

Edmore Public School
706 Main St, Edmore, ND 58330

Earth Science Lesson Plan

Dates:

August 28 - September 1, 2023

Time and Period:

9:35 - 10:27 AM, Second Period

Performance Standard:

MS-ESS2-4

Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

MS-ESS2-6

Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.

Monday, August 28

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| Topic | Circulation in Earth's Atmosphere (pp. 4-6 of Module E) |
| Objectives | Describe how the atmosphere influences weather and climate. |
| Bell Ringer | Define <i>atmospheric circulation</i> . |
| Procedure / Instructional Delivery | <ul style="list-style-type: none"> • Discussion • Why it matters pp. 2 • Hands-On Activity: Lab Activity no. 1 Warm Air Rises |
| Assessment | Lab Activity no. 1 Worksheet and Exit Ticket |

Tuesday, August 29

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| Topic | Formation of Wind (pp. 6-8 of Module E) |
| Objectives | Develop a model to learn more about the effects of differences in air pressure. |
| Bell Ringer | Define <i>air pressure</i> . |
| Procedure / Instructional Delivery | <ul style="list-style-type: none"> • Discussion • Hands-on Activity: Model the Formation of Wind |
| Assessment | Lab Activity no. 2 Worksheet pp. 7-8 and Exit Ticket |

| Wednesday, August 30 | |
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| Topic | Convection (pp. 9 and 10 of Module E) |
| Objectives | Describe how wind direction in the atmosphere influences weather conditions. |
| Bell Ringer | What is the difference between conduction and convection ? |
| Procedure / Instructional Delivery | <ul style="list-style-type: none"> • Discussion • Engineer it: Heat and Cooling System |
| Assessment | <ul style="list-style-type: none"> • Engineer It no. 5 pp. 9 • Discussion Questions nos. 6-10 pp. 10 • Exit Ticket |

| Thursday, August 31 | |
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| Topic | The Effect of Earth's Rotation (pp. 11 and 12 of Module E) |
| Objectives | Describe how the rotation of Earth affects patterns of atmospheric wind circulation. |
| Bell Ringer | Define coriolis effect . |
| Procedure / Instructional Delivery | <ul style="list-style-type: none"> • Discussion, • Hands-on Activity: Modelling the Effects of Earth's Rotation on Matter in the Atmosphere • Write-Pair-Share using the <i>Convection Cells</i> Diagram (Laptops ON). |
| Assessment | Exit Ticket: Write-Pair-Share and Worksheet pp. 11 and 12 |

| Friday, September 1 | |
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| Topic | Global Winds (pp. 13 and 14 of Module E) |
| Objectives | Examine how global winds in the atmosphere, and the pressure associated with them, affect weather in different parts of the world. |
| Bell Ringer | What are global winds and pressure belts ? |
| Procedure / Instructional Delivery | <ul style="list-style-type: none"> • Discussion • Write-Pair-Share and/or Foldable Comparing and contrasting the different types of global winds and |

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| | pressure belts using the Model of Global Winds Diagram (Laptops ON). |
| Assessment | Exit Ticket and Worksheet pp. 13 and 14 |