Edmore Public School 706 Main St, Edmore, ND 58330

| Earth Science Lesson Plan | |
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| Dates: | Time and Period: |
| September 11 - 15, 2023 | 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, September 11 | |
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| Торіс | Circulation in Earth's Oceans pp. 24-27 |
| Objectives | Use a model of ocean circulation to explain the factors that influence the movement of ocean water |
| Bell Ringer | What are <i>ocean currents?</i> |
| Procedure / Instructional Delivery | Discussion Use of Maps and Simulations Analysis of Models |
| Assessment | Exit Ticket and Worksheet pp. 24-27 |

| Tuesday September 12 | |
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| Торіс | Factors that Affect Surface Currents pp. 28 and 29 |
| Objectives | Use a model to study patterns of oceanic circulation in surface currents. |
| Bell Ringer | Define <i>continental deflection</i> . |
| Procedure / Instructional Delivery | Discussion Use of Maps and Simulations Analysis of Models |
| Assessment | Modelling Deep Currents, pp. 30 Exit Ticket and Worksheet pp. 29 |

| Wednesday, September 13 | |
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| Торіс | Review: Factors that Affect Surface Currents Densities in Water pp. 30 - 33 |
| Objectives | Analyze ways in which variations in temperature and salinity work together to drive the movement of water throughout the oceans. |
| Bell Ringer | Define <i>density.</i> |
| Procedure / Instructional Delivery | Discussion Use of Maps and Simulations Laboratory Activity |
| Assessment | Densities in Water Worksheet, pp. 31-32 Checkpoint, pp. 44 |

| Thursday, September 14 | |
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| Торіс | The Formation of Deep Ocean Currents pp. 34 and 35 |
| Objectives | Use models to represent energy and matter flowing within systems to describe deep-ocean currents. |
| Bell Ringer | What are two factors that affect deep currents? |
| Procedure / Instructional Delivery | Discussion Use of Models and Simulations Engineer It |
| Assessment | Formation of Deep Ocean Currents Worksheet, pp. 34 and 35 Checkpoint, pp. 45 |

| Friday, September 15 | | |
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| Торіс | Quiz no. 2 and Relating Circulation to Flow of Matter and Energy | |
| Objectives | Explore the flow of energy and matter in the Earth system. | |
| Bell Ringer | What makes up the earth's subsystems? | |
| Procedure / Instructional Delivery | Discussion Use of Maps and Simulations Use of Models | |
| Assessment | Formation of Deep Ocean Currents Worksheet, pp. 36 and 37 Quiz no. 2 | |