Genetics Unit Test Review Guide

**Vocabulary to Know:**

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| Dominant: | Mutation: |
| Recessive: | Genetic Condition:  |
| Heterozygous (hybrid): | Offspring: |
| Homozygous (purebred): | Sex-linked traits: |
| Alleles: | Pedigree: |
| Genotype: | Trait: |
| Phenotype: | DNA: |
| Carrier: | Heredity: |

1. A pea plant that is homozygous dominant for tall height is crossed with a recessive plant for height. Use D for tall height. Show the cross below and analyze it. (3 Punnett squares on the test)

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1. How many chromosomes do you get from each parent?
2. What are chromosomes made of?
3. How are pedigrees used?
4. What chromosomes represent a female? A male?
5. What are the causes of genetic conditions in humans?
6. What do you know about the following genetic conditions:
7. Hemophilia:
8. Sickle Cell Disorder
9. Cystic Fibrosis
10. Down’s Syndrome
11. What was Gregor Mendel known for?
12. In DNA, what bonds with Adenine? Thymine? Cytosine? Guanine?
13. How do we get boy babies and girl babies based upon sex chromosomes?
14. Why do boys have more sex-linked traits than girls? Why are mothers often carriers of sex-linked traits but do not show the trait?
15. Read and analyze a pedigree (sample).