**Honors Biology – 3rd Quarter Checkpoint #1**

**Part I – Baby Lab**

Complete the following information from the Baby Lab

1. Baby Information
   1. Child’s gender (1 pt)
   2. Child’s Name (1 pt)… You pick a name!
   3. Child’s Parents (1 pt)… Put you and your partner’s names.
2. Choose *4 traits* your baby inherited by **basic (complete) autosomal dominance** and **recessiveness.**
   1. For each trait, state genotype and whether your baby is homozygous recessive, homozygous dominant, or heterozygous. (4 pts)
   2. State the baby’s phenotype for each trait. (4 pts)
3. Choose *1 trait* your baby inherited by **incomplete dominance**. (1 pt)
   1. Explain the concept of “incomplete dominance.” (1 pt)
   2. State the baby’s genotype for the trait. (1 pt)
   3. State the baby’s phenotype for the trait. (1 pt)
4. Choose *1 trait* your baby inherited that is a **polygenic** trait.
   1. Explain the concept of “polygenic.” (1 pt)
   2. State the baby’s genotype for the trait. (1 pt)
   3. State the baby’s phenotype for the trait. (1 pt)

**Part II – Blood Types**

1. Given the Blood Types for your Baby’s Mother and Father, show all the possible Punnett Square(s) to predict what Blood Types your Baby could inherit. Most babies will have more than one Punnett Square. (5 pts)
2. For each Punnett Square, provide the Phenotypes (Blood Types) predicted by percentages or ratios. (5 pts)

**Part III – Chromosomal Abnormality**

1. What chromosomal abnormality is indicated on the provided karyotype? (3 pts)
   1. Describe how the abnormality can be seen/diagnosed on the karyotype. (2 pts)
   2. Name 3-5 symptoms of this abnormality. (2 pts)
   3. What is the prognosis (long-term outcome) for your baby? *(Will your baby most likely survive* *childhood?* *If so, what would be the expected quality of life?)* (2 pts)
   4. What type of treatments and/or assistance would be needed for a baby with this disorder? (3 pts)

**Part IV – References**

1. List at least 1 correctly cited resource in MLA format. (5 pts)
2. Report is typed and proofread. (5 pts)

Total Points Earned = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DIVIDED BY……..**

Total Points Possible = \_\_\_\_\_\_50\_\_\_\_\_\_\_

Final Honors Grade = \_\_\_\_\_\_\_\_\_\_\_\_\_\_