Heredity Test:

1. Who came up with the Punnett Square?
   A. Rosalind Franklin  B. Gregor Mendel  C. Maurice Wilkins  D. Thomas Hunt Morgan

2. Who first found out about DNA’s Structure?
   A. James Watson  B. Francis Crick  C. Maurice Wilkins  D. All of the above

3. If a mother has Type A blood and a father has Type B blood, what cannot be their child’s blood type?
   A. Type A  B. Type B  C. Type O  D. None of the above

4. List the order of meiosis:

5. What are the three forms of nondisjunction?

6. What is DNA made out of?

7. Solve the Transcriptions (All/Some are not true DNA chains)
   1. TGATCGATA
   2. ATGTGACTA
   3. UATGCACT
   4. GCAUTGCA
   5. AATTUUGG
   6. CGAUTUUA
   7. TTAUGGCC
   8. GGTTAUCC
   9. AACCGGTT
   10. UUTUGGCA

Use the Pedigree for questions 8-10
8. Which of the following numbers in each section are female?
   Section I-
   Section II-
   Section III-
9. Which of the following are male?
   Section I-
   Section II-
   Section III-
10. Is the pedigree X linked or autosomal?
11. Trisomy 21 is also known as ______________________ and happens when __________
12. What is Turner’s Syndrome?
13. What is Klinefelter’s syndrome?
14. If a homozygous black guinea pig (BB) is crossed with a homozygous white guinea pig (bb), what is the probability that an offspring will have black fur? (percentage)
15. What are the sex chromosomes for a male?
16. What are the sex chromosomes for a female?
17. Give an example of homozygous alleles?
18. Give an example of heterozygous alleles?

19. What is the genotypic ratio?

20. What is the phenotypic ratio?

21. What are multifactorial traits?

True or False:
22. Aneuploidy is when there is an abnormal number of chromosomes

23. Aneuploidy can cause cancer

24. If a mother has type AB blood and the child has type O blood, the father must have Type O blood

25. Name the types of RNA

Tie Breaker:
   When the gene for one trait exists as only two alleles & the alleles play according to ____________________________________________, there are 3 possible genotypes (combination of alleles) & 2 possible phenotypes (the dominant one or the recessive one).

Draw the symbol for a miscarriage on a pedigree