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| **Content Area** | Science | | | **Grade Level** | 8th Grade | | |
| **Course Name/Course Code** |  | | | | | | |
| **Standard** | **Grade Level Expectations (GLE)** | | | | | | **GLE Code** |
| 1. Physical Science | 1. Identify and calculate the direction and magnitude of forces that act on an object, and explain the results in the object’s change of motion | | | | | | SC09-GR.8-S.1-GLE.1 |
| 1. There are different forms of energy, and those forms of energy can be changed from one form to another – but total energy is conserved | | | | | | SC09-GR.8-S.1-GLE.2 |
| 1. Distinguish between physical and chemical changes, noting that mass is conserved during any change | | | | | | SC09-GR.8-S.1-GLE.3 |
| 1. Recognize that waves such as electromagnetic, sound, seismic, and water have common characteristics and unique properties | | | | | | SC09-GR.8-S.1-GLE.4 |
| 1. Life Science | 1. Human activities can deliberately or inadvertently alter ecosystems and their resiliency | | | | | | SC09-GR.8-S.2-GLE.1 |
| 1. Organisms reproduce and transmit genetic information (genes) to offspring, which influences individuals’ traits in the next generation | | | | | | SC09-GR.8-S.2-GLE.2 |
| 1. Earth Systems Science | 1. Weather is a result of complex interactions of Earth's atmosphere, land and water, that are driven by energy from the sun, and can be predicted and described through complex models | | | | | | SC09-GR.8-S.3-GLE.1 |
| 1. Earth has a variety of climates defined by average temperature, precipitation, humidity, air pressure, and wind that have changed over time in a particular location | | | | | | SC09-GR.8-S.3-GLE.2 |
| 1. The solar system is comprised of various objects that orbit the Sun and are classified based on their characteristics | | | | | | SC09-GR.8-S.3-GLE.3 |
| 1. The relative positions and motions of Earth, Moon, and Sun can be used to explain observable effects such as seasons, eclipses, and Moon phases | | | | | | SC09-GR.8-S.3-GLE.4 |
| **Colorado 21st Century Skills**    **Critical Thinking and Reasoning:** *Thinking Deeply, Thinking Differently*  **Information Literacy:** *Untangling the Web*  **Collaboration:** *Working Together, Learning Together*  **Self-Direction:** *Own Your Learning*  **Invention:** *Creating Solutions* | | **Reading & Writing Standards for Literacy**  **in Science and Technical Subjects 6 - 12**  **Reading Standards**   * Key Ideas & Details * Craft And Structure * Integration of Knowledge and Ideas * Range of Reading and Levels of Text Complexity   **Writing Standards**   * Text Types & Purposes * Production and Distribution of Writing * Research to Construct and Present Knowledge * Range of Writing | | | | | |
| **Unit Titles** | | | **Length of Unit/Contact Hours** | | | **Unit Number/Sequence** | |
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| **Unit Title** |  | | | **Length of Unit** |  |
| **Focusing Lens(es)** |  | **Standards and Grade Level Expectations Addressed in this Unit** |  | | |
| **Inquiry Questions (Engaging- Debatable):** |  | | | | |
| **Unit Strands** |  | | | | |
| **Concepts** |  | | | | |

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| **Generalizations**  **My students will Understand that…** | **Guiding Questions**  **Factual Conceptual** | |
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