

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

**Biology Lesson Plan**

**Dates:**  
May 6 - 10, 2024

**Time and Period:**  
2:32 - 3:25 PM, Seventh Period

**Performance Standard:**

**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.

**Monday, May 6**

**FIELDTRIP**

**Tuesday, May 7**

**FIELDTRIP**

**Wednesday, May 8**

**Topic**

Genetic Engineering - Laboratory Activity

<b>Objectives</b>	Use a plasmid vector to transform bacteria with genes for Green Fluorescent Protein (GFP) and antibiotic resistance in a controlled experiment.
<b>Bell Ringer</b>	What is the role of arabinose in this laboratory activity?
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Bacterial Transformation Worksheet

**Thursday, May 9**

<b>Topic</b>	Genetic Engineering - Laboratory Activity (Continuation)
<b>Objectives</b>	Use a plasmid vector to transform bacteria with genes for Green Fluorescent Protein (GFP) and antibiotic resistance in a controlled experiment.
<b>Bell Ringer</b>	What is the role of ampicillin in this laboratory activity?
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Bacterial Transformation Worksheet

**Thursday, May 10**

<b>Topic</b>	Genetic Engineering - Laboratory Activity (Last Work Period) Review for Semester Test
<b>Objectives</b>	Use a plasmid vector to transform bacteria with genes for Green Fluorescent Protein (GFP) and antibiotic resistance in a controlled experiment.
<b>Bell Ringer</b>	What are the benefits of using genetic engineering?
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Bacterial Transformation Worksheet

