



# Project Learning Tree

## Explore Your Environment: K-8 Activity Guide

### Correlations to Florida Education Standards

#### Understanding and Using the Explore Your Environment: K-8 Activity Guide (Guide) Correlations Tables

##### Focus:

The standards listed in the correlations tables are Florida Next Generation Sunshine State Standards (NGSSS) for Science and Social Studies, Florida Standards (FS) for Language Arts and Mathematics, and Benchmarks for Excellent Student Thinking (BEST) Standards for Language Arts and Mathematics.\* The standards are organized into and color coded the same as grade level groupings in the Guide (**Red for K-2**, **Green for 3-5**, and **Blue for 6-8**), and within each grouping listed by core subject area (Science, Language Arts, Mathematics, and Social Studies) from the lowest grade to the highest. The standard type (NGSSS, FS, BEST) is noted for each standard, with the BEST Standards at the end of each grade level grouping. For each standard, a list of correlated activities is included with the corresponding page number for ease of location in the Guide.

##### Grades:

Grade levels targeted in the Guide activities are listed in the table. Teachers will have to determine if a standard that serves multiple grade levels is or is not appropriate for their particular student audience. Some activities may be adapted up or down for other grade levels at the teacher's discretion.

##### Applicability of Standards to Activities:

Applicability of a standard to an activity is keyed to the *Doing the Activity*, *Variation*, and *Assessment* portions of the activity. Use of *Enrichments* as noted in the Guide, as well as C-Palms connections, could result in the applicability of standards not listed. Teachers are encouraged to adapt activities to meet the needs of their particular student audience. Doing so could also result in additional standards not listed in this table, or make some listed standards no longer applicable. Many activities contain a grade level *Variation* that expands the applicability of the activity beyond the target grade level. These are noted in the **Variation/Assessment** column of the tables and are highlighted in the color for the applicable grade level. For teacher convenience, this column also includes assessments that embrace specific standards, as well as activities broken into multiple parts or contain topic specific variations for the same grade level.

##### C-Palms Links:

Each standard is hot linked to C-Palms. Simply click on the standard code to open the associated C-Palms page. There are substantial resources to support the Guide lessons on C-Palms. Included are items such as, but are not limited to:

- **Access Points** – Expectations written for students with significant cognitive disabilities to access the general education curriculum, which reflect the core intent of the Standards with reduced levels of complexity. Each standard is broken down into Independent, Supported, and Participatory elements.
- **Related Resources** – Numerous resources to facilitate teaching and learning are available for every standard/benchmark. Below are a few examples:
  - **Teaching Ideas and Lesson Plans** – Many of these facilitate extension of Guide lessons. For example, SC.4.P.9.1 provides a lesson plan entitled “Chemical Changes: Burning” that expands the Science concept *chemical change* to include Language Arts *identifying the main idea*.
  - **Professional Development** – For those educators who want more information about incorporating specific content or skills development into their lessons, websites and other resources are offered. For example, SC.5.L.17.1 offers a professional development entitled “Adaptation” that is designed to help teachers explore the meaning of standards-based instruction and will allow you to look extensively at concepts.
  - **Video/Audio Animations, Images/Photographs, Educational Games, Presentations/Slide Shows, Worksheets, Center Ideas**, and other teaching tools – Numerous standards provide tools to support or expand Guide lessons. For example: SC.3.L.14.1 has text resources on plant parts.
  - **STEM Lessons** – Many Benchmarks offer STEM lessons, most of which require C-Palms membership to access (free and easy to sign up). The majority of the lessons are model-eliciting activities (MEAs), which encourage students to invent and test models.
  - **Student Resources** – Mini-lessons intended for student use. For example, SC.7.L.17.3 offers 2 student tutorials, one of which is “Limits to Population Growth.”

### Search the Tables:

Press Ctrl + F and search for an activity name, concept, word, or standard number by typing it in the window that opens at the top of your screen. The number of times your search item appears in the tables, along with arrows to scroll through each occurrence are also in the window.

### Acknowledgements:

Correlations of the [Explore Your Environment: K-8 Activity Guide](#) to Florida Education Standards was made possible by an agreement between Florida Project Learning Tree/University of Florida and Gugliotti Environmental and Conservation Education Services – Nature Teach, and funded by the Sustainable Forestry Initiative 2021 Education Grant.

## Grades K – 2

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.K.L.14.3</u>	NGSSS	Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do.		Backyard Safari	29
Science	<u>SC.K.N.1.1</u>	NGSSS	Collaborate with a partner to collect information.		A Tree's Life	14
					Here We Grow Again	57
					Peppermint Beetle	68
					Trees as Habitats	76
Science	<u>SC.K.N.1.2</u>	NGSSS	Make observations of the natural world and know that they are descriptors collected using the five senses.		A Tree's Life	14
					Adopt a Tree	21
					Bursting Buds	40
Science	<u>SC.K.N.1.3</u>	NGSSS	Keep records as appropriate -- such as pictorial records -- of investigations conducted.		Adopt a Tree	21
					Birds and Bugs	35
					Bursting Buds	40
					Have Seeds, Will Travel	50
					Here We Grow Again	57
					Trees as Habitats	76
					We All Need Trees	82

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.K.N.1.4</u>	NGSSS	Observe and create a visual representation of an object which includes its major features.		A Tree's Life	14
					Bursting Buds	40
				Assessment		43
					Have Seeds, Will Travel	50
				Assessment		55
					Here We Grow Again	57
					The Closer You Look	72
Science	<u>SC.K.N.1.5</u>	NGSSS	Recognize that learning can come from careful observation.		Adopt a Tree	21
					Make Your Own Paper	63
					The Closer You Look	72
					Trees as Habitats	76
Science	<u>SC.K.P.8.1</u>	NGSSS	Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light) and texture.		Have Seeds, Will Travel	50
					We All Need Trees	82
				Assessment		86

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.1.L.14.1</u>	NGSSS	Make observations of living things and their environment using the five senses.		A Tree's Life	14
					Adopt a Tree	21
					Bursting Buds	40
					Here We Grow Again	57
					Trees as Habitats	76
Science	<u>SC.1.L.14.2</u>	NGSSS	Identify the major parts of plants, including stem, roots, leaves, and flowers.		Have Seeds, Will Travel	50
					The Closer You Look	72
Science	<u>SC.1.L.14.3</u>	NGSSS	Differentiate between living and nonliving things.		Adopt a Tree	21
Science	<u>SC.1.L.17.1</u>	NGSSS	Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.		Backyard Safari	29
					Here We Grow Again	57
Science	<u>SC.1.P.8.1</u>	NGSSS	Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light), texture, and whether objects sink or float.		Have Seeds, Will Travel	50
				Assessment	We All Need Trees	82
						86

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.1.N.1.1</u>	NGSSS	Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations.		Adopt a Tree	21
					Backyard Safari	29
					Birds and Bugs	35
					Have Seeds, Will Travel	50
					Here We Grow Again	57
				Assessment	Here We Grow Again	61
					Trees as Habitats	76
				Assessment	Trees as Habitats	79
Science	<u>SC.1.N.1.2</u>	NGSSS	Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and motion, and compare their observations with others.		Adopt a Tree	21
					Birds and Bugs	35
					Bursting Buds	40
					Have Seeds, Will Travel	50
					Here We Grow Again	57
					The Closer You Look	72
					Trees as Habitats	50

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.1.N.1.3</u>	NGSSS	Keep records as appropriate - such as pictorial and written records - of investigations conducted.		Adopt a Tree	21
					Birds and Bugs	35
					Bursting Buds	40
					Have Seeds, Will Travel	50
					Here We Grow Again	57
					Trees as Habitats	76
Science	<u>SC.2.L.16.1</u>	NGSSS	Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies.		Have Seeds, Will Travel	50
					Here We Grow Again	57
Science	<u>SC.2.L.17.1</u>	NGSSS	Compare and contrast the basic needs that all living things, including humans, have for survival.		Birds and Bugs	35
Science	<u>SC.2.L.17.2</u>	NGSSS	Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.		Backyard Safari	29

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.2.N.1.1</u>	NGSSS	Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.		Adopt a Tree	21
					Backyard Safari	29
					Birds and Bugs	35
					Bursting Buds	40
					Have Seeds, Will Travel	50
					Here We Grow Again	57
				Assessment	Here We Grow Again	61
					Trees as Habitats	76
				Assessment	Trees as Habitats	79
Science	<u>SC.2.N.1.2</u>	NGSSS	Compare the observations made by different groups using the same tools.		Backyard Safari	29
					The Closer You Look	72
Science	<u>SC.2.N.1.3</u>	NGSSS	Ask "how do you know?" in appropriate situations and attempt reasonable answers when asked the same question by others.		Did You Notice?	44
Science	<u>SC.2.N.1.5</u>	NGSSS	Distinguish between empirical observation (what you see, hear, feel, smell, or taste) and ideas or inferences (what you think).		Bursting Buds	40
					Here We Grow Again	57
					Peppermint Beetle	68
					Trees as Habitats	76
Science	<u>SC.3.L.17.1</u>	NGSSS	Describe how animals and plants respond to changing seasons.	3-5	Bursting Buds	42



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.3.N.1.1</u>	NGSSS	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	3-5	Adopt a Tree	22
					Backyard Safari	31
					Birds and Bugs	38
				3-5	Here We Grow Again	59
				Assessment		61
				Urban Environ.	Trees as Habitats	78
				Assessment		79
Science	<u>SC.3.N.1.3</u>	NGSSS	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	3-5	Birds and Bugs	38
					Bursting Buds	42
					Here We Grow Again	59
					We All Need Trees	85
Science	<u>SC.3.N.1.4</u>	NGSSS	Recognize the importance of communication among scientists.	3-5	Bursting Buds	42
Science	<u>SC.3.N.1.6</u>	NGSSS	Infer based on observation.	Urban Environ.	Trees as Habitats	78
				Assessment		79
				Part B	Water Wonders	206
Science	<u>SC.3.N.3.2</u>	NGSSS	Recognize that scientists use models to help understand and explain how things work.	3-5	Peppermint Beetle	70
				Assessment		71
Science	<u>SC.35.CS-CP.1.3</u>	NGSSS	Identify, research, and collect a data set on a topic, issue, problem, or question using age-appropriate technologies.	3-5	Did You Notice?	46

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.35.CS-CS.2.3</u>	NGSSS	Explain the process of arranging or sorting information into useful order as well as the purpose for doing so.	3-5	Did You Notice?	46
Science	<u>SC.35.CS-PC.3.1</u>	NGSSS	Identify digital information resources used to answer research questions (e.g., online library catalog, online encyclopedias, databases, and websites).	3-5	Did You Notice?	46
Science	<u>SC.35.CS-PC.3.2</u>	NGSSS	Gather, organize, and analyze information from digital resources.	3-5	Did You Notice?	46
Science	<u>SC.4.E.6.3</u>	NGSSS	Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.	3-5	We All Need Trees	85
Science	<u>SC.4.L.16.1</u>	NGSSS	Identify processes of sexual reproduction in flowering plants, including pollination, fertilization (seed production), seed dispersal, and germination.	3-5	Have Seeds, Will Travel	54
Science	<u>SC.4.L.16.4</u>	NGSSS	Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants.	3-5	A Tree's Life	17
Science	<u>SC.4.N.1.1</u>	NGSSS	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	3-5	Adopt a Tree	22
					Backyard Safari	31
					Birds and Bugs	38
					Bursting Buds	42
				3-5	Here We Grow Again	59
				Assessment		61
Science	<u>SC.4.N.1.4</u>	NGSSS	Attempt reasonable answers to scientific questions and cite evidence in support.	3-5	Adopt a Tree	22
					Here We Grow Again	59
				Urban Environ.	Trees as Habitats	78
				Assessment		79

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.4.N.1.6</u>	NGSSS	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.	3-5	Adopt a Tree	22
					Backyard Safari	31
					Birds and Bugs	38
				Urban Environ.	Trees as Habitats	78
					We All Need Trees	85
Science	<u>SC.4.N.1.7</u>	NGSSS	Recognize and explain that scientists base their explanations on evidence.	3-5	Here We Grow Again	59
				Assessment		61
				Urban Environ.	Trees as Habitats	78
				Assessment		79
				3-5	We All Need Trees	85
				Assessment		86
Science	<u>SC.4.N.1.8</u>	NGSSS	Recognize that science involves creativity in designing experiments.	3-5	Have Seeds, Will Travel	54
					Here We Grow Again	59
Science	<u>SC.5.L.15.1</u>	NGSSS	Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.	3-5	Birds and Bugs	38
Science	<u>SC.5.L.17.1</u>	NGSSS	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	3-5	Birds and Bugs	38
				Assessment		39
				3-5	Have Seeds, Will Travel	54

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<u>SC.5.N.1.1</u>	NGSSS	Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	3-5	Here We Grow Again	59
Science	<u>SC.5.N.1.4</u>	NGSSS	Identify a control group and explain its importance in an experiment.	3-5	Here We Grow Again	59
Science	<u>SC.5.N.1.6</u>	NGSSS	Recognize and explain the difference between personal opinion/interpretation and verified observation.	Urban Environ.	Trees as Habitats	78
				3-5	We All Need Trees	85
				Assessment		86
Science	<u>SC.5.N.2.1</u>	NGSSS	Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence.	3-5	Here We Grow Again	59
				Assessment		61
Language Arts	<u>LAFS.K.SL.1.1</u>	FS	Participate in collaborative conversations with diverse partners about <i>kindergarten topics</i> and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.		A Tree's Life	14
					Backyard Safari	29
					Did You Notice?	44
					Trees as Habitats	76
Language Arts	<u>LAFS.K.SL.2.4</u>	FS	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.		Adopt a Tree	21
					Backyard Safari	29
Language Arts	<u>LAFS.K.SL.2.5</u>	FS	Add drawings or other visual displays to descriptions as desired to provide additional detail.		Here We Grow Again	57

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K.SL.2.6</u>	FS	Speak audibly and express thoughts, feelings, and ideas clearly.		A Tree's Life	14
					Backyard Safari	29
					Did You Notice?	44
					Here We Grow Again	57
					Trees as Habitats	76
					We All Need Trees	82
Language Arts	<u>LAFS.K.W.1.2</u>	FS	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.		Adopt a Tree	21
				Assessment		42
Language Arts	<u>LAFS.K.W.1.3</u>	FS	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.		Adopt a Tree	21
				Assessment		24
Language Arts	<u>LAFS.K12.L.3.6</u>	FS	Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.		A Tree's Life	14
					Adopt a Tree	21
Language Arts	<u>LAFS.K12.SL.1.1</u>	FS	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.		Trees as Habitats	76
				Urban Environ.		78
					We All Need Trees	82
				3-5		85

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.SL.2.4</u>	FS	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	3-5	A Tree's Life	17
					Did You Notice?	46
					Trees as Habitats	76
				Urban Environ.		78
Language Arts	<u>LAFS.K12.SL.2.5</u>	FS	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.		A Tree's Life	14
				3-5		17
				3-5	Did You Notice?	46
Language Arts	<u>LAFS.K12.W.1.3</u>	FS	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.		Adopt a Tree	21
				Assessment		24
					Backyard Safari	29
				Assessment		32
Language Arts	<u>LAFS.K12.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		Adopt a Tree	21
				Assessment		24
					Backyard Safari	29
				Assessment		32
				3-5	Make Your Own Paper	66
				Assessment		67

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.W.3.7</u>	FS	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.		A Tree's Life	14
				3-5	Make Your Own Paper	66
				3-5	Peppermint Beetle	70
				Assessment		71
					Trees as Habitats	76
				Urban Environ.		78
Language Arts	<u>LAFS.K12.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research.		A Tree's Life	14
Language Arts	<u>LAFS.1.SL.1.1</u>	FS	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. <ul style="list-style-type: none"> <li>a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</li> <li>b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</li> <li>c. Ask questions to clear up any confusion about the topics and texts under discussion.</li> </ul>		A Tree's Life	14
					Backyard Safari	29
					Did You Notice	44
					Trees as Habitats	76

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.1.SL.2.4</u>	FS	Describe people, places, things, and event relevant details, expressing ideas and feelings clearly.		A Tree's Life	21
					Backyard Safari	29
					Did You Notice?	44
					Have Seeds, Will Travel	50
					Here We Grow Again	57
					Trees as Habitats	76
				Assessment		79
					We All Need Trees	82
Language Arts	<u>LAFS.1.SL.2.5</u>	FS	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.		Did You Notice?	44
					Here We Grow Again	57
Language Arts	<u>LAFS.1.W.1.2</u>	FS	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	Assessment	Backyard Safari	32
Language Arts	<u>LAFS.1.W.1.3</u>	FS	Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.		Adopt a Tree	21
				Assessment		24
Language Arts	<u>LAFS.2.SL.1.1</u>	FS	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.		A Tree's Life	14
					Backyard Safari	29
					Did You Notice?	44
					Trees as Habitats	76
Language Arts	<u>LAFS.2.SL.2.4</u>	FS	Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.		A Tree's Life	14



Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.2.W.3.7</u>	FS	Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).		Trees as Habitats	76
Language Arts	<u>LAFS.3.RI.1.3</u>	FS	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.	3-5	Did You Notice?	46
Language Arts	<u>LAFS.3.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 <i>topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.	3-5	A Tree's Life	17
					Backyard Safari	31
					Here We Grow Again	59
				Urban Environ.	Trees as Habitats	78
				3-5	We All Need Trees	85
Language Arts	<u>LAFS.3.SL.2.4</u>	FS	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	3-5	Make Your Own Paper	66
				Assessment		67
Language Arts	<u>LAFS.3.W.1.3</u>	FS	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	Urban Environ.	Trees as Habitats	78
				Assessment		79

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.3.W.3.7</u>	FS	Conduct short research projects that build knowledge about a topic.	3-5	A Tree's Life	17
					Did You Notice?	46
					Here We Grow Again	59
				3-5	Peppermint Beetle	70
				Assessment		71
				Urban Environ.	Trees as Habitats	78
Language Arts	<u>LAFS.3.W.3.8</u>	FS	Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	3-5	Did You Notice?	46
					We All Need Trees	85
Language Arts	<u>LAFS.4.RI.1.3</u>	FS	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	3-5	Did You Notice?	46
Language Arts	<u>LAFS.4.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 <i>topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	3-5	A Tree's Life	17
					Did You Notice?	46
					Here We Grow Again	59
				Urban Environ.	Trees as Habitats	78
					We All Need Trees	85

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.SL.2.4</u>	FS	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	3-5	A Tree's Life	17
				Assessment		18
				3-5	Make Your Own Paper	66
				Assessment		67
				Urban Environ.	Trees as Habitats	78
				Assessment		79
Language Arts	<u>LAFS.4.SL.2.5</u>	FS	Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.	3-5	A Tree's Life	17
					Did You Notice?	46
Language Arts	<u>LAFS.4.W.1.3</u>	FS	<p>Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ol style="list-style-type: none"> <li>Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.</li> <li>Use dialogue and description to develop experiences and events or show the responses of characters to situations.</li> <li>Use a variety of transitional words and phrases to manage the sequence of events.</li> <li>Use concrete words and phrases and sensory details to convey experiences and events precisely.</li> <li>Provide a conclusion that follows from the narrated experiences or events.</li> </ol>	Assessment	Trees as Habitats	79
Language Arts	<u>LAFS.4.W.2.4</u>	FS	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	3-5	Make Your Own Paper	66
				Assessment		67

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.W.3.7</u>	FS	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	3-5	A Tree's Life	17
					Did You Notice?	46
					Here We Grow Again	59
					Peppermint Beetle	70
				Urban Environ.	Trees as Habitats	78
				3-5	We All Need Trees	85
Language Arts	<u>LAFS.4.W.3.8</u>	FS	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	3-5	Did You Notice?	46
Language Arts	<u>LAFS.4.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). b. Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").	3-5	A Tree's Life	17
Language Arts	<u>LAFS.5.RI.1.3</u>	FS	Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.	3-5	Did You Notice?	46
Language Arts	<u>LAFS.5.RI.3.7</u>	FS	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.	3-5	A Tree's Life	17

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.5.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	3-5	A Tree's Life	17
					Did You Notice?	46
					Here We Grow Again	59
				Urban Environ.	Trees as Habitats	78
				3-5	We All Need Trees	85
Language Arts	<u>LAFS.5.SL.2.4</u>	FS	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.	3-5	Make Your Own Paper	66
Language Arts	<u>LAFS.5.SL.2.5</u>	FS	Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.	3-5	A Tree's Life	17
					Did You Notice?	46
Language Arts	<u>LAFS.5.W.1.3</u>	FS	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	Assessment	Trees as Habitats	79
Language Arts	<u>LAFS.5.W.2.4</u>	FS	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	3-5	Make Your Own Paper	66
				Assessment		67

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.5.W.3.7</u>	FS	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	3-5	A Tree's Life	17
					Did You Notice?	46
				Urban Environ.	Trees as Habitats	78
Language Arts	<u>LAFS.5.W.3.8</u>	FS	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.	3-5	Did You Notice?	46
Language Arts	<u>LAFS.5.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").	3-5	A Tree's Life	17
					Did You Notice?	46
Social Studies	<u>SS.K.A.1.1</u>	NGSSS	Develop an understanding of how to use and create a timeline.		Did You Notice?	44
Social Studies	<u>SS.1.A.3.2</u>	NGSSS	Create a timeline based on the student's life or school events, using primary sources.		Did You Notice?	44
Social Studies	<u>SS.3.A.1.2</u>	NGSSS	Utilize technology resources to gather information from primary and secondary sources.	3-5	Did You Notice?	46
Mathematics	<u>MAFS.K.MD.2.3</u>	FS	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.		Birds and Bugs	35
					Have Seeds, Will Travel	50

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Mathematics	<a href="#"><u>MAFS.K12.MP.2.1</u></a>	FS	Reason abstractly and quantitatively. Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.	3-5	Birds and Bugs	38
Mathematics	<a href="#"><u>MAFS.K12.MP.4.1</u></a>	FS	Model with Mathematics. Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	3-5	Here We Grow Again	59
Mathematics	<a href="#"><u>MAFS.1.MD.3.4</u></a>	FS	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.		Birds and Bugs	35
Mathematics	<a href="#"><u>MAFS.2.MD.1.1</u></a>	FS	Measure the length of an object to the nearest inch, foot, centimeter, or meter by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.		Adopt a Tree	21
					Bursting Buds	40
					Here We Grow Again	57

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MAFS.2.MD.4.10</u>	FS	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.		Birds and Bugs	35
					Have Seeds, Will Travel	50
Mathematics	<u>MAFS.3.MD.2.3</u>	FS	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i>	3-5	Birds and Bugs	38
					Have Seeds, Will Travel	53
Language Arts	<u>ELA.K.C.1.2</u>	BEST	Using a combination of drawing, dictating, and/or writing, create narratives with the events in chronological order.		Make Your Own Paper	63
Language Arts	<u>ELA.K.C.1.4</u>	BEST	Using a combination of drawing, dictating, and/or writing, provide factual information about a topic.		Adopt a Tree	21
				Assessment		24
					Make Your Own Paper	63
				Assessment		67
Language Arts	<u>ELA.K.C.5.1</u>	BEST	Use a multimedia element to enhance oral or written tasks.		Adopt a Tree	21
				Assessment		24
Language Arts	<u>ELA.K12.EE.1.1</u>	BEST	Cite evidence to explain and justify reasoning.		Here We Grow Again	57
				Assessment		61
					Trees as Habitats	76
				Assessment		79
				3-5	We All Need Trees	85
				Assessment		86



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.3.1</u>	BEST	Make inferences to support comprehension.		Trees as Habitats	76
				Assessment		79
				3-5	We All Need Trees	85
Language Arts	<u>ELA.K12.EE.4.1</u>	BEST	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.		A Tree's Life	14
					Backyard Safari	29
					Trees as Habitats	76
Language Arts	<u>ELA.K12.EE.6.1</u>	BEST	Use appropriate voice and tone when speaking or writing.		A Tree's Life	14
					Backyard Safari	29
Language Arts	<u>ELA.1. C.4.1</u>	BEST	Participate in research to gather information to answer a question about a single topic.		A Tree's Life	14
					Trees as Habitats	76
Language Arts	<u>ELA.1. C.5.1</u>	BEST	Use a multimedia element to enhance oral or written tasks.		Adopt a Tree	21
				Assessment		24
Language Arts	<u>ELA.K.V.1.1</u>	BEST	Use grade-level academic vocabulary appropriately in speaking and writing.		A Tree's Life	14
Language Arts	<u>ELA.1. V.1.3</u>	BEST	Identify and use picture clues, context clues, word relationships, reference materials, and/or background knowledge to determine the meaning of unknown words.		A Tree's Life	14
Language Arts	<u>ELA.2. C.1.2</u>	BEST	Write personal or fictional narratives using a logical sequence of events, transitions, and an ending.		Adopt a Tree	21
				Assessment		24

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.2. C.4.1</u>	BEST	Participate in research to gather information to answer a question about a single topic using multiple sources.		A Tree's Life	14
					Trees as Habitats	76
Language Arts	<u>ELA.2. C.5.1</u>	BEST	Use one or more multimedia element(s) to enhance oral or written tasks.		Adopt a Tree	21
Language Arts	<u>ELA.2. V.1.1</u>	BEST	Use grade-level academic vocabulary appropriately in speaking and writing.		A Tree's Life	14
				Assessment		18
Language Arts	<u>ELA.2. V.1.3</u>	BEST	Identify and use context clues, word relationships, reference materials, and/or background knowledge to determine the meaning of unknown words.		A Tree's Life	14
Mathematics	<u>MA.K.DP.1.1</u>	BEST	Collect and sort objects into categories and compare the categories by counting the objects in each category. Report the results verbally, with a written numeral or with drawings.		Birds and Bugs	35
					Have Seeds, Will Travel	50
Mathematics	<u>MA.K12.MTR.7.1</u>	BEST	Apply mathematics to real-world contexts. Mathematicians who apply mathematics to real-world contexts: <ul style="list-style-type: none"> <li>• Connect mathematical concepts to everyday experiences.</li> <li>• Use models and methods to understand, represent and solve problems.</li> <li>• Perform investigations to gather data or determine if a method is appropriate.</li> </ul> Redesign models and methods to improve accuracy or efficiency.		Birds and Bugs	35
					Bursting Buds	40
					Here We Grow Again	57
Mathematics	<u>MA.1.DP.1.1</u>	BEST	Collect data into categories and represent the results using tally marks or pictographs.		Birds and Bugs	35
					Have Seeds, Will Travel	50
Mathematics	<u>MA.1.DP.1.2</u>	BEST	Interpret data represented with tally marks or pictographs by calculating the total number of data points and comparing the totals of different categories.		Birds and Bugs	35
Mathematics	<u>MA.2.DP.1.1</u>	BEST	Collect, categorize and represent data using tally marks, tables, pictographs or bar graphs. Use appropriate titles, labels and units.		Birds and Bugs	35
Mathematics	<u>MA.2.DP.1.2</u>	BEST	Interpret data represented with tally marks, tables, pictographs or bar graphs including solving addition and subtraction problems.		Birds and Bees	35
Mathematics	<u>MA.2.M.1.1</u>	BEST	Estimate and measure the length of an object to the nearest inch, foot, yard, centimeter or meter by selecting and using an appropriate tool.		Here We Grow Again	57

## Grades 3 - 5

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.K.N.1.1</u>	NGSSS	Collaborate with a partner to collect information.	K-2	Discover Diversity	101
Science	<u>SC.K.N.1.3</u>	NGSSS	Keep records as appropriate -- such as pictorial records -- of investigations conducted.	K-2	Get Outside!	126
Science	<u>SC.1.L.14.1</u>	NGSSS	Make observations of living things and their environment using the five senses.	K-2	Tree Cookies	174
					Tree Factory	183
Science	<u>SC.1.L.14.2</u>	NGSSS	Identify the major parts of plants, including stem, roots, leaves, and flowers.	K-2	Tree Factory	183
				Assessment		185
Science	<u>SC.1.L.17.1</u>	NGSSS	Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.	K-2	Every Tree for Itself	113
Science	<u>SC.1.N.1.2</u>	NGSSS	Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and motion, and compare their observations with others.	K-2	Discover Diversity	101
Science	<u>SC.1.N.1.3</u>	NGSSS	Keep records as appropriate - such as pictorial and written records - of investigations conducted.	K-2	Every Tree for Itself	113
					Get Outside!	126
Science	<u>SC.2.N.1.2</u>	NGSSS	Compare the observations made by different groups using the same tools.	K-2	Discover Diversity	101
				Assessment		102
Science	<u>SC.3.L.14.1</u>	NGSSS	Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction.	Part A	Tree Cookies	171
					Tree Factory	180
				Assessment		185

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.3.L.17.1</u>	NGSSS	Describe how animals and plants respond to changing seasons.	Part A	Signs of Fall	155
				Assessment		159
				Part A	Tree Cookies	171
				Part B		
				Assessment		175
Science	<u>SC.3.L.17.2</u>	NGSSS	Recognize that plants use energy from the Sun, air, and water to make their own food.		Tree Cookies	171
				Assessment		175
Science	<u>SC.3.N.1.1</u>	NGSSS	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.		Charting Biodiversity	90
				Plant Adaptations		92
					Discover Diversity	97
					Fallen Log	116
					Get Outside!	121
				Part A	Soil Builders	161
				Part B		
				Part A	Trees in Trouble	197
				Part B		

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.3.N.1.2</u>	NGSSS	Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.		Discover Diversity	97
				Assessment		102
					Get Outside!	121
				Part A	Soil Builders	161
Science	<u>SC.3.N.1.3</u>	NGSSS	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.		Charting Biodiversity	90
				Plant Adaptations		92
					Discover Diversity	97
					Every Drop Counts	104
					Every Tree for Itself	110
					Fallen Log	116
					Get Outside!	121
				Part A	Signs of Fall	155
				Part A	Soil Builders	161
				Part B		
				Part A	Trees in Trouble	197
				Part B		
				Part A	Water Wonders	206

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.3.N.1.6</u>	NGSSS	Infer based on observation.		Discover Diversity	97
				Assessment		102
					Fallen Log	116
				Part A	Signs of Fall	155
				Assessment (Part B)		159
				Part A	Tree Cookies	171
				Assessment		175
				Part A	Trees in Trouble	197
				Part B		
				Assessment		201
				Part B	Water Wonders	206
Science	<u>SC.3.N.1.7</u>	NGSSS	Explain that empirical evidence is information, such as observations or measurements, that is used to help validate explanations of natural phenomena.	Part B Assessment	Signs of Fall	159
				Assessment	Soil Builders	167

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.3.N.3.2</u>	NGSSS	Recognize that scientists use models to help understand and explain how things work.		Every Tree for Itself	110
					Tree Factory	180
				Assessment		185
				Part A	Water Wonders	206
				Part B		
				Assessment		212
					Web of Life	216
				Assessment		220
Science	<u>SC.3.N.3.3</u>	NGSSS	Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.		Every Tree for Itself	110
					Tree Factory	180
Science	<u>SC.3.P.8.3</u>	NGSSS	Compare materials and objects according to properties such as size, shape, color, texture, and hardness.	Part A	Tree ID	186
				Part B		
				Assessment		191
Science	<u>SC.3.P.9.1</u>	NGSSS	Describe the changes water undergoes when it changes state through heating and cooling by using familiar scientific terms such as melting, freezing, boiling, evaporation, and condensation.	Part A	Water Wonders	206
				Assessment		212
Science	<u>SC.35.CS-CS.2.1</u>	NGSSS	Solve age-appropriate problems using information organized using digital graphic organizers (e.g., concept maps and Venn-diagrams).	Assessment	Tree ID	191
Science	<u>SC.35.CS-CP.1.3</u>	NGSSS	Identify, research, and collect a data set on a topic, issue, problem, or question using age-appropriate technologies.		Web of Life	216

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<u>SC.4.E.6.3</u>	NGSSS	Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.	Part A	Every Drop Counts	104
				Part B		
					My Green Future	132
					Trees for Many Reasons	193
Science	<u>SC.4.E.6.4</u>	NGSSS	Describe the basic differences between physical weathering (breaking down of rock by wind, water, ice, temperature change, and plants) and erosion (movement of rock by gravity, wind, water, and ice).	Part B	Water Wonders	206
Science	<u>SC.4.L.17.2</u>	NGSSS	Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them.		Web of Life	216
				Assessment		220
Science	<u>SC.4.L.17.4</u>	NGSSS	Recognize ways plants and animals, including humans, can impact the environment.	Part A	Every Drop Counts	104
				Part B		
					Fallen Log	116
					My Green Future	132
					Peek at Packaging	136
					Trees for Many Reasons	193
Science	<u>SC.4.N.1.1</u>	NGSSS	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.		Charting Biodiversity	90
				Plant Adaptations		92
					Fallen Log	116



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.4.N.1.2</u>	NGSSS	Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.		Discover Diversity	97
				Assessment		102
					Get Outside!	121
Science	<u>SC.4.N.1.4</u>	NGSSS	Attempt reasonable answers to scientific questions and cite evidence in support.		Fallen Log	116
				Part A	Soil Builders	161
				Assessment		97
				Assessment	Tree ID	191
				Part A	Trees in Trouble	197
				Assessment		201
Science	<u>SC.4.N.1.5</u>	NGSSS	Compare the methods and results of investigations done by other classmates.		Discover Diversity	97
				Assessment		102
					Get Outside!	121
				Part A	Soil Builders	161

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.4.N.1.6</u>	NGSSS	Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.		Discovery Diversity	97
					Every Tree for Itself	110
					Fallen Log	116
					Get Outside!	121
				Part A	Soil Builders	161
				Part B		
				Part A	Tree Cookies	171
				Part A	Water Wonders	206
Science	<u>SC.4.N.1.7</u>	NGSSS	Recognize and explain that scientists base their explanations on evidence.	Part A	Every Drop Counts	104
					Fallen Log	116
				Part A	Signs of Fall	155
				Assessment		159
				Assessment	Soil Builders	167
				Part A	Trees in Trouble	197
				Assessment		201

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<u>SC.4.N.1.8</u>	NGSSS	Recognize that science involves creativity in designing experiments.		Every Tree for Itself	110
				Assessment	Soil Builders	167
				Part B	Trees in Trouble	197
				Part B	Water Wonders	206
Science	<u>SC.4.N.3.1</u>	NGSSS	Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.		Tree Factory	180
				Part A	Water Wonders	206
				Part B		
				Assessment		212
					Web of Life	216
				Assessment		220
Science	<u>SC.4.P.8.1</u>	NGSSS	Measure and compare objects and materials based on their physical properties including: mass, shape, volume, color, hardness, texture, odor, taste, attraction to magnets.	Part A	Tree ID	186
				Part B		
				Assessment		191
Science	<u>SC.4.P.8.2</u>	NGSSS	Identify properties and common uses of water in each of its states.	Part A	Water Wonders	206
				Assessment		212
Science	<u>SC.4.P.9.1</u>	NGSSS	Identify some familiar changes in materials that result in other materials with different characteristics, such as decaying animal or plant matter, burning, rusting, and cooking.		Fallen Log	116
				Part A	Soil Builders	161

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<a href="#"><u>SC.5.E.7.1</u></a>	NGSSS	Create a model to explain the parts of the water cycle. Water can be a gas, a liquid, or a solid and can go back and forth from one state to another.	Part A	Water Wonders	206
				Part B		
				Assessment		212
Science	<a href="#"><u>SC.5.E.7.2</u></a>	NGSSS	Recognize that the ocean is an integral part of the water cycle and is connected to all of Earth's water reservoirs via evaporation and precipitation processes.	Part A	Water Wonders	206
				Assessment		212
Science	<a href="#"><u>SC.5.L.14.2</u></a>	NGSSS	Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support -- some with internal skeletons others with exoskeletons -- while some plants have stems for support.		Tree Factory	180
Science	<a href="#"><u>SC.5.L.15.1</u></a>	NGSSS	Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.		Discover Diversity	97
					Every Tree for Itself	110
					Trees for Many Reasons	193
Science	<a href="#"><u>SC.5.L.17.1</u></a>	NGSSS	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.		Plant Adaptations	90
				Plant Adaptations	Charting Biodiversity	92
				Assessment		93
				Part A	Signs of Fall	155

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<u>SC.5.N.1.1</u>	NGSSS	Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	Part A	Every Drop Counts	104
				Part B		
					Get Outside!	121
				Part B	Soil Builders	161
				Assessment		167
Science	<u>SC.5.N.1.2</u>	NGSSS	Explain the difference between an experiment and other types of scientific investigation.	Part A	Trees in Trouble	197
				Part B		
				Part A	Water Wonders	206
				Part B		
Science	<u>SC.5.N.1.6</u>	NGSSS	Recognize and explain the difference between personal opinion/interpretation and verified observation.	Part A	Soil Builders	161
				Part B		
				Assessment		167
				Part A	Tree Cookies	171
				Assessment		175

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.5.N.2.1</u>	NGSSS	Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence.	Assessment (Part B)	Signs of Fall	159
				Part A	Soil Builders	161
				Assessment		167
				Part A	Trees in Trouble	197
				Part B		
				Assessment		201
Science	<u>SC.5.N.2.2</u>	NGSSS	Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.		Get Outside!	121
Science	<u>SC.5.P.8.3</u>	NGSSS	Demonstrate and explain that mixtures of solids can be separated based on observable properties of their parts such as particle size, shape, color, and magnetic attraction.	Part A	Soil Builders	161
Science	<u>SC.6.N.1.1</u>	NGSSS	Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	6-8	Trees in Trouble	200
				Assessment		201
Science	<u>SC.6.N.1.3</u>	NGSSS	Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.	6-8	Trees in Trouble	200
Science	<u>SC.6.N.1.5</u>	NGSSS	Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.	6-8	Signs of Fall	158
					Trees in Trouble	200
Science	<u>SC.7.E.6.6</u>	NGSSS	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.	6-8	Trees for Many Reasons	195
Science	<u>SC.7.N.1.1</u>	NGSSS	Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	6-8	Trees in Trouble	200
				Assessment		201

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.7.N.1.3</u>	NGSSS	Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation.	6-8	Trees in Trouble	200
Science	<u>SC.7.N.1.4</u>	NGSSS	Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment.	6-8	Trees in Trouble	200
Science	<u>SC.7.N.1.6</u>	NGSSS	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	6-8	Signs of Fall	158
				Assessment		159
				6-8	Trees in Trouble	200
				Assessment		201
Science	<u>SC.8.N.1.1</u>	NGSSS	Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	6-8	Trees in Trouble	200
				Assessment		201
Science	<u>SC.8.N.1.6</u>	NGSSS	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.	6-8	Signs of Fall	158
				Assessment		159
				6-8	Trees in Trouble	200
				Assessment		201
Science	<u>SC.8.P.9.2</u>	NGSSS	Differentiate between physical changes and chemical changes.	6-8	Signs of Fall	159
Science	<u>SC.35.CS-CC.1.1</u>	NGSSS	Identify technology tools for individual and collaborative data collection, writing, communication, and publishing activities.	Part A	Soil Builders	161
Science	<u>SC.68.CS-CC.1.3</u>	NGSSS	Design, develop, and publish a collaborative digital product using a variety of digital tools and media-rich resources that demonstrate and communicate concepts to inform, persuade, and/or entertain.	6-8	Poet-Tree	148

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K.SL.1.1</u>	FS	Participate in collaborative conversations with diverse partners about <i>kindergarten topics</i> and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges.	K-2	Get Outside!	126
Language Arts	<u>LAFS.K.SL.2.6</u>	FS	Speak audibly and express thoughts, feelings, and ideas clearly.	K-2	Get Outside!	126
Language Arts	<u>LAFS.K12.L.3.5</u>	FS	Demonstrate understanding of word relationships and nuances in word meanings.		Poet-Tree	143
				6-8		148
Language Arts	<u>LAFS.K12.R.1.2</u>	FS	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.		Trees for Many Reasons	193
				6-8		195
Language Arts	<u>LAFS.K12.R.1.3</u>	FS	Analyze how and why individuals, events, and ideas develop and interact over the course of a text.		Trees for Many Reasons	193
Language Arts	<u>LAFS.K12.SL.1.1</u>	FS	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.		Fallen Log	116
						136
				6-8	Peek at Packaging	139
				Assessment		140
					Trees for Many Reasons	193
				6-8		195



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.SL.2.4</u>	FS	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.		Discover Diversity	97
				Assessment		102
				Part B	Every Drop Counts	104
				Assessment		108
				Assessment	My Green Future	134
					Peek at Packaging	136
				Assessment		140
				Part B	Tree Cookies	171
				6-8	Trees for Many Reasons	195
Language Arts	<u>LAFS.K12.SL.2.5</u>	FS	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	Part A	Soil Builders	161
Language Arts	<u>LAFS.K12.W.1.1</u>	FS	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	Assessment	Soil Builders	167
				Assessment	Trees in Trouble	201
Language Arts	<u>LAFS.K12.W.1.2</u>	FS	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.		Fallen Log	116
				Assessment		119
				Assessment	Peek at Packaging	140
					Water Wonders	212
					Web of Life	220

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.W.1.3</u>	FS	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.		Every Tree for Itself	110
				K-2		113
				Assessment		114
				6-8	Trees in Trouble	200
				Part A	Water Wonders	206
				Assessment		212

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.			110
				K-2	Every Tree for Itself	113
				Assessment		114
					Get Outside!	121
				Assessment		127
				Assessment	Peek at Packaging	140
				6-8	Poet-Tree	148
				Assessment	Tree Factory	185
					Tree ID	191
					Trees for Many Reasons	196
				6-8	Trees in Trouble	200
				Assessment		201
				Part A	Water Wonders	206
				Assessment		212
				Assessment	Web of Life	220
Language Arts	<u>LAFS.K12.W.2.6</u>	FS	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.	6-8	Poet-Tree	148

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.W.3.7</u>	FS	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.		Charting Biodiversity	90
				Plant Adaptations		92
				Part B	Tree Cookies	171
				Part A	Trees in Trouble	197
				Part B		200
				6-8		
					Web of Life	216
Language Arts	<u>LAFS.1.SL.1.1</u>	FS	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. <ol style="list-style-type: none"> <li>Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</li> <li>Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</li> <li>Ask questions to clear up any confusion about the topics and texts under discussion</li> </ol>	K-2	Get Outside!	126
Language Arts	<u>LAFS.1.SL.2.4</u>	FS	Describe people, places, things, and event relevant details, expressing ideas and feelings clearly.	K-2	Get Outside!	126
Language Arts	<u>LAFS.2.SL.1.1</u>	FS	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. <ol style="list-style-type: none"> <li>Follow agreed-upon rules for (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).</li> <li>Build on others' talk in conversations by linking their comments to the remarks of others.</li> <li>Ask for clarification and further explanation as needed about the topics and texts under discussion.</li> </ol>	K-2	Get Outside!	126

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.3.L.2.3</u>	FS	Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases for effect. b. Recognize and observe differences between the conventions of spoken and written standard English.	Part A	Every Drop Counts	104
				Part B		
				Assessment		108
Language Arts	<u>LAFS.3.L.3.5</u>	FS	Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., <i>take steps</i> ). b. Identify real-life connections between words and their use (e.g., <i>describe people who are friendly or helpful</i> ). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., <i>knew, believed, suspected, heard, wondered</i> ).		Poet-Tree	143
Language Arts	<u>LAFS.3.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 <i>topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.		My Green Future	132
					Trees for Many Reasons	193
Language Arts	<u>LAFS.3.SL.1.2</u>	FS	Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.		Trees for Many Reasons	193

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.3.W.1.2</u>	FS	<p>Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> <li>a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.</li> <li>b. Develop the topic with facts, definitions, and details.</li> <li>c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.</li> <li>d. Provide a concluding statement or section.</li> </ul>		Fallen Log	116
				Assessment		119
				Assessment	My Green Future	134
					Peek at Packaging	136
					Trees in Trouble	201
					Water Wonders	212
					Web of Life	220
Language Arts	<u>LAFS.3.W.1.3</u>	FS	<p>Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ul style="list-style-type: none"> <li>a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.</li> <li>b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.</li> <li>c. Use temporal words and phrases to signal event order.</li> <li>d. Provide a sense of closure.</li> </ul>	Part A	Water Wonders	206
				Assessment		212

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.3. W.3.7</u>	FS	Conduct short research projects that build knowledge about a topic.		Charting Biodiversity	90
				Plant Adaptations		92
					Discover Diversity	97
				Part A	Every Drop Counts	104
				Part B		
					Fallen Log	116
					Get Outside!	121
					Peek at Packaging	136
				Part A	Soil Builders	161
				Part B		
				Part B	Tree Cookies	171
				Part B	Trees in Trouble	197
				Part B	Water Wonders	206
					Web of Life	216
Language Arts	<u>LAFS.4.L.3.5</u>	FS	Demonstrate understanding of word relationships, and nuances in word meanings. <ol style="list-style-type: none"> <li>Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.</li> <li>Recognize and explain the meaning of common idioms, adages, and proverbs.</li> <li>Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms)</li> </ol>		Poet-Tree	143

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.RL.1.1</u>	FS	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.		Trees for Many Reasons	193
Language Arts	<u>LAFS.4.RL.1.2</u>	FS	Determine a theme of a story, drama, or poem from details in the text; summarize the text.		Trees for Many Reasons	193
Language Arts	<u>LAFS.4.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 4 topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.		Fallen Log	116
					My Green Future	132
					Trees for Many Reasons	193
Language Arts	<u>LAFS.4.SL.2.4</u>	FS	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.		Charting Biodiversity	90
				Plant Adaptations		92
				Part A	Every Drop Counts	104
				Part B		
				Assessment		108
					Peek at Packaging	136
				Assessment		140
				Part B	Tree Cookies	171



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.W.1.2</u>	FS	<p>Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> <li>a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.</li> <li>b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</li> <li>c. Link ideas within categories of information using words and phrases (e.g., <i>another</i>, <i>for example</i>, <i>also</i>, <i>because</i>).</li> <li>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</li> <li>e. Provide a concluding statement or section related to the information or explanation presented.</li> </ul>		Fallen Log	116
				Assessment		119
				Assessment	My Green Future	134
					Peek at Packaging	136
					Trees in Trouble	201
					Water Wonders	212
					Web of Life	220
Language Arts	<u>LAFS.4.W.1.3</u>	FS	<p>Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ul style="list-style-type: none"> <li>a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.</li> <li>b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.</li> <li>c. Use a variety of transitional words and phrases to manage the sequence of events.</li> <li>d. Use concrete words and phrases and sensory details to convey experiences and events precisely.</li> <li>e. Provide a conclusion that follows from the narrated experiences or events.</li> </ul>		Every Tree for Itself	110
				Assessment		114
				Part A	Water Wonders	206
				Assessment		212

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.W.2.4</u>	FS	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)		Every Drop Counts	104
				Assessment		108
					Get Outside!	121
				Assessment		127
				Assessment	Peek at Packaging	140
					Tree ID	191
					Trees for Many Reasons	196
				Part A	Water Wonders	206
				Assessment		212
				Assessment	Web of Life	220

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.W.3.7</u>	FS	Conduct short research projects that build knowledge through investigation of different aspects of a topic.		Charting Biodiversity	90
				Plant Adaptations		92
					Discover Diversity	97
				Part A	Every Drop Counts	104
				Part B		
					Fallen Log	116
					Get Outside!	121
				Part B	Tree Cookies	171
				Part B	Trees in Trouble	197
					Web of Life	216
Language Arts	<u>LAFS.4.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research.		Trees for Many Reasons	193
Language Arts	<u>LAFS.5.L.3.5</u>	FS	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. Interpret figurative language, including similes and metaphors, in context, etc.		Poet-Tree	143
Language Arts	<u>LAFS.5.RL.1.2</u>	FS	Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.		Trees for Many Reasons	193

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.5.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.		Fallen Log	116
					My Green Future	132
					Trees for Many Reasons	193
Language Arts	<u>LAFS.5.SL.2.4</u>	FS	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.		Charting Biodiversity	90
				Plant Adaptations		92
					Discover Diversity	97
				Assessment		102
				Part A	Every Drop Counts	104
				Part B		
				Assessment		108
					Peek at Packaging	136
				Assessment		140
				Part B	Tree Cookies	171

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.5.SL.2.5</u>	FS	Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.	Part A	Every Drop Counts	104
				Part B		
				Assessment		108
				Part A	Soil Builders	161
Language Arts	<u>LAFS.5.W.1.2</u>	FS	<p>Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ul style="list-style-type: none"> <li>a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.</li> <li>b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</li> <li>c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially).</li> <li>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</li> <li>e. Provide a concluding statement or section related to the information or explanation presented.</li> </ul>		Fallen Log	116
				Assessment		119
				Assessment	My Green Future	134
					Peek at Packaging	136
					Trees in Trouble	201
					Water Wonders	212
					Web of Life	220
Language Arts	<u>LAFS.5.W.1.3</u>	FS	<p>Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</p> <ul style="list-style-type: none"> <li>a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.</li> <li>b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.</li> <li>c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events.</li> <li>d. Use concrete words and phrases and sensory details to convey experiences and events precisely.</li> <li>e. Provide a conclusion that follows from the narrated experiences or events.</li> </ul>		Every Tree for Itself	110
				Assessment		114
				Part A	Water Wonders	206
				Assessment		212

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.5.W.2.4</u>	FS	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)		Every Tree for Itself	110
				Assessment		114
				Assessment	Peek at Packaging	140
					Tree ID	191
					Trees for Many Reasons	196
				Part A	Water Wonders	206
				Assessment		212
				Assessment	Web of Life	220
Language Arts	<u>LAFS.5.W.3.7</u>	FS	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.		Charting Biodiversity	90
				Plant Adaptations		92
				Part B	Every Drop Counts	104
				Part B	Tree Cookies	171
					Web of Life	216
Language Arts	<u>LAFS.5.W.3.9</u>	FS	<p>Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <ol style="list-style-type: none"> <li>Apply grade 5 Reading standards to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]”).</li> <li>Apply grade 5 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]”).</li> </ol>		Trees for Many Reasons	193

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.L.3.5</u>	FS	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. Interpret figures of speech (e.g., personification) in context, etc.	6-8	Poet-Tree	148
Language Arts	<u>LAFS.6.RL.1.2</u>	FS	Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	Assessment	Trees for Many Reasons	196
Language Arts	<u>LAFS.6.RL.2.4</u>	FS	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.	6-8	Poet-Tree	148
Language Arts	<u>LAFS.6.SL.1.1</u>	FS	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. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	6-8	Trees for Many Reasons	195
Language Arts	<u>LAFS.6.SL.2.4</u>	FS	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.	6-8	Peek at Packaging	139
				Assessment		140
				6-8	Signs of Fall	158
				Assessment		159
				6-8	Trees for Many Reasons	195

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.W.1.2</u>	FS	<p>Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <p>a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.</p> <p>c. Use appropriate transitions to clarify the relationships among ideas and concepts.</p> <p>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</p> <p>e. Establish and maintain a formal style.</p> <p>f. Provide a concluding statement or section that follows from the information or explanation presented.</p>	Assessment	Peek at Packaging	140
				Assessment	Trees in Trouble	201
Language Arts	<u>LAFS.6.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment	Peek at Packaging	140
				6-8	Poet-Tree	148
Language Arts	<u>LAFS.68.WHST.1.2</u>	FS	<p>Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <p>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.</p> <p>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.</p> <p>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</p> <p>e. Establish and maintain a formal style and objective tone.</p>	Assessment	Trees in Trouble	201
Language Arts	<u>LAFS.7.L.3.5</u>	FS	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. Interpret figures of speech (e.g., personification) in context, etc.	6-8	Poet-Tree	184



Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.RL.1.2</u>	FS	Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.	Assessment	Trees for Many Reasons	196
Language Arts	<u>LAFS.7.RL.2.4</u>	FS	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	6-8	Poet-Tree	148
Language Arts	<u>LAFS.7.RL.2.5</u>	FS	Analyze how a dramas or poems form or structure (e.g., soliloquy, sonnet) contributes to its meaning.	6-8	Poet-Tree	148
Language Arts	<u>LAFS.7.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.	6-8	Trees for Many Reasons	195
Language Arts	<u>LAFS.7.SL.2.4</u>	FS	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	6-8	Peek at Packaging	139
				Assessment		140
				6-8	Signs of Fall	158
				Assessment		159
				6-8	Trees for Many Reasons	195

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.W.1.2</u>	FS	<p>Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <p>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.</p> <p>c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.</p> <p>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</p> <p>e. Establish and maintain a formal style.</p> <p>f. Provide a concluding statement or section that follows from and supports the information or explanation presented.</p>	Assessment	Peek at Packaging	140
				Assessment	Trees in Trouble	201
Language Arts	<u>LAFS.7.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment	Peek at Packaging	140
				6-8	Poet-Tree	148
Language Arts	<u>LAFS.8.L.3.5</u>	FS	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. Interpret figures of speech (e.g., personification) in context, etc.	6-8	Poet-Tree	148
Language Arts	<u>LAFS.8.RL.1.2</u>	FS	Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	Assessment	Trees for Many Reasons	196
Language Arts	<u>LAFS.8.RL.2.4</u>	FS	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	6-8	Poet-Tree	148

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	6-8	Trees for Many Reasons	195
Language Arts	<u>LAFS.8.SL.2.4</u>	FS	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	6-8	Peek at Packaging	139
				Assessment		140
				6-8	Signs of Fall	158
				Assessment		159
				6-8	Trees for Many Reasons	195

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.W.1.2</u>	FS	<p>Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <p>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.</p> <p>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.</p> <p>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</p> <p>e. Establish and maintain a formal style.</p> <p>f. Provide a concluding statement or section that follows from and supports the information or explanation presented.</p>	Assessment	Peek at Packaging	140
				Assessment	Trees in Trouble	201
Language Arts	<u>LAFS.8.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment	Peek at Packaging	140
				6-8	Poet-Tree	148
Mathematics	<u>MAFS.K12.MP.2.1</u>	FS	Reason abstractly and quantitatively. Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.	Part A		104
				Part B		
					Every Tree for Itself	110
				K-2		113
					Get Outside!	121

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MAFS.K12.MP.4.1</u>	FS	Model with mathematics. Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.	Part A	Every Drop Counts	104
				Part B		
					Every Tree for Itself	110
				K-2		113
Mathematics	<u>MAFS.2.MD.4.10</u>	FS	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	K-2	Every Tree for Itself	113
Social Studies	<u>SS.1.A.3.2</u>	NGSSS	Create a timeline based on the student's life or school events, using primary sources.	K-2	Tree Cookies	174
Social Studies	<u>SS.4.C.2.2</u>	NGSSS	Identify ways citizens work together to influence government and help solve community and state problems.	Part B	Every Drop Counts	104
Social Studies	<u>SS.5.C.2.5</u>	NGSSS	Identify ways good citizens go beyond basic civic and political responsibilities to improve government and society.	Part B	Every Drop Counts	104
Social Studies	<u>SS.5.G.1.4</u>	NGSSS	Construct maps, charts, and graphs to display geographic information.		Discover Diversity	97
Social Studies	<u>SS.8.G.5.1</u>	NGSSS	Describe human dependence on the physical environment and natural resources to satisfy basic needs in local environments in the United States.	6-8	Trees for Many Reasons	195

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.1.1</u>	BEST	Cite evidence to explain and justify reasoning.			97
				K-2	Discover Diversity	101
				Assessment		102
				Part A	Every Drop Counts	104
				Part B		
					Every Tree for Itself	110
				Plant Adaptations		113
				Assessment		114
					Fallen Log	116
				Assessment		119
					My Green Future	132
				Assessment		134
				Part A	Signs of Fall	155
				6-8		158
				Assessment		159
				Part B	Soil Builders	161
				Assessment		167
				Part A	Tree Cookies	171

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.1.1</u> (Continued)	BEST	Cite evidence to explain and justify reasoning.	6-8	Trees for Many Reasons	195
				Part A	Trees in Trouble	197
				6-8		200
				Assessment		201
				Part A	Water Wonders	206
				Part B		
Language Arts	<u>ELA.K12.EE.2.1</u>	BEST	Read and comprehend grade-level complex texts proficiently.	Assessment	Tree Cookies	175
				6-8	Trees for Many Reasons	195
					Trees in Trouble	200

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.3.1</u>	BEST	Make inferences to support comprehension.		Every Drop Counts	104
						110
				K-2	Every Tree for Itself	113
				Assessment		114
					Fallen Log	116
					Peek at Packaging	136
				Part A	Soil Builders	161
				Part B		
				Assessment		167
				Part B	Tree Cookies	171
				Assessment		175
				Part A	Tree ID	186
				Assessment		191
					Trees for Many Reasons	193
				6-8		195
				Assessment		196



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.3.1 - continued</u>	BEST	Make inferences to support comprehension.	Part A	Trees in Trouble	197
				6-8		200
				Assessment		201
				Part A	Water Wonders	206
				Part B		
				Assessment		212

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.4.1</u>	BEST	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.		Discover Diversity	97
				Part B	Every Drop Counts	104
					Get Outside!	121
				K-2		126
					My Green Future	132
					Peek at Packaging	136
				6-8		139
					Poet-Tree	143
				K-2	Tree Factory	183
				Part A	Trees in Trouble	197
				6-8		200
				Part A	Water Wonders	206
				Part B		
				Part A	Soil Builders	161
				Part B		

Language Arts	<u>ELA.K12.EE.3.1</u>	BEST	Make inferences to support comprehension.	Language Arts	<u>ELA.K12.EE.3.1</u>	BEST
Language Arts	<u>ELA.K12.EE.5.1</u>	BEST	Use the accepted rules governing a specific format to create quality work.		Poet-Tree	143
				6-8		148
				Assessment		149
				Assessment	Web of Life	220
Language Arts	<u>ELA.K12.EE.6.1</u>	BEST	Use appropriate voice and tone when speaking or writing.	Assessment	Fallen Log	119
				6-8	Trees in Trouble	200
Language Arts	<u>ELA.K.C.1.2</u>	BEST	Using a combination of drawing, dictating, and/or writing, create narratives with the events in chronological order.	K-2	Tree Cookies	174
Language Arts	<u>ELA.K.C.2.1</u>	BEST	Present information orally using complete sentences.	K-2	Discover Diversity	101
				Assessment		102
Language Arts	<u>ELA.K.C.1.4</u>	BEST	Using a combination of drawing, dictating, and/or writing, provide factual information about a topic.	K-2	Tree Cookies	174
Language Arts	<u>ELA.1.C.1.2</u>	BEST	Write narratives that retell two or more appropriately sequenced events, including relevant details and a sense of closure.	K-2	Every Tree for Itself	113
				Assessment		114
Language Arts	<u>ELA.1.C.2.1</u>	BEST	Present information orally using complete sentences and appropriate volume.	K-2	Discover Diversity	101
				Assessment		102
Language Arts	<u>ELA.1.C.4.1</u>	BEST	Participate in research to gather information to answer a question about a single topic.	K-2	Discover Diversity	101
Language Arts	<u>ELA.2.C.1.2</u>	BEST	Write personal or fictional narratives using a logical sequence of events, transitions, and an ending.	K-2	Every Tree for Itself	113
				Assessment		114
				K-2	Tree Cookies	174

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.2.C.2.1</u>	BEST	Present information orally using complete sentences, appropriate volume, and clear pronunciation.	K-2	Discover Diversity	101
				Assessment		102
Language Arts	<u>ELA.2.C.5.1</u>	BEST	Use one or more multimedia element(s) to enhance oral or written tasks.	K-2	Tree Cookies	174
Language Arts	<u>ELA.3.C.1.2</u>	BEST	Write personal or fictional narratives using a logical sequence of events, appropriate descriptions, dialogue, a variety of transitional words or phrases, and an ending.	Assessment	Get Outside!	127
					Tree Cookies	175
					Tree Factory	185
				Part A	Water Wonders	206
				Assessment		212
Language Arts	<u>ELA.3.C.1.3</u>	BEST	Write opinions about a topic or text, include reasons supported by details from one or more sources, use transitions, and provide a conclusion.	Part B	Every Drop Counts	104
				Assessment	Trees for Many Reasons	193
						196
Language Arts	<u>ELA.3.C.1.4</u>	BEST	Write expository texts about a topic, using one or more sources, providing an introduction, facts and details, some elaboration, transitions, and a conclusion.	Part B	Every Drop Counts	104
				Assessment		108
				Assessment	Web of Life	220
Language Arts	<u>ELA.3.C.1.5</u>	BEST	Improve writing as needed by planning, revising, and editing with guidance and support from adults and feedback from peers.	Assessment	Poet-Tree	149

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.3.C.2.1</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, and clear pronunciation.		Charting Biodiversity	90
						97
				K-2	Discover Diversity	101
				Assessment		102
				Part B	Every Drop Counts	104
				Assessment		108
					My Green Future	132
				Assessment		134
					Peek at Packaging	136
				Assessment		140
				Part B	Tree Cookies	171
				Part A	Water Wonders	206
				Assessment		212

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.3.C.4.1</u>	BEST	Conduct research to answer a question, organizing information about the topic from multiple sources.		Charting Biodiversity	90
				Plant Adaptions		92
				Part B	Every Drop Counts	104
				Part B	Tree Cookies	171
					Web of Life	216
Language Arts	<u>ELA.3.F.1.4</u>	BEST	Read grade-level texts with accuracy, automaticity, and appropriate prosody or expression.		Poet-Tree	143
				Assessment	Tree Cookies	175
Language Arts	<u>ELA.3.R.1.4</u>	BEST	Identify types of poems: free verse, rhymed verse, haiku, and limerick.		Poet-Tree	143
				Assessment		148
Language Arts	<u>ELA.3.R.2.2</u>	BEST	Identify the central idea and explain how relevant details support that idea in a text.		Poet-Tree	143
					Trees for Many Reasons	193
				Assessment		196
Language Arts	<u>ELA.3.R.3.2</u>	BEST	Summarize a text to enhance comprehension a. Include plot and theme for a literary text. b. Use the central idea and relevant details for an informational text.	Assessment	Trees for Many Reasons	196

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.3.V.1.1</u>	BEST	Use grade-level academic vocabulary appropriately in speaking and writing.		Discover Diversity	97
				Assessment		102
					Every Tree for Itself	114
				Assessment	Fallen Log	119
					Get Outside!	127
				Part A	Tree Cookies	171
				Assessment	Tree ID	191
				Part A	Water Wonders	206
				Assessment		212
Language Arts	<u>ELA.4.C.1.2</u>	BEST	Write personal or fictional narratives using a logical sequence of events and demonstrating an effective use of techniques such as descriptions and transitional words and phrases.		Get Outside!	127
				Assessment	Tree Cookies	175
					Tree Factory	185
				Part A	Water Wonders	206
				Assessment		212
Language Arts	<u>ELA.4.C.1.3</u>	BEST	Write to make a claim supporting a perspective with logical reasons, using evidence from multiple sources, elaboration, and an organizational structure with transitions.	Assessment	Every Drop Counts	108
					Trees in Trouble	201
Language Arts	<u>ELA.4.C.1.4</u>	BEST	Write expository texts about a topic, using multiple sources, elaboration, and an organizational structure with transitions.	Assessment	Web of Life	220

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.4.C.1.5</u>	BEST	Improve writing by planning, revising, and editing, with guidance and support from adults and feedback from peers.	Assessment	Poet-Tree	149
Language Arts	<u>ELA.4.C.2.1</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, and clear pronunciation.		Charting Biodiversity	90
					Discover Diversity	97
				Assessment	Discover Diversity	102
				Part B	Every Drop Counts	104
				Assessment	Every Drop Counts	108
					My Green Future	132
				Assessment	My Green Future	134
					Peek at Packaging	136
				Assessment	Peek at Packaging	140
				Part A	Soil Builders	161
				Part B	Soil Builders	
				Part B	Tree Cookies	171
Language Arts	<u>ELA.4.C.4.1</u>	BEST	Conduct research to answer a question, organizing information about the topic, using multiple valid sources.	Part B	Every Drop Counts	104
				Part B	Tree Cookies	171
					Web of Life	216



Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>ELA.4.C.5.1</u>	BEST	Arrange multimedia elements to create emphasis in oral or written tasks.	Assessment	Fallen Log	119
					My Green Future	132
				Assessment		134
					Peek at Packaging	136
				Part B	Tree Cookies	171
					Tree Factory	185
				Assessment	Tree ID	191
					Web of Life	220
Language Arts	<u>ELA.4.F.1.4</u>	BEST	Read grade-level texts with accuracy, automaticity, and appropriate prosody or expression.		Poet-Tree	143
				Assessment	Tree Cookies	175
Language Arts	<u>ELA.4.R.1.4</u>	BEST	Explain how rhyme and structure create meaning in a poem.		Poet-Tree	143
Language Arts	<u>ELA.4.R.2.2</u>	BEST	Explain how relevant details support the central idea, implied or explicit.		Poet-Tree	143
					Trees for Many Reasons	193
Language Arts	<u>ELA.4.R.3.1</u>	BEST	Explain how figurative language contributes to meaning in text(s).		Poet-Tree	143
Language Arts	<u>ELA.4.R.3.2</u>	BEST	Summarize a text to enhance comprehension. a. Include plot and theme for a literary text. b. Include the central idea and relevant details for an informational text.	Assessment	Trees for Many Reasons	196

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.4.V.1.1</u>	BEST	Use grade-level academic vocabulary appropriately in speaking and writing.		Discover Diversity	97
				Assessment		102
					Every Tree for Itself	114
				Assessment	Fallen Log	119
					Get Outside!	127
				Part A	Tree Cookies	171
				Assessment	Tree ID	191
				Part A	Water Wonders	206
				Assessment		212
Language Arts	<u>ELA.5.C.1.2</u>	BEST	Write personal or fictional narratives using a logical sequence of events and demonstrating an effective use of techniques such as dialogue, description, and transitional words and phrases.		Get Outside	127
				Assessment	Tree Cookies	175
					Tree Factory	185
				Part A	Water Wonders	206
				Assessment		212
Language Arts	<u>ELA.5.C.1.4</u>	BEST	Write expository texts about a topic using multiple sources and including an organizational structure, relevant elaboration, and varied transitions.	Part B	Every Drop Counts	104
				Assessment		108
				Assessment	Web of Life	220

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>ELA.5.C.1.5</u>	BEST	Improve writing by planning, revising, and editing, with guidance and support from adults and feedback from peers.	Assessment	Poet-Tree	149
Language Arts	<u>ELA.5.C.2.1</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, clear pronunciation, and appropriate.		Charting Biodiversity	90
					Discover Diversity	97
				Assessment	Discover Diversity	102
				Part B	Every Drop Counts	104
				Assessment	Every Drop Counts	108
					My Green Future	132
				Assessment	My Green Future	134
					Peek at Packaging	136
				Assessment	Peek at Packaging	140
				Part A	Soil Builders	161
				Part B	Soil Builders	
				Part B	Tree Cookies	171
Language Arts	<u>ELA.5.C.4.1</u>	BEST	Conduct research to answer a question, organizing information about the topic and using multiple reliable and valid sources.		Charting Biodiversity	90
				Part B	Every Drop Counts	104
				Part B	Tree Cookies	171
					Web of Life	216

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.5.C.5.1</u>	BEST	Arrange multimedia elements to create emphasis in oral or written tasks.	Assessment	Fallen Log	119
					My Green Future	132
				Assessment		134
					Peek at Packaging	136
				Part B	Tree Cookies	171
				Assessment	Tree Factory	185
					Tree ID	191
					Web of Life	220
Language Arts	<u>ELA.5.F.1.4</u>	BEST	Read grade-level texts with accuracy, automaticity, and appropriate prosody or expression.		Poet-Tree	143
				Assessment	Tree Cookies	175
Language Arts	<u>ELA.5.R.2.3</u>	BEST	Analyze an authors purpose and/or perspective in an informational text.		Trees for Many Reasons	193
Language Arts	<u>ELA.5.R.1.4</u>	BEST	Explain how figurative language and other poetic elements work together in a poem.		Poet-Tree	143
Language Arts	<u>ELA.5.R.2.1</u>	BEST	Explain how text structures and/or features contribute to the overall meaning of texts.		Poet-Tree	143
Language Arts	<u>ELA.5.R.2.2</u>	BEST	Explain how relevant details support the central idea(s), implied or explicit.		Poet-Tree	143
					Trees for Many Reasons	193
Language Arts	<u>ELA.5.R.2.4</u>	BEST	Track the development of an argument, identifying the specific claim(s), evidence, and reasoning.	Part A	Signs of Fall	155
				Assessment		159

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.5.R.3.1</u>	BEST	Analyze how figurative language contributes to meaning in text(s).		Poet-Tree	143
Language Arts	<u>ELA.5.R.3.2</u>	BEST	Summarize a text to enhance comprehension. a. Include plot and theme for a literary text. b. Include the central idea and relevant details for an informational text.	Assessment	Trees for Many Reasons	196
Language Arts	<u>ELA.5.V.1.1</u>	BEST	Use grade-level academic vocabulary appropriately in speaking and writing.		Discover Diversity	97
				Assessment		102
				Assessment	Every Tree for Itself	114
					Fallen Log	119
					Get Outside!	127
				Part B	Tree Cookies	171
				Assessment	Tree ID	191
				Part A	Water Wonders	206
				Assessment		212
Language Arts	<u>ELA.6.12.F.2.4</u>	BEST	Read grade-level texts with accuracy, automaticity, and appropriate prosody or expression.	6-8	Trees in Trouble	200
Language Arts	<u>ELA.6.C.1.2</u>	BEST	Write personal or fictional narratives using narrative techniques, precise words and phrases, and figurative language.	6-8	Trees in Trouble	200
Language Arts	<u>ELA.6.C.1.3</u>	BEST	Write and support a claim using logical reasoning, relevant evidence from sources, elaboration, and a logical organizational structure with varied transitions.	6-8	Trees for Many Reasons	195
Language Arts	<u>ELA.6.C.1.5</u>	BEST	Improve writing by planning, revising, and editing, considering feedback from adults and peers.	Assessment	Poet-Tree	149
Language Arts	<u>ELA.6.C.2.1</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, clear pronunciation, and appropriate pacing.	Assessment	Peek at Packaging	140

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<a href="#">ELA.6.R.3.4</a>	BEST	Identify rhetorical appeals in a text.	6-8	Trees in Trouble	200
Language Arts	<a href="#">ELA.7.C.1.2</a>	BEST	Write personal or fictional narratives using narrative techniques, a recognizable point of view, precise words and phrases, and figurative language.	6-8	Trees in Trouble	200
Language Arts	<a href="#">ELA.7.C.1.3</a>	BEST	Write and support a claim using logical reasoning, relevant evidence from sources, elaboration, a logical organizational structure with varied transitions, and acknowledging at least one counterclaim.	6-8	Trees for Many Reasons	195
Language Arts	<a href="#">ELA.7.C.1.5</a>	BEST	Improve writing by planning, revising, and editing, considering feedback from adults and peers.	Assessment	Poet-Tree	149
Language Arts	<a href="#">ELA.7.C.2.1</a>	BEST	Present information orally, in a logical sequence, emphasizing key points that support the central idea.	Assessment	Peek at Packaging	140
				Assessment	Signs of Fall	159
Language Arts	<a href="#">ELA.8.C.1.2</a>	BEST	Write personal or fictional narratives using narrative techniques, varied transitions, and a clearly established point of view.	6-8	Trees in Trouble	200
Language Arts	<a href="#">ELA.8.C.1.3</a>	BEST	Write to argue a position, supporting at least one claim and rebutting at least one counterclaim with logical reasoning, credible evidence from sources, elaboration, and using a logical organizational structure.	6-8	Trees for Many Reasons	195
Language Arts	<a href="#">ELA.8.C.1.5</a>	BEST	Improve writing by planning, editing, considering feedback from adults and peers, and revising for clarity and cohesiveness.	Assessment	Poet-Tree	149
Language Arts	<a href="#">ELA.8.C.2.1</a>	BEST	Present information orally, in a logical sequence, supporting the central idea with credible evidence.	Assessment	Peek at Packaging	140
				Assessment	Signs of Fall	159
Mathematics	<a href="#">MA.K12.MTR.3.1</a>	BEST	Complete tasks with mathematical fluency. Mathematicians who complete tasks with mathematical fluency: <ul style="list-style-type: none"> <li>• Select efficient and appropriate methods for solving problems within the given context.</li> <li>• Maintain flexibility and accuracy while performing procedures and mental calculations.</li> <li>• Complete tasks accurately and with confidence.</li> <li>• Adapt procedures to apply them to a new context.</li> <li>• Use feedback to improve efficiency when performing calculations.</li> </ul>	Part A	Every Drop Counts	104
					Get Outside!	121

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<a href="#">MA.K12.MTR.4.1</a>	BEST	Engage in discussions that reflect on the mathematical thinking of self and others. Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others: <ul style="list-style-type: none"> <li>Communicate mathematical ideas, vocabulary and methods effectively.</li> <li>Analyze the mathematical thinking of others.</li> <li>Compare the efficiency of a method to those expressed by others.</li> <li>Recognize errors and suggest how to correctly solve the task.</li> <li>Justify results by explaining methods and processes.</li> <li>Construct possible arguments based on evidence.</li> </ul>		Every Drop Counts	104
					Every Tree for Itself	110
					Get Outside!	121
Mathematics	<a href="#">MA.K12.MTR.7.1</a>	BEST	Apply mathematics to real-world contexts. Mathematicians who apply mathematics to real-world contexts: <ul style="list-style-type: none"> <li>Connect mathematical concepts to everyday experiences.</li> <li>Use models and methods to understand, represent and solve problems.</li> <li>Perform investigations to gather data or determine if a method is appropriate.</li> <li>Redesign models and methods to improve accuracy or efficiency.</li> </ul>		Discover Diversity	97
					Every Drop Counts	104
				K-2	Every Tree for Itself	113
				Assessment		114
					Get Outside!	121
				Part A	Soil Builders	161
				K-2	Tree Cookies	174
					Every Tree for Itself	174
Mathematics	<a href="#">MA.1.NSO.1.1</a>	BEST	Starting at a given number, count forward and backwards within 120 by ones. Skip count by 2s to 20 and by 5s to 100.	K-2	Tree Cookies	174
Mathematics	<a href="#">MA.2.DP.1.1</a>	BEST	Collect, categorize and represent data using tally marks, tables, pictographs or bar graphs. Use appropriate titles, labels and units.	K-2	Every Tree for Itself	113
Mathematics	<a href="#">MA.2.DP.1.2</a>	BEST	Interpret data represented with tally marks, tables, pictographs or bar graphs including solving addition and subtraction problems.	K-2	Every Tree for Itself	113
Mathematics	<a href="#">MA.3.DP.1.1</a>	BEST	Collect and represent numerical and categorical data with whole-number values using tables, scaled pictographs, scaled bar graphs or line plots. Use appropriate titles, labels and units.	K-2	Every Tree for Itself	113
				Part A	Soil Builders	161

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<a href="#"><u>MA.3.M.1.2</u></a>	BEST	Solve real-world problems involving any of the four operations with whole-number lengths, masses, weights, temperatures or liquid volumes.		Every Drop Counts	104
Mathematics	<a href="#"><u>MA.3.M.2.2</u></a>	BEST	Solve one- and two-step real-world problems involving elapsed time.	Part A	Every Drop Counts	104
Mathematics	<a href="#"><u>MA.4.NSO.2.2</u></a>	BEST	Multiply two whole numbers, up to three digits by up to two digits, with procedural reliability.		Get Outside!	121
Mathematics	<a href="#"><u>MA.4.DP.1.1</u></a>	BEST	Collect and represent numerical data, including fractional values, using tables, stem-and-leaf plots or line plots.	Part A	Soil Builders	161
Mathematics	<a href="#"><u>MA.4.DP.1.3</u></a>	BEST	Solve real-world problems involving numerical data.	Part A	Every Drop Counts	104
				Part B		
					Every Tree for Itself	110
Mathematics	<a href="#"><u>MA.4.M.1.1</u></a>	BEST	Select and use appropriate tools to measure attributes of objects.	Part A	Soil Builders	161
Mathematics	<a href="#"><u>MA.4.NSO.2.2</u></a>	BEST	Multiply two whole numbers, up to three digits by up to two digits, with procedural reliability.		Get Outside!	121
Mathematics	<a href="#"><u>MA.5.AR.1.1</u></a>	BEST	Solve multi-step real-world problems involving any combination of the four operations with whole numbers, including problems in which remainders must be interpreted within the context.	Part A	Every Drop Counts	104
Mathematics	<a href="#"><u>MA.5.AR.2.4</u></a>	BEST	Given a mathematical or real-world context, write an equation involving any of the four operations to determine the unknown whole number with the unknown in any position.	Part A	Every Drop Counts	104
Mathematics	<a href="#"><u>MA.5.DP.1.1</u></a>	BEST	Collect and represent numerical data, including fractional and decimal values, using tables, line graphs or line plots.	Part A	Soil Builders	161



## Grades 6 – 8

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<a href="#"><u>SC.3.N.1.1</u></a>	NGSSS	Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	3-5	Field, Forest, and Stream	261
Science	<a href="#"><u>SC.3.N.1.2</u></a>	NGSSS	Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.	3-5	Field, Forest, and Stream	261
Science	<a href="#"><u>SC.3.N.1.3</u></a>	NGSSS	Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	3-5	Improve Your Place	295
					Nature's Skyscrapers	329
					Nothing Succeeds Like Succession	338
					Plant a Tree	353
Science	<a href="#"><u>SC.3.N.1.6</u></a>	NGSSS	Infer based on observation.	3-5	Field, Forest, and Stream	261
				Assessment		262
Science	<a href="#"><u>SC.3.N.3.2</u></a>	NGSSS	Recognize that scientists use models to help understand and explain how things work.	3-5	Life on the Edge	311
Science	<a href="#"><u>SC.35.CS-CC.1.1</u></a>	NGSSS	Identify technology tools for individual and collaborative data collection, writing, communication, and publishing activities.	Assessment	Field, Forest, and Stream	262
Science	<a href="#"><u>SC.35.CS-CS.1.1</u></a>	NGSSS	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species).	3-5	Life on the Edge	311
Science	<a href="#"><u>SC.35.CS-CS.2.3</u></a>	NGSSS	Explain the process of arranging or sorting information into useful order as well as the purpose for doing so.	3-5	Improve Your Place	295
Science	<a href="#"><u>SC.35.CS-CS.3.2</u></a>	NGSSS	Create an artifact (independently and collaboratively) that answers a research question clearly communicating thoughts and ideas.	3-5	Exploration Energy!	252
				Assessment	Plant a Tree	354

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.4.E.6.3</u>	NGSSS	Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.	3-5	Exploration Energy!	252
					Our Federal Forests	346
					Plant a Tree	353
Science	<u>SC.4.L.17.4</u>	NGSSS	Recognize ways plants and animals, including humans, can impact the environment.	3-5	Decisions, Decisions	227
					Improve Your Place	295
Science	<u>SC.4.N.1.1</u>	NGSSS	Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	3-5	Exploration Energy!	252
Science	<u>SC.4.N.1.2</u>	NGSSS	Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.	3-5	Nature's Skyscrapers	329
Science	<u>SC.4.N.1.5</u>	NGSSS	Compare the methods and results of investigations done by other classmates.	3-5	Field, Forest, and Stream	261
Science	<u>SC.5.E.7.5</u>	NGSSS	Recognize that some of the weather-related differences, such as temperature and humidity, are found among different environments, such as swamps, deserts, and mountains.	3-5	Field, Forest, and Stream	261
Science	<u>SC.5.L.15.1</u>	NGSSS	Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.	3-5	Life on the Edge	311
					Nothing Succeeds Like Succession	338
Science	<u>SC.5.N.1.6</u>	NGSSS	Recognize and explain the difference between personal opinion/interpretation and verified observation.	3-5	Field, Forest, and Stream	261
				Assessment		262
Science	<u>SC.6.E.6.2</u>	NGSSS	Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.		Field, Forest, and Stream	257
Science	<u>SC.6.E.7.6</u>	NGSSS	Differentiate between weather and climate.	Part B	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.6.N.1.1</u>	NGSSS	Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	Part B	Environmental Justice for All	233
					If You Were the Boss	280
				Assessment		284
				Part A	Our Federal Forests	342
				Part B		
Science	<u>SC.6.N.1.4</u>	NGSSS	Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.	Part B	Exploration Energy!	247
					Field, Forest, and Stream	257
					Forest in the City	265
				Part B	Our Federal Forests	342
Science	<u>SC.6.N.1.5</u>	NGSSS	Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.		Field, Forest, and Steam	257
				Assessment		262

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<u>SC.6.N.3.4</u>	NGSSS	Identify the role of models in the context of the sixth grade science benchmarks.	Part A	Global Goods	272
				Part B		
					If You Were the Boss	280
				Part A	Life on the Edge	308
				Part A	Living with Fire	315
				Assessment		320
				Part B	Nothing Succeeds Like Succession	334
				Assessment		339
				Part B	Renewable or Not?	364
Science	<u>SC.68.CS-CC.1.3</u>	NGSSS	Design, develop, and publish a collaborative digital product using a variety of digital tools and media-rich resources that demonstrate and communicate concepts to inform, persuade, and/or entertain.	Assessment (Part B)	Exploration Energy!	254
				Assessment	Field, Forest, and Stream	262
				Part B	Reduce, Reuse, Recycle	356
Science	<u>SC.68.CS-CS.1.2</u>	NGSSS	Create or modify and use a simulation to analyze and illustrate a concept in depth (i.e., use a simulation to illustrate a genetic variation), individually and collaboratively.	Part B	Renewable or Not?	364
Science	<u>SC.68.CS-CS.1.3</u>	NGSSS	Evaluate what kinds of real-world problems can be solved using modeling and simulation.		If You Were the Boss	280
				Part B	Renewable or Not?	364

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.68.CS-CS.1.4</u>	NGSSS	Interact with content-specific models and simulations to support learning, research and problem solving (e.g., immigration, international trade, invasive species).		If You Were the Boss	280
				Part A	Life on the Edge	308
				Part A	Living with Fire	315
				Part B		
				Part B	Renewable or Not?	364
Science	<u>SC.68.CS-CS.2.2</u>	NGSSS	Solve real-life issues in science and engineering (i.e., generalize a solution to open-ended problems) using computational thinking skills.		If You Were the Boss	280
Science	<u>SC.68.CS-CS.2.4</u>	NGSSS	Organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents), charts, tables and graphs.	(Including Optional Step 9)	If You Were the Boss	280
					Improve Your Place	293
				Part B	Our Federal Forests	342
				Assessment		347
				Part A	Reduce, Reuse, Recycle	356
				Assessment	Renewable or Not?	371
				Part A	The Global Climate	375
				Assessment		380
Science	<u>SC.68.CS-CS.2.6</u>	NGSSS	Create a program that implements an algorithm to achieve a given goal, individually and collaboratively.	Part B	Renewable or Not?	364
Science	<u>SC.68.CS-CS.2.9</u>	NGSSS	Identify simple data types and data structures.	Part A	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.68.CS-PC.3.1</u>	NGSSS	Answer research questions using digital information resources.	Part B	Environmental Justice for All	233
					Global Goods	272
					Invasive Species	299
				Part A	Our Federal Forests	342
				Part B		
Science	<u>SC.68.CS-CP.3.3</u>	NGSSS	Create an artifact (independently and collaboratively) that answers a research question and communicates results and conclusions.		Decisions, Decisions	224
				Assessment (Part B)	Exploration Energy!	254
					Invasive Species	299
				Part B	Life on the Edge	308
Science	<u>SC.7.E.6.6</u>	NGSSS	Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water.		Decisions, Decisions	224
					Environmental Justice for All	233
					Invasive Species	299
				Part A	Life on the Edge	308
				Part B		
				Part A	Reduce, Reuse, Recycle	356
				Part B	Renewable or Not?	364
				Part A	The Global Climate	375
				Part B		

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<u>SC.7.L.15.2</u>	NGSSS	Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms.	Part A	Life on the Edge	308
Science	<u>SC.7.L.15.3</u>	NGSSS	Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species.	Part A	Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	334
				Part C		
Science	<u>SC.7.L.17.2</u>	NGSSS	Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism.		Invasive Species	299
Science	<u>SC.7.L.17.3</u>	NGSSS	Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.		Field, Forest, and Stream	257
					If You Were the Boss	280
					Invasive Species	299
				Part B	Living with Fire	315
				Part B	Nothing Succeeds Like Succession	334
				Part C		
				Part A	Our Federal Forests	342
				Part B		
Science	<u>SC.7.N.1.1</u>	NGSSS	Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	Part B	Environmental Justice for All	233
					If You Were the Boss	280
				Assessment		284
				Part A	Our Federal Forests	342
				Part B		

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.7.N.1.6</u>	NGSSS	Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based.	Part B	Nothing Succeeds Like Succession	334
				Part C		
				Assessment		339
Science	<u>SC.7.N.3.2</u>	NGSSS	Identify the benefits and limitations of the use of scientific models.	Part A	Global Goods	272
				Part B		
					If You Were the Boss	280
					Life on the Edge	308
				Part B	Living with Fire	315
				Assessment		320
				Part B	Renewable or Not?	364
Science	<u>SC.7.P.11.2</u>	NGSSS	Investigate and describe the transformation of energy from one form to another.	Part A	Exploration Energy!	247
Science	<u>SC.7.P.11.3</u>	NGSSS	Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another.	Part A	Exploration Energy!	247
Science	<u>SC.8.N.1.1</u>	NGSSS	Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.	Part B	Environmental Justice for All	233
					If You Were the Boss	280
				Assessment		284
				Part A	Our Federal Forests	342
				Part B		



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Science	<u>SC.8.N.1.3</u>	NGSSS	Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim.		Forest in the City	265
Science	<u>SC.8.N.1.4</u>	NGSSS	Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data.		If You Were the Boss	280
				Assessment (Part B)	Our Federal Forests	347
Science	<u>SC.8.N.1.6</u>	NGSSS	Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence		Field, Forest, and Stream	257
				Part B	Nothing Succeeds Like Succession	334
				Part C		
				Assessment		339
Science	<u>SC.8.N.3.1</u>	NGSSS	Select models useful in relating the results of their own investigations.		Forest in the City	265
				Part B	Global Goods	272
					If You Were the Boss	280
				Part B	Renewable or Not?	364
				Assessment		371

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Science	<u>SC.8.N.4.1</u>	NGSSS	Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels.		Decisions, Decisions	224
					If You Were the Boss	280
				Part A	Life on the Edge	308
				Part B		
				Part B	Living with Fire	315
				Assessment		320
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350
				Part A	The Global Climate	375
				Part B		
				Assessment		380
Science	<u>SC.8.N.4.2</u>	NGSSS	Explain how political, social, and economic concerns can affect science, and vice versa.		Decisions, Decisions	224
					If You Were the Boss	280
				Part B	Life on the Edge	308
Language Arts	<u>LAFS.K12.R.1.1</u>	FS	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	Part A	Environmental Justice for All	233
				Assessment		238

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.R.1.2</u>	FS	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	3-5	Nothing Succeeds Like Succession	338
Language Arts	<u>LAFS.K12.R.3.8</u>	FS	Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.	Assessment	Decisions, Decisions	228
				Part B	The Global Climate	375
Language Arts	<u>LAFS.K12.SL.1.1</u>	FS	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	3-5	Decisions, Decisions	227
				Part A	Environmental Justice for All	233
				Part B		
					Field, Forest, and Stream	257
				3-5	Field, Forest and Stream	261
				Part A	Global Goods	272
				Part B		
				Part B	Our Federal Forests	342
				Part A	Reduce, Reuse, Recycle	356
				Part B	The Global Climate	375
				Part A	What's in a Label?	382
				Part B		

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.SL.1.3</u>	FS	Evaluate a speakers point of view, reasoning, and use of evidence and rhetoric.			224
				3-5	Decisions, Decisions	227
				Assessment		228
Language Arts	<u>LAFS.K12.SL.2.4</u>	FS	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	Part A	Environmental Justice for All	233
				Part B		
				Part A	Exploration Energy!	247
				3-5		252
						257
				3-5	Field, Forest, and Stream	261
				Assessment		262
				Part B	Global Goods	272
					Invasive Species	299
				Assessment		303
				Part B	Life on the Edge	308
					Renewable or Not?	364

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.SL.2.5</u>	FS	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	Assessment (Part B)	Exploration Energy!	254
				Assessment	Global Goods	277
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Part B	Life on the Edge	308
				3-5	Nothing Succeeds Like Succession	338
				Part B	Our Federal Forests	342
				Assessment		347
				Part B	The Global Climate	375
Language Arts	<u>LAFS.K12.W.1.1</u>	FS	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	Assessment	Environmental Justice for All	238
				Assessment (Part B)	Our Federal Forests	347
				Assessment	Renewable or Not?	371
					The Global Climate	380

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.W.1.2</u>	FS	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Part A	Exploration Energy!	247
				Assessment	Improve Your Place	293
					Invasive Species	303
				Assessment (Part A)	Life on the Edge	308
				Assessment	Nothing Succeeds Like Succession	339
					Plant a Tree	354
					Reduce, Reuse, Recycle	362
Language Arts	<u>LAFS.K12.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	Assessment	Forest in the City	268
					Global Goods	277
					Improve Your Place	293
				Part B	Life on the Edge	308
				Assessment (Part A)		312
				Assessment	Nature's Skyscrapers	330
					Nothing Succeeds Like Succession	339
					Renewable or Not?	371
					What's in a Label?	387
Language Arts	<u>LAFS.K12.W.2.5</u>	FS	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.		Improve Your Place	293

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.K12.W.2.6</u>	FS	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.	Part B	Life on the Edge	308
Language Arts	<u>LAFS.K12.W.3.7</u>	FS	Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	Part B	Environmental Justice for All	233
				Part A	Exploration Energy!	247
				3-5	Exploration Energy!	252
					Forest in the City	265
				Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
				Part A	Living with Fire	315
				Part B		
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350
				Part A	Reduce, Reuse, Recycle	356
Language Arts	<u>LAFS.K12.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research.	Part A	Environmental Justice for All	233
				Assessment		238
Language Arts	<u>LAFS.3.RI.1.2</u>	FS	Determine the main idea of a text; recount the key details and explain how they support the main idea.	3-5	Nothing Succeeds Like Succession	338

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.3.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 <i>topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion.	3-5	Decisions, Decisions	224
					Plant a Tree	353
Language Arts	<u>LAFS.K12.SL.1.3</u>	FS	Evaluate a speakers point of view, reasoning, and use of evidence and rhetoric.	Part B	The Global Climate	375
Language Arts	<u>LAFS.3.W.1.1</u>	FS	Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section.	3-5	Decisions, Decisions	224
Language Arts	<u>LAFS.3.W.1.2</u>	FS	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. d. Provide a concluding statement or section.	Assessment (Part A)	Life on the Edge	312
Language Arts	<u>LAFS.3. W.3.7</u>	FS	Conduct short research projects that build knowledge about a topic.	3-5	Exploration Energy!	252
					Field, Forest, and Stream	261
Language Arts	<u>LAFS.4.RI.1.2</u>	FS	Determine the main idea of a text and explain how it is supported by key details; summarize the text.	3-5	Nothing Succeeds Like Succession	338



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 <i>topics and texts</i> , building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	3-5	Decisions, Decisions	224
					Plant a Tree	353
Language Arts	<u>LAFS.4.SL.2.4</u>	FS	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	3-5	Exploration Energy!	252
Language Arts	<u>LAFS.4.W.1.1</u>	FS	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., <i>for instance, in order to, in addition</i> ). d. Provide a concluding statement or section related to the opinion presented.	3-5	Decisions, Decisions	224
Language Arts	<u>LAFS.4.W.1.2</u>	FS	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., <i>another, for example, also, because</i> ). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	Assessment (Part A)	Life on the Edge	312

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.4.W.2.4</u>	FS	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment (Part A)	Life on the Edge	312
				Assessment	Nature’s Skyscrapers	330
Language Arts	<u>LAFS.4.W.3.7</u>	FS	Conduct short research projects that build knowledge through investigation of different aspects of a topic.	3-5	Exploration Energy!	252
					Field, Forest, and Stream	261
Language Arts	<u>LAFS.5.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <i>grade 5 topics and texts</i> , building on others’ ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	3-5	Decisions, Decisions	224
					Plant a Tree	353
Language Arts	<u>LAFS.5.SL.2.4</u>	FS	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.	3-5	Exploration Energy!	252
Language Arts	<u>LAFS.5.SL.2.5</u>	FS	Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.	Assessment	Field, Forest, and Stream	262
				3-5	Nothing Succeeds Like Succession	338
				Assessment	Our Federal Forests	347
Language Arts	<u>LAFS.5.W.1.1</u>	FS	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer’s purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Links opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). d. Provide a concluding statement or section related to the opinion presented.	3-5	Decisions, Decisions	224

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.5.W.1.2</u>	FS	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	Assessment (Part A)	Life on the Edge	312
Language Arts	<u>LAFS.5.W.2.4</u>	FS	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment	Nature’s Skyscrapers	330
Language Arts	<u>LAFS.5.W.3.7</u>	FS	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	3-5	Exploration Energy!	252
Language Arts	<u>LAFS.6.L.3.6</u>	FS	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.		Invasive Species	299
					Renewable or Not?	364
				Part B	The Global Climate	375
Language Arts	<u>LAFS.6.RI.1.1</u>	FS	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Part A	Environmental Justice for All	233
				Assessment		238

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.SL.1.1</u>	FS	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. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.		Decisions, Decisions	224
				Part A	Environmental Justice for All	233
				Part B		
					Field, Forest, and Stream	257
					Forest in the City	265
				Part A	Global Goods	272
				Part B		
					If You Were the Boss	280
					Improve Your Place	293
					Invasive Species	299
				Part B	Our Federal Forests	342
					Plant a Tree	350
				Part A	Reduce, Reuse, Recycle	356
				Part B	Renewable or Not?	364
				Part A	The Global Climate	375
				Part B		
				Part A	What's in a Label?	382
				Part B		

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.SL.1.2</u>	FS	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.	(Includes Part A <u>and</u> Part B)	Environmental Justice for All	233
				Assessment		238
				Part B	The Global Climate	375
Language Arts	<u>LAFS.6.SL.1.3</u>	FS	Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.		Decisions, Decisions	224
				Assessment		228
				Part B	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.SL.2.4</u>	FS	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.		Decisions, Decisions	224
				Part A	Environmental Justice for All	233
				Part B		
				Assessment		238
					Field, Forest, and Stream	257
				Part B	Global Goods	272
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Assessment		303
				Part B	Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	339
				Assessment	Renewable or Not?	371

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.SL.2.5</u>	FS	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.		Decisions, Decisions	224
				Part B	Environmental Justice for All	233
				Assessment		238
				Assessment	Field, Forest, and Stream	262
				Part B	Global Goods	272
				Assessment		277
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Part B	Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	334
				Part B	Our Federal Forests	342
				Assessment		347
				Part B	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.W.1.1</u>	FS	Write arguments to support claims with clear reasons and relevant evidence. <ol style="list-style-type: none"> <li>Introduce claim(s) and organize the reasons and evidence clearly.</li> <li>Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.</li> <li>Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.</li> <li>Establish and maintain a formal style.</li> <li>Provide a concluding statement or section that follows from the argument presented</li> </ol>	Assessment	Environmental Justice for All	238
				Assessment (Part B)	Our Federal Forests	347
				Assessment	Renewable or Not?	371
					The Global Climate	380
Language Arts	<u>LAFS.6.W.1.2</u>	FS	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. <ol style="list-style-type: none"> <li>Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</li> <li>Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.</li> <li>Use appropriate transitions to clarify the relationships among ideas and concepts.</li> <li>Use precise language and domain-specific vocabulary to inform about or explain the topic.</li> <li>Establish and maintain a formal style.</li> <li>Provide a concluding statement or section that follows from the information or explanation presented.</li> </ol>	Part A	Exploration Energy!	247
					Improve Your Place	293
				Assessment (Part A)	Life on the Edge	312
				Assessment	Plant a Tree	354



Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment	Forest in the City	268
				Assessment	Global Goods	277
					Improve Your Place	293
				Assessment (Part A)	Life on the Edge	312
				Assessment	Nature's Skyscrapers	330
					Nothing Succeeds Like Succession	339
					Renewable or Not?	364
					What's in a Label?	387
Language Arts	<u>LAFS.6.W.3.7</u>	FS	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	Part B	Global Goods	272
					Invasive Species	299
				Part B	Live On the Edge	308
					Living with Fire	315
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.6.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 6 Reading standards to literature (e.g., “Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics”). b. Apply grade 6 Reading standards to literary nonfiction (e.g., “Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not”).	Part A	Environmental Justice for All	233
				Assessment		238
Language Arts	<u>LAFS.68.RH.3.8</u>	FS	Distinguish among fact, opinion, and reasoned judgment in a text.	Part A	Environmental Justice for All	233
Language Arts	<u>LAFS.68.RST.2.4</u>	FS	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.	Part B	Environmental Justice for All	233
Language Arts	<u>LAFS.68.RST.3.8</u>	FS	Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.	Part A	Environmental Justice for All	233
Language Arts	<u>LAFS.68.WHST.1.1</u>	FS	Write arguments focused on <i>discipline-specific content</i> . a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.	Assessment	Environmental Justice for All	238
				Assessment (Part B)	Our Federal Forests	347
				Assessment	Renewable or Not?	371
					The Global Climate	380

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.68.WHST.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	Assessment	Forest in the City	268
				Assessment	Global Goods	277
					Improve Your Place	293
				Assessment (Part A)	Life on the Edge	312
				Assessment	Nature's Skyscrapers	330
					Renewable or Not?	364
					What's in a Label?	387
Language Arts	<u>LAFS.68.WHST.2.6</u>	FS	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.	Assessment	Environmental Justice for All	238
					Exploration Energy!	254
				Part B	Life on the Edge	308
Language Arts	<u>LAFS.68.WHST.3.7</u>	FS	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
					Living with Fire	315
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.68.WHST.3.9</u>	FS	Draw evidence from informational texts to support analysis reflection, and research.	Part A	Environmental Justice for All	233
				Assessment		238
Language Arts	<u>LAFS.7.L.3.6</u>	FS	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.		Invasive Species	299
					Renewable or Not?	364
				Part B	The Global Climate	375
Language Arts	<u>LAFS.7.RI.1.1</u>	FS	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Part A	Environmental Justice for All	233
				Assessment		238

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. d. Acknowledge new information expressed by others and, when warranted, modify their own views.		Decisions, Decisions	224
				Part A	Environmental Justice for All	233
				Part B		
					Field, Forest, and Stream	257
					Forest in the City	265
				Part A	Global Goods	272
				Part B		
					If You Were the Boss	280
					Improve Your Place	293
					Invasive Species	299
				Part B	Our Federal Forests	342
					Plant a Tree	350
				Part A	Reduce, Reuse, Recycle	356
				Part B	Renewable or Not?	364
				Part A	The Global Climate	375
				Part B		
				Part A	What's in a Label?	382
				Part B		

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.SL.1.2</u>	FS	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.	(Includes Part A <u>and</u> Part B)	Environmental Justice for All	233
				Assessment		238
				Part B	The Global Climate	375
Language Arts	<u>LAFS.7.SL.1.3</u>	FS	Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.		Decisions, Decisions	224
				Assessment		228
				Part B	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.SL.2.4</u>	FS	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	Part A	Environmental Justice for All	233
				Part B		
				Assessment		238
				Part A	Exploration Energy!	247
					Field, Forest, and Stream	257
				Assessment		262
				Part B	Global Goods	272
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Assessment		303
				Part B	Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	339
				Assessment	Renewable or Not?	371

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.SL.2.5</u>	FS	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.		Decisions, Decisions	224
				Part B	Environmental Justice for All	233
				Assessment		238
				Assessment	Field, Forest, and Stream	262
				Part B	Global Goods	272
				Assessment		277
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Part B	Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	339
				Part B	Our Federal Forests	342
				Assessment		347
				Part B	The Global Climate	375



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.W.1.1</u>	FS	Write arguments to support claims with clear reasons and relevant evidence. <ol style="list-style-type: none"> <li>Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.</li> <li>Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</li> <li>Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.</li> <li>Establish and maintain a formal style.</li> <li>Provide a concluding statement or section that follows from and supports the argument presented.</li> </ol>	Assessment	Environmental Justice for All	238
				Assessment (Part B)	Our Federal Forests	347
				Assessment	Renewable or Not?	371
					The Global Climate	380
Language Arts	<u>LAFS.7.W.1.2</u>	FS	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. <ol style="list-style-type: none"> <li>Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</li> <li>Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.</li> <li>Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.</li> <li>Use precise language and domain-specific vocabulary to inform about or explain the topic.</li> <li>Establish and maintain a formal style.</li> <li>Provide a concluding statement or section that follows from and supports the information or explanation presented.</li> </ol>	Part A	Exploration Energy!	247
					Improve Your Place	293
				Assessment (Part A)	Life on the Edge	312
				Assessment	Plant a Tree	354

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.7.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment	Forest in the City	268
					Global Goods	277
					Improve Your Place	293
				Assessment (Part A)	Life on the Edge	312
				Assessment	Nature’s Skyscrapers	330
					Nothing Succeeds Like Succession	339
					What’s in a Label?	387
Language Arts	<u>LAFS.7.W.3.7</u>	FS	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350
Language Arts	<u>LAFS.7.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research. <ol style="list-style-type: none"> <li>Apply grade 7 Reading standards to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”).</li> <li>Apply grade 7 Reading standards to literary nonfiction (e.g. “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims”).</li> </ol>	Part A	Environmental Justice for All	233
				Assessment		238

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.L.3.6</u>	FS	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.		Invasive Species	299
					Renewable or Not?	364
				Part B	The Global Climate	375
Language Arts	<u>LAFS.8.RI.1.1</u>	FS	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	Part A	Environmental Justice for All	233
				Assessment		238
Language Arts	<u>LAFS.8.RI.3.8</u>	FS	Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	Part B	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.SL.1.1</u>	FS	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.		Decisions, Decisions	224
				Part A	Environmental Justice for All	233
				Part B		
					Field, Forest and Stream	257
					Forest in the City	265
				Part A	Global Goods	272
				Part B		
					If You Were the Boss	280
					Improve Your Place	293
					Invasive Species	299
				Part B	Our Federal Forests	342
					Plant a Tree	350
				Part A	Reduce, Reuse, Recycle	356
				Part B	Renewable or Not?	364
				Part A	The Global Climate	375
				Part B		
				Part A	What's in a Label?	382
				Part B		

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.SL.1.3</u>	FS	Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.		Decisions, Decisions	224
				Assessment		228
				Part B	The Global Climate	375
Language Arts	<u>LAFS.8.SL.2.4</u>	FS	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	Part A	Environmental Justice for All	233
				Part B		
				Assessment		238
				Part A	Exploration Energy!	247
					Field, Forest, and Stream	257
				Assessment		262
				Part B	Global Goods	272
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Assessment		303
				Part B	Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	339
				Assessment	Renewable or Not?	371

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.SL.2.5</u>	FS	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.		Decisions, Decisions	224
				Part B	Global Goods	272
				Assessment		277
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Part B	Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	339
				Part B	Our Federal Forests	342
				Assessment		347
				Part B	The Global Climate	375
Language Arts	<u>LAFS.8.W.1.1</u>	FS	<p>Write arguments to support claims with clear reasons and relevant evidence.</p> <ol style="list-style-type: none"> <li>Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</li> <li>Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</li> <li>Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.</li> <li>Establish and maintain a formal style.</li> <li>Provide a concluding statement or section that follows from and supports the argument presented.</li> </ol>	Assessment	Environmental Justice for All	238
				Assessment (Part B)	Our Federal Forests	347
				Assessment	Renewable or Not?	371
					The Global Climate	380

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.W.1.2</u>	FS	<p>Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p> <ul style="list-style-type: none"> <li>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.</li> <li>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.</li> <li>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.</li> <li>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</li> <li>e. Establish and maintain a formal style.</li> <li>f. Provide a concluding statement or section that follows from and supports the information or explanation presented.</li> </ul>	Part A	Exploration Energy!	247
					Improve Your Place	293
				Assessment (Part A)	Life on the Edge	312
				Assessment	Plant a Tree	354
Language Arts	<u>LAFS.8.W.2.4</u>	FS	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Assessment	Forest in the City	268
					Global Goods	277
					Improve Your Place	293
				Assessment (Part A)	Life on the Edge	312
				Assessment	Nature's Skyscrapers	330
					Nothing Succeeds Like Succession	339
					Renewable or Not?	364
					What's in a Label?	387

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>LAFS.8.W.2.6</u>	FS	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	Assessment	Environmental Justice for All	238
					Exploration Energy!	254
				Part B	Life on the Edge	308
Language Arts	<u>LAFS.8.W.3.7</u>	FS	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
					Living with Fire	315
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350
Language Arts	<u>LAFS.8.W.3.9</u>	FS	Draw evidence from literary or informational texts to support analysis, reflection, and research. <ol style="list-style-type: none"> <li>Apply grade 7 Reading standards to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”).</li> <li>Apply grade 7 Reading standards to literary nonfiction (e.g. “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims”).</li> </ol>	Part A	Environmental Justice for All	233
				Assessment		238



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<a href="#">MAFS.K12.MP.2.1</a>	FS	Reason abstractly and quantitatively. Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.			257
				3-5	Field Forest and Steam	261
				Assessment		262
					Forest in the City	265
				Assessment		268
					If You Were the Boss	280
					Nature’s Skyscrapers	325
				3-5		329
				Part C	Nothing Succeeds Like Succession	334
				Part A	Reduce, Reuse, Recycle	356
				Part A	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<a href="#">MAFS.K12.MP.3.1</a>	FS	Construct viable arguments and critique the reasoning of others. Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.		If You Were the Boss	280
				Assessment		284
				Part C	Nothing Succeeds Like Succession	334
				Assessment		339
Mathematics	<a href="#">MAFS.K12.MP.4.1</a>	FS	Model with mathematics. Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.		Forest in the City	265
					If You Were the Boss	280
					Nature's Skyscrapers	325
				Part A	Reduce, Reuse, Recycle	356
				Part B	Renewable or Not?	364
				Part A	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<a href="#">MAFS.K12.MP.5.1</a>	FS	Use appropriate tools strategically. Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.		Nature's Skyscrapers	325
				3-5		329
				Part B	Renewable or Not?	364
				Part B	The Global Climate	375
Mathematics	<a href="#">MAFS.K12.MP.6.1</a>	FS	Attend to precision. Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.		Nature's Skyscrapers	325
				Assessment		330
Mathematics	<a href="#">MAFS.K12.MP.8.1</a>	FS	Look for and express regularity in repeated reasoning. Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$ . Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$ , $(x - 1)(x^2 + x + 1)$ , and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.		Nature's Skyscrapers	325

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MAFS.4.MD.1.1</u>	FS	Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i>	3-5	Nature's Skyscrapers	329
Mathematics	<u>MAFS.6.RP.1.1</u>	FS	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."</i>	Part A	Reduce, Reuse, Recycle	356
Mathematics	<u>MAFS.6.SP.1.3</u>	FS	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Part B	Exploration Energy!	247
Mathematics	<u>MAFS.6.SP.2.5</u>	FS	Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	Part B	Exploration Energy!	247
					Nature's Skyscrapers	325
Mathematics	<u>MAFS.7.RP.1.2</u>	FS	Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. c. Represent proportional relationships by equations. <i>For example, if total cost <math>t</math> is proportional to the number <math>n</math> of items purchased at a constant price <math>p</math>, the relationship between the total cost and the number of items can be expressed as <math>t = pn</math>.</i> d. Explain what a point $(x, y)$ on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where $r$ is the unit rate.		If You Were the Boss	280
				Part A	The Global Climate	375

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MAFS.7.SP.1.1</u>	FS	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inference.		Forest in the City	265
				Part C	Nothing Succeeds Like Succession	334
				Part A	Our Federal Forests	342
				Part B		
				Part A	Reduce, Reuse, Recycle	356
Mathematics	<u>MAFS.7.SP.3.7</u>	FS	<p>Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p> <p>a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i></p> <p>b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies</i></p>	Assessment	The Global Climate	380
Social Studies	<u>SS.3.C.2.1</u>	NGSSS	Identify group and individual actions of citizens that demonstrate civility, cooperation, volunteerism, and other civic virtues.	Assessment	Decisions, Decisions	228
				3-5	Plant a Tree	353
					Reduce, Reuse, Recycle	356
Social Studies	<u>SS.4.C.2.2</u>	NGSSS	Identify ways citizens work together to influence government and help solve community and state problems.	Assessment	Decisions, Decisions	228
Social Studies	<u>SS.4.C.2.3</u>	NGSSS	Explain the importance of public service, voting, and volunteerism.	3-5	Improve Your Place	295

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Social Studies	<u>SS.5.G.4.1</u>	NGSSS	Construct maps, charts, and graphs to display geographic information.	3-5	Improve Your Place	295
Social Studies	<u>SS.6.G.1.2</u>	NGSSS	Analyze the purposes of map projections (political, physical, special purpose) and explain the applications of various types of maps.	Part B	Environmental Justice for All	233
Social Studies	SS.7.C.2.3	NGSSS	Experience the responsibilities of citizens at the local, state, or federal levels.	Part B	Reduce, Reuse, Recycle	356
Social Studies	<u>SS.7.C.2.10</u>	NGSSS	Examine the impact of media, individuals, and interest groups on monitoring and influencing government.		Decisions, Decisions	224
				Assessment		228
Social Studies	<u>SS.7.C.2.12</u>	NGSSS	Develop a plan to resolve a state or local problem by researching public policy alternatives, identifying appropriate government agencies to address the issue, and determining a course of action.	Part A	Environmental Justice for All	233
				Assessment		238
				Part B	Exploration Energy!	247
				Assessment		254
					Improve Your Place	293
				Part B	Our Federal Forests	342
Social Studies	<u>SS.7.C.2.13</u>	NGSSS	Examine multiple perspectives on public and current issues.		Decisions, Decisions	224
				Assessment		228
				Part A	Environmental Justice for All	233
					If You Were the Boss	280

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Social Studies	<u>SS.7.C.2.14</u>	NGSSS	Conduct a service project to further the public good.		Improve Your Place	293
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350
				Part B	Reduce, Reuse, Recycle	356
Social Studies	<u>SS.7.E.1.3</u>	NGSSS	Review the concepts of supply and demand, choice, scarcity, and opportunity cost as they relate to the development of the mixed market economy in the United States.	Part B	Renewable or Not?	364
Social Studies	<u>SS.7.E.3.3</u>	NGSSS	Compare and contrast a single resource economy with a diversified economy.	Part B	Renewable or Not?	364
Social Studies	<u>SS.7.G.3.1</u>	NGSSS	Use maps to describe the location, abundance, and variety of natural resources in North America.	Part A	Global Goods	272
				Part B		
Social Studies	<u>SS.7.E.3.4</u>	NGSSS	Compare and contrast the standard of living in various countries today to that of the United States using gross domestic product (GDP) per capita as an indicator.	Part B	Renewable or Not?	364
Social Studies	<u>SS.7.G.4.2</u>	NGSSS	Use maps and other geographic tools to examine the importance of demographics within political divisions of the United States.	Part B	Environmental Justice for All	233
Social Studies	<u>SS.7.G.5.1</u>	NGSSS	Use a choropleth or other map to geographically represent current information about issues of conservation or ecology in the local community.		Decisions, Decisions	224
					If You Were the Boss	280
				Part B	Environmental Justice for All	233
					Improve Your Place	293
				Part B	Nothing Succeeds Like Succession	334
				Assessment		339

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Social Studies	<u>SS.7.G.6.1</u>	NGSSS	Use Geographic Information Systems (GIS) or other technology to view maps of current information about the United States.	Part B	Environmental Justice for All	233
Social Studies	<u>SS.8.FL.2.1</u>	NGSSS	Explain why when deciding what to buy, consumers may choose to gather information from a variety of sources. Describe how the quality and usefulness of information provided by sources can vary greatly from source to source. Explain that, while many sources provide valuable information, other sources provide information that is deliberately misleading.	Part A	What's in a Label??	382
Social Studies	<u>SS.8.FL.2.2</u>	NGSSS	Analyze a source's incentives in providing information about a good or service, and how a consumer can better assess the quality and usefulness of the information.	Part A	What's in a Label??	382
Social Studies	<u>SS.8.G.2.2</u>	NGSSS	Use geographic terms and tools to analyze case studies of regional issues in different parts of the United States that have had critical economic, physical, or political ramifications.	Part A	Environmental Justice for All	233
				Part B		
Social Studies	<u>SS.8.G.3.2</u>	NGSSS	Use geographic terms and tools to explain differing perspectives on the use of renewable and non-renewable resources in the United States and Florida over time.	Part A	Global Goods	272
				Part B		
				Part A	Our Federal Forests	342
				Part B		



Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Social Studies	<u>SS.8.G.5.1</u>	NGSSS	Describe human dependence on the physical environment and natural resources to satisfy basic needs in local environments in the United States.	Part A	Environmental Justice for All	233
				Part A	Exploration Energy!	247
					Forest in the City	265
				Part A	Global Goods	272
				Part B		
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350
				Part B	Renewable or Not?	364
				Part A	What's in a Label?	382
Social Studies	<u>SS.8.G.5.2</u>	NGSSS	Describe the impact of human modifications on the physical environment and ecosystems of the United States throughout history.	Part A	Environmental Justice for All	233
				Part B		
				Assessment		238
					Invasive Species	299
				Part A	Life on the Edge	308
				Part B		
				Part A	Reduce, Reuse, Recycle	356

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Social Studies	<u>SS.8.G.6.1</u>	NGSSS	Use appropriate maps and other graphic representations to analyze geographic problems and changes over time throughout American history.	Part A	Nothing Succeeds Like Succession	334
				Part B		
				Part C		
				Assessment		339
Language Arts	<u>ELA.K12.EE.1.1</u>	BEST	Cite evidence to explain and justify reasoning.	Part B	Environmental Justice for All	233
				Assessment		238
				Assessment	Forest in the City	268
				Part B	Global Goods	272
				Assessment		277
					If You Were the Boss	280
					Improve Your Place	293
				Assessment	Life on the Edge	312
				Part B	Living with Fire	315
				Assessment	Nature's Skyscrapers	330
				Part B	Our Federal Forests	342
				Assessment		347
				Assessment	Renewable or Not?	371

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	ELA.K12.EE.1. - continued	BEST	Cite evidence to explain and justify reasoning.	Part A and Part B	The Global Climate	375
				Assessment		380
				Part B	What's in a Label?	382
				Assessment		387
Language Arts	<u>ELA.K12.EE.2.1</u>	BEST	Read and comprehend grade-level complex texts proficiently.		Decisions, Decisions	224
				Part A	Nothing Succeeds Like Succession	334
Language Arts	<u>ELA.K12.EE.3.1</u>	BEST	Make inferences to support comprehension.		Decisions, Decisions	224
					Field, Forest, and Stream	257
				3-5		261
				Assessment		262
					If You Were the Boss	280
				Part A and Part B	Our Federal Forests	342
				Assessment		347

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.4.1</u>	BEST	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.		Decisions, Decisions	224
				3-5		227
				Part B	Environmental Justice for All	233
				Part A and Part B	Exploration Energy!	247
					Field, Forest, and Stream	257
					Forest in the City	265
				Part A and Part B	Global Goods	272
					If You Were the Boss	280
					Improve Your Place	293
				3-5		295
					Invasive Species	299
				Part B	Living with Fire	315
				Part A and Part B	Nothing Succeeds Like Succession	334
				3-5		338

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.4.1 - Continues</u>	BEST	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.	Part B	Our Federal Forests	342
					Plant a Tree	350
				3-5		353
				Part A	Reduce, Reuse, Recycle	356
				Part A and Part B	Renewable or Not?	364
				Part A and Part B	The Global Climate	375
				Part A	What's in a Label?	382
Language Arts	<u>ELA.K12.EE.5.1</u>	BEST	Use the accepted rules governing a specific format to create quality work.	Part B	Environmental Justice for All	233
				Assessment		238
				3-5	Exploration Energy!	252
				Assessment		254
					Invasive Species	299
				Part B	Life on the Edge	308
				Part B	Living with Fire	315
				Assessment		320

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.K12.EE.5.1 – continued</u>	BEST	Use the accepted rules governing a specific format to create quality work.	Part A, Part B and Part C	Nothing Succeeds Like Succession	334
				Assessment		339
				Part B	Our Federal Forests	342
				Assessment		347
				Assessment	Plant a Tree	354
				Part A and Part B	Reduce, Reuse, Recycle	356
				3-5		361
				Assessment		362
				Part B	What's in a Label?	382
				Assessment		387
Language Arts	<u>ELA.K12.EE.6.1</u>	BEST	Use appropriate voice and tone when speaking or writing.	Part B	Life on the Edge	308
				Part A and Part B	What's in a Label?	382
				Assessment		387

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.3.C.1.3</u>	BEST	Write opinions about a topic or text, include reasons supported by details from one or more sources, use transitions, and provide a conclusion.	3-5	Decisions, Decisions	227
Language Arts	<u>ELA.3.C.2.1</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, and clear pronunciation.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.3.C.4.1</u>	BEST	Conduct research to answer a question, organizing information about the topic from multiple sources.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.3.C.5.2</u>	BEST	Use digital writing tools individually or collaboratively to plan, draft, and revise writing.	Assessment	Exploration Energy!	254
Language Arts	<u>ELA.4.C.2.1</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, and clear pronunciation.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.4.C.4.1</u>	BEST	Conduct research to answer a question, organizing information about the topic, using multiple valid sources.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.4.C.5.1</u>	BEST	Arrange multimedia elements to create emphasis in oral or written tasks.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.4.C.5.2</u>	BEST	Use digital writing tools individually or collaboratively to plan, draft, and revise writing.	Assessment	Exploration Energy!	254
Language Arts	<u>ELA.5.C.2.1</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, clear pronunciation, and appropriate.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.5.C.4.1</u>	BEST	Conduct research to answer a question, organizing information about the topic and using multiple reliable and valid sources.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.5.C.5.1</u>	BEST	Arrange multimedia elements to create emphasis in oral or written tasks.	3-5	Exploration Energy!	252
Language Arts	<u>ELA.5.C.5.2</u>	BEST	Use digital writing tools individually or collaboratively to plan, draft, and revise writing.	Assessment	Exploration Energy!	254
Language Arts	<u>ELA.612.F.2.4</u>	BEST	Read grade-level texts with accuracy, automaticity, and appropriate prosody or expression.		Decisions, Decisions	224
				Part A	Nothing Succeeds Like Succession	334

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>ELA.6.C.1.2</u>	BEST	Write personal or fictional narratives using narrative techniques, precise words and phrases, and figurative language.	Assessment	Global Goods	277
					Nothing Succeeds Like Succession	339
Language Arts	<u>ELA.6.C.1.3</u>	BEST	Write and support a claim using logical reasoning, relevant evidence from sources, elaboration, and a logical organizational structure with varied transitions.	Assessment	Environmental Justice for All	238
					Global Goods	277
					Improve Your Place	293
				Part B	Life on the Edge	308
				Assessment (Part B)		312
				Assessment (Part B)	Our Federal Forests	347
				Assessment	Renewable or Not?	371
					The Global Climate	380
					What's in a Label?	387
Language Arts	<u>ELA.6.C.1.4</u>	BEST	Write expository texts to explain and/or analyze information from multiple sources, using a logical organizational structure, relevant elaboration, and varied transitions.	Part A	Exploration Energy!	247
				Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
				Assessment	Our Federal Forests	347
					Plant a Tree	354
Language Arts	<u>ELA.6.C.1.5</u>	BEST	Improve writing by planning, revising, and editing, considering feedback from adults and peers.		Improve Your Place	293



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.6.C.2.1</u>	BESTT	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, clear pronunciation, and appropriate pacing.		Decisions, Decisions	224
				Part B	Environmental Justice for All	233
				Assessment		238
				Part A	Exploration Energy!	247
					Field, Forest, and Stream	257
				Assessment	Forest in the City	268
				Part B	Global Goods	272
					If You Were the Boss	280
				Assessment		284
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Part B	Life on the Edge	308
					Living with Fire	315
				Part A	Nothing Succeeds Like Succession	334

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.6.C.2.1 continued</u>	BEST	Present information orally, in a logical sequence, using nonverbal cues, appropriate volume, clear pronunciation, and appropriate pacing.	Part A	Our Federal Forests	342
				Part B	Reduce, Reuse, Recycle	356
					Renewable or Not?	364
				Part B	The Global Climate	375
				Assessment (Part B)		380
				Part B	What's in a Label?	382
				Assessment		387
Language Arts	<u>ELA.6.C.4.1</u>	BEST	Conduct research to answer a question, drawing on multiple reliable and valid sources, and refocusing the inquiry when appropriate.	Part B	Environmental Justice for All	233
				Part A	Exploration Energy!	247
				Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
					Living with Fire	315
				Part A and Part B	Our Federal Forests	342
					Plant a Tree	350

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>ELA.6.C.5.1</u>	BEST	Integrate diverse digital media to enhance audience engagement in oral or written tasks.	Assessment	Environmental Justice for All	238
				Part B	Life on the Edge	308
Language Arts	<u>ELA.6.C.5.2</u>	BEST	Use digital tools to produce writing.	Assessment (Part B)	Exploration Energy!	254
					Improve Your Place	293
				Assessment	What's in a Label?	387
Language Arts	<u>ELA.6.R.2.4</u>	BEST	Track the development of an argument, identifying the types of reasoning used.	Part B	Environmental Justice for All	233
				Part A	What's in a Label?	382
Language Arts	<u>ELA.6.V.1.1</u>	BEST	Integrate academic vocabulary appropriate to grade level in speaking and writing.	Part A and Part B	Exploration Energy!	247
				Assessment (Part A & Part B)		254
					If You Were the Boss	280
				Assessment		284
				Part B	Life on the Edge	308

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.6.V.1.1 - continued</u>	BEST	Integrate academic vocabulary appropriate to grade level in speaking and writing.	Part A, Part B, and Part C	Nothing Succeeds Like Succession	334
				Assessment		339
				Part B	Reduce, Reuse, Recycle	356
				Assessment		362
				Part A and Part B	Renewable or Not?	364
				Assessment		371
				Assessment	What's in a Label?	387
Language Arts	<u>ELA.6.V.1.2</u>	BEST	Apply knowledge of Greek and Latin roots and affixes to determine meanings of words and phrases in grade-level content.	Part A	Renewable or Not?	364
Language Arts	<u>ELA.6.V.1.3</u>	BEST	Apply knowledge of context clues, figurative language, word relationships, reference materials, and/or background knowledge to determine the connotative and denotative meaning of words and phrases, appropriate to grade level.		Invasive Species	299
				Part A	Renewable or Not?	364
				Part B	The Global Climate	375
Language Arts	<u>ELA.7.C.1.2</u>	Best	Write personal or fictional narratives using narrative techniques, a recognizable point of view, precise words and phrases, and figurative language.	Assessment	Global Goods	277
					Nothing Succeeds Like Succession	339

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.7.C.1.3</u>	BEST	Write and support a claim using logical reasoning, relevant evidence from sources, elaboration, a logical organizational structure with varied transitions, and acknowledging at least one counterclaim.	Assessment	Environmental Justice for All	238
					Global Goods	277
					Improve Your Place	293
				Part B	Life on the Edge	308
				Assessment (Part B)		312
				Assessment (Part B)	Our Federal Forests	347
				Assessment	Renewable or Not?	364
					The Global Climate	380
				Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
				Assessment	Our Federal Forests	347
					Plant a Tree	354
Language Arts	<u>ELA.7.C.1.5</u>	BEST	Improve writing by planning, revising, and editing, considering feedback from adults and peers.		Improve Your Place	293

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.7.C.2.1</u>	BEST	Present information orally, in a logical sequence, emphasizing key points that support the central idea.		Decisions, Decisions	224
				Part B	Environmental Justice for All	233
				Assessment		238
				Part A	Exploration Energy!	247
					Field, Forest, and Stream	257
				Assessment	Forest in the City	268
				Part B	Global Goods	272
					If You Were the Boss	280
				Assessment		284
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Part B	Life on the Edge	308
				Part B	Living with Fire	315
				Part A	Nothing Succeeds Like Succession	334
				Part A	Our Federal Forests	342

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.7.C.2.1 - continued</u>	BEST	Present information orally, in a logical sequence, emphasizing key points that support the central idea..	Part B	Reduce, Reuse, Recycle	356
					Renewable or Not?	364
				Part B	The Global Climate	375
				Assessment (Part B)		380
				Part B	What's in a Label?	382
				Assessment		387
Language Arts	<u>ELA.7.C.4.1</u>	BEST	Conduct research to answer a question, drawing on multiple reliable and valid sources, and generating additional questions for further research.	Part B	Environmental Justice for All	233
				Part A	Exploration Energy!	247
				Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
					Living with Fire	315
				Part A	Our Federal Forests	342
				Part B		
					Plant a Tree	350

Subject	Standard	Standard Type	Description	Variation/Assessment	Activity	Page Number
Language Arts	<u>ELA.7.C.5.1</u>	BEST	Integrate diverse digital media to build cohesion in oral or written tasks.	Assessment	Environmental Justice for All	238
				Part B	Life on the Edge	308
				Part B	Our Federal Forests	342
				Assessment		347
					Plant a Tree	350
				Assessment		354
Language Arts	<u>ELA.7.C.5.2</u>	BEST	Use digital tools to produce and share writing.	Assessment (Part B)	Exploration Energy!	254
				Part B	Global Goods	272
					Improve Your Place	293
					Invasive Species	299
				Part B	Life on the Edge	308
					The Global Climate	375
				Assessment	What's in a Label?	387
Language Arts	<u>ELA.7.R.2.4</u>	BEST	Track the development of an argument, analyzing the types of reasoning used and their effectiveness.	Part A	What's in a Label?	382



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.7.V.1.1</u>	BEST	Integrate academic vocabulary appropriate to grade level in speaking and writing.	Part A	Exploration Energy!	247
				Part B		
				Assessment (Part A & Part B)		254
					If You Were the Boss	280
				Assessment		284
					Life on the Edge	308
				Part A	Nothing Succeeds Like Succession	334
				Part B		
				Part C		
				Assessment		339
				Part B	Reduce, Reuse, Recycle	356
				Assessment		362
				Part A	Renewable or Not?	364
				Part B		
				Assessment		371
				Assessment	What's in a Label?	387
Language Arts	<u>ELA.7.V.1.2</u>	BEST	Apply knowledge of Greek and Latin roots and affixes to determine meanings of words and phrases in grade-level content.	Part A	Renewable or Not?	364

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.7.V.1.3</u>	BEST	Apply knowledge of context clues, figurative language, word relationships, reference materials, and/or background knowledge to determine the connotative and denotative meaning of words and phrases, appropriate to grade level.		Invasive Species	299
				Part A	Renewable or Not?	364
				Part B	The Global Climate	375
Language Arts	<u>ELA.8.C.1.2</u>	BEST	Write personal or fictional narratives using narrative techniques, varied transitions, and a clearly established point of view.	Assessment	Global Goods	277
					Nothing Succeeds Like Succession	339
Language Arts	<u>ELA.8.C.1.3</u>	BEST	Write to argue a position, supporting at least one claim and rebutting at least one counterclaim with logical reasoning, credible evidence from sources, elaboration, and using a logical organizational structure.	Assessment	Environmental Justice for All	238
					Global Goods	277
					The Global Climate	380
Language Arts	<u>ELA.8.C.1.4</u>	BEST	Write expository texts to explain and analyze information from multiple sources, using relevant supporting details, logical organization, and varied purposeful transitions.	Part A	Energy Exploration!	247
				Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
				Assessment	Our Federal Forests	347
					Plant a Tree	353
Language Arts	<u>ELA.8.C.1.5</u>	BEST	Improve writing by planning, editing, considering feedback from adults and peers, and revising for clarity and cohesiveness.		Improve Your Place	293

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.8.C.2.1</u>	BEST	Present information orally, in a logical sequence, supporting the central idea with credible evidence.		Decisions, Decisions	224
				Part B	Environmental Justice for All	233
				Assessment		238
				Part A	Exploration Energy	247
					Field, Forest, and Stream	257
				Assessment	Forest in the City	268
				Part B	Global Goods	272
					If You Were the Boss	280
				Assessment		284
					Improve Your Place	293
				Assessment		296
					Invasive Species	299
				Part B	Life on the Edge	308
					Living with Fire	315
				Part A	Nothing Succeeds Like Succession	334

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.8.C.2.1 – continued</u>	BEST	Present information orally, in a logical sequence, supporting the central idea with credible evidence.	Part A	Our Federal Forests	342
				Part B	Reduce, Reuse, Recycle	356
					Renewable or Not?	364
				Part B	The Global Climate	375
				Assessment (Part B)		380
				Part B	What's in a Label?	382
				Assessment		387
Language Arts	<u>ELA.8.R.2.4</u>	BEST	Track the development of an argument, analyzing the types of reasoning used and their effectiveness, identifying ways in which the argument could be improved.	Part B	Environmental Justice for All	233
Language Arts	<u>ELA.8.C.4.1</u>	BEST	Conduct research to answer a question, drawing on multiple reliable and valid sources, and generating additional questions for further research.	Part B	Environmental Justice for All	233
				Part A	Exploration Energy!	247
				Part B	Global Goods	272
					Invasive Species	299
				Part B	Life on the Edge	308
					Living with Fire	315
				Part A and Part B	Our Federal Forests	342
					Plant a Tree	350

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.8.C.5.1</u>	BEST	Integrate diverse digital media to emphasize the relevance of a topic or idea in oral or written tasks.	Assessment	Environmental Justice for All	238
				Part B	Life on the Edge	308
				Part B	Our Federal Forests	342
				Assessment		347
					Plant a Tree	350
				Assessment		354
Language Arts	<u>ELA.8.C.5.2</u>	BEST	Use a variety of digital tools to collaborate with others to produce writing.	Assessment (Part B)	Exploration Energy!	254
					Improve Your Place	293
Language Arts	<u>ELA.8.R.2.4</u>	BEST	Track the development of an argument, analyzing the types of reasoning used and their effectiveness, identifying ways in which the argument could be improved.	Part A	What's in a Label?	382
Language Arts	<u>ELA.8.V.1.1</u>	BEST	Integrate academic vocabulary appropriate to grade level in speaking and writing.	Part A	Exploration Energy!	247
				Part B		
				Assessment (Part A & Part B)		254
					If You Were the Boss	280
				Assessment		284
					Life on the Edge	308

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Language Arts	<u>ELA.8.V.1.1 - continued</u>	BEST	Integrate academic vocabulary appropriate to grade level in speaking and writing.	Part A, Part B, and Part C	Nothing Succeeds Like Succession	334
				Assessment		339
				Part B	Reduce, Reuse, Recycle	356
				Assessment		362
				Part A and Part B	Renewable or Not?	364
				Assessment		371
				Assessment	What's in a Label?	387
Language Arts	<u>ELA.8.V.1.3</u>	BEST	Apply knowledge of context clues, figurative language, word relationships, reference materials, and/or background knowledge to determine the connotative and denotative meaning of words and phrases, appropriate to grade level.		Invasive Species	299
				Part A	Renewable or Not?	364
				Part B	The Global Climate	375
Mathematics	<u>MA.K12.MTR.1.1</u>	BEST	<p>Mathematicians who participate in effortful learning both individually and with others:</p> <ul style="list-style-type: none"> <li>Analyze the problem in a way that makes sense given the task.</li> <li>Ask questions that will help with solving the task.</li> <li>Build perseverance by modifying methods as needed while solving a challenging task.</li> <li>Stay engaged and maintain a positive mindset when working to solve tasks.</li> <li>Help and support each other when attempting a new method or approach.</li> </ul>	Part B	Exploration Energy!	247
					If You Were the Boss	280
					Nature's Skyscrapers	325

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MA.K12.MTR.2.1</u>	BEST	<p>Demonstrate understanding by representing problems in multiple ways.</p> <p>Mathematicians who demonstrate understanding by representing problems in multiple ways:</p> <ul style="list-style-type: none"> <li>• Build understanding through modeling and using manipulatives.</li> <li>• Represent solutions to problems in multiple ways using objects, drawings, tables, graphs and equations.</li> <li>• Progress from modeling problems with objects and drawings to using algorithms and equations.</li> <li>• Express connections between concepts and representations.</li> <li>• Choose a representation based on the given context or purpose.</li> </ul>		Nature's Skyscrapers	325
Mathematics	<u>MA.K12.MTR.3.1</u>	BEST	<p>Complete tasks with mathematical fluency.</p> <p>Mathematicians who complete tasks with mathematical fluency:</p> <ul style="list-style-type: none"> <li>• Select efficient and appropriate methods for solving problems within the given context.</li> <li>• Maintain flexibility and accuracy while performing procedures and mental calculations.</li> <li>• Complete tasks accurately and with confidence.</li> <li>• Adapt procedures to apply them to a new context.</li> <li>• Use feedback to improve efficiency when performing calculations.</li> </ul>		Nature's Skyscrapers	325
Mathematics	<u>MA.K12.MTR.4.1</u>	BEST	<p>Engage in discussions that reflect on the mathematical thinking of self and others.</p> <p>Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others:</p> <ul style="list-style-type: none"> <li>• Communicate mathematical ideas, vocabulary and methods effectively.</li> <li>• Analyze the mathematical thinking of others.</li> <li>• Compare the efficiency of a method to those expressed by others.</li> <li>• Recognize errors and suggest how to correctly solve the task.</li> <li>• Justify results by explaining methods and processes.</li> <li>• Construct possible arguments based on evidence.</li> </ul>		Nature's Skyscrapers	325
				3-5		329
				Assessment		330
				Part A	The Global Climate	375
				Assessment		380

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<a href="#">MA.K12.MTR.5.1</a>	BEST	Use patterns and structure to help understand and connect mathematical concepts. Mathematicians who use patterns and structure to help understand and connect mathematical concepts: <ul style="list-style-type: none"> <li>• Focus on relevant details within a problem.</li> <li>• Create plans and procedures to logically order events, steps or ideas to solve problems.</li> <li>• Decompose a complex problem into manageable parts.</li> <li>• Relate previously learned concepts to new concepts.</li> <li>• Look for similarities among problems.</li> <li>• Connect solutions of problems to more complicated large-scale situations.</li> </ul>	Part B	Renewable or Not?	364
				Part A and Part B	The Global Climate	375
				Assessment		380
Mathematics	<a href="#">MA.K12.MTR.6.1</a>	BEST	Assess the reasonableness of solutions. Mathematicians who assess the reasonableness of solutions: <ul style="list-style-type: none"> <li>• Estimate to discover possible solutions.</li> <li>• Use benchmark quantities to determine if a solution makes sense.</li> <li>• Check calculations when solving problems.</li> <li>• Verify possible solutions by explaining the methods used.</li> <li>• Evaluate results based on the given context.</li> </ul>		Nature's Skyscrapers	325



Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MA.K12.MTR.7.1</u>	BEST	<p>Apply mathematics to real-world contexts.</p> <p>Mathematicians who apply mathematics to real-world contexts:</p> <ul style="list-style-type: none"> <li>• Connect mathematical concepts to everyday experiences.</li> <li>• Use models and methods to understand, represent and solve problems.</li> <li>• Perform investigations to gather data or determine if a method is appropriate.</li> <li>• Redesign models and methods to improve accuracy or efficiency.</li> </ul>	Part B	Exploration Energy!	247
					Field, Forest, and Stream	275
				3-5		261
					Forest in the City	265
					If You Were the Boss	280
				3-5	Life on the Edge	311
					Nature's Skyscrapers	325
				3-5	Plant a Tree	353
				Part A	Reduce, Reuse, Recycle	356
				Part B	Renewable or Not?	364
				Part A	The Global Climate	375
				Assessment (Part A)		380
Mathematics	<u>MA.3.DP.1.1</u>	BEST	Collect and represent numerical and categorical data with whole-number values using tables, scaled pictographs, scaled bar graphs or line plots. Use appropriate titles, labels and units.	3-5	Decisions, Decisions	227
Mathematics	<u>MA.3.M.1.1</u>	BEST	Select and use appropriate tools to measure the length of an object, the volume of liquid within a beaker and temperature.	3-5	Nature's Skyscrapers	329
Mathematics	<u>MA.4.M.1.1</u>	BEST	Select and use appropriate tools to measure attributes of objects.	3-5	Nature's Skyscrapers	329
Mathematics	<u>MA.5.DP.1.1</u>	BEST	Collect and represent numerical data, including fractional and decimal values, using tables, line graphs or line plots.	3-5	Decisions, Decisions	227

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MA.6.AR.2.2</u>	BEST	Write and solve one-step equations in one variable within a mathematical or real-world context using addition and subtraction, where all terms and solutions are integers.		Nature's Skyscrapers	325
Mathematics	<u>MA.6.AR.2.3</u>	BEST	Write and solve one-step equations in one variable within a mathematical or real-world context using multiplication and division, where all terms and solutions are integers.		Nature's Skyscrapers	325
Mathematics	<u>MA.6.AR.3.1</u>	BEST	Given a real-world context, write and interpret ratios to show the relative sizes of two quantities using appropriate notation: $a/b$ , $a$ to $b$ , or $a:b$ where $b \neq 0$ .		Nature's Skyscrapers	325
Mathematics	<u>MA.6.AR.3.4</u>	BEST	Apply ratio relationships to solve mathematical and real-world problems involving percentages using the relationship between two quantities.		If You Were the Boss	280
					Nature's Skyscrapers	325
Mathematics	<u>MA.6.AR.3.5</u>	BEST	Solve mathematical and real-world problems involving ratios, rates and unit rates, including comparisons, mixtures, ratios of lengths and conversions within the same measurement system.	Part B	Exploration Energy!	247
					Nature's Skyscrapers	325
Mathematics	<u>MA.6.DP.1.1</u>	BEST	Recognize and formulate a statistical question that would generate numerical data.	Part B	Exploration Energy!	247
					Field, Forest, and Stream	257
					Forest in the City	265
					Nature's Skyscrapers	325
				Part A	The Global Climate	375
Mathematics	<u>MA.6.DP.1.4</u>	BEST	Given a histogram or line plot within a real-world context, qualitatively describe and interpret the spread and distribution of the data, including any symmetry, skewness, gaps, clusters, outliers and the range.		Forest in the City	265
				Assessment		268
Mathematics	<u>MA.6.DP.1.5</u>	BEST	Create box plots and histograms to represent sets of numerical data within real-world contexts.		Forest in the City	265

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MA.6.DP.1.6</u>	BEST	Given a real-world scenario, determine and describe how changes in data values impact measures of center and variation.	Part B	Exploration Energy!	247
				Part A	The Global Climate	375
				Assessment (Part A)		380
Mathematics	<u>MA.6.NSO.3.5</u>	BEST	Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages.	Part A	The Global Climate	375
Mathematics	<u>MA.6.NSO.4.1</u>	BEST	Apply and extend previous understandings of operations with whole numbers to add and subtract integers with procedural fluency.		If You Were the Boss	280
Mathematics	<u>MA.6.NSO.4.2</u>	BEST	Apply and extend previous understandings of operations with whole numbers to multiply and divide integers with procedural fluency.		If You Were the Boss	280
Mathematics	<u>MA.7.AR.2.2</u>	BEST	Write and solve two-step equations in one variable within a mathematical or real-world context, where all terms are rational numbers.		Nature's Skyscrapers	325
Mathematics	<u>MA.7.AR.3.2</u>	BEST	Apply previous understanding of ratios to solve real-world problems involving proportions.		Nature's Skyscrapers	325
Mathematics	<u>MA.7.AR.4.1</u>	BEST	Determine whether two quantities have a proportional relationship by examining a table, graph or written description.		Field, Forest, and Stream	257
				Assessment		262
				Part A	Reduce, Reuse, Recycle	356
				Part A	The Global Climate	375
				Assessment		380
Mathematics	<u>MA.7.AR.4.5</u>	BEST	Solve real-world problems involving proportional relationships.		Nature's Skyscrapers	325
				Part A	Reduce, Reuse, Recycle	356
Mathematics	<u>MA.7.DP.1.1</u>	BEST	Determine an appropriate measure of center or measure of variation to summarize numerical data, represented numerically or graphically, taking into consideration the context and any outliers.	Part B	Exploration Energy!	247

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MA.7.DP.1.2</u>	BEST	Given two numerical or graphical representations of data, use the measure(s) of center and measure(s) of variability to make comparisons, interpret results and draw conclusions about the two populations.		Forest in the City	265
				Assessment		268
				Part A	The Global Climate	375
				Assessment (Part A)		380
Mathematics	<u>MA.7.DP.1.3</u>	BEST	Given categorical data from a random sample, use proportional relationships to make predictions about a population.		Field, Forest, and Stream	257
				Part A	The Global Climate	375
				Assessment (Part A)		380
Mathematics	<u>MA.7.DP.1.5</u>	BEST	Given a real-world numerical or categorical data set, choose and create an appropriate graphical representation.	Assessment	Field, Forest, and Stream	262
					Forest in the City	265
				Part B	Our Federal Forests	342
				Assessment		347
				Part A and Part B	Reduce, Reuse, Recycle	356
				Part A	The Global Climate	375
				Assessment (Part A)		380
Mathematics	<u>MA.7.DP.2.4</u>	BEST	Use a simulation of a simple experiment to find experimental probabilities and compare them to theoretical probabilities.	Part B	Renewable or Not?	364
Mathematics	<u>MA.7.GR.1.3</u>	BEST	Explore the proportional relationship between circumferences and diameters of circles. Apply a formula for the circumference of a circle to solve mathematical and real-world problems.		Nature's Skyscrapers	325

Subject	Standard	Standard Type	Description	Variation/ Assessment	Activity	Page Number
Mathematics	<u>MA.7.GR.1.5</u>	BEST	Solve mathematical and real-world problems involving dimensions and areas of geometric figures, including scale drawings and scale factors.		If You Were the Boss	280
Mathematics	<u>MA.7.NSO.2.3</u>	BEST	Solve real-world problems involving any of the four operations with rational numbers.		If You Were the Boss	280
Mathematics	<u>MA.7.AR.4.1</u>	BEST	Determine whether two quantities have a proportional relationship by examining a table, graph or written description.		If You Were the Boss	280
Mathematics	<u>MA.7.GR.1.5</u>	BEST	Solve mathematical and real-world problems involving dimensions and areas of geometric figures, including scale drawings and scale factors.		If You Were the Boss	280
Mathematics	<u>MA.7.NSO.1.2</u>	BEST	Rewrite rational numbers in different but equivalent forms including fractions, mixed numbers, repeating decimals and percentages to solve mathematical and real-world problems.	Part A	The Global Climate	375
Mathematics	<u>MA.7.NSO.2.1</u>	BEST	Solve mathematical problems using multi-step order of operations with rational numbers including grouping symbols, whole-number exponents and absolute value.		Nature's Skyscrapers	325
Mathematics	<u>MA.8.DP.1.1</u>	BEST	Given a set of real-world bivariate numerical data, construct a scatter plot or a line graph as appropriate for the context.		Forest in the City	265
				Part A	The Global Climate	375
Mathematics	<u>MA.8.F.1.1</u>	BEST	Given a set of ordered pairs, a table, a graph or mapping diagram, determine whether the relationship is a function. Identify the domain and range of the relation.	Part A	The Global Climate	375