**Biology EOC Review: Page 3: Mendelian Genetics, DNA & Gene Expression**

1. What is a gene?
2. What is an allele?
3. Define homozygous and heterozygous.
4. What is the difference between genotype and phenotype?
5. Know how to use a Punnett square
6. Name two types of non-Mendelian inheritance.
7. What are the three parts of a nucleotide?
8. List the nitrogenous bases in their complimentary pairs.
9. What does DNA stand for?
10. What is different about the nucleotide parts in RNA as compared to DNA?
11. What do codons specify for?
12. What is the product of transcription?
13. Explain the translation process.
14. Make a sketch of **DNA replication**.
15. What are the three types of mutations?
16. Which type of mutation is more likely to be harmful: a point mutation or a frameshift mutation?
17. Mutation is passed to offspring only if it is in a…
18. What is genetic engineering used for?
19. What is a karyotype and what can you tell from it?
20. What is a genome?