



Name: _____ Date: _____

DNA, Proteins, and Chromosomes

- Go to <http://gslc.genetics.utah.edu/units/basics/tour> > **What is DNA?**

Use the tutorial to answer the following questions.

1. Instructions for an organism to work are found in the _____ in the cell.
2. Scientists call the shape of DNA a _____ .
3. The four bases that make up DNA are A, C, T, and G. Which base combines with which?
_____ — _____
_____ — _____
4. DNA makes “words” that are always made of three letters. This group of letters is called a **codon**.

- Now go to <http://gslc.genetics.utah.edu/units/basics/tour> > **What is a protein?**

Read through the tutorial to get a general understanding of what proteins are and what they do.

(Draw your own version of the process described at the end)

- Go to <http://www.dnai.org/c/index.html> > **Tour** > **chromosome close up** > **Animation zooming in: examining the X**

Use the tutorial to answer the following questions.

5. Most human cells contain _____ pairs of chromosomes. How many total chromosomes does that make? _____
6. Genes make up _____ % of human DNA.
7. Genes carry coded instructions called _____ for making proteins in our bodies. They are often separated by long stretches of “non coding” DNA called _____ .
8. FYI – All DNA, whether an exon or an intron, consists of a sequence of the chemicals A, T, C, and G.