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

BOTH Assignments from list 1 DUE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Assignment from List 2 DUE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Honors Biology Homework Genetics/Human Genetics**

**3 TOTAL ASSIGNMENTS DUE!!!**

**List 1: You will CHOOSE TWO from this list to complete**

1. Do the 64- Box *Three Trait* Punnett Square. Get the sheet from Mrs. Tyler.
2. Download a test for colorblindness from the Internet and print it (must be a color printer!). Test at least 20 students from Laney for colorblindness. Make a graph/data chart that summarizes your results.
3. Make a crossword puzzle of at least 12 important genetic terms and have at least 2 people in the class complete it. Turn in a blank copy and an answer key as well.
4. Make a brochure to advertise for the blood bank. Your goal should be to convince people to give blood. Please be creative, colorful, and use scientific facts (donors vs. acceptors, etc).
5. Choose one genetic trait (such as dimples, hitchhikers thumb, freckles, hair color, etc.) and make a pedigree of the trait in your family. It must include at least 10 people and at least 3 generations. Be creative and choose a trait that would be interesting to follow in your family.
6. Should parents be allowed to “genetically engineer” their children? (Determine their eye color, hair color, height, etc. before they are born.) State why or why not and back up your claim with support. This should be 2-3 good paragraphs typed.
7. If you think of an assignment that is not listed here, but you would like to do, ask me about it. If I approve, you can do it!

**List 2: Choose 1 from this list to complete**

1. Research any of the genetic disorders we discussed in class OR research one we haven’t talked about. Make a Google Website or Prezi that includes the following: how the disease is inherited (autosomal or x-linked), what the symptoms are, how common it is in the population, and if there are any treatments. Also include pictures and/or a video about your disorder. Points will be based on length, information, and creativity.
2. Is the Human Genome Project worth the money it costs? Be sure to describe what the HGP is and include both pros and cons of the HGP. It should be at least 3 good paragraphs long typed. Include all citations.
3. Some scientists believe that Mendel faked his data. Research this issue and write whether you think he faked his data or not. Be sure to include all citations. It should be 2-3 good paragraphs typed.