**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. binary fission
12. budding
13. grafting
14. cloning
15. spores
16. Define meiosis and explain why it is necessary. Where does it occur in humans?
17. Explain each phase of meiosis.
18. Compare the products/outcomes of mitosis and meiosis.
19. What is fertilization, where does it occur, and what is the result?
20. Where are sperm and egg created?
21. What cells do meiosis occur in? In what cells do mitosis occur?
22. What are the advantages and disadvantages of sexual reproduction over asexual reproduction?
23. How many chromosomes are in body cells and in sex cells?
24. How is a normal karyotype arranged?