

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Science Genetics	Eighth	5 th Six Weeks	4 Weeks
TEKS/Student Expectations		Examples/Specifications:	
<p>(3)</p> <p>(E) connect Grade 8 science concepts with the history of science and contributions of scientists.</p> <p>(11)</p> <p>(A) identify that change in environmental conditions can affect the survival of individuals and of species;</p> <p>(B) distinguish between inherited traits and other characteristics that result from interactions with the environment; and</p> <p>(C) make predictions about possible outcomes of various genetic combinations of inherited characteristics.</p>		<p>3 E- discuss the history of genetics, such as Mendel's Peas</p> <p>11 A, B, and C- explain how genetics make species change and evolve, explain how these characteristic are related to the environment</p>	
Language of Instruction:		Instructional Resources/Textbook Correlations:	
Trait Heredity Genetics Purebred Gene Allele Dominant allele Recessive allele Hybrid Probability Punnett square Phenotype Genotype Homozygous Heterozygous	Codominance Sperm Egg Meiosis Messenger RNA Transfer RNA Mutation Multiple alleles Sex-linked gene Carrier Pedigree Genetic disorder Amniocentesis Karyotype Selective breeding	Inbreeding Hybridization Clone Genetic engineering Gene therapy Genome Species Adaptation Natural selection Fossil Fossil record	Prentice Hall Science Explorer Textbook and Guided Reading Workbook Chapter 16, 17, and 18 Weblinks/Other Resources:

Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:
Teacher Test DNA Construction Lab Phenotype Comparison Lab Punnett Square Worksheet and Quiz	4 days- Mendel and the beginnings of genetics 3 day- DNA Construction 2 day- Phenotype Comparison 3 days- Punnett Squares 4 days- The effects of genetics on species of the world 4 days- Uses for studying genetics