

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

**Earth Science Lesson Plan**

**Dates:**  
 April 15 - 19, 2024

**Time and Period:**  
 9:35 - 10:27 AM, Second Period

**Performance Standard:**

**MS-ESS1-1**

Develop and use a model of the Earth-Sun-Moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.

**MS-ESS1-2**

Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.

**MS-ESS1-3**

Analyze and interpret data to determine scale properties of objects in the solar system.

**Monday, April 15**

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| <b>Topic</b>                                  | Newton's Laws of Motion, pp. 124 - 126   |
| <b>Objectives</b>                             | Explore applications of Newton's Laws, which relate force and motion of objects. |
| <b>Bell Ringer</b>                            | State the Laws of Motion.  |
| <b>Procedure /<br/>Instructional Delivery</b> | Interactive Discussion, Hands-on / Laboratory Activity                           |
| <b>Assessment</b>                             | Newton's Laws of Motion, pp. 124 - 126   |

**Tuesday, April 16**

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| <b>Topic</b>                                  | Modelling Gravity, pp. 127 - 130  |
| <b>Objectives</b>                             | Analyze the equation for gravitational force to determine which changes in variables will increase the force. |
| <b>Bell Ringer</b>                            | Mathematically, write the equation for the universal law of gravitation.                                      |
| <b>Procedure /<br/>Instructional Delivery</b> | Interactive Discussion, Hands-on / Laboratory Activity  |

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| <b>Assessment</b> | Modelling Gravity, pp. 127 - 130 |
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| <b>Wednesday, April 17</b> |  |
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| <b>Topic</b>                              | Gravity's Role in Orbital Model, pp. 131 - 133                               |
| <b>Objectives</b>                         | Predict the trajectory of a falling object based on Newton's laws of motion. |
| <b>Bell Ringer</b>                        | Define <i>projectile</i>   |
| <b>Procedure / Instructional Delivery</b> | Interactive Discussion, Hands-on / Laboratory Activity                       |
| <b>Assessment</b>                         | Gravity's Role in Orbital Model, pp. 131 - 133                               |

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| <b>Thursday, April 18</b> |  |
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| <b>Topic</b>                              | Velocity and Orbits, pp. 134 and 135<br>Review Quiz               |
| <b>Objectives</b>                         | Investigate the role of gravitational force in projectile motion. |
| <b>Bell Ringer</b>                        | Define velocity   |
| <b>Procedure / Instructional Delivery</b> | Interactive Discussion, Hands-on / Laboratory Activity            |
| <b>Assessment</b>                         | Velocity and Orbits, pp. 134 and 135                              |

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| <b>Friday, April 19</b> |  |
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| <b>Topic</b>                              | Explaining the Motions of Objects in Space, pp.<br>QUIZ  |
| <b>Objectives</b>                         | Explore the velocity of a ball rolling on the table and how its path is affected after it rolls off the table. |
| <b>Bell Ringer</b>                        | What evidence does gravity have on space bodies in the universe?   |
| <b>Procedure / Instructional Delivery</b> | Interactive Discussion, Hands-on / Laboratory Activity   |
| <b>Assessment</b>                         | Modelling Scales in the Universe, pp. 114 - 116  |