

| Standards | Lesson 1: What is Energy? | Lesson 2: Lighting | Lesson 3: Water Heating | Lesson 4: Insulation, Heating, and Cooling | Lesson 5: Appliances |
|--|--|-------------------------------|--|---|---------------------------------|
| <i>Grade 3: Science</i> | | | | | |
| Earth and Space Science: Earth's resources can be used for energy. | X | X | X | | |
| Matter and Forms of Energy: Heat, electrical energy, light, sound and magnetic energy are forms of energy. | X | X | X | X | X |
| <i>Grade 3: Math</i> | | | | | |
| Operations and Algebraic Thinking | | X | | | X |
| Measurement and Data | | X | X | X | X |
| <i>Grade 3: Reading</i> | | | | | |
| Analyze informational text development. a. Determine the main idea of a text. b. Retell the key details and explain how they support the main idea. | X | X | X | X | X |
| Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. | X | X | X | X | X |

| | | | | | |
|--|---|---|---|---|---|
| Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area. | X | X | X | X | X |
| Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently. | X | X | X | X | X |
| Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). | X | X | X | X | X |
| By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2-3 text complexity band independently and proficiently | X | X | X | X | X |
| <i>Grade 3: Writing</i> | | | | | |
| Write opinion pieces on topics or texts, supporting a point of view with reasons. | X | X | X | X | X |
| Write informative/explanatory texts to examine a topic and convey ideas and information clearly. | X | X | X | X | X |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| <i>Grade 4: Science</i> | | | | | |
| Physical Science: Electricity, Heat and Matter Energy can be transferred from one location to another or can be transformed from one form to another. | X | X | X | X | X |
| <i>Grade 4: Math</i> | | | | | |
| Measurement and Data | | X | | X | X |
| <i>Grade 4: Reading</i> | | | | | |
| Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text | X | X | X | X | X |
| Analyze informational text development. a. Determine the main idea of a text and explain how it is supported by key details. b. Provide a summary of the text that includes the main idea and key details, as well as other important information | X | X | X | X | X |
| Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text | X | X | X | X | X |

| | | | | | |
|---|---|---|---|---|---|
| Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area | X | X | X | X | X |
| Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text | X | X | X | X | X |
| Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears | X | X | X | X | X |
| By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range | X | X | X | X | X |
| <i>Grade 4: Writing</i> | | | | | |
| Write opinion pieces on topics or texts, | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| supporting a point of view with reasons and information | X | X | X | X | X |
| Write informative/explanatory texts to examine a topic and convey ideas and information clearly | X | X | X | X | X |
| <i>Grade 5: Science</i> | | | | | |
| Scientific Inquiry, Practice and Applications | X | X | X | X | X |
| Science is a Human Endeavor | X | X | X | X | X |
| Physical Science Light and sound are forms of energy that behave in predictable ways | X | | X | X | |
| <i>Grade 5: Math</i> | | | | | |
| Numbers and Operations in base Ten Solve real-world problems by adding, subtracting, multiplying, and dividing decimals | X | X | X | | |
| Measurement and Data Convert like measurement units within a given measurement system. | X | X | X | X | |
| Measurement and Data Represent and interpret data | X | X | X | X | |

| | | | | | |
|--|---|---|---|---|--|
| Geometry Graph points on the coordinate plane to solve real-world and mathematical problems | | X | X | | |
| <i>Grade 5: Reading (Informational Text)</i> | | | | | |
| Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject | X | X | X | X | |
| <i>Grade 5: Writing</i> | | | | | |
| Write opinion pieces on topics or texts, supporting a point of view with reasons and information. | X | X | X | X | |
| Write informative/explanatory texts to examine a topic and convey ideas and information clearly | X | X | X | X | |
| Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. | X | X | X | X | |
| Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. | X | X | X | X | |
| Draw evidence from literary or informational | | | | | |

| | | | | | |
|--|---|---|---|---|---|
| texts to support analysis, reflection, and research | X | X | X | X | |
| <i>Grade 5: Speaking and Listening</i> | | | | | |
| Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly | X | X | X | X | |
| Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace | | | | | X |
| <i>Grade 6: Science</i> | | | | | |
| Scientific Inquiry, Practice and Applications | X | X | X | X | X |
| Physical Science - Matter and Motion There are two categories of energy: kinetic and potential | X | | | | |
| <i>Grade 6: Math</i> | | | | | |
| Expressions and Equations Use variables to represent numbers and write expressions when solving a real-world or mathematical problem | X | X | X | | |

| | | | | | |
|--|---|---|---|---|--|
| Geometry Graph points on the coordinate plane to solve real-world and mathematical problems | | X | X | | |
| Statistics and Probability Summarize numerical data sets in relation to their context | X | X | X | X | |
| <i>Grade 6: Reading</i> | | | | | |
| Informational Text Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings | X | X | X | X | |
| <i>Grade 6: Writing</i> | | | | | |
| Write arguments to support claims with clear reasons and relevant evidence | X | X | X | X | |
| Research to Build and Present Knowledge Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate | X | X | X | X | |
| Draw evidence from literary or informational texts to support analysis, reflection, and research | X | X | X | X | |
| Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, | X | X | X | X | |

| | | | | | |
|--|---|---|---|---|---|
| purposes, and audiences | | | | | |
| <i>Grade 6: Speaking and Listening</i> | | | | | |
| Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly | X | X | X | X | |
| Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation | | | | | X |
| <i>Grade 6: Technology</i> | | | | | |
| Information and Communications Technology Select and use digital learning tools or resources to support planning, implementing, and reflecting upon a defined task. | X | X | X | X | |
| Use advanced search techniques to locate needed information using digital learning tools and resources. | X | X | X | X | |
| Create artifacts using digital learning tools and resources to demonstrate knowledge | | | | X | |

| | | | | | |
|---|--|--|--|---|--|
| Society and Technology Analyze an environmental concern and investigate technology solutions to that problem | | | | X | |
| Apply a complete design process to solve an identified individual or community problem: research, develop, test, evaluate and present several possible solutions, and redesign to improve the solution. | | | | X | |