Unit 7 Variation and Distribution Review

1. Describe the law of segregation. _____
2. Explain the law of independent assortment.
   _____
3. The purpose of a punnett square is _____
4. Complete the following Dihybrid cross. Do the genotype and phenotype ratio
   Smooth seeds are dominant to wrinkled seeds. Yellow seeds are dominant to green seeds. Cross a heterozygous smooth seed, homozygous yellow seed pea plant, with a homozygous wrinkled seed, homozygous green pea plant.

5. _____ is when one allele is not completely dominant over another allele, giving 3 phenotypes instead of 2.
6. Explain and give an example of codominance._____
   _____
7. Explain and give an example of polygenic traits. _____
   _____
8. Cross a person with type O blood with a person with type AB blood. Give the genotype and phenotype %

9. A sex-influenced trait is when the phenotype depends on the presence of _____.
10. _____ is an example of a sex-influenced trait.
11. Describe sex-linked traits and give an example._____
    _____
12. What is the genotype for a woman with hemophelia. _____
13. What is the genotype of a man that does not have hemophelia. _____
14. Can a man be a carrier for a sex-linked trait? Explain _____
    _____
15. Why is it more common for a man to go bald than a woman? _____
16. What does nature versus nurture mean? _____
    _____
17. Explain and give several examples of how environmental factors affect the phenotype expression of genes. _____
    _____
18. Can epigenetics affect the phenotype of an organism? _____
19. Which genotypes give you the same phenotype? _____
20. Give an example of a trait controlled by multiple alleles in humans. _____
21. Height is an example of this type of trait _____
22. _____ is when the phenotype depends on the presence of hormones.
23. _____is when the single, recessive allele on the X is expressed.
24. _____ is a trait with 3 or more alleles in a population.
25. _____ is when both alleles are expressed and neither is dominant or recessive.
26. At the end of the corn lab, a student had these results: 252 thick skin and sweet taste, 248 thick skin and normal taste, 258 thin skin and sweet taste, and 245 thin skin and normal taste. What is the phenotype ration of the experiment?_____