BSC 1005: Life Science

Activity 5: Chapter 5 Genetics *Name(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

Complete the following problems. Use your class notes to help find the answers.

1. Define **genes:**
2. Define **alleles:**
3. How many chromosomes are in a human body cell? Where do they come from?
4. A purple flowered pea plant can be also described as ***PP***. What is the phenotype and genotype of this plant?
5. Look at slide 15.
   1. Draw a Punnett Square for a homozygous purple flower (dominant) with a homozygous white flower. Label color of the flowers for each of the offspring
   2. Draw a Punnett Square for a cross between a heterozygous yellow seed pea plant (dominant) with a homozygous recessive green seed plant.
6. If two parents are carriers for CF, what is the chance that they will have a child with CF?
7. What is a quantitative trait and give an example.