Name: Period: Date:

Learning Objectives

Chapter 7: Mendelian Genetics

Standard Students Know:	Learning Objective	Pre – Assessment 1	Mid – Assessment 2	Post - Assessment 3
3.a Students know how to predict the probable outcome of phenotype in a genetic cross from the genotype of the parents and mode of inheritance. 7.b Students know why alleles that are lethal in a homozygous individual may be carried in a heterozygous and thus maintained in a gene pool. HS-LS3-2 Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors. HS-LS3-3 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population. 3.d Students know how to use data on frequency of recombination at meiosis to estimate distance between loci and to interpret genetic maps of chromosomes. 3.c Students know how to predict the probably mode of inheritance from a pedigree diagram showing phenotypes	What is a carrier?			
	What is a sex-linked (X-linked) gene?			
	What is x chromosome inactivation?			
	How many copies of each autosomal gene affect phenotype?			
	What is incomplete dominance?			
	What is codominance?			
	What is a polygenic trait?			
	How does environmental factors interact with phenotypes?			
	What is a linkage map?			
	What is a pedigree? How is it used?			
	What is a karyotype?			
	How can a karyotype be used to identify genetic disorders?			

To assess yourself use the following scale:

1) I have never heard of this concept
2) I have heard of this concept
3) I completely understand this concept

Chapter Summary: