Grade 9 and 10
Distance Learning Module 6: Week of: May 11th – May 15th
Genetics

Honors Biology - *Modified from Unit # 4 - Inheritance*

Targeted Goals from Stage 1: Desired Results

Content Knowledge:

DNA contains the genetic information that controls functions and traits

Probability can be used to predict the inheritance of traits

Vocabulary:

recessive, dominant, sex-linked, variation, nondisjunction, monohybrid, dihybrid, polygenic, codominance, incomplete dominance

Skills:

Apply principles of probability and statistics to the inheritance of traits.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Gregor Mendel and Monohybrid Crosses - Review and take notes on slides 1-34 (be sure to focus on the vocabulary) - Punnett Square Practice Problems	Mendel and Principles of Genetics Slideshow Punnett Square Practice Problems	Submit practice problems through Classroom
Tuesday: Dihybrid Crosses and Mendel's Laws - Review and take notes on slides 35-40 - Dihybrid Cross Practice Problems	Mendel and Principles of Genetics Slideshow Dihybrid Cross Practice Problems (PDF)	Submit practice problems through Classroom
Wednesday:	Mendel and Principles of Genetics Slideshow	Submit practice problems through Classroom

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Other Patterns of Inheritance - Review and take notes on slides 41-59 - Do the practice problems in the slides - Practice Problems	Incomplete and Codominance Problem Set Blood Type Crosses	
Thursday: Pedigrees - Review and take notes on Human Pedigrees Slideshow - Complete "Color Blindness Problem Set" (link to the activity is on last slide, use corresponding worksheet to fill in answers)	Human Pedigrees Slideshow Color Blindness Problem Set	Submit color blindness problem set through Classroom
Friday: Genetics Wrap Up - Complete summary practice problems	Google Forms Quiz (Genetics Review)	Complete Google Forms Quiz

Week criteria for success (attach student checklists or rubrics):

Assignment	Criteria for Success
Monohybrid Cross Practice Problems	Solutions to monohybrid cross problems are submitted through Classroom
Dihybrid Cross Practice Problems	Solutions to dihybrid cross problems are submitted through Classroom
Other Patterns of Inheritance Problems	Solutions to incomplete/codominance problems and blood typing problems are submitted through Classroom

Assignment	Criteria for Success
Pedigree - Color Blindness Problem Set	Web Activity is completed and solutions to color blindness problem set are submitted through Classroom
Summary Questions	Score of an 80% or better on Google Forms Quiz

Supportive resources and tutorials for the week (plans for re-teaching): *links are posted in Google classroom*

Collection of Genetics Resources

Practice Genetics Problems

Utah Genetics