial qualities; made of oil and dead skin cells

#### 47. Can you go past your due date?

-usually no more than two weeks past your due date

#### 48. How do unborn babies eat and drink?

-a baby gets its food, as well as water and oxygen, from its mother's bloodstream

#### 49. Why is a Cesarean birth (C-section) necessary?

-placenta previa (placenta covers cervix), placental abruption (separation of the placenta from uterine lining), uterine rupture, breech position, fetal distress, cord prolapse (cord comes through birth canal before baby), failure to progress during labor, repeat cesarean, STD for mother, baby's head large or small pelvis for the mother (CPD), preeclampsia (hypertension), birth defects, multiple births

#### 50. What is the infant mortality rate in the United States?

- 6.14 infant deaths per 1000 births; worldwide is 35 deaths per 1000 births

#### 51. How often do pregnant women go to their OB-GYN?

- typically once a month for weeks 4-28, twice a month for weeks 28-36, and weekly from weeks 36-birth; if you are older than 35 or have complications, you will probably see your doctor more often

#### 52. What happens to the placenta and umbilical cord after birth?

- they will normally be discarded with other medical waste

#### 53. What is the most babies ever born to one woman?

- Feodor Vassilyev's 1<sup>st</sup> wife (name not known) gave birth to 69 children, 16 pairs of twins, 7 sets of triplets, and 4 sets of quadruplets between 1725-1765