

UNIT 8

Grade	10
Unit of Study	Inheritance and Complex Patterns of Inheritance
Length of Unit	3-4 weeks
Sample Essential Questions	Sample Corresponding Big Ideas
What processes lead to genetic variation occurring in offspring? How do complex patterns of inheritance affect inheritance of traits?	Meiosis sorts chromosomes and produces the sex cells used to pass on genes. Complex patterns of inheritance produce novel trends in traits. Some traits are more likely in men than women.

Missouri Learning Standards

Biology Power Standards

Supporting Standards

Power Standard 2:I can understand that there is a genetic basis for the transfer of biological characteristics from one generation to the next through reproductive processes.

LS3.A.1 & LS3.B.3

Unit 8 Sequence

MLS	Topic(s)	Learning Targets	Academic Vocabulary
LS3.A.1	Meiosis & Variation	I can use the meiosis model to describe the relationships between chromosomes, gametes and fertilization that produce unique individuals in a population	Meiosis Fertilization
LS3.B.3	Genetic Variation	I can use evidence to describe how DNA sequences relate to specialized cell functions, including genetic variation results from meiosis, mutations and/or environmental factors.	Genetic Variation Crossing Over

LS3.B.4	Punnett Squares & Pedigrees	I can perform mathematical functions and use appropriate statistical analyses of data to determine the probability of a trait in a population for complex patterns of inheritance.	Incomplete Dominance Codominance Sex-Linked Inheritance Carrier Multiple Alleles
---------	-----------------------------	--	--

MLS	Learning Activities	
LS3.A.1 LS3.B.3	Meiosis Illustrated Packet	Must Do ▾
LS3.B.4	Spongebob Part 2: Complex Patterns	Must Do ▾
LS3.B.4	Hospital Mix Up	Must Do ▾
LS3.B.4 LS3.A.1 LS3.B.3	Genetics Escape Room	Must Do ▾

Assessments		
MLS	Description or Location	Rubric/Location
LS3.A.1 LS3.B.3 LS3.B.4	Unit 8 Test	Pear Assessment
LS3.A.1 LS3.B.3 LS3.B.4	Murdock Family Adoption CER	Paper

Additional Resources	
Quizizz.com , Blooket.com , Quizlet.com , Openstax.org	