## Reading Focus: Literature, Informational
Writing Focus: Narrative, Opinion, Informative/Explanatory

## Unifying Concept: Life Science
**Structures of Life**

## Suggested Duration: 11 weeks

### Enduring Understanding:
Plants and animals have identifiable characteristics and have adaptations that help them survive.

### Essential Questions:
- What is the purpose of a seed?
- What is the life cycle of a plant?
- How are the terms vertebrates and invertebrates used to classify animals?
- How do animals and plants adapt to life in a desert environment?
- What structures does a crayfish (snail) have and what functions do they serve?
- What factors need to be considered in order to build a suitable habitat for a crayfish or a snail?

### Academic Vocabulary:
- Embryo
- Root
- Fruit
- Seedling
- Mold
- Stem
- Property
- Behavior
- Seed
- Territory
- Seed Coat
- Habitat
- Flower
- Structures
- Germination
- Functions
- Growth
- Antennae
- Leaf
- Carapace
- Life Cycle
- Crustaceans
- Organism
- Nutrient
- Property
- Behavior
- Seed
- Territory
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- Germination
- Functions
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- Antennae
- Leaf
- Carapace
- Life Cycle
- Crustaceans
- Organism
- Nutrient

## Standards

### Highly-Leveraged Standards

**Strand 4: Life Science**

**4.S4.C1: Characteristics of Organisms:** Understand that basic structures in plants and animals serve a function.

**PO1.** Compare structures in plants (e.g., roots, stems, leaves, flowers) and animals (e.g., muscles, bones, nerves) that serve different functions in growth and survival.

**PO2.** Classify animals by identifiable group characteristics:
- Vertebrates – mammals, birds, fish, reptiles, amphibians
- Invertebrates – insects, arachnids

**4.S4.C3: Organisms and Environments:** Understand the relationships among various organisms and their environment.

**PO1.** Describe ways various resources (e.g., air, water, plants, animals, soil) are utilized to meet the needs of a population.

**4.S4.C4: Diversity, Adaptation, and Behavior:** Identify plant and animal adaptations

**PO1.** Recognize that successful characteristics of populations are inherited traits that are favorable in a particular environment.

### Supporting Standards

**Strand 3: Science in Personal and Social Perspectives**

**4.S3.C2: Science and Technology in Society:** Understand the impact of technology.

**PO1.** Describe how science and technology (e.g., computers, air conditioning, medicine) have improved the lives of many people.

**PO2.** Describe benefits (e.g., easy communications, rapid transportation) and risks (e.g., pollution, destruction of natural resources) related to the use of technology.

**PO3.** Design and construct a technological solution to a common problem or need using common materials.
PO2. Give examples of adaptations that allow plants and animals to survive.
- Camouflage – horned lizards, coyotes
- Mimicry – Monarch and Viceroy butterflies
- Physical – cactus spines
- Mutualism – species of acacia that harbor ants, which repel other harmful insects

**Constant Standards**

<table>
<thead>
<tr>
<th>Strand 1: Inquiry Process</th>
</tr>
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<tbody>
<tr>
<td><strong>4.S1.C1: Observations, Questions and Hypothesis:</strong> Observe, ask questions, and make predictions.</td>
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| **PO1.** Demonstrate safe behavior and appropriate procedures (e.g., use and care of technology, materials, organisms) in all science inquiry. |
| **PO2.** Plan a simple investigation that identifies the variables to be controlled. |
| **PO3.** Conduct controlled investigations (e.g., related to erosion, plant life cycles, weather, magnetism) in life, physical, and Earth and space sciences. |
| **PO4.** Measure using appropriate tools (e.g., ruler, scale, balance) and units of measure (i.e., metric, U.S. customary). |
| **PO5.** Record data in an organized and appropriate format (e.g., t-chart, table, list, written log). |

**4.S1.C3: Analysis and Conclusion:** Organize and analyze data; compare to predictions.
| **PO1.** Analyze data obtained in a scientific investigation to identify trends. |
| **PO2.** Formulate conclusions based upon identified trends in data. |
| **PO3.** Determine that data collected is consistent with the formulated question. |
| **PO4.** Determine whether the data supports the prediction for an investigation. |
| **PO5.** Develop new questions and predictions based upon the data collected in the investigation. |

**4.S1.C4: Communication:** Communicate results of investigations.
| **PO1.** Communicate verbally or in writing the results of an inquiry. |
| **PO2.** Choose an appropriate graphic representation for collected data: |
  - bar graph
  - line graph
  - Venn diagram
  - model |
| **PO3.** Communicate with other groups or individuals to compare the results of a common investigation. |
Strand 2: History and Nature of Science

4.S2.C1: History of Science as a Human Endeavor: Identify individual and cultural contributions to scientific knowledge.

PO1: Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations (e.g., Margaret Mead [anthropologist], supports Strand 4; Nikola Tesla [engineer, inventor] supports Strand 5; Michael Faraday [scientist], supports Strand 5; Benjamin Franklin [scientist], supports Strand 5).

PO2: Describe science-related career opportunities.


PO1. Explain the role of experimentation in scientific inquiry.

PO2. Describe the interaction of components in a system (e.g., flashlight, radio).

PO3. Explain various ways scientists generate ideas (e.g., observation, experiment, collaboration, theoretical and mathematical models).

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Social Justice Standards

Identity 4 – I can feel good about my identity without making someone else feel badly about who they are. (ID.3.5.4)

Diversity 8 – I want to know more about other people’s lives and experiences, and I know how to ask questions respectfully and listen carefully and non-judgmentally. (DI.3.5.8)

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Action 17 – I know it’s important for me to stand up for myself and for others, and I know how to get help if I need ideas on how to do this. (AC.3.5.17)

Teaching Tolerance Anti-Bias Framework [https://www.tolerance.org/frameworks](https://www.tolerance.org/frameworks)

Adopted Texts and Materials

Textbook:

- “Structures of Life” materials unit/kit
- Teacher’s manual for “Structures of Life”
- 8 copies of Structures of Life (Science Stories)
- [Learning Progressions for K – 5 Science](https://www.tolerance.org/frameworks)

Multicultural Books aligned with Structures of Life Science Resource Kit

Dig, Wait, Listen: A Desert Toad’s Tale (2001) (PreK-5) A spadefoot toad waits under the sand for the rain, hears the sounds of other desert animals, and eventually mates and spawns other toads.
**Scholastic Leveled Readers**

- *Children of Clay: A Family of Pueblo Potters* (1992) *(Grades 4-up)* A Tewa Indian family living in Santa Clara Pueblo in New Mexico follow the ages-old traditions of their people as they create various objects of clay.

**Multicultural Inclusive Strategies**

- See *Resources* Tab in Structures of Life Teacher Edition
- TUSD Science Resource Center Website [http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum](http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum)
- [Crosscutting Concept Resources](http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum)
- [National Academies Press](http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum)
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- [Learning Progressions for K – 5 Science](http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum)
- [Understanding & Applying Science & Engineering Practices](http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum)

**Science Kit Supplemental Resources**

- Instructional and Assessment Guides
  - **Culturally Responsive Practices** *(TUSD SPARKS, SPARKS Strategies)*
  - **Pre/Post Unit Assessment** [http://intranet/science/Kit_Asmts.html](http://intranet/science/Kit_Asmts.html)
  - **Concept Map** - pre and post with linking phrases to indicate relationships of concepts and processes

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<td>- Quick writes (e.g. definitions and examples of types of structures and functions of the crayfish)</td>
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<tr>
<td>- Conduct research and construct explanations using words, visuals, and data (e.g. How do specific species of plants and animals survive in the desert?)</td>
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<td>- Engage in arguments with evidence and reasoning (e.g. write an argument the highlights effects on animals from a human endeavor that changes the environment)</td>
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<td>- Develop an argument of the importance of the saguaro cactus in the desert.</td>
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## Reading Focus: Literature, Informational
Writing Focus: Narrative, Informative/Explanatory, Opinion

## Unifying Concept: Physical Science
**Electric Circuits**

## Suggested Duration: 11 weeks

### Enduring Understanding:
Electricity is a technological tool that provides energy to objects and has certain properties.

### Essential Questions:
- What are properties of electricity?
- What characteristics make an item an insulator or a conductor? What are examples of each type?
- How are circuits built and how do they work?
- How do open circuits, closed circuits and parallel circuits compare and differ?
- How do engineers develop and build electric circuits?
- How is electricity used to create a magnet?

### Academic Vocabulary:
- Electricity
- Insulators
- Circuit
- Switch
- Electricity flow
- Open circuit
- Battery
- Closed circuit
- Light bulb
- Parallel circuit
- Wire
- Series circuit
- Filament
- Magnet
- Illuminate
- Magnetism
- Fahnestock Clip
- Electromagnet
- Bulb Socket
- Magnetize
- Troubleshooting
- Electric current
- Conductors
- Diode

### Standards

#### Highly-Leveraged Standards

| Strand 5: Physical Science           | Supporting Standards
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<td><strong>PO1.</strong> Demonstrate that electricity flowing in circuits can produce light, heat, sound, and magnetic effects.</td>
<td><strong>PO1.</strong> Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations (e.g., Margaret Mead [anthropologist], supports Strand 4; Nikola Tesla [engineer, inventor] supports Strand 5; Michael Faraday [scientist], supports Strand 5; Benjamin Franklin [scientist], supports Strand 5).</td>
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<td><strong>PO2.</strong> Construct series and parallel electric circuits.</td>
<td><strong>PO2.</strong> Describe science-related career opportunities.</td>
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<td><strong>PO3.</strong> Explain the purpose of conductors and insulators in various practical applications.</td>
<td><strong>4.S2.C2: Nature of Scientific Knowledge</strong></td>
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<td><strong>PO4.</strong> Investigate the characteristics of magnets (e.g., opposite poles attract, like poles repel, the force between two magnet poles depends on the distance between them).</td>
<td><strong>PO1.</strong> Explain the role of experimentation in scientific inquiry.</td>
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<td><strong>PO5.</strong> State cause and effect relationships between magnets and circuitry.</td>
<td><strong>PO2.</strong> Describe the interaction of components in a system (e.g., flashlight, radio).</td>
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#### Supporting Standards

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Office of Curriculum, Instruction, and Professional Development  
Last Edited: 06/12/2018
PO1. Differentiate inferences from observations.
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Strand 3: Science in Personal and Social Perspectives
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2018-2019 Science Curriculum Map, Grade 4

- Ask questions and define problems
- Develop and use models
- Plan and carry out investigations
- Analyze and interpret data
- Construct explanations and design solutions
- Engage in argument from evidence
- Obtain, evaluate, and communicate information

Social Justice Standards

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Teaching Tolerance Anti-Bias Framework: [https://www.tolerance.org/frameworks](https://www.tolerance.org/frameworks)

Adopted Texts and Materials

Textbook:
- “Electric Circuits” materials unit/kit
- Teacher’s manual for “Electric Circuits”
- 8 copies of Electric Circuits (Science Stories)
- [Learning Progressions for K – 5 Science](https://www.fossweb.com)
- FOSS website: [www.fossweb.com](http://www.fossweb.com)

Multicultural Book aligned with Electric Circuits Science Resource Kit

Blackout (2011) (IL:K-3 RL:1.4) When a busy family’s activities come to a halt because of a blackout, they find they enjoy spending time together and not being too busy for once.

Scholastic Leveled Readers

Multicultural Inclusive Strategies

Science Kit Supplemental Resources

Instructional and Assessment Guides

Culturally Responsive Practices ([TUSD SPARKS, SPARKS Strategies](http://intranet/science/Kit_Asmts.html))

Pre/Post Unit Assessment:
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Concept Map - pre and post with linking phrases to indicate relationships of concepts and processes

Formative/Performance Assessment
- Conduct research and construct explanations using words, visuals and data (e.g. What are different electrical sources and how do they compare?)

Additional Instructional Resources

- TUSD Science Resource Center Website: [http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum](http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum)
- Crosscutting Concept Resources
- National Academies Press
- Science and Engineering Practices
- [Learning Progressions for K – 5 Science](https://www.fossweb.com)
- Understanding & Applying Science & Engineering Practices
- Electricity for Kids Website: [http://www.sciencekids.co.nz/electricity.html](http://www.sciencekids.co.nz/electricity.html)
- Introduction to Electricity for Kids Video: [https://www.youtube.com/watch?v=Uf76pThNXZc](https://www.youtube.com/watch?v=Uf76pThNXZc)
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<th>Engage in arguments with evidence and reasoning (e.g. is solar energy better than coal produced electricity?)</th>
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<tr>
<td>• Use data from electrical energy usage (in your home, at school's solar project, wind farm example) and compare/contrast the efficiency of each source.</td>
</tr>
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<td>• See Resources Tab in Electric Circuits Teacher Edition</td>
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### Enduring Understanding:
Rapid and slow processes are continuously changing the surface of the earth.

### Essential Questions:
- How does weather affect earth materials?
- Why do scientists use stream models to study effects of erosion?
- How do engineers use scientific knowledge about downhill movement to solve problems?
- How are fast changes in the Earth’s surface related to the very slow changes on Earth’s surface?
- How does the surface of the earth affect how water flows?
- In what ways do humans change the surface of the Earth?

### Unifying Concept: Earth and Space Science
The Changing Earth

### Academic Vocabulary:
- Weathering
- Physical Weathering
- Chemical Weathering
- Erosion
- Deposition
- Gravity
- Earth Materials
- Watershed
- River Bed
- Stream Load
- Floodplain
- Competence
- Capacity
- Delta
- Reduce
- Reuse
- Recycle
- Fast Land Changes
- Slow Land Changes
- Plate Tectonics
- Transform Fault

### Standards

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<td><strong>PO1.</strong> Describe ways various resources (e.g., air, water, plants, animals, soil) are utilized to meet the needs of a population.</td>
<td><strong>PO1.</strong> Identify the sources of water within an environment (e.g., ground water, surface water, atmospheric water, glaciers).</td>
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<td><strong>PO2.</strong> Differentiate renewable resources from nonrenewable resources.</td>
<td><strong>PO2.</strong> Describe the distribution of water on the Earth’s surface.</td>
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<td><strong>PO3.</strong> Analyze the effect that limited resources (e.g., natural gas, minerals) may have on an environment.</td>
<td><strong>PO3.</strong> Differentiate between weather and climate as they relate to the southwestern United States.</td>
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<td><strong>PO4.</strong> Describe ways in which resources can be conserved (e.g., by reducing, reusing, recycling, finding substitutes).</td>
<td><strong>PO4.</strong> Measure changes in weather (e.g., precipitation, wind speed, barometric pressure).</td>
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<td><strong>Strand 6: Earth and Space Science</strong></td>
<td><strong>PO5.</strong> Interpret the symbols on a weather map or chart to identify the following:</td>
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<td><strong>4.S6.C2: Earth’s Processes and Systems:</strong> Understand the processes acting on the Earth and their interaction with the earth systems.</td>
<td>- Temperatures</td>
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<td><strong>PO1.</strong> Identify the Earth processes that cause erosion.</td>
<td>- Fronts</td>
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<td><strong>PO2.</strong> Describe how currents and wind cause erosion and land changes.</td>
<td>- Precipitation</td>
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<td><strong>PO3.</strong> Describe the role that water plays in the following processes that alter the Earth’s surface features:</td>
<td><strong>PO6.</strong> Compare weather conditions in various locations (e.g., regions of Arizona, various U.S. cities, coastal vs. interior geographical regions).</td>
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**2018-2019 Science Curriculum Map, Grade 4**

- **Weathering**
  - PO4. Compare rapid and slow processes that change the Earth’s surface, including:
    - Rapid – earthquakes, volcanoes, floods
    - Slow – wind, weathering
  - PO5. Identify the Earth events that cause changes in atmospheric conditions (e.g., volcanic eruptions, forest fires).
  - PO6. Analyze evidence that indicates life and environmental conditions have changed (e.g., tree rings, fish fossils in desert regions, ice cores).

**Constant Standards**

**Strand 1: Inquiry Process**

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# Social Justice Standards

**Identity 4** – I can feel good about my identity without making someone else feel badly about who they are. (ID.3-5.4)

**Diversity 8** – I want to know more about other people’s lives and experiences, and I know how to ask questions respectfully and listen carefully and non-judgmentally. (DI.3.5-8)

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### Teaching Tolerance Anti-Bias Framework
[https://www.tolerance.org/frameworks](https://www.tolerance.org/frameworks)

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## Adopted Texts and Materials

### Textbook:
- “Changing Earth” materials unit/kit
- Teacher’s manual for “Changing Earth”
- 8 copies of Changing Earth (Science Stories)
- Learning Progressions for K – 5 Science
- FOSS website: [www.fossweb.com](http://www.fossweb.com)

### Multicultural Books aligned with The Changing Earth Science Resource Kit

- **Window** (1991) *(IL: K–5)* Chronicles the events and changes in a young boy’s life and in his environment, from babyhood to grownup, through wordless scenes observed from the window of his room.

- **Eight Days: A Story of Haiti** (2010) *(IL:K-3  RL:3)* Junior tells of the games he played in his mind during the eight days he was trapped in his house after the devastating January 12, 2010 earthquake in Haiti.

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## Instructional and Assessment Guides

### Culturally Responsive Practices *(TUSD SPARKS, SPARKS Strategies)*

**Pre/Post Unit Assessment:**
[http://intranet/science/Kit_Asmts.html](http://intranet/science/Kit_Asmts.html)

**Concept Map** - pre and post with linking phrases to indicate relationships of concepts and processes

**Formative/Performance Assessment** – Examples:
- Quick writes (e.g. compare and contrast how sand moves under different wind speeds)
- Conduct research and construct explanations using words, visuals, and data (e.g. How rocks and minerals are related and their relationship to weathering and erosion)

### Additional Instructional Resources

- See Resources Tab in Changing Earth Teacher Edition
- TUSD Science Resource Center Website: [http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum](http://curriculum.tusd1.org/Subject-Areas/Science/Science-Grade-4-Curriculum)
- Crosscutting Concepts
- National Academies Press
- Science and Engineering Practices
- Learning Progressions for K – 5 Science
- Understanding & Applying Science & Engineering Practices
- Geology for Kids Website: [http://www.onegeology.org/extra/kids/earthprocesses/weathering.html](http://www.onegeology.org/extra/kids/earthprocesses/weathering.html)
- Weathering and Erosion for Kids Video: [https://www.youtube.com/watch?v=R-Iak3Wvh9c](https://www.youtube.com/watch?v=R-Iak3Wvh9c)
- Engage in arguments with evidence and reasoning (e.g. are the outcomes of the Glen Canyon Dam good, bad, or neutral?)
- Use observational data from stream tables to construct an explanation of how moving water affects the surface of the Earth.
### Unifying Concept: Earth and Space Science

**Weather** (mini-kit)

### Suggested Duration: 2-3 Weeks

#### Enduring Understanding:

Weather is observed and studied to help people in their daily lives.

#### Essential Questions:
- How do scientists measure weather?
- Why do meteorologists study weather patterns?
- How does weather vary across Arizona? Across the United States? Across the world?
- How do climate and weather differ?

#### Academic Vocabulary:
- Meteorology
- Elevation
- Weather
- Latitude
- Climate
- Altitude
- Weather Station
- Cardinal Direction
- Atmosphere
- Temperature
- Forecasting
- Precipitation
- Thermometer
- Cold Front
- Wind Vane
- Stationary Front
- Rain Gauge
- Warm Front
- Barometer
- Region
- Anemometer
- Air Masses
- Hygrometer
- Air Pressure

### Standards

#### Highly-Leveraged Standards

**Strand 6: Earth and Space Science**


- **PO1.** Identify the sources of water within an environment (e.g., ground water, surface water, atmospheric water, glaciers).
- **PO2.** Describe the distribution of water on the Earth’s surface.
- **PO3.** Differentiate between weather and climate as they relate to the southwestern United States.
- **PO4.** Measure changes in weather (e.g., precipitation, wind speed, barometric pressure).
- **PO5.** Interpret the symbols on a weather map or chart to identify the following:
  - Temperatures
  - Fronts
  - Precipitation
- **PO6.** Compare weather conditions in various locations (e.g., regions of Arizona, various U.S. cities, coastal vs. interior geographical regions).

#### Supporting Standards

**Strand 4: Life Science**


- **PO1.** Describe ways various resources (e.g., air, water, plants, animals, soil) are utilized to meet the needs of a population.
- **PO2.** Differentiate renewable resources from nonrenewable resources.
- **PO3.** Analyze the effect that limited resources (e.g., natural gas, minerals) may have on an environment.
- **PO4.** Describe ways in which resources can be conserved (e.g., by reducing, reusing, recycling, finding substitutes).

(This investigation also builds on 2nd grade content and prepares students for deeper understanding of 4th grade content.)

#### Constant Standards

Office of Curriculum, Instruction, and Professional Development
Strand 1: Inquiry Process


PO1. Differentiate inferences from observations.
PO2. Formulate a relevant question through observations that can be tested by an investigation.
PO3. Formulate predictions in the realm of science based on observed cause and effect relationships.
PO4. Locate information (e.g., book, article, website) related to an investigation.


PO1. Demonstrate safe behavior and appropriate procedures (e.g., use and care of technology, materials, organisms) in all science inquiry.
PO2. Plan a simple investigation that identifies the variables to be controlled.
PO3. Conduct controlled investigations (e.g., related to erosion, plant life cycles, weather, magnetism) in life, physical, and Earth and space sciences.
PO4. Measure using appropriate tools (e.g., ruler, scale, balance) and units of measure (i.e., metric, U.S. customary).
PO5. Record data in an organized and appropriate format (e.g., t-chart, table, list, written log).

4.S1.C3: Analysis and Conclusion: Organize and analyze data; compare to predictions.

PO1. Analyze data obtained in a scientific investigation to identify trends.
PO2. Formulate conclusions based upon identified trends in data.
PO3. Determine that data collected is consistent with the formulated question.
PO4. Determine whether the data supports the prediction for an investigation.
PO5. Develop new questions and predictions based upon the data collected in the investigation.


PO1. Communicate verbally or in writing the results of an inquiry.
PO2. Choose an appropriate graphic representation for collected data:
  - bar graph
  - line graph
  - Venn diagram
  - model
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PO2: Describe science-related career opportunities.
### 4.S2.C2: Nature of Scientific Knowledge
Understand how science is a process for generating knowledge.

**PO1.** Explain the role of experimentation in scientific inquiry.

**PO2.** Describe the interaction of components in a system (e.g., flashlight, radio).

**PO3.** Explain various ways scientists generate ideas (e.g., observation, experiment, collaboration, theoretical and mathematical models).

### Strand 3: Science in Personal and Social Perspectives

### 4.S3.C1: Changes in the Environment
Describe the interactions between human populations, natural hazards, and the environment.

**PO1.** Describe how natural events and human activities have positive and negative impacts on environments (e.g., fire, floods, pollution, dams).

**PO2.** Evaluate the consequences of environmental occurrences that happen either rapidly (e.g., fire, flood, tornado) or over a long period of time (e.g., drought, melting ice caps, the greenhouse effect, erosion).

### 4.S3.C2: Science and Technology in Society
Understand the impact of technology.

**PO1.** Describe benefits (e.g., easy communications, rapid transportation) and risks (e.g., pollution, destruction of natural resources) related to the use of technology.

**PO2.** Describe how science and technology (e.g., computers, air conditioning, medicine) have improved the lives of many people.

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**Teaching Tolerance Anti-Bias Framework:** [https://www.tolerance.org/frameworks](https://www.tolerance.org/frameworks)

### Adopted Texts and Materials

- “Weather” materials mini-kit
### 2018-2019 Science Curriculum Map, Grade 4

- Teacher’s manual for “Weather”
- Weather Forecasting Delta Readers
- **Learning Progressions for K – 5 Science**
- FOSS website: [www.fossweb.com](http://www.fossweb.com)

### Scholastic Leveled Readers

![Image](sun.png)

**Instructional and Assessment Guides**

- **Culturally Responsive Practices** ([TUSD SPARKS, SPARKS Strategies](#))

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1. **Highly-Leveraged Standards** are essential for students to learn because they have endurance (knowledge and skills relevant throughout a student’s lifetime); leverage (knowledge and skills used across multiple content areas); and essentiality (knowledge and skills necessary for success in future courses or grade levels).*

2. **Supporting Standards** are emphasized during the quarter as they are integral to achieve mastery of the Highly Leveraged Standards. Mastery of these standards are used measured using classroom assessments.

3. **Constant Standards** are repeatedly addressed to reinforce grade-level mastery.

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*This definition for Highly-Leveraged Standards was adapted from the “power standard” definition on the website of the Millis Public Schools, K-12, Massachusetts, USA, 2016.*