

Science and Engineering Practices (SEP's)- 1. Ask Questions and Define Problems. 2. Develop and use models. 3. Plan and conduct investigations. 4. Analyze and interpret data. 5. Use mathematical and computational thinking. 6. Construct explanations and design solutions. 7. Engage in Scientific argument from evidence. 8. Obtain, evaluate, and communicate information.

Crosscutting Concepts (CCC's)- 1. Patterns 2. Cause and Effect- Mechanism and Explanation 3. Scale, Proportion, and Quantity 4. Systems and System Models 5. Energy and Matter: Flows, Cycles, and Conservation 6. Structure and Function 7. Stability and Change

Brookhaven School District
Pacing Guide 2019-2020
6th Grade Science
First Nine Weeks

| Pacing | Strand Competency DCI's | SEP's | CCC's | Student Target Outcomes And Goals | Assessment | Technology | Resources |
|--|--|---------|-------|--|--|--|---|
| Week 1 Aug. 6- Aug. 9 FIRST LESSON | DCI- 1. Hierarchical Organization Life Science Obtain and Communicate evidence to support cell theory. L.6.1.1 L.6.1.2 UNIT Living Things | 1, 3, 5 | 6, 7 | Students will understand that Living things range from simple To complex organism. Students will understand that organisms function as whole living systems. Students will use models to explain Cellular components. HANDS ON STUDENT ACTIVITY TO LEARN ABOUT THE ENGINEERING DESIGN PROCESS | Section Quiz Read Theory Class Works | Teachers will integrate computer each week through the use of Read Theory (Differentiated Reading Comprehension) Class works Science Lesson : Cells and Systems DE: The Living Cell DE-TL6 – Elem. School – All about Plants Learn 360 – Simply: Cell: Parts of a Cell and their functions | Chapter 1: Plant Cells Differentiated Passages: 1. What are cells 2. Unicellular vs. Multi-cellular 3. Organelles Cell Theory Rap Intro to Engineering Design Process – Student Activity Read works Standardized Test Article: Why Humans Can't Live Off Sunlight L6.1.1 DE – Interactive – Science Lab: Cells Interactive Notebook (IN) Plant/Animal Cell Venn Diagram Plant cell flip book Cell Theory |
| Week 2 Aug. 12- Aug. 16 | Life Science Develop Models to explain how cell parts work together. Classify | 2, 8 | 4, 6 | Students will distinguish between Living and non-living things students will be able to Communicate The cell theory. Students WILL CREATE an Plant Cell Model. | Read Theory Class Works Section Quiz Cell Model | Read Theory - Differentiated Reading Class works Science Lesson: Plants 4 L360- All about | Chapter 1: Plant Cells, Plant Diversity Differentiated Passages: 1.Organization of Cells 2.Cell Division and Mitosis 3.Photosynthesis and Respiration |

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| | organisms as protist, fungus, plant or animal. L.6.1.3 L.6.1.4 UNIT Living Things | | | | | Plants and Animal Cells DE – The Cell | News Article: Australian Scientists Hope the Triton Snail Will Help Save the Great Barrier Reef IN: Animal Cell Flipbook Levels of Organization |
| Week 3 Aug. 19- Aug. 23 | <u>DCI- 1</u> Hierarchical organization Life Science Provide evidence that organisms are unicellular and multi-cellular. Use models to explain cellular components L.6.1.5 L.6.1.6 UNIT Living Things | 1, 2, 6 | 4, 6 | Compare and Contrast Structure and function In living things to include cells and whole organisms Students WILL CREATE an Animal Cell Model. | Section Quiz Read Theory Class Works Cell Model | Read Theory – Differentiated Reading Class works Science Lessons Plants 5 DE: The Basics OF Biology: The Kingdom of Plants | Chapter 1: Plant Cells, Plant Diversity Differentiated Passages: 1.Moving Cellular Material 2.Flowering vs. Non Flowering 3.Plant Parts and Adaptations News Article: The World’s First Flower Probably Looked Like the Modern Day Magnolia News Article: MIT Researcher Wants to Light Up the World with Glowing Plants. CELL Model Packet – EDP Student Activity IN: Identify Organelles and their function |
| Week 4 Aug. 26- Aug. 30 | <u>DCI 1-</u> Hierarchical Organization Life Science Understanding that all | 4, 8 | 2 | Explain how different cellular Components function together to Support life. | Class Works Section Quiz Read Theory | Read Theory Differentiated Reading - | Chapter 1: Plant Cells Differentiated Passages: 1.Life Cycle of a Plant 2.Photosynthesis Immune Troops! Move In – Text |

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| | <p>living things range from simple to complex organisms.</p> <p>L.6.1 L.6.1.3</p> <p>UNIT Living Things</p> | | | | | | <p>Based Questions</p> <p>Cells: Building Blocks of Living Things</p> <p>News Article: Lemon Shark Displays Wolverine-Like Self Healing Skills</p> <p>IN: Plant or Animal Cell Tabs</p> |
| <p>Week 5 Sept. 3- Sept. 6</p> <p>9-6 4.5 Wk Test</p> | <p><u>DCI 1-</u> Hierarchical Organization</p> <p>Life Science L.6.1.6</p> <p>UNIT Organs and Systems</p> | 7 | 6 | <p>Students will understand specialized structures and function of the Human body.</p> <p>Students will create a model/diagram of the digestive system.</p> | <p>Class Works Section Quiz Read Theory Model</p> <p>4 ½ Week Test</p> <p>DE – Body Systems Interactive</p> | <p>Read Theory - Differentiated Reading</p> <p>Class works Science Lesson Cells and Systems 5</p> <p>L360 Human Body</p> <p>4 1/2 Week Test Sept. 6th</p> | <p>Chapter 2: Body Systems</p> <p>Differentiated Passages: 1.Circulatory System 2.Digestive System 3.Muscular System</p> <p>Read Works Standardized Test Practice Article: The Cells That Make Us Read Works Standardized Article: Pumping Up the Heart</p> <p>News Article: Brainless Jellyfish Could Help Reveal Why We Sleep</p> <p>IN: Body Systems</p> |
| <p>Week 6 Sept. 9- Sept. 13</p> | <p><u>DCI 1 –</u> Hierarchical Organization</p> <p>Life Science L.6.1.6</p> <p>Develop and use models to show</p> | 2, 6, 7 | 4, 6 | <p>Students will understand how Specialized structures serve the needs of the organism.</p> <p>Students will create a model/diagram of the skeletal or respiratory system.</p> | <p>Read Theory Class Works Section quiz</p> | <p>Read Theory - Differentiated Reading</p> <p>Class works Science Lesson: Growth and Change</p> <p>DE – 3D Human Body</p> | <p>Chapter 2: Body Systems</p> <p>Differentiated Passages 1.Nervous System 2.Respiratory System 3.Skeletal System</p> <p>Read Works Standardized Test Article: Focus: Understanding How the Brain Works L.6.1.6</p> |

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| | relationship among the increasing complexity of multi-cellular organisms UNIT Organs and Systems | | | | | Interactive Tour | News Article: Nasal Cell Transplant Enables Paralyzed Man to Walk Again. Systems Activity – EDP Student Activity IN: Body Systems Diagrams |
| Week 7 Sept. 16- Sept. 20 | <u>DCI 1-</u> Hierarchical organization Life Science L.6.1.1 L.6.4.4 L.6.4.5 Distinguish between living and non-living things including viruses and bacteria. UNIT Different Cells | 4, 7 | 4, 6 | Students will understand the role of specialized cells | Class works Read Theory Section quiz | Read Theory - Differentiated Reading Class works Science Lessons Living and Nonliving things 5 Brain Pop – Diversity of Life: Bacteria, Protist, Fungi DE – Microscopic Life | 1. Viruses, Bacteria, Protists, and Fungi Unit Read Works Standardized Article: Human Micro biome: Your body is an Ecosystem L.6.1.1 News Article: Stanford Scientists Reprogram Dangerous Cancer Cells to Immune Cells DE: The Enemy Within: Bacteria and Viruses IN: Prokaryotic vs. Eukaryotic |
| Week 8 Sept. 23- Sept 27 | <u>DCI 1-</u> Hierarchical Organization Life Science L.6.1.1 | 4, 8 | 2, 6 | Students will understand viruses, bacteria, protists, and fungi Students will create a characteristics chart comparing viruses, bacteria, protists, and fungi. | Class works Read Theory Unit quiz | Read Theory - Differentiated Reading DE – Life Science – Protists and Fungi L360 - Protists | 1.Viruses, Bacteria, Protists, and Fungi Unit 2. Read Theory Nonfiction Reading Passages Read works Standardized Test Practice Article: Parasites: Kings of the World (L.6.1.6) |

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| | <p>L.6.4.4 L.6.4.5</p> <p>Develop and use models to show relationship among organisms.</p> <p>UNIT Diseases and their Causes</p> | | | | | <p>Class works Science Lessons Living Things of the Past</p> | <p>News Article: Zika Virus Outbreak</p> <p>IN: Characteristics of Organisms</p> |
| <p>WEEK 9 Sept. 30 -Oct. 4</p> | <p>Nine Weeks Test</p> | | | | | | |

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| <p>Week 10</p> <p>Oct. 7- Oct. 11</p> | <p><u>DCI 3-</u> Ecology and interdependence</p> <p>Life Science L.6.3.1 L.6.3.2 L.6.3.3 Use scientific reasoning to explain differences between biotic and Abiotic factors.</p> <p>Develop and use models to describe the levels of organisms within an ecosystem.</p> <p>UNIT Earth's Ecosystems</p> | 4, 8 | 2, 3 | Students will explain factors that organisms need to survive. Students will explain differences between biotic and Abiotic factors. | Class Works Section quiz Read Theory | <p>Teachers will integrate computer each week through the use of Read Theory {Differentiated Reading Comprehension</p> <p>Class work Science Lessons Habitats and Ecosystems 4</p> <p>DE – Ecosystems: Abiotic and Biotic Factors</p> <p>Learn360: Biospheres (Biotic and Abiotic Factors)</p> | <p>1.Chapter 3 Lessons 1-2 Interaction, Adaptation And Survival</p> <p>2. Differentiated Passages: a. What is an Ecosystem b. Biotic and Abiotic Factors</p> <p>Interaction Of Life Packet – Lesson 1 Ecosystems – biotic and Abiotic factors</p> <p>Read Works Standardized Test Article: Endangered Animals at a Glance L.6.3.3</p> <p>News Article: These Fascinating Orange Dwarf Crocodiles May Be Evolving Into A New Species</p> <p>Text based passage: Sea Snakes</p> <p>Biodomes Engineering Design – EDP Student Activity</p> <p>IN: Abiotic/Biotic Factors Organism Relationships Ecosystems Levels Biomes</p> |

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| <p>Week 11 Oct. 14- Oct. 18</p> | <p>DCI 3- Ecology and Interdependence</p> <p>Life Science L.6.3.2 L.6.3.5</p> <p>Develop and use food chains, webs and pyramids to analyze how energy is transferred through an ecosystem from producers to consumers to decomposers</p> <p>UNIT Food Chains, Webs, and Pyramids</p> | <p>2, 8</p> | <p>5, 7</p> | <p>Students will use models to explain food chains, Webs, and pyramids to analyze how energy is transferred through an ecosystem.</p> <p>Students will CREATE a food web.</p> | <p>Class Works Section quiz Read Theory</p> | <p>Read Theory - Differentiated Reading</p> <p>Class works Science Lesson Food Chains and Webs</p> <p>DE – An Ecosystem</p> <p>L360 – Ecosystems DE – Food Chains</p> <p>DE – Food Chains The Science of Plants</p> | <p>1.Chapter 3 Lesson 1-2 Interaction, Adaptation And Survival</p> <p>2.Differentiated Passages: a. Food Chains and Food Webs b. Producers, Consumers, and Decomposers</p> <p>Interaction of Life Packet – Lesson 2 – Relationships within ecosystems Lesson 3 – Matter and Energy in Ecosystems</p> <p>Handout: Food Chain Pyramid</p> <p>Read works Standardized Test Article: The Eco Pyramid</p> <p>Read Works Standardized Test Article The Ecosystem of the Forest</p> <p>News Article: Wizard Hat Amoeba Named After Gadalf from Lord of The Rings</p> <p>IN: Food Webs and Food Chains Energy Pyramid</p> |
| <p>Week 12 Oct. 21- Oct. 25</p> | <p>DCI 3- Ecology and Interdependence</p> <p>Life Science L.6.3.4</p> | <p>3, 7</p> | <p>7, 2</p> | <p>Students will investigate Organism interactions in a Competitive or mutually Beneficial relationship.</p> | <p>Class Works Section quiz Read Theory</p> | <p>Read Theory - Differentiated Reading</p> <p>Class works Science Lesson: Dependency, Adaptation and Survival 4</p> | <p>1. Chapter 3 Lesson 1-2 Interaction, Adaptation And Survival</p> <p>2. Differentiated Passages: a. What are Biomes and Habitats b. Limiting Factors</p> |

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| | <p>Investigate organism interactions in a competitive or mutually beneficial relationships.</p> <p>UNIT Adaptations and Survival</p> | | | | | <p>DE – Symbiotic Relationships: Buffalo and Oxpecker</p> <p>Relationship DE – Fig Trees of Sulawesi: Symbiotic</p> | <p>Read Works Article: Seeing the Invisible: Mutualism and Plant Reproduction</p> <p>Read works Standardized Test Practice Article: Secrets of Survival: The Ancient Utah Juniper</p> <p>Text based article: Poison Dart Frogs</p> <p>News Article: Evoware Hopes to Reduce Plastic Waste with Edible Seaweed Wrappers and Ello Jello Cups.</p> <p>IN: Natural Selection Primary, Secondary Succession</p> |
| <p>Week 13</p> <p>FALL BREAK – SHORT WEEK</p> <p>Oct. 30- Nov. 1</p> | <p>DCI- 3 Ecology and Interdependence</p> <p>Life Science L.6.3.3</p> <p>Analyze cause and effect relationships to explore how changes in the physical environment can lead to population changes in an ecosystem</p> | .1, 5, 6 | 5, 7 | <p>Students will analyze cause and effect to explore how Changes in environment impact population</p> <p>Life After Trash: Student Activity</p> | <p>Class Works Unit Test Read Theory</p> | <p>Read Theory- Differentiated Reading</p> <p>Class works Science Lessons: Dependency, Adaptation and Survival 5</p> <p>L360 Adaptation and Natural Selection</p> | <p>1.Chapter 3 Lesson 1-2 Interaction, Adaptation, And survival</p> <p>2.Differentiated Passage: a. Causes of Environmental Change b. Impact on Living Things</p> <p>Read works Standardized Article: What a Dump L.6.3.3</p> <p>News Article: Are Coral Reefs Adapting to Climate Change</p> <p>Acid Rain Effects – EDP Student Activity</p> |

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| | Environmental Changes Impact Population | | | | | | IN: Environmental Impact |
| Week 14 Nov. 4- Nov. 8 | DCI 4- Adaptations and Diversity Life Science L.6.4.1 L.6.4.2 Use classification methods to explore the diversity of organisms in kingdoms to support claims that organisms have shared structural and behavioral characteristics UNIT Classification of Organisms | 3, 8 | 6 | Students will demonstrate Understanding of classification Tools and models. | Class works Section quiz Read works | Read Theory - Differentiated Reading Class works Science Lesson: Classification of Living Things 4 Brain Pop – Science – Diversity of Life - Six Kingdoms DE – Simply Science: Kingdoms | 1.Classifying of Living Things Unit/ Chapter 3 Lesson 3 2. Reading Passage: Microorganisms Read works Standardized Test Article: Meet the Microbes L.6.4.2 News Article: Scientists Discover 1.5 Million New Species of Plankton and Lots of Plastic IN: 3 Domains 6 Kingdoms Dichotomous Key *** These can be spread out throughout the unit. |
| Week 15 Nov. 11- Nov. 15 11-13 4.5 Wk Test | DCI 4- Adaptations and Diversity Life Science L.6.4.3 L.6.4.4 L.6.4.1 Analyze and | 1, 3, 7 | 5, 6 | Students will analyze and interpret Data from observations to Describe how fungi obtained energy. Class experiment: Analyze and interpret data from observations (mold, rotting plant material) | Section quiz Read works Class Works | Read Theory - Differentiated Reading Class works Science Lessons: Classification of Living Things 5 | 1.Classifying of Living Thing Unit 2.Reading Passage: Fungi are alive 3. It's Still Pretty Simple Packet News Article: How the Ingenious Mushroom Creates |

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| | Interpret data from observations to describe how fungi obtain energy and respond to stimuli UNIT Classification of Organisms- Fungi | | | | | DE – Classification of Living Things L360 – Classification Systems | Its Own Microclimate IN: Classification Bundle from TPT |
| Week 16 Nov. 18- Nov. 22 | DCI 4- Adaptations and Diversity Life Science L.6.4.5 Use classification tools to and models to classify bacteria and viruses based on structural or behavioral characteristic. UNIT Classification of Living Things- Bacteria | 4, 7 | 2, 6 | Engage in scientific arguments that bacteria and viruses can be both helpful and harmful | Class works Section quiz Read Theory | Read Theory - Differentiated Reading Class works Science Lessons: Living and Non Living Things 5 DE – Classification Hierarchy L360 - Classification | 1.Classifying of Living Thing Unit 2.Microorganisms – Bacteria And Archaea 3.Bacteria’s Role in the World Section Read Works standardized article: Final Push News Article: Bacteria turns Toxic Liquid into Pure Gold Nuggets **Students will DRAW and LABEL a Paramecium cell model. |
| Out Nov. 25- Nov. 29 | | | | THANKSGIVING BREAK | | | |
| Week 17 | Life Science L.6.4.2 | 4, 8 | | Engage in scientific arguments that bacteria | Class works Section Quiz | Read Theory - Differentiated | 1.Classifying of Living Things Unit |

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| Dec. 2- Dec. 6 | Engage in scientific arguments that bacteria and viruses can be both helpful and harmful UNIT Classification of Living Things- Viruses | | | and viruses can be both helpful and harmful Students will create a flyer/handout that discusses the positive and negative aspects of bacteria and viruses. | Read Theory | Reading Class works Science Lesson Living Things of the Past. L360 – Video Vocabulary – Animal Kingdom, Protista, Kingdom Plantae, Phylum | 2. Microorganisms – Viruses Read Works Standardized Test Article: Uninvited guest: (L.6.1) News Article: Breakthrough Ebola Vaccine Provides Hope for West Africa Student Flyer on bacteria and viruses |
| Week 18 Dec. 9-13 | DCI 4- Adaptation and Diversity Life Science L.6.4.4 Conduct investigations using a microscope or multimedia Source to compare the characteristics of protists. UNIT Classification of Living Things- Protists | 3, 8 | 6, 7 | Conduct investigations using a microscope or multimedia Source to compare the characteristics of protists. | Class works Section Quiz Read Theory | Read Theory - Differentiated Reading Class works Science Lesson Growth and Change L360 – Video Vocabulary – Kingdom, Genus, Kingdom Fungi | 1. Classifying of Living Thing Unit 2. Microorganisms – Protists Section News Article: Why These Cool Images May Send you Scrambling For Disinfectant Investigations chart on characteristics of protists and methods used to obtain energy |
| Week 19 Dec. 16- Dec. 20 | | Exams | | | | | |

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| Week 20 Jan. 7- Jan. 10 | DCI 8- Earth and the Universe Earth Science E.6.8.7 E.6.8.1 Obtain , evaluate, and summarize theories on creation of universe. Surface features of the sun and predict how features may effect Earth. UNIT Formation of the Universe and the Sun | 3,7 | 1, 2 | Students will obtain, evaluate and summarize past and present theories to explain the formation and composition of the universe. Students will learn about the surface features of the Sun (photosphere, corona, sunspots, solar flares). | Class Works Section quiz Read Theory | Teachers will integrate computer each week through the use of Read Theory Class works Science Lessons Astronomy Learn 360: The Sun Learn 360: Lunar Cycle | 1.Chapter 6 – The Earth-Sun System 2.Differentiated Reading Passage : a. Age and Exploration of Astronomy b. Day and Night The Sun Worksheet Read Works Standardized Article: One-on-One With the Sun Read Works Article: The Sun Heats Up Journey to the Stars News Article: Short But Spectacular Lunar Eclipse Delights Millions DOGO News: Largest Solar Flare in over a Decade Causes Slight Disruption But Sparks Beautiful Auroras IN: Compare/contrast theories on formation and composition of universe. History of Space Exploration |

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| <p>Week 21 Jan. 13 – Jan. 17</p> | <p>DCI 8- Earth and the Universe</p> <p>Earth Science E.6.8.6 E.6.8.5 How Gravity affects objects in our solar system. Understanding tides on earth. Create Model of the sun-earth-moon system.</p> <p>UNIT Sun-Earth-Moon System</p> | <p>3, 4</p> | <p>2</p> | <p>Construct explanations of how gravity affects objects in our solar system.</p> <p>Design models representing motions within the Sun-Earth-Moon system (moon phases, solar and lunar eclipses, tides, day and year, positions of celestial bodies)</p> | <p>Class Works Section quiz Read Theory</p> | <p>Read Theory - Differentiated Reading</p> <p>Class works Science Lessons : Earth’s Motion</p> <p>DE – Science Kids all about the moon</p> | <p>1. Chapter 6 – The Earth-Sun-Moon System 2. Differentiated Reading Passages a. The Moon b. Shadows and Seasons</p> <p>Meet Our Solar System Packet</p> <p>News Article: Stargazers Eagerly Await “Super Blue Moon”</p> <p>DOGO News: Earth’s Gravity is Pulling Cracks in the Moon’s Surface</p> <p>IN: Moon Phases Lunar Cycle Vocab Lunar Cycle Flipbook Lunar Eclipses Solar Eclipses Tides</p> |
| <p>Week 22 Jan. 21- Jan. 24</p> | <p>DCI 8- Earth and the Universe</p> <p>Earth Science E.6.8.2 E.6.8.3 E.6.8.4</p> <p>Use graphical displays and models to explain the structure of the universe.</p> | <p>3, 4</p> | <p>3, 6</p> | <p>Evaluate modern techniques used to explore our solar system. Obtain and Evaluate information to model and compare the objects in our solar system.</p> <p>Students will be able to complete a comparison chart for asteroids, comets, and meteors.</p> | <p>Class Works Section quiz Read Theory</p> | <p>Read Theory - Differentiated Reading</p> <p>Class works Science Lesson: The Solar System</p> <p>DE: Elementary Video Adventures: Astronomy</p> | <p>1. Chapter 6 – The Solar System 2. Differentiated Reading Passage: Planets</p> <p>Asteroids, Comets, and Meteors articles with Comparison Chart</p> <p>Read Works Standardized Test Article: All the Buzz E.6.8.3</p> <p>Text Based Article: The Inner Solar System</p> |

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|--------------------------------|---|------|------|---|--|--|---|
| | UNIT The Solar System | | | | | | News Article: Caltech Scientists Find Evidence of a Massive Ninth Planet in Our Solar System IN: Gravity Planets Meteor, Meteorite, Meteoroid Asteroid, Comet, Meteor |
| Week 23 Jan. 27- Jan. 31 | DCI 8- Earth and the Universe Earth Science E.6.8.2 E.6.8.3 E.6.8.4 Explore modern techniques used to explore our solar systems position in the universe. UNIT Stars, Galaxies, and Universe | 2, 6 | 4 | Use graphical displays or models to explain the hierarchical structure of the universe (stars, galaxies, galactic clusters. Students will create a display or model that shows the hierarchical structure of the universe. | Class Works Chapter quiz Read Theory | Read Theory Differentiated Reading - Learn 360: The Amazing Universe | 1.Chapter 6 – Stars and Galaxies 2.Differentiated Passage: Stars in the Sky Read Works Standardized Test Article: Way-Out World E.6.8. Text Based Article – The Outer Solar System News Article: Get Ready for A Close Encounter with a Massive Asteroid E.6.8.4 Read works Standardized Article: The Most Expensive House in the Universe IN: Galaxies H-R Diagram |
| Week 24 Feb. 3- Feb. 7 | DCI 6- Motions, Forces, and Energy Physical Science | 2, 3 | 3, 5 | Students will demonstrate and understanding of Newton’s laws of motion using real world models and examples. | Class Works Section quiz Read Theory | Read Theory - Differentiated Reading Class works Science Lesson Force and | 1.Chapter 8 Force and Motion 2.Differentiated Passage: a. Describing Motion b. Isaac Newton’s Laws of Motion Read works Standardized |

Science and Engineering Practices (SEP's)- 1. Ask Questions and Define Problems. 2. Develop and use models. 3. Plan and conduct investigations. 4. Analyze and interpret data. 5. Use mathematical and computational thinking. 6. Construct explanations and design solutions. 7. Engage in Scientific argument from evidence. 8. Obtain, evaluate, and communicate information.

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| <p>2-6 4.5 Wk Test</p> | <p>P6.6.1 P6.6.2</p> <p>Students will use an understand Newton's laws of motion. IN: Motion, Forces, and Energy</p> | | | | | <p>Motion</p> <p>Learn 360 – Force and Newton's Laws</p> | <p>article: How Soccer Can Help Us Understand Physics P6.6.1</p> <p>News Article: Power Felt Converts Wasted Energy into Electricity</p> <p>Build-Testing-Improving Paper Airplanes – EDP Student Activity</p> <p>IN: Speed, Velocity, Acceleration Speed Problems Forces Force Calculations</p> <p>EDP Results of Paper Airplanes Activity</p> |
| <p>Week 25 Feb. 10- Feb. 14</p> | <p>DCI 6- Motions, Forces, and Energy</p> <p>Physical Science P6.6.5 P6.6.4</p> <p>Students will conduct investigations to predict and explain the motion of an object.</p> <p>UNIT Motion, Forces, and</p> | <p>1, 4, 5</p> | <p>3, 6</p> | <p>Students will conduct investigations to predict and explain the motion of an object according to its position, direction, speed, and acceleration. Compare and contrast types of force.</p> <p>Students will create a chart that demonstrates that compares the types of force.</p> | <p>Class Works Section quiz Read Theory</p> | <p>Read Theory - Differentiated Reading</p> <p>Class works Science Lesson: Electricity and Magnetism</p> <p>Learn 360 – Forms of Energy</p> | <p>1. Chapter 8 Force and Motion 2. Differentiated Reading Passage: a. May the Force Be With You b. Balanced and Unbalanced Forces</p> <p>Read Works Standardized Article: Sir Isaac Newton and LeBron James P.6.6.5</p> <p>News Article: Will Seafloor Carpets Be the Key to Harvesting Wave Energy</p> <p>Zip Line – EDP Student Activity</p> <p>IN: Newton's Laws</p> |

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| | Energy | | | | | | |
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| <p>Week 26 Feb. 17- Feb. 21</p> | <p>DCI 6- Motions, Forces, and Energy</p> <p>Physical Science P6.6.1 P6.6.3 P6.6.6 Students will use data to explain differences between forces in various environments . Use mathematical computation and diagrams to calculate the sum of forces acting on various objects.</p> <p>UNIT Motions, Forces and Energy</p> | 5, 6 | 6, 7 | <p>Investigate and communicate ways to manipulate force to improve movement. Investigate forces acting on objects. Use data to explain differences between forces in various environments.</p> <p>Students will investigate difference of force on an object and compare earth, space, and underwater forces.</p> | <p>Class Works Section quiz Read Theory</p> | <p>Read Theory Differentiated Reading - Class works Science Lesson Energy Brain Pop – Forms of Energy</p> | <p>1.Chapter 8 Changes in Motion 2.Differentiated Reading Passage: a. Friction b. Gravity</p> <p>Building for Hurricanes – Engineering Design Challenge</p> <p>Read Works Standardized article: Super Bowl P.6.6.6</p> <p>Read works Standardized article: How do Airplanes Fly? P6.6.6</p> <p>News Article: ‘Master the Force’ to Explode Watermelons</p> <p>Watercraft – EDP Student activity lesson</p> <p>EDP Worksheet for the Building for Hurricanes</p> <p>Chart comparing results from hurricane activity</p> <p>Data results from Watercraft activity</p> |
| <p>Week 27 Feb. 24- Feb. 28</p> | <p>DCI 6- Motions, Forces, and Energy</p> | 3, 5, 6 | 2 | <p>Determine the relationships between the concepts of potential, kinetic and thermal energy.</p> | <p>Class Work Chapter quiz Read Theory</p> | <p>Read Theory - Differentiated Reading</p> | <p>1.Chapter 8 Energy 2.Differentiated Reading Passage: Work, Force, Energy</p> <p>Read Works standardized</p> |

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| | <p>Physical Science P6.6.7</p> <p>Students will understand the relationship between potential, kinetic and thermal energy.</p> <p>UNIT Motion, Forces, and Energy</p> | | | | | <p>Class works Science Lesson: Heat and Light</p> | <p>article: Everyday Energy</p> <p>Read Works: Crashing, Jumping, Falling</p> <p>News Article: 'Fire Ice'- The New Source of Green Energy? Japan Certainly Seems to Think So</p> <p>Paddle Power – EDP Student Activity and worksheet</p> <p>IN: Potential/Kinetic Energy Energy Sources Energy Transformations Energy</p> |
| <p>Week 28 Mar. 2- Mar. 6</p> | <p>Nine Weeks Test</p> | | | | | | |

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