**Reading Guide Chapter 3 Nucleic Acids**

**Principles of Life Pages 38-42**

1. What is the function of nucleic acids in general? Of DNA specifically? Of RNA specifically?
2. What are the building blocks of nucleic acids? What are the components of the monomer?
3. Draw and label a simple diagram of the monomer.
4. What sugars are found in DNA and RNA?
5. Differentiate between a purine and a pyrimidine.
6. What type of bond forms between the monomers of nucleic acids?
7. What type of reaction occurred to form this bond?
8. What bases are found in DNA? In RNA?
9. Explain what complimentary base pairing is and provide an example.
10. How are base pairs held together?
11. In what shape(s) is RNA found?
12. In what shape(s) is DNA found?
13. Describe the antiparallel nature of DNA.
14. What is DNA replication?
15. What is transcription?
16. What is translation?
17. What is a genome?
18. What do DNA sequences suggest about evolutionary relationships?