

**Edmore Public School**  
**706 Main St, Edmore, ND 58330**

**Biology Lesson Plan**

**Dates:**

October 30 - November 3, 2023

**Time and Period:**

2:32 - 3:25 PM, Seventh Period

**Performance Standard:**

**HS-LS1-1**

Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.

**HS-LS2-8**

Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.

**HS-LS3-1**

Construct an explanation to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.

**HS-LS3-2**

Make and defend a claim based on evidence that inheritable genetic variations result from various factors.

**HS-LS3-3**

Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.

**Monday, October 30**

<b>Topic</b>	Traits and Probability, pp. 177 - 181
<b>Objectives</b>	Predict the possible genotypes and phenotypes and their ratios from a monohybrid cross.
<b>Bell Ringer</b>	Differentiate between <b>monohybrid</b> and <b>dihybrid</b> crosses.
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Worksheet: Punnett Squares / Testcross

Tuesday, October 31	
<b>Topic</b>	Review and Practice: Monohybrid Crosses, pp. 177 - 181
<b>Objectives</b>	Determine the genotype of an organism by analyzing a testcross or punnett square.
<b>Bell Ringer</b>	<b>Answer Quicklab pp. 179</b>
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Worksheet: Punnett Squares / Testcross

Wednesday, November 1	
<b>Topic</b>	Dihybrid Crosses, pp. 177 - 181
<b>Objectives</b>	Determine the genotype of an organism by analyzing a testcross or punnett square.
<b>Bell Ringer</b>	<b>Answer Quicklab nos. 3 and 4 pp. 179</b>
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Worksheet: Punnett Squares / Testcross

Thursday, November 2	
<b>Topic</b>	Continuation: Dihybrid Crosses
<b>Objectives</b>	Determine the genotype of an organism by analyzing a testcross or punnett square.
<b>Bell Ringer</b>	Give an example genotype for the following: <b><i>Homozygous Dominant, Homozygous Recessive, and Heterozygous Dominant.</i></b>
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Worksheet: Punnett Squares / Testcross

**Friday, November 3**

<b>Topic</b>	Quiz Introduction to Chromosomes and Phenotypes, pp. 192 - 195
<b>Objectives</b>	Model the inheritance of a sex-linked trait.
<b>Bell Ringer</b>	Define <i>sex-linked genes</i> .
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Quiz