THE MIRACLE OF LIFE WORKSHEET -

NAME:

Directions: Watch the video and then answer the questions.

Introduction:

- 1. How old is the earth?
- 2. Where on Earth did life first begin?
- 3a. How many chromosomes in each human body cell/somatic cell?b. How many chromosomes in a human sex cell (sperm or egg)
- 4. What is the genetic material in the nucleus of a cell called?

The Female Reproductive System:

- 1. How many egg cells in the human ovary?
- 2. How many chromosomes in the human egg cell?
- 3. When the follicle ruptures and the egg cell is released, what is this process called?
- 4. Where does the egg go after ovulation?
- 5. How small a human egg cell?
- 6. Once it is in the fallopian tube, what moves the egg down toward the uterus?
- 7. How wide is the fallopian tube/oviduct?
- 8. How long does it take the egg to travel 5 inches down the fallopian tube?
- 9. How long will the egg live in the fallopian tube after ovulation?
- 10. What happens to the egg if it is not fertilized?
- 11. Name the 2 female sex hormones.
- 12. Name the male sex hormone.
- 13. When can we tell whether the fetus is male or female?
- 14. How many people presently live on this planet?
- 15. How many millions of people are born each year?

The Male Reproductive System:

- 1. Where are sperm formed?
- 2. What is the function of the Cowper's gland?

- 3. What is the function of the prostate?
- 4. What do the seminal vesicles produce?
- 5. Through what tube do the sperm leave the male's body?
- 6. What keeps the urine in the bladder from entering the urethra during intercourse?
- 7. What is the total length of the seminiferous tubules?
- 8. How many sperm are produced /day?
- 9. Why must the testes be outside the body?
- 10. What do we call the pouch that houses/contains the testicles?
- 11. How many sperm does the average male produce in his reproductive lifetime?
- 12. How long does it take the sperm to develop and mature?
- 13. How many chromosomes are in the head of a human sperm cell?
- 14. What cells protect & feed the developing sperm cells?
- 15. How many sperm cells are in the ejaculated semen?
- 16. What happens to the sperm if they are not ejaculated after several weeks?
- 17. Where do sperm develop the ability to swim?
- 18. What structure enables the sperm to swim?
- 19. What substance is found on the head of the sperm?
- 20. What do these enzymes do?
- 21. What percent of the male's sperm are deformed or defective?
- 22. Name some things that can be wrong with the sperm.
- 23. List causes of sperm deformity.
- 24. The seminal vesicles release what nourishing substance?
- 25. How much semen is ejaculated?
- 26. How is semen forced out of the penis?
- 27. SEMINAL FLUID + SPERM =

Fertilization / Conception

1. What is the pH of the vagina?

- 2. Why is the female vagina acidic?
- 3. How many sperm die in the vagina?
- 4. How long do sperm live inside the body of the female?
- 5. What is the mouth/opening of the uterus called?
- 6. What protein does the cervix secrete?
- 7. What is the function of musin?
- 8. What are the fallopian tubes/oviducts lined with?
- 9. In what direction do the cilia beat & how does this affect the sperm?
- 10. Two hundred million sperm begin the journey, how many million reach the egg?
- 11. What is the function of the enzymes in the head of the sperm?
- 12. How many sperm actually fertilize the egg?
- 13. Where does fertilization take place?
- 14. What keeps the other sperm from fertilizing the egg once 1 sperm has penetrated?
- 15. What happens to the tail of the sperm once it penetrates the egg?
- 16. What happens to the head of the sperm once it is inside the egg?
- 17. When does the fertilized egg begin to divide?
- 18. Once the egg is fertilized & begins to divide what is it called?
- 19. After 5 days, what is the fertilized egg called?
- 20. When does the blastocyst implant in the uterus?
- 21. What feeds the blastocyst?