**Complex Patterns of Inheritance Guided Notes**

**Incomplete Dominance**

-Occurs when a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ phenotype is somewhere between the two \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ phenotypes. Neither allele is completely \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or recessive. Example: When plants that are homozygous for \_\_\_\_\_\_\_ flowers are crossed with plants that are homozygous for \_\_\_\_\_\_\_\_\_\_\_ flowers, the offspring have pink flowers.

**Codominance**

-Occurs when both alleles for a gene are expressed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, neither allele is dominant or recessive (both traits are fully \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_). Occurs in heterozygous individuals. Example: a plant that is homozygous for red flowers is crossed with a plant that is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for white flowers. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ will have some red areas and some white areas.

**Sex-Linked Genes**

-\_\_\_\_\_\_\_\_\_\_\_ (genes) that are located on the sex chromosome are sex-linked. In mammals, individuals with two X chromosomes, an \_\_\_\_\_ genotype, are \_\_\_\_\_\_\_\_\_\_\_\_\_. Individuals with one X and one Y, an \_\_\_\_\_\_ genotype, are \_\_\_\_\_\_\_\_\_\_. The father’s gametes determine the \_\_\_\_\_\_\_\_ of an organism. Many sex-linked traits are carried on the \_\_\_\_ chromosome.

**Sex-Linked Disorders in Humans**

-Some genetic disorders are sex-linked such as Duchenne Muscular Dystrophy, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and color blindness. \_\_\_\_\_\_\_\_\_\_ are more likely to be affected by sex-linked disorders because they only have one \_\_\_\_\_ chromosome.

**Polygenic Traits**

-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ traits produced by \_\_\_\_\_\_\_ or more genes. Example: human skin color is a result of \_\_\_\_\_\_\_ genes that interact to produce a continuous range of colors. As many as \_\_\_\_\_\_ different genes determine eye color, but two main genes stand out and are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.