GENETICS

*(HSCE B.4)*

Learning Targets

* I can draw a chromosome and indicate where the genes are located. (B4.1A)
* I can explain that the information passed from parent to offspring is coded on genes. (B4.1B)
* I can explain what Mendel’s Laws of segregation and independent assortment are. (B4.1d)
* I can explain why Mendel’s Principles lead to such great genetic diversity. (B4.3d, B4.3e)
* I can summarize (either written or by diagram) the basic process and products of meiosis. (B4.3A)
* I can make several comparisons between mitosis and meiosis. (B4.3A)
* I can explain the principle of dominant and recessive alleles. (B4.1c)
* I can predict the genotype and phenotype of single-factor crosses using a Punnett Square. (B4.1e)
* If provided an example, I can differentiate between incomplete dominant traits and codominant traits. (B4.1c)
* I can explain how mutations in gametes can be passed to the next generation. (B4.2A, B4.3B, B4.3f, B4.4c)
* I can interpret a human karyotype to identify several genetic disorders. (B4.3C, B4.2D)