

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

**Biology Lesson Plan**

**Dates:**  
 April 15 - 19, 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, April 15**

<b>Topic</b>	Manipulating DNA, pp. 254 - 257
<b>Objectives</b>	Apply your understanding of DNA to manipulate specific genes to produce desired traits.
<b>Bell Ringer</b>	Define <i>restriction enzymes</i>
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Manipulating DNA, pp. 254 - 257

**Tuesday, April 16**

<b>Topic</b>	Copying DNA, pp. 259 - 260
<b>Objectives</b>	Describe the pattern of events that happen during DNA replication.
<b>Bell Ringer</b>	Define <i>polymerase chain reaction</i>
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Copying DNA, pp. 259 - 260 Work Period: Blood Flow

<b>Wednesday, April 17</b>	
<b>Topic</b>	DNA Fingerprinting, pp. 262 - 264
<b>Objectives</b>	Interpret different DNA fingerprints and explore other uses of DNA forensics.
<b>Bell Ringer</b>	What are 2 uses of DNA fingerprinting?
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	DNA Fingerprinting, pp. 262 - 264 Completion of Mini Project: Blood Flow

<b>Thursday, April 18</b>	
<b>Topic</b>	Gel Electrophoresis, pp. 259 - 260
<b>Objectives</b>	Describe the pattern of events that happen during DNA replication.
<b>Bell Ringer</b>	What is the role of Gel Electrophoresis?
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Gel Electrophoresis, pp. 259 - 260 Review Quiz

<b>Friday, April 19</b>	
<b>Topic</b>	QUIZ Completion of Lab Genetic Engineering, pp. 265 - 269
<b>Objectives</b>	Describe applications of genetic engineering.
<b>Bell Ringer</b>	What is the role of electric current in gel electrophoresis
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	QUIZ Completion of Lab Genetic Engineering, pp. 265 - 269

