**Reproduction Test Review**

\* The test is 30 multiple choice questions.

You should be able to define the following terms:

*Nucleus*

*chromatids*

*Centrioles*

*Cytokinesis*

*Centromeres*

*Zygote*

*Homologous pairs*

*Diploid*

*Haploid*

*Spindle fibers*

*Haploid*

*Karyotype*

*Somatic cell*

*Autosome*

*Gamete*

*Fertilization*

*Embryo*

1. Describe the structure of DNA including the names and pairing of the nucleotide bases.
2. Describe the life cycle of a typical cell using the stages listed.
3. Interphase
4. Prophase
5. Metaphase
6. Anaphase
7. Telophase
8. Cytokinesis
9. What is asexual reproduction? What are its benefits?
10. What happens in the forms of asexual reproduction listed below. Include in representative organisms for each.
11. fission
12. budding
13. grafting
14. spores
15. Define meiosis and explain why it is necessary. Where does it occur in humans?
16. Explain each phase of meiosis.
17. Compare the products/outcomes of mitosis and meiosis.
18. What is fertilization, where does it occur, and what is the result?
19. Describe the parts, with functions, of the normal human male and female reproductive systems.
20. Where are sperm and egg created?
21. How is gamete formation different in males than in females?
22. What cells do meiosis occur in? In what cells do mitosis occur?
23. What are the advantages and disadvantages of sexual reproduction over asexual reproduction?
24. How many chromosomes are in body cells and in sex cells?
25. How is a normal karyotype arranged?
26. Describe what needs to happen for a human to successfully conceive.
27. What are the three layers that form during differentiation? What do each of these three layers go on to form?
28. What happens during each trimester of pregnancy?