

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

**Biology Lesson Plan**

**Dates:**

November 27 - December 1, 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, November 27**

<b>Topic</b>	Unit Test: Mendelian and Non Mendelian Genetics Introduction to DNA, pp. 216
<b>Objectives</b>	Identify the substance that makes up genetic material.
<b>Bell Ringer</b>	What are the four nucleotide bases of <b>DNA</b> ?
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Unit Test

Tuesday, November 28	
<b>Topic</b>	Structure of DNA, pp. 220 - 224
<b>Objectives</b>	Identify the components of DNA and its structure.
<b>Bell Ringer</b>	Define <i>Nucleotides</i>
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Worksheet: DNA Model

Wednesday, November 29	
<b>Topic</b>	Laboratory Activity: DNA Extraction, pp. 220 - 224
<b>Objectives</b>	Extract strands of DNA from the nuclei of strawberry cells.
<b>Bell Ringer</b>	What is a nucleotide made of?
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Laboratory Worksheet

Thursday, November 30	
<b>Topic</b>	Replication, pp. 225-228
<b>Objectives</b>	Explain the purpose and process of replication.
<b>Bell Ringer</b>	Define <i>DNA polymerase</i> .
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity
<b>Assessment</b>	Worksheet

Friday, December 1	
<b>Topic</b>	Transcription, pp. 229 - 232
<b>Objectives</b>	Explain the purpose and process of transcription.
<b>Bell Ringer</b>	Define <i>Central Dogma</i>
<b>Procedure / Instructional Delivery</b>	Guided Practice, Interactive Discussion, Hands - on / Laboratory Activity

<b>Assessment</b>	Worksheet
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