Baby Genetics Case File

Student Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Baby info:
   1. Child’s Gender:
   2. Child’s Name:
   3. Child’s parents:
2. What chromosomal abnormality is indicated on your ***karyotype***?
   1. Describe how it appears on the karyotype.
   2. What disorder does it indicate?
   3. What are the symptoms of the disorder?
   4. What is the prognosis for your baby with this disorder?
   5. What treatments and/or assistance would be necessary?
3. What allelic disorder is indicated by your family history? Attach the pedigree 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. What treatments and/or assistance would be necessary for a child with this disorder?
4. Write out all possible Punnett Square(s) to predict your baby’s blood type.
   1. Explain why multiple squares were or were not necessary.
   2. Write out the genotypic and phenotypic ratios for your Punnett square(s).
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
      2. State the baby’s phenotype
   2. Choose 1 trait that is inherited by incomplete dominance.
      1. Explain why this is considered to be incomplete dominance.
      2. State the baby’s genotype and phenotype in your explanation
   3. Choose 1 trait that in polygenic.
      1. Explain what polygenic means
      2. Explain how polygenic inheritance worked to give your baby his/her phenotype
      3. Be sure to include your baby’s genotype in your explanation
6. List 2 Correctly-cited resources from which you found the information about your genetic disorders in MLA format.