Baby Genetics Case File

Student Names:

1. Baby info **and Portrait 3**
   1. Child’s Gender: **1**
   2. Child’s Name: **1**
   3. Child’s parents: **1**
2. What chromosomal abnormality is indicated on your ***karyotype***?
   1. Describe how it appears on the karyotype**. 1**
   2. What disorder does it indicate? **1**
   3. What are the **symptoms** of the disorder? **3**
   4. What is the **prognosis** for your baby with this disorder? **3**
   5. What **treatments and/or assistance** would be necessary? 3
3. What allelic disorder is indicated by your family history? Attach the pedigree **(5 points)** that you created based on your family history. Don’t forget that if there are carriers, they should be half shaded!
   1. What are the signs and symptoms of this disorder? **2**
   2. What treatments and/or assistance would be necessary for a child with this disorder? **3**
4. Write out all possible Punnett Square(s) to predict your baby’s blood type. **1**
   1. Explain why multiple squares were or were not necessary. **1**
   2. Write out the **genotypic and phenotypic** ratios for your Punnett square(s). **2**
5. From the Baby lab
   1. Choose 4 traits that are inherited by **basic** autosomal dominance or recessiveness.
      1. For each trait, give the genotype and state whether it is homozygous dominant, heterozygous, or homozygous recessive **4**
      2. State the baby’s phenotype **4**
   2. Choose 1 trait that is inherited by incomplete dominance.
      1. Explain why this is considered to be incomplete dominance. **1**
      2. State the baby’s genotype and phenotype in your explanation **2**
   3. Choose 1 trait that in polygenic.
      1. Explain what polygenic means **1**
      2. Explain how polygenic inheritance worked to give your baby his/her phenotype **2**
      3. Be sure to include your baby’s genotype in your explanation **1**
6. List 2 Correctly-cited resources from which you found the information about your genetic disorders in MLA format. **2 points**
7. **Collaboration – 2 points**

/ 50 points -- 4 C’s Project Grade