GVC #2—I can compare sexual and asexual reproduction, including patterns of inheritance in sexually reproducing organisms.

Learning Target - c. I can predict patterns of Mendelian inheritance using a Punnett square.

Genetics Book Notes

p. 124-140

Vocabulary

1. Use your book to describe the following:
    a. Heredity (p. 127) –

    b. Gene (p. 128) –

    c. Allele (p. 124) –

    d. Linked Gene (p. 131) –

2. The different alleles of a gene can be either **Dominant** or **Recessive**.
    a. What does it mean for an allele to be DOMINANT (p. 130)

    b. Based on your answer in part a, what do you think it would mean for an allele to be RECESSIVE?

Mendel

3. From the video that we watched on Mendel, list 3 interesting facts that you remember about him:
    a.

    b.

    c.

4. Mendel developed 2 important laws that help explain the patterns of inheritance that he observed, describe each of these 2 laws
    a. Law of Segregation (p. 130):

    b. Law of Independent Assortment (p. 131):

Genotype vs. Phenotype

5. A GENOTYPE is (p. 132/133)

    _____

6. A PHENOTYPE is (p. 132/133)

    _____

7. Having freckles is a dominant trait. A person with the allele combinations Ff and FF would have freckles, a person with the allele combination of ff would not have freckles.
    a. Which information listed above, describes the GENOTYPE?

    b. Which information describe the PHENOTYPE?

8. Genotypes can be described in the 3 ways listed below, Using the Freckle allele from #7 give an example of each of the genotypes listed below. (p. 131/133)

    Homozygous Dominant - _____
    Homozygous Recessive - _____
    Heterozygous - _____

9. Define Mendelian Trait (p. 137):