

# 5th Grade Science



## Prioritized Standards and Instructional Units 2023-2024

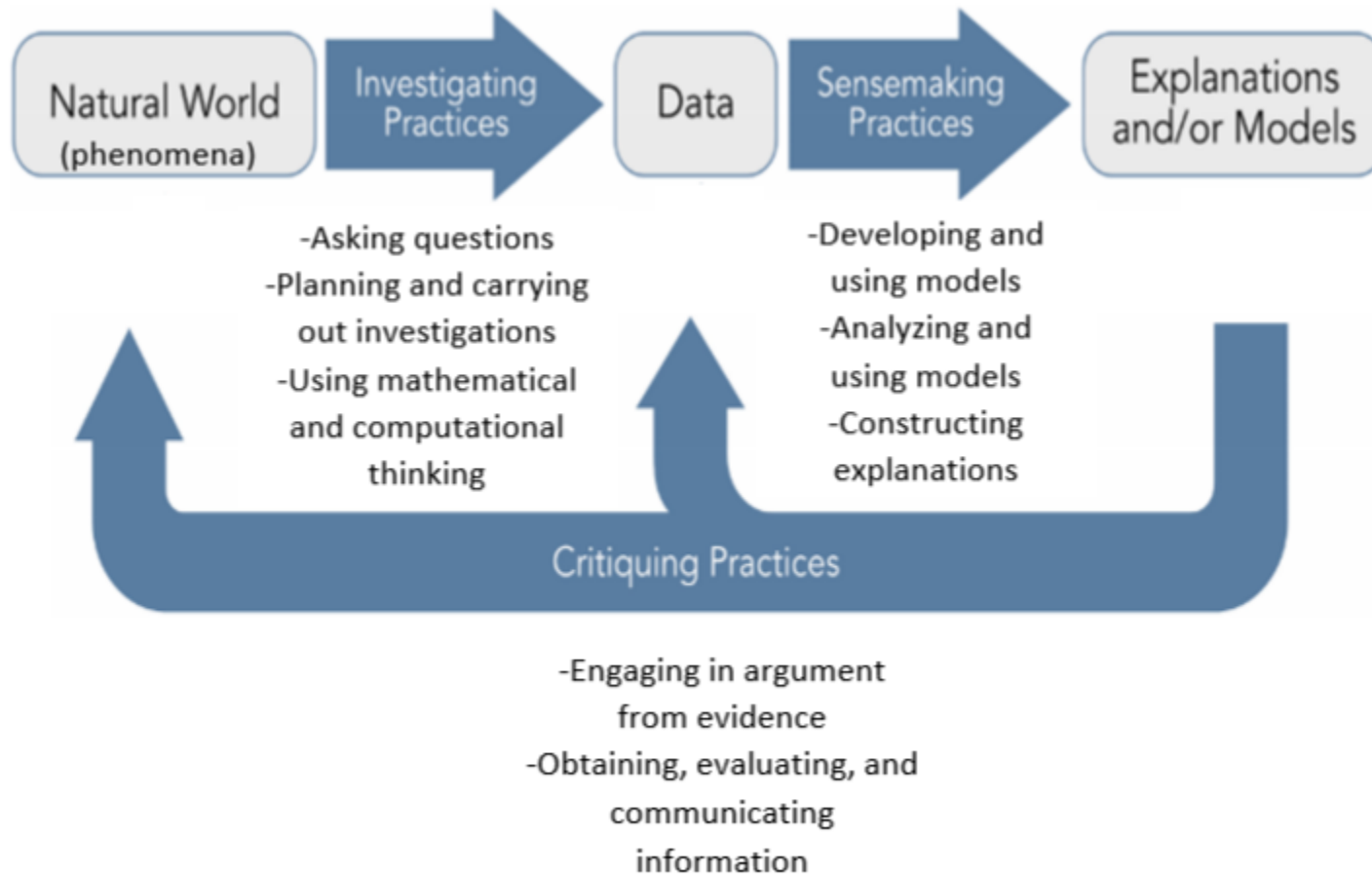
## 5th Grade Science

| <b>UNIT 1:</b><br><b>Earth's Systems</b><br>25 Days   | <b>UNIT 2:</b><br><b>Matter and Energy in Organisms and Ecosystems</b><br>25 Days   |
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| <p style="text-align: center;"><b><u>PRIORITY</u></b></p> <p style="text-align: center;"><b><u>Science and Engineering Practices</u></b></p> <p><b>Developing and Using Models</b></p> <ul style="list-style-type: none"> <li>Develop a model using an example to describe a scientific principle. (5-ESS2-1)</li> </ul> <p><b>Using Mathematics and Computational Thinking</b></p> <ul style="list-style-type: none"> <li>Describe and graph quantities such as area and volume to address scientific questions. (5-ESS2- 2)</li> </ul> <p><b>Obtaining, Evaluating, and Communicating Information</b></p> <ul style="list-style-type: none"> <li>Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem. (5-ESS3-1)</li> </ul> <p style="text-align: center;"><b><u>SUPPORTING</u></b></p> <p style="text-align: center;"><b><u>Performance Expectations</u></b></p> <p><b>5-ESS2-1.</b> Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</p> <p><b>5-ESS2-2.</b> Describe and graph the amounts of saltwater and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.</p> <p><b>5-ESS3-1.</b> Obtain and combine information about solutions individual communities use to protect the Earth's resources and environment.<br/> [Clarification Statement: Examples could include agricultural solutions to prevent fertilizer runoff or using goats to control invasive plant species.]</p> | <p style="text-align: center;"><b><u>PRIORITY</u></b></p> <p style="text-align: center;"><b><u>Science and Engineering Practices</u></b></p> <p><b>Developing and Using Models</b></p> <ul style="list-style-type: none"> <li>Use models to describe phenomena. (5- PS3-1)</li> <li>Develop a model to describe phenomena. (5-LS2-1)</li> </ul> <p><b>Engaging in Argument from Evidence</b></p> <ul style="list-style-type: none"> <li>Support an argument with evidence, data, or a model. (5-LS1-1)</li> </ul> <p style="text-align: center;"><b><u>SUPPORTING</u></b></p> <p style="text-align: center;"><b><u>Performance Expectations</u></b></p> <p><b>5-PS3-1.</b> Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.</p> <p><b>5-LS1-1.</b> Support an argument that plants get the materials they need for growth chiefly from air and water.</p> <p><b>5-LS2-1.</b> Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.</p> |

## 5th Grade Science

| <b>UNIT 3:</b><br><b>Space System: Stars and the Solar System</b><br>25 Days   | <b>UNIT 4:</b><br><b>Structure and the Properties of Matter</b><br>25 Days  |
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| <p style="text-align: center;"><b><u>PRIORITY</u></b></p> <p style="text-align: center;"><b><u>Science and Engineering Practices</u></b></p> <p><b>Analyzing and Interpreting Data</b></p> <ul style="list-style-type: none"> <li>Represent data in graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships. (5- ESS1-2)</li> </ul> <p><b>Engaging in Argument from Evidence</b></p> <ul style="list-style-type: none"> <li>Support an argument with evidence, data, or a model. (5-PS2-1),(5-ESS1-1)</li> </ul> <p style="text-align: center;"><b><u>SUPPORTING</u></b></p> <p style="text-align: center;"><b><u>Performance Expectations</u></b></p> <p><b>5-ESS1-1.</b> Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.</p> <p><b>5-ESS1-2.</b> Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.</p> <p><b>5-PS2-1.</b> Support an argument that the gravitational force exerted by Earth on objects is directed down.</p> | <p style="text-align: center;"><b><u>PRIORITY</u></b></p> <p style="text-align: center;"><b><u>Science and Engineering Practices</u></b></p> <p><b>Developing and Using Models</b></p> <ul style="list-style-type: none"> <li>Develop a model to describe phenomena. (5-PS1-1)</li> </ul> <p><b>Planning and Carrying Out Investigations</b></p> <ul style="list-style-type: none"> <li>Conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (5-PS1-4)</li> <li>Make observations and measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon. (5-PS1-3)</li> </ul> <p><b>Using Mathematics and Computational Thinking</b></p> <ul style="list-style-type: none"> <li>Measure and graph quantities such as weight to address scientific and engineering questions and problems. (5-PS1-2)</li> </ul> <p style="text-align: center;"><b><u>SUPPORTING</u></b></p> <p style="text-align: center;"><b><u>Performance Expectations</u></b></p> <p><b>5-PS1-1.</b> Develop a model to describe that matter is made of particles too small to be seen.</p> <p><b>5-PS1-2.</b> Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.</p> <p><b>5-PS1-3.</b> Make observations and measurements to identify materials based on their properties.</p> <p><b>5-PS1-4.</b> Conduct an investigation to determine whether the mixing of two or more substances results in new substances.</p> |

# Science and Engineering Practices Grouping



# Unit 1

## Unit/Core Idea: Earth's Systems

Pacing: 25 days

### Unit/Core Idea: Earth's Systems

Essential Question: How do Earth's surface processes and human activities affect each other?

#### Supporting Questions:

- How do Earth's major systems interact?
- How do the properties and movements of water shape Earth's surface and affect its systems?
- How do humans depend on Earth's resources?
- How do humans change the planet?
- How do people model and predict the effect of human activities on Earth's climate?

#### Sample Phenomena:

- **What is the driest place on Earth?**  
<https://docs.google.com/document/d/1c7Aga5uH1MsZLrxwJkFGS7JGAdaa1s3r7hrm2PR3Zx8/template/preview> Use picture on assessment for phenomena.
- **Why do rivers curve?**  
<https://thewonderofscience.com/phenomenon/2018/5/13/why-do-rivers-curve>
- **Humans need water (What happens when you don't drink enough**



water?)

- **Starving Polar Bears**  
<https://www.nationalgeographic.com/science/article/polar-bears-starve-melting-sea-ice-global-warming-study-beaufort-sea-environment> video
- **Glacier National Park is melting**



| Science and Engineering Practices (Priority)   | Performance Expectations (Supporting)   |
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| <p><b>Developing and Using Models</b><br/>Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.</p> <ul style="list-style-type: none"> <li>Develop a model using an example to describe a scientific principle. (5-ESS2-1)</li> </ul> <p><b>Using Mathematics and Computational Thinking</b><br/>Mathematical and computational thinking in 3–5 builds on K–2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions.</p> <ul style="list-style-type: none"> <li>Describe and graph quantities such as area and volume to address scientific questions. (5-ESS2- 2)</li> </ul> <p><b>Obtaining, Evaluating, and Communicating Information</b><br/>Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.</p> <ul style="list-style-type: none"> <li>Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem. (5-ESS3-1)</li> </ul> | <p><b>5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</b><br/>[Clarification Statement: Examples could include the influence of the ocean on ecosystems, landform shape, and climate; the influence of the atmosphere on landforms and ecosystems through weather and climate; and the influence of mountain ranges on winds and clouds in the atmosphere. The geosphere, hydrosphere, atmosphere, and biosphere are each a system.] [Assessment Boundary: Assessment is limited to the interactions of two systems at a time.]</p> <p><b>5-ESS2-2. Describe and graph the amounts of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.</b> [Assessment Boundary: Assessment is limited to oceans, lakes, rivers, glaciers, ground water, and polar ice caps, and does not include the atmosphere.]</p> <p><b>5-ESS3-1.</b> Obtain and combine information about solutions individual communities use to protect the Earth’s resources and environment.<br/>[Clarification Statement: Examples could include agricultural solutions to prevent fertilizer runoff or using goats to control invasive plant species.]</p> |

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| <p><b>Kentucky Academic Standards Connections</b></p> | <p><b>ELA/Literacy –</b><br/> RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (5-ESS3-1)<br/> RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (5-ESS2-1),(5-ESS2-2),(5-ESS3-1)<br/> RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (5-ESS3-1)<br/> W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. (5-ESS2-2),(5-ESS3-1)<br/> W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. (5-ESS3-1)<br/> SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. (5-ESS2-1),(5-ESS2-2)</p> <p><b>Mathematics –</b><br/> MP.2 Reason abstractly and quantitatively. (5-ESS2-1),(5-ESS2-2),(5-ESS3-1)<br/> MP.4 Model with mathematics. (5-ESS2-1),(5-ESS2-2),(5-ESS3-1)<br/> 5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. (5-ESS2-1)</p> |
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# Unit 2

## Unit/Core Idea: Matter and Energy in Organisms and Ecosystems

Pacing: 25 days

Unit/Core Idea: Matter and Energy in Organisms and Ecosystems  
Essential Question: Where does the energy in food come from and what is it used for?

### Supporting Questions:

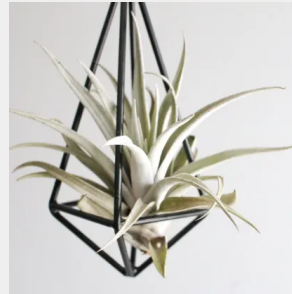
- What is energy?
- How do food and fuel provide energy? If energy is conserved, why do people say it is produced or used?
- How do organisms obtain and use the matter and energy they need to live and grow?
- How do matter and energy move through an ecosystem?
- How do organisms interact with living and nonliving environments to obtain matter and energy?

### Sample Phenomena:

- **Roll a car** across the floor, use a dropper popper, fling a rubber band, chew a piece of gum, any simple example.



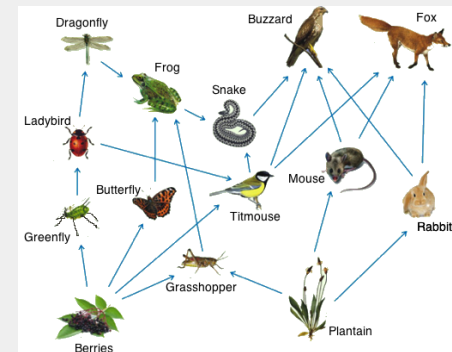
**Animals that eat algae**



**Air Plant** - How does it grow without soil?

- 50 year sealed ecosystem!  
<https://thewonderofscience.com/phenomenon/2017/10/8/ls2-eco-systems>

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- **Food Web**


| Science and Engineering Practices (Priority)  | Performance Expectations (Supporting)  |
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| <p><b>Developing and Using Models</b><br/>Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.</p> <ul style="list-style-type: none"> <li>• Use models to describe phenomena. (5- PS3-1)</li> <li>• Develop a model to describe phenomena. (5-LS2-1)</li> </ul> <p><b>Engaging in Argument from Evidence</b><br/>Engaging in argument from evidence in 3–5 builds on K– 2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).</p> <ul style="list-style-type: none"> <li>• Support an argument with evidence, data, or a model. (5-LS1-1)</li> </ul> | <p><b>5-PS3-1. Use models to describe that energy in animals’ food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.</b> [Clarification Statement: Examples of models could include diagrams, and flow charts.]</p> <p><b>5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.</b> [Clarification Statement: Emphasis is on the idea that plant matter comes mostly from air and water, not from the soil.]</p> <p><b>5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.</b> [Clarification Statement: Emphasis is on the idea that matter that is not food (air, water, decomposed materials in soil) is changed by plants into matter that is food. Examples of systems could include organisms, ecosystems, and the Earth.] [Assessment Boundary: Assessment does not include molecular explanations.]</p> |

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| <p><b>Kentucky Academic Standards Connections</b></p> | <p><b>ELA/Literacy –</b><br/> RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (5-LS1-1)<br/> RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (5-PS3-1),(5-LS2-1)<br/> RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (5-LS1-1)<br/> W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (5-LS1-1)<br/> SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. (5-PS3-1),(5-LS2-1)</p> <p><b>Mathematics –</b><br/> MP.2 Reason abstractly and quantitatively. (5-LS1-1),(5-LS2-1)<br/> MP.4 Model with mathematics. (5-LS1-1),(5-LS2-1)<br/> MP.5 Use appropriate tools strategically. (5-LS1-1)<br/> 5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. (5-LS1-1)</p> |
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# Unit 3

## Unit/Core Idea: Space Systems: Stars and the Solar System

Pacing: 25 days

| Unit/Core Idea: Space Systems: Stars and the Solar System  |  |
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| Essential Question: How do lengths and directions of shadows or relative lengths of day and night change from day to day, and how does the appearance of some stars change in different seasons?   |  |
| <b>Supporting Questions:</b> <ul style="list-style-type: none"> <li>-What is the universe and what goes on in stars?</li> <li>-What are the predictable patterns caused by Earth's movement in the solar system?</li> <li>-How objects fall down regardless of location on Earth?</li> </ul> | <b>Sample Phenomena:</b> <ul style="list-style-type: none"> <li>- <b>Image of universe and stars</b><br/> <a href="https://astronomy.com/news/2020/01/these-are-the-universes-five-strangest-stars">https://astronomy.com/news/2020/01/these-are-the-universes-five-strangest-stars</a></li> <li>- <b>3D printed sundial</b><br/> </li> <li>- <b>Is the Earth flat or spherical?</b><br/> <a href="https://docs.google.com/document/d/1O8eMbaWDU8uw8Rxz1ILIO4Iq9sJ4VGxYuHPMCYZN1/template/preview">https://docs.google.com/document/d/1O8eMbaWDU8uw8Rxz1ILIO4Iq9sJ4VGxYuHPMCYZN1/template/preview</a> Use the image on page 2.</li> </ul> |

| Science and Engineering Practices (Priority)  | Performance Expectations (Supporting)   |
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| <b>Analyzing and Interpreting Data</b><br>Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used. <ul style="list-style-type: none"> <li>• Represent data in graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships. (5- ESS1-2)</li> </ul> <b>Engaging in Argument from Evidence</b><br>Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s). | <b>5-ESS1-1. Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.</b> [Assessment Boundary: Assessment is limited to relative distances, not sizes, of stars. Assessment does not include other factors that affect apparent brightness (such as stellar masses, age, stage).]<br><b>5-ESS1-2. Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.</b> [Clarification Statement: Examples of patterns could include the position and motion of Earth with respect to the sun and selected stars that are visible only in particular months.] [Assessment Boundary: Assessment does not include causes of seasons.] |

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| <ul style="list-style-type: none"> <li>Support an argument with evidence, data, or a model. (5-PS2-1),(5-ESS1-1)</li> </ul> | <b>5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down.</b> [Clarification Statement: “Down” is a local description of the direction that points toward the center of the spherical Earth.] [Assessment Boundary: Assessment does not include mathematical representation of gravitational force.] |
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| <b>Kentucky Academic Standards Connections</b> | <p><b>ELA/Literacy –</b></p> <p>RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (5-PS2-1),(5-ESS1-1)</p> <p>RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (5-ESS1-1)</p> <p>RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). (5-ESS1-1)</p> <p>RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (5-PS2-1),(5-ESS1-1)</p> <p>W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (5-PS2-1),(5-ESS1-1)</p> <p>SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. (5-ESS1-2)</p> <p><b>Mathematics –</b></p> <p>MP.2 Reason abstractly and quantitatively. (5-ESS1-1),(5-ESS1-2)</p> <p>MP.4 Model with mathematics. (5-ESS1-1),(5-ESS1-2)</p> <p>5.NBT.A.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. (5-ESS1-1)</p> <p>5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. (5-ESS1-2)</p> |
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# Unit 4

Unit/Core Idea: Structure and Properties of Matter

Pacing: 25 days

| Unit/Core Idea: Structure and Properties of Matter<br>Essential Question: How can one explain the structure, properties, and interactions of matter?  |  |
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| <b>Supporting Questions:</b><br>-How do particles combine to form the variety of matter one observes?<br>-How do substances combine or change (react) to make new substances?<br>-How does one characterize and explain these reactions and predictions about them? | <b>Sample Phenomena:</b><br>-Inflate a balloon -<br><a href="https://docs.google.com/document/d/1UqBiJaT1ZFiT9ew1WZAci-UKRRigGtmlKBR5f1Xjx8/template/preview">https://docs.google.com/document/d/1UqBiJaT1ZFiT9ew1WZAci-UKRRigGtmlKBR5f1Xjx8/template/preview</a><br>- What caused the 1947 explosions at Lake Lenore Washington?<br><a href="https://sites.google.com/view/modelbasedinquiry/phenomena-ideas/physical-sciences">https://sites.google.com/view/modelbasedinquiry/phenomena-ideas/physical-sciences</a> Watch without sound on.<br>-Can you combine substances to make a new substance?<br><a href="https://www.youtube.com/watch?v=UMcWCOOyTAQ">https://www.youtube.com/watch?v=UMcWCOOyTAQ</a><br>Watch 7:18 - 8:25 |

| Science and Engineering Practices (Priority)   | Performance Expectations (Supporting)   |
|--|---|
| <b>Developing and Using Models</b><br>Modeling in 3–5 builds on K–2 experiences and progresses to building and revising simple models and using models to represent events and design solutions. <ul style="list-style-type: none"> <li>Develop a model to describe phenomena. (5-PS1-1)</li> </ul> <b>Planning and Carrying Out Investigations</b><br>Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions. <ul style="list-style-type: none"> <li>Conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (5-PS1-4)</li> <li>Make observations and measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon. (5-PS1-3)</li> </ul> <b>Using Mathematics and Computational Thinking</b><br>Mathematical and computational thinking in 3–5 builds on K–2 experiences and progresses to extending quantitative measurements to a variety of physical properties and using computation and mathematics to analyze data and compare alternative design solutions. <ul style="list-style-type: none"> <li>Measure and graph quantities such as weight to address scientific</li> </ul> | <b>5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen.</b> [Clarification Statement: Examples of evidence supporting a model could include adding air to expand a basketball, compressing air in a syringe, dissolving sugar in water, and evaporating salt water.] [Assessment Boundary: Assessment does not include the atomic-scale mechanism of evaporation and condensation or defining the unseen particles.]<br><b>5-PS1-2. Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.</b> [Clarification Statement: Examples of reactions or changes could include phase changes, dissolving, and mixing that form new substances.] [Assessment Boundary: Assessment does not include distinguishing mass and weight.]<br><b>5-PS1-3. Make observations and measurements to identify materials based on their properties.</b> [Clarification Statement: Examples of materials to be identified could include baking soda and other powders, metals, minerals, and liquids. Examples of properties could include color, hardness, reflectivity, electrical conductivity, thermal conductivity, response to magnetic forces, and solubility; density is not intended as an identifiable property.] [Assessment Boundary: Assessment does not include density or distinguishing mass and weight.]<br><b>5-PS1-4. Conduct an investigation to determine whether the mixing of two or more substances results in new substances.</b> |

and engineering questions and problems. (5-PS1-2)

**Kentucky Academic  
Standard Connections**

**ELA/Literacy –**

RI.5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (5-PS1-1)

W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. (5-PS1-2),(5-PS1-3),( 5-PS1-4)

W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. (5-PS1-2),(5-PS1-3),(5-PS1-4)

W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.  
(5-PS1-2),(5-PS1-3),(5-PS1-4)

**Mathematics –**

MP.2 Reason abstractly and quantitatively. (5-PS1-1),(5-PS1-2),(5-PS1-3)

MP.4 Model with mathematics. (5-PS1-1),(5-PS1-2),(5-PS1-3)

MP.5 Use appropriate tools strategically. (5-PS1-2),(5-PS1-3)

5.NBT.A.1 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. (5-PS1-1)

5.NF.B.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (5-PS1-1)

5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real-world problems. (5-PS1-2)

5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. (5-PS1-1)

5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft., and improvised units. (5-PS1-1)