|  |  |
| --- | --- |
| **DNA Molecule Model Activity:****Post-Lab Questions** | **Macintosh HD:Users:seh235:Desktop: logo black.jpg** |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_

**Math Applications**

1. If a DNA molecule were composed of 10% guanine, what percents of the molecule would be made up of cytosine, adenine, and thymine? Show your work.
2. If a DNA molecule contained a total of 600 bases and 20% of the bases were cytosine, *how many* bases would be adenine?
3. DNA is an *information* molecule. How does it store this information? (Which part of the DNA structure stores the information?)
4. How does DNA’s structure relate to its functions? List three specific jobs that DNA does, and match them to a specific aspect of its structure that allows it to perform the function. *For example:* The fact that the bases always match with their complementary pair – allows DNA to accurately copy itself.

**Coloring Review of DNA Structure**

In the molecule of DNA below, use colored pencils and follow these instructions:

* Circle the ***phosphate groups*** with **GREEN**
* Color the ***deoxyribose*** ***molecules*** in **RED**
* Trace over the ***hydrogen bonds*** with **BLUE**
* Color the ***purines*** in **YELLOW**
* Color the ***pyrimidines*** in **PINK**
* Circle a ***nucleotide*** with **PURPLE**

