

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Biology Human Genetics	9 - 12	3 rd Six Weeks	8 - 10 Days
TEKS/Student Expectations		Examples/Specifications:	
<p>(3) Scientific processes. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to: (C) evaluate the impact of research on scientific thought, society, and the environment; (D) describe the connection between biology and future careers; F) research and describe the history of biology and contributions of scientists</p> <p>(6) Science concepts. The student knows the structures and functions of nucleic acids in the mechanisms of genetics. The student is expected to: (A) describe components of deoxyribonucleic acid (DNA), and illustrate how information for specifying the traits of an organism is carried in the DNA; (D) compare genetic variations observed in plants and animals; F) identify and analyze karyotypes</p>		<p>Students will: Gathering and interpreting data</p> <p>Analyzing karyotypes and pedigrees Manipulating models of DNA Determining probability of human genetic disorders in families,</p>	
Language of Instruction:		Instructional Resources/Textbook Correlations:	
Genetic engineering Restriction enzyme Gel electrophoresis Recombinant DNA Plasmid Transgenic Clone Karyotype Sex chromosome Autosome Pedigree Sex linked gene Nondisjunction DNA fingerprint		<p>Textbook - Chapters 13 and 14 Lab – Karyotype Lab</p> <hr/> <p>Weblinks/Other Resources:</p> <p>TAKS Tune-up book</p>	

Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:
Chapter Worksheet TAKS Bell Ringers Pedigree Analysis Human Genetic Disorder Problems Daily Work Homework Teacher – designed test	