Project Learning Tree (PLT) is an award-winning environmental education program designed for teachers and other educators, parents, and community leaders working with youth from preschool through grade 12. It offers lesson plans and activities for all ages that can be easily incorporated into existing curriculum or used in informal settings.

The following correlation showcases ways to use the 96 lessons found within PLT’s PreK-8 Environmental Education Activity Guide to help meet requirements for South Dakota Content Standards. South Dakota Content Standards serve as expectations for what students should know and be able to do by the end of each grade. These Content standards are a critical component to ensure South Dakota students in every classroom receive current and relevant learning experiences. The goal is that all students will graduate college, career, and life ready.

This correlation is designed to assist K-8 teachers, academic planners, STEM specialists, parent volunteers, and other in-school or out-of-school educators in planning learning activities for helping school age children in Kindergarten through Grade 8 in meeting benchmarks mandated by the South Dakota Content Standards. Information on South Dakota Content Standards can be accessed at https://doe.sd.gov/contentstandards/.
Activity 1:

*The Shape of Things, page 17*

**Objectives:** Students will identify common shapes appearing in the natural and built environment as a way of understanding the function of shapes

**Grade Levels:** PreK-K (Part A); K-3 (Part B)

**Subject Areas:** Visual Arts, Language Arts, Math, Science

Visual Arts Standards:
- Kindergarten: K.VA.CR.11
- First Grade: 1.VA.CR.11
- Second Grade: 2.VA.CR.11
- Third Grade: 3.VA.CR.11

Language Arts Standards:
- First Grade: 1.SL.1; 1.SL.4; 1.SL.5; 1.SL.6
- Second Grade: 2.SL.1; 2.SL.4; 2.SL.5; 2.SL.6
- Third Grade: 3.SL.1; 3.SL.4; 3.SL.5; 3.SL.6

Math Standards:
- Kindergarten: K.G.1; K.G.2; K.G.3
- First Grade: 1.G.1; 1.G.2
- Second Grade: 2.G.1
- Third Grade: 3.G.1

Science Standards:
- Kindergarten: K-LS1-1
- First Grade: N/A
- Second Grade: 2-PS1-1; 2-LS4-1
- Third Grade: 3-LS3-2
Activity 2:

Get in Touch with Trees, page 20

Objectives: Students will describe a variety of textures and demonstrate how their sense of touch is used to explore and respond to the environment around them

Grade Levels: K-6

Subject Areas: Science, Language Arts, Visual Arts

Science Standards:
- Kindergarten: K-LS1-1
- First Grade: 1-LS1-1
- Second Grade: 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2
- Fourth Grade: 4-LS1-1
- Fifth Grade: N/A
- Sixth Grade: N/A

Language Arts Standards:
- Kindergarten: K.SL.1; K.SL.2; K.SL.3; K.SL.4; K.SL.5; K.SL.6
- First Grade: 1.SL.1; 1.SL.2; 1.SL.3; 1.SL.4
- Second Grade: 2.SL.1; 2.SL.2; 2.SL.3; 2.SL.4
- Third Grade: 3.SL.1; 3.SL.2; 3.SL.3; 3.SL.4
- Fourth Grade: 4.SL.1; 4.SL.2; 4.SL.3; 4.SL.4
- Fifth Grade: 5.SL.1; 5.SL.2; 5.SL.3; 5.SL.4
- Sixth Grade: 6.SL.1; 6.SL.2; 6.SL.3; 6.SL.4

Visual Arts:
- Kindergarten: K.VA.CR.1.1; K.VA.CR.2.1
- First Grade: 1.VA.CR.1.1; 1.VA.CR.2.1
- Second Grade: 2.VA.CR.1.1; 2.VA.CR.2.1
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.1.2; 3.VA.CR.2.2
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.2.2
- Sixth Grade: 6.VA.CR.1.1; 6.VA.CR.1.2; 6.VA.CR.2.1; 6.VA.CR.2.2; 6.VA.CR.2.3
Activity 3:

*Peppermint Beetle, page 23*

**Objectives:** Students will demonstrate how animals, including insects, use their sense of smell to respond to the environment around them.

Students will identify the importance of their own sense of smell in their daily lives.

**Grade Levels:** K-6

**Subject Areas:** Science, Social Studies

Science Standards:

- Kindergarten: K-LS1-1
- First Grade: 1-LS1-1
- Second Grade: 2-LS4-1
- Third Grade: 3-LS3-2; 3-LS4-2; 3-LS4-4
- Fourth Grade: 4-LS1-1; 4-LS1-2
- Fifth Grade: N/A
- Sixth Grade: MS-LS2-4

Language Arts Standards:

- Kindergarten: K.SL.1; K.SL.2; K.SL.3; K.SL.4; K.SL.5; K.SL.6
- First Grade: 1.SL.1; 1.SL.2; 1.SL.3; 1.SL.4
- Second Grade: 2.SL.1; 2.SL.2; 2.SL.3; 2.SL.4
- Third Grade: 3.SL.1; 3.SL.2; 3.SL.3; 3.SL.4
- Fourth Grade: 4.SL.1; 4.SL.2; 4.SL.3; 4.SL.4
- Fifth Grade: 5.SL.1; 5.SL.2; 5.SL.3; 5.SL.4
- Sixth Grade: 6.SL.1; 6.SL.2; 6.SL.3; 6.SL.4
Activity 4:

*Sounds Around, page 26*

**Objectives:** Students will identify sounds and map their location in the environment
Students will explain how noise can be a problem in the community
Students will create and carry out a plan to lessen a local noise problem
Students will study a Greek myth about sounds in nature

**Grade Levels:** Part A: PreK-K; Part B: 1-6; Part C: 6-8; Part D: 3-8

**Subject Areas:** Science, Language Arts, Social Studies, Math

**Science Standards:**
- Kindergarten: K-ESS2-2; K-ESS3-1; K-ESS3-3
- First Grade: 1-PS4-1
- Second Grade: N/A
- Third Grade: 3-LS4-4
- Fourth Grade: 4-PS3-2; 4-ESS3-2
- Fifth Grade: 5-ESS3-1
- Sixth Grade: MS-ESS3-3

**Language Arts Standards:**
- Kindergarten: K.SL.1; K.SL.2; K.SL.3; K.SL.4; K.SL.5; K.SL.6
- First Grade: 1.SL.1; 1.SL.2; 1.SL.3; 1.SL.4
- Second Grade: 2.SL.1; 2.SL.2; 2.SL.3; 2.SL.4
- Third Grade: 3.SL.1; 3.SL.2; 3.SL.3; 3.SL.4
- Fourth Grade: 4.SL.1; 4.SL.2; 4.SL.3; 4.SL.4
- Fifth Grade: 5.SL.1; 5.SL.2; 5.SL.3; 5.SL.4
- Sixth Grade: 6.SL.1; 6.SL.2; 6.SL.3; 6.SL.4

**Social Studies Standards:**
- Kindergarten: K.G.1.1; K.G.1.2; K.G.3.1
- First Grade: 1.G.1.1
- Second Grade: 2.G.6.2
- Third Grade: 3.G.2.1
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.6.1
- Sixth Grade: N/A

**Math Standards:**
- Kindergarten: K.MD.2; K.MD.3
- First Grade: 1.MD.4
- Second Grade: 2.MD.1; 2.MD.4; 2.MD.6; 2.MD.10
- Third Grade: 3.MD.3
- Fourth Grade: 4.MD.1; 4.MD.4
- Fifth Grade: 5.G.1; 5.G.2
- Sixth Grade: 6.SP.2; 6.SP.3; 6.SP.4; 6.SP.5
Activity 5:

Poet-Tree, page 31

Objectives: Students will express their points of view and attitudes about the environment using various forms of poetry

Students will analyze their own and other people’s poetry to discover its full meaning

Grade Levels: 3-8

Subject Areas: Language Arts, Science, Social Studies

Language Arts Standards:

- Third Grade: 3.L.2; 3.L.3; 3.RL.7; 3.RF.4; 3.SL.1; 3.SL.6; 3.W.4
- Fourth Grade: 4.RL.1; 4.RL.2; 4.RL.5; 4.W.4; 4.L.1; 4.L.2; 4.L.3; 4.L.5; 4.L.6; 4.SL.2
- Fifth Grade: 5.L.1; 5.L.2; 5.L.3; 5.RL.1; 5.RL.2; 5.RL.4; 5.RL.5; 5.RL.6; 5.RF.3; 5.RF.4; 5.SL.1; 5.SL.2; 5.SL.3; 5.SL.4; 5.SL.6; 5.W.2; 5.W.4;
- Sixth Grade: 6.RL.1; 6.RL.2; 6.RL.4; 6.RL.7; 6.W.2; 6.W.4; 6.L.1; 6.L.2; 6.L.3; 6.L.5; 6.L.6; 6.SL.1
- Seventh Grade: 7.RL.1; 7.RL.2; 7.RL.4; 7.RL.5; 7.RL.6; 7.RL.7; 7.W.4; 7.L.1; 7.L.2; 7.L.3; 7.L.4; 7.L.5; 7.L.6; 7.SL.1; 7.SL.2; 7.SL.4; 7.SL.6; 7.SL.7
- Eighth Grade: 8.RL.1; 8.RL.2; 8.RL.4; 8.RL.5; 8.RL.6; 8.W.4; 8.L.1; 8.L.2; 8.L.3; 8.L.4; 8.L.5; 8.L.6; 8.SL.1; 8.SL.3; 8.SL.4

Science Standards: N/A

Social Studies Standards:

- Third Grade: 3.H.1.1; 3.H.1.2
- Fourth Grade: N/A
- Fifth Grade: 5.G.2.1; 5.G.2.2; 5.G.2.3; 5.G.5.1; 5.G.6.1
- Sixth Grade: N/A
- Eighth Grade: N/A
Activity 6:

_Picture This! Page 34_

**Objectives:** Students will categorize similarities and differences between organisms
Students will make the connection between diverse organisms and the diverse environments in which they live

**Grade Levels:** Part A: PreK-1; Part B: 1-5

**Subject Areas:** Science, Visual Arts, Math

**Science Standards:**
- Kindergarten: K-ESS3-1
- First Grade: 1-LS1-2; 1-LS3-1
- Second Grade: 2-LS4-1
- Third Grade: 3-LS3-1; 3-LS3-2
- Fourth Grade: 4-LS1-1
- Fifth Grade: N/A

**Visual Arts Standards:**
- Kindergarten: K.VA.CR.1.1; K.VA.CR.2.1; K.VA.CR.3.1; K.VA.PR.4.1
- First Grade: 1.VA.CR.1.1; 1.VA.CR.2.1; 1.VA.PR.4.1
- Second Grade: 2.VA.CR.1.1; 2.VA.CR.2.1
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.1.2; 3.VA.CR.2.2
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.2.2

**Math Standards:**
- Kindergarten: K.CC.4; K.CC.5; K.MD.1; K.MD.2; K.G.1; K.G.2; K.G.4; K.G.6
- First Grade: 1.MD.1; 1.G.1
- Second Grade: 2.MD.1; 2.MD.2; 2.MD.4; 2.G.1
- Third Grade: 3.G.1
- Fourth Grade: 4.G.2
- Fifth Grade: 5.G.3
Objectives: Students will identify similarities and differences between organisms by collecting pictures and categorizing them

Students will comprehend the connection between diverse organisms and the diverse environments in which they live

Grade Levels: 3-6

Subject Areas: Science, Language Arts

Science Standards:

- Third Grade: 3-LS1-1; 3-LS2-1; 3-LS3-1; 3-LS3-2; 3-LS4-1; 3-LS4-2; 3-LS4-3; 3-LS4-4; 3-ESS2.2
- Fourth Grade: 4-LS1-1; 4-LS1-2; 4-ESS2-2
- Fifth Grade: 5-LS1-1; 5-LS2-1; 5-ESS2-2; 5-ESS3-1
- Sixth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-LS3-2; MS-LS4-1; MS-LS4-2; MS-LS4-4; MS-LS4-5; MS-LS4-6

Language Arts Standards:

- Third Grade: 3.RI.5; 3.RI.7; 3.RI.8; 3.L.1; 3.L.2; 3.L.3; 3.RL.1; 3.RL.4; 3.RL.5; 3.RF.4; 3.SL.1; 3.SL.4; 3.W.1; 3.W.2; 3.W.3
- Fourth Grade: 4.RF.4; 4.RL.1; 4.RI.2; 4.RI.3; 4.RI.4; 4.RL.1; 4.RL.4; 4.W.1; 4.W.2; 4.W.3; 4.W.4; 4.L.1; 4.L.2; 4.L.3; 4.L.4; 4.L.5; 4.L.6; 4.SL.1; 4.SL.4
- Fifth Grade: 5.RI.1; 5.RI.2; 5.RI.3; 5.RI.4; 5.RI.5; 5.RI.6; 5.RI.8; 5.L.1; 5.L.2; 5.L.3; 5.L.4; 5.L.5; 5.L.6; 5.RL.1; 5.RL.4; 5.RF.3; 5.RF.4; 5.SL.1; 5.SL.2; 5.SL.3; 5.W.1; 5.W.2; 5.W.3; 5.W.4
Activity 8

The Forest of S.T. Shrew, page 40

Objectives: Students will describe some of the plants and animals that characterize several microhabitats within the forest

Grade levels: 1-6

Subject Areas: Science, Language Arts, Visual Arts

Science Standards:

- First Grade: 1-LS1-1; 1-LS1-2; 1-LS1-3
- Second Grade: 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS2-1; 3-LS3-1; 3-LS3-2; 3-LS4-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-5; MS-LS4-4; MS-LS4-6

Language Arts Standards:

- First Grade: 1.RI.1; 1.RI.2; 1.RI.3; 1.RI.4; 1.RI.7; 1.RI.8; 1.RL.1; 1.RL.2; 1.RL.3; 1.RL.4; 1.RL.6; 1.RL.9; 1.L.4; 1.L.6; 1.SL.1; 1.SL2; 1.SL3; 1.SL4; 1.SL6
- Second Grade: 2.RI.1; 2.RI.2; 2.RI.4; 2.RI.6; 2.RI.8; 2.RL.1; 2.RL.2; 2.RL.3; 2.RL.5; 2.RL.6; 2.L.4; 2.L.6; 2.SL.1; 2.SL2; 2.SL3; 2.SL6
- Third Grade: 3.RI.1; 3.RI.2; 3.RI.4; 3.RI.8; 3.RI.9; 3.L.3; 3.L.4; 3.L.5; 3.L.6; 3.RL.1; 3.RL.3; 3.RL.4; 3.RL.5; 3.RL.6; 3.SL.1; 3.SL2; 3.SL3; 3.SL4; 3.SL6
- Fourth Grade: 4.RI.1; 4.RI.2; 4.RI.4; 4.RI.5; 4.RI.8; 4.RL.1; 4.RL.2; 4.RL.3; 4.RL.6; 4.RL.7; 4.L.1; 4.L.3; 4.L.4; 4.L.6; 4.SL.1; 4.SL2; 4.SL3
- Fifth Grade: 5.RI.1; 5.RI.2; 5.RI.3; 5.RI.4; 5.RI.8; 5.L.1; 5.L.3; 5.L.4; 5.L.5; 5.L.6; 5.RL.1; 5.RL.2; 5.RL3; 5.RL.4; 5.RL.5; 5.RLR.6; 5.SL.1; 5.SL2; 5.SL3; 5.SL4
- Sixth Grade: 6.RI.1; 6.RI.2; 6.RI.3; 6.RI.4; 6.RI.5; 6.RI.6; 6.RI.8; 6.RL.1; 6.RL.2; 6.RL.3; 6.RL.4; 6.RL.5; 6.RL.6; 6.L.1; 6.L.3; 6.L.4; 6.L.5; 6.L.6; 6.SL.1; 6.SL.3; 6.SL4

Visual Arts Standards:

- First Grade: 1.VA.CR.1.1; 1.VA.CR.2.1
- Second Grade: 2.VA.CR.1.1; 2.VA.CR.2.1
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.1.2; 3.VA.CR.2.2
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.2.2
- Sixth Grade: 6.VA.CR.1.1; 6.VA.CR.1.2; 6.VA.CR.2.1; 6.VA.CR.2.2; 6.VA.CR.2.3
Activity 9

*Planet Diversity, page 45*

**Objectives:** Students will investigate the diversity of plants and animals on a small plot of land. Students will compare their data with others in the class to conclude what factors influence the abundance or lack of diversity. Students will explain the value of a diversity of life forms in a particular ecosystem.

**Grade Levels:** 4-6

**Subject Areas:** Science, Social Studies, Language Arts, Visual Arts

Science Standards:
- Fourth Grade: 4-LS1-1; 4-LS1-2
- Fifth Grade: N/A
- Sixth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1; MS-LS2-2; MS-LS2-4; MS-LS2-5; MS-LS3-2; MS-LS4-4; MS-LS4-6

Social Studies Standards:
- Fourth Grade: 4.G.2.1; 4.G.3.1
- Fifth Grade: 5.G.2.2; 5.G.6.1
- Sixth Grade: N/A

Language Arts Standards:
- Fourth Grade: 4.W.1; 4.W.2; 4.W.3; 4.W.4; 4.W.7; 4.W.8; 4.L.1; 4.SL.1; 4.SL.3; 4.SL.4
- Fifth Grade: 5.L.1; 5.L.3; 5.L.6; 5.SL.1; 5.SL.2; 5.SL.3; 5.SL.4; 5.W.1; 5.W.2; 5.W.3; 5.W.4; 5.W.7; 5.W.8

Visual Arts Standards:
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade: 6.VA.CR.1.1
Activity 10

Charting Diversity, page 50

Objectives: Students will organize different species of plants and animals according to various characteristics

Students will determine how certain characteristics help species adapt to environmental conditions

Grade Levels: 4-8

Subject Areas: Science

Science Standards:

- Fourth Grade: 4-LS1-1; 4-LS2-2
- Fifth Grade: N/A
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-LS3-2; MS-LS4-1; MS-LS4-4; MS-LS4-6
Activity 11

Can It Be Real? Page 54

Objectives: Students will predict whether unusual plant and animal characteristics are real
Students will research a plant or animal to understand how organisms are adapted to their particular environments

Grade Levels: 4-8

Subject Areas: Science, Language Arts

Science Standards:

- Fourth Grade: 4-LS1-1; 4-LS1-2
- Fifth Grade: N/A
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-LS3-2; MS-LS4-1; MS-LS4-4; MS-LS4-6

Language Arts:

- Fourth Grade: 4.RI.7; 4.RL.1; 4.W.3; 4.W.4; 4.W.7; 4.W.8; 4.W.9; 4.L.1; 4.L.2; 4.L.3; 4.L.6; 4.SL.1; 4.SL.4
- Fifth Grade: 5.RI.4; 5.L.1; 5.L.2; 5.L.3; 5.L.6; 5.RL.1; 5.SL.1; 5.SL.4; 5.W.3; 5.W.4; 5.W.8
- Sixth Grade: 6.RI.7; 6.RL.1; 6.W.3; 6.W.8; 6.L.1; 6.L.2; 6.L.3; 6.L.6; 6.SL.1; 6.SL.4
- Eighth Grade: 8.RL.1; 8.W.3; 8.W.4; 8.W.7; 8.L.1; 8.L.2; 8.L.3; 8.L.6; 8.SL.1; 8.SL.4
Activity 12

*Invasive Species, page 59*

**Objectives:** Students will learn what invasive species are, why they are problematic, and how to prevent their spread

**Grade Levels:** 5-8

**Subject Areas:** Science, Math, Social Studies

Science Standards:
- Fifth Grade: N/A
- Sixth Grade-Eighth grade: MS-LS2-1; MS-LS2-2; MS-LS2-4; MS-LS2-5; MS-LS4-1; MS-LS4-2; MS-LS4-4; MS-LS4-6

Math Standards:
- Fifth Grade: 5.MD.2; 5.OA.3
- Sixth Grade: 6.EE.9; 6.SP.3; 6.SP.4; 6.SP.5
- Seventh Grade: 7.SP.1; 7.SP.2; 7.SP.3; 7.SP.4; 7.SP.5; 7.SP.7; 7.SP.8
- Eighth Grade: 8.SP.1; 8.SP.2; 8.SP.4

Social Studies Standards:
- Fifth Grade: 5.G.2.2; 5.G.2.3; 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.3.2; 7.G.4.2; 7.G.5.2; 7.G.5.3; 7.G.6.1; 7.G.7.3
- Eighth Grade: N/A
Objectives: Students will examine various products and determine which ones are made from trees.
Students will describe ways that trees are used to make products and ways that these products can be conserved.

Grade Levels: Part A: K-1; Part B: 2-6

Subject Areas: Science, Social Studies, Visual Arts, Language Arts

Science Standards:
- Kindergarten: K-LS1-1
- First Grade: 1-LS1-1
- Second Grade: 2-LS2-1
- Third Grade: N/A
- Fourth Grade: N/A
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade: MS-LS1-6

Social Studies Standards:
- Kindergarten: K.G.3.1; K.G.6.1
- First Grade: 1.G.6.1
- Second Grade: 2.G.3.1; 2.G.6.1; G.G.6.2
- Third Grade: 3.E.1.1; 3.E.5.1
- Fourth Grade: N/A
- Fifth Grade: 5.G.2.2; 5.E.1.1
- Sixth Grade: N/A

Visual Arts Standards:
- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.1.2
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.1.2
- Sixth Grade: 6.VA.CR.1.1; 6.VA.CR.1.2

Language Arts Standards:
- Kindergarten: K.RF.3; K.RF.4; K.RL.4; K.W.2; K.W.7; K.L.1; K.L.2; K.L.6; K.SL.1; K.SL.2; K.SL.3; K.SL.6
• First Grade: 1.RF.3; 1.RF.4; 1.W.2; 1.W.7; 1.L.1; 1.L.2; 1.L.6; 1.SL.1; 1.SL.2; 1.SL.3; 1.SL.6
• Second Grade: 2.RF.4; 2.W.2; 2.W.7; 2.L.1; 2.L.2; 2.L.3; 2.L.6; 2.SL.1; 2.SL.2; 2.SL.3; 2.SL.6
• Third Grade: 3.L.1; 3.L.2; 3.L.3; 3.L.6; 3.RL.1; 3.RF.4; 3.SL.1; 3.SL.2; 3.SL.3; 3.SL.6; 3.W.2
• Fourth Grade: 4.RF.4; 4.RL.4; 4.W.2; 4.W.4; 4.L.1; 4.L.2; 4.L.3; 4.L.6; 4.SL.1; 4.SL.2
• Fifth Grade: 5.L.1; 5.L.2; 5.L.3; 5.L.6; 5.RL.4; 5.RF.4; 5.SL.1; 5.SL.2; 5.SL.4; 5.W.2; 5.W.4
• Sixth Grade: 6.RL.4; 6.W.2; 6.W.4; 6.L.1; 6.L.2; 6.L.3; 6.L.6; 6.SL.1; 6.SL.4
Activity 14

Renewable or Not? Page 69

Objectives: Students will identify and define renewable and nonrenewable resources and explain the differences between them.

Students will participate in simulations that demonstrate society’s use of renewable and nonrenewable resources to understand the factors that make a renewable resource sustainable.

Grade Levels: 4-8

Subject Areas: Science, Social Studies, Math

Science Standards:
- Fourth Grade: 4-LS1-1; 4-ESS3-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-PS1-3; MS-LS2-1; MS-LS2-5; MS-ESS3-4

Social Studies Standards:
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.1; 5.G.2.2; 5.G.2.3; 5.E.1.1; 5.E.1.2
- Sixth Grade: 6.E.4.1; 6.E.4.3
- Seventh Grade: 7.G.5.2; 7.G.5.3; 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.E.4.3

Math Standards:
- Fourth Grade: 4.OA.5; 4.MD.2; 4.MD.4
- Fifth Grade: 5.OA.3; 5.MD.2
- Sixth Grade: 6.EE.9; 6.SP.2; 6.SP.3; 6.SP.4; 6.SP.5
- Seventh Grade: 7.SP.1; 7.SP.2; 7.SP.3; 7.SP.4
- Eighth Grade: 8.SP.1; 8.SP.2; 8.SP.3; 8.SP.4.
Activity 15

*A Few of My Favorite Things, page 75*

**Objectives:** Students will explain how the different materials that go into making a product all come from natural resources

Students will identify natural resources as being renewable or nonrenewable

Older students will also describe some of the impacts from obtaining and processing natural resources and the energy required for making products

**Grade Levels:** 2-8

**Subject Areas:** Social Studies, Science, Visual Arts

Social Studies Standards:

- Second Grade: 2.G.6.2; 2.E.1.1
- Third Grade: 3.E.1.1; 3.E.5.1
- Fourth Grade: 4.E.1.1
- Fifth Grade: 5.E.1.1; 5.E.1.2; 5.E.5.1
- Sixth Grade: 6.E.4.3
- Seventh Grade: 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.E.4.3

Science Standards:

- Second Grade: 2-PS1-1; 2-PS1-2; 2-PS1-3
- Third Grade: N/A
- Fourth Grade: 4-ESS3-1
- Fifth Grade: 5-PS1-3; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-PS1-3; MS-ESS3-3; MS-ESS3-4

Visual Arts Standards:

- Second Grade: 2.VA.CR.1.1; 2.VA.CR.2.1
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.1.2; 3.VA.CR.2.1; 3.VA.CR.2.2
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2; 4.VA.CR.2.1
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.2.1
- Sixth-Eighth Grade: 6-8.VA.CR.1.1; 6-8.VA.CR.2.1; 6-8.VA.CR.2.1; 6-8.VA.CR.2.2; 6-8.VA.CR.2.3
Activity 16

*Pass the Plants, Please, page 77*

**Objectives:** Students will identify edible plant parts and give examples of each

Students will describe how plants are used to make various kinds of foods

Students will discuss the importance of plants in people’s diets

**Grade Levels:** Part A: K-8; Part B: 3-8

**Subject Areas:** Science, Math, Social Studies, Language Arts

Science Standards:

- Kindergarten: K-LS1-1; K-ESS3-1
- First Grade: N/A
- Second Grade: 2-PS1-1; 2-LS2-2; 2-LS4-1
- Third Grade: 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: N/A
- Fifth Grade: 5-PS1-3
- Sixth Grade-Eighth Grade: N/A

Math Standards:

- Kindergarten: K.CC.6; K.MD.2; K.MD.3
- First Grade: 1.MD.4
- Second Grade: 2.OA.4; 2.MD.10
- Third Grade: 3.MD.3
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade: 6.SP.2; 6.SP.3; 6.SP.4; 6.SP.5
- Seventh Grade: N/A
- Eighth Grade: 8.SP.4

Social Studies Standards:

- Kindergarten: K.G.6.1
- First Grade: N/A
- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade: 3.E.1.1; 3.E.5.1
- Fourth Grade: 4.H.3.1
- Fifth Grade: 5.H.3.1; 5.G.2.1; 5.G.2.2; 5.E.1.1; 5.E.5.1
- Sixth Grade: 6.H.4.3
- Eighth Grade: N/A

Language Arts Standards:

- Kindergarten: K.L.1; K.SL.1; K.SL.2; K.SL.3; K.SL.4; K.SL.5; K.SL.6
- First Grade: 1.W.8; 1.L.1; 1.SL.1; 1.SL.2; 1.SL.3; 1.SL.4; 1.SL.5
- Second Grade: 2.W.8; 2.L.1; 2.L.3; 2.L.6; 2.SL.1; 2.SL.3; 2.SL.4
- Third Grade: 3.L.1; 3.L.3; 3.L.6; 3.SL.1; 3.SL.3; 3.SL.4
- Fourth Grade: 4.L.1; 4.L.3; 4.SL.1; 4.SL.3
- Fifth Grade: 5.L.1; 5.L.3; 5.SL.1; 5.SL.3
- Sixth Grade: 6.L.1; 6.L.3; 6.L.6; 6.SL.1; 6.SL.3
- Seventh Grade: 7.L.1; 7.L.3; 7.L.6; 7.SL.1; 7.SL.3
- Eighth Grade: 8.L.1; 8.L.3; 8.L.6; 8.SL.1; 8.SL.3
Activity 17

People of the Forest, page 82

Objectives: Students will describe the lifestyles of several forest-dwelling peoples of the present or past and ways that they depend upon the forest

Students will describe some of the effects forest people have on their environment

Students will consider how the lives of forest people have changed over time

Grade Levels: 5-8

Subject Areas: Social Studies, Language Arts

Social Studies Standards:

- Fifth Grade: 5.H.2.4; 5.H.3.1; 5.G.2.1; 5.G.2.2; 5.G.2.3; 5.G.5.1; 5.G.6.1
- Sixth Grade: 6.H.4.3
- Eighth Grade: N/A

Language Arts Standards:

- Fifth Grade: 5.RI.1; 5.RL.6; 5.W.2; 5.W.4; 5.W.7; 5.W.9; 5.L.1; 5.L.3; 5.SL.1; 5.SL.2; 5.SL.4
- Seventh Grade: 7.RI.1; 7.RL.6; 7.W.2; 7.W.4; 7.W.7; 7.W.9; 7.L.1; 7.L.3; 7.SL.1; 7.SL.2; 7.SL.4
- Eighth Grade: 8.RI.1; 8.RL.6; 8.W.2; 8.W.4; 8.W.7; 8.W.9; 8.L.1; 8.L.3; 8.SL.1; 8.SL.2; 8.SL.4
Objectives: Students will develop an understanding of how groups of people, or cultures, used stories to explain the natural occurrences around them

Grade Levels: K-6

Subject Areas: Language Arts; Science; Social Studies

Language Arts Standards:
- Kindergarten: K.RI.1; K.RI.2; K.RI.3; K.RI.8; K.W.1; K.L.1; K.SL.1; K.SL.2; K.SL.3; K.SL.6
- First Grade: 1.RI.1; 1.RI.2; 1.RI.3; 1.RI.8; 1.W.1; 1.L.1; 1.SL.1; 1.SL.2; 1.SL.3; 1.SL.6
- Second Grade: 2.RI.1; 2.RI.2; 2.RI.3; 2.L.1; 2.L.3; 2.SL.1; 2.SL.2; 2.SL.3; 2.SL.4; 2.SL.6; 2.W.1
- Third Grade: 3.RI.1; 3.RI.2; 3.RI.3; 3.L.1; 3.L.3; 3.SL.1; 3.SL.2; 3.SL.3; 3.SL.4; 3.SL.6; 3.W.1
- Fourth Grade: 4.RI.1; 4.RI.2; 4.RI.3; 4.L.1; 4.L.3; 4.SL.1; 4.SL.2; 4.SL.3; 4.SL.4; 4.SL.6; 4.W.1
- Fifth Grade: 5.RI.1; 5.RI.2; 5.RI.3; 5.RI.8; 5.L.1; 5.L.2; 5.L.3; 5.SL.1; 5.SL.2; 5.SL.3; 5.SL.4; 5.W.1
- Sixth Grade: 6.RI.1; 6.RI.2; 6.RI.3; 6.RI.8; 6.L.1; 6.L.2; 6.L.3; 6.SL.1; 6.SL.2; 6.SL.3; 6.SL.4; 6.W.1

Science Standards:
- Kindergarten: K-PS3-1; K-LS1-1; K-ESS2-2
- First Grade: 1-PS4-2
- Second Grade: 2-LS2-1
- Third Grade: 3-LS2-1; 3-LS3-2; 3-LS4-4
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade: N/A

Social Studies Standards:
- Kindergarten: K.G.6.1
- First Grade: 1.G.6.1
- Second Grade: 2.H.2.1
- Third Grade: 3.H.2.1; 3.H.2.3
- Fourth Grade: 4.H.3.1; 4.H.5.2; 5.G.3.1
- Fifth Grade: 5.H.2.4; 5.H.3.1; 5.G.5.1
- Sixth Grade: 6.H.2.1; 6.H.4.3
Activity 19

*Viewpoints on the Line, page 89*

**Objectives:** Students will share their views and opinions with others and gain awareness on the range of opinions related to environmental issues.

Students will identify the need for balanced information when forming opinions.

**Grade Levels:** 6-8

**Subject Areas:** Social Studies, Science

**Social Studies Standards:**

- Sixth Grade: 6.H.2.2; 6.H.2.4; 6.H.3.1; 6.H.4.2; 6.H.4.3; 6.H.5.1; 6.H.5.2; 6.H.5.3; 6.C.1.2; 6.C.5.1
- Eighth Grade: 8.C.1.2; 8.C.4.3; 8.C.5.1; 8.C.5.2

**Science Standards:**

- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1; MS-LS2-4; MS-LS2-5; MS-LS4-1; MS-LS4-2; MS-LS4-4; MS-LS4-5; MS-LS4-6; MS-ESS3-2; MS-ESS3-3; MS-ESS3-4; MS-ESS3-5
Activity 20

Environmental Exchange Box, page 92

Objectives: Students will discover the characteristics of local forested areas, which may include woodlands, urban forests, schoolyard trees, and/or Tree Farms, and compare these characteristics to the forested areas of another region

Grade Levels: K-8

Subject Areas: Science, Math, Social Studies, Language Arts, Visual Arts

Science Standards:
- Kindergarten: K-ESS2-2; K-ESS3-3
- First Grade: N/A
- Second Grade: N/A
- Third Grade: 3-ESS2-2
- Fourth Grade: N/A
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3

Math Standards: N/A

Social Studies Standards:
- Kindergarten: K.G.1.1; K.G.1.2; K.G.3.1; K.G.6.1
- First Grade: 1.C.3.1; 1.G.1.1; 1.G.1.2; 1.G.3.1; 1.G.6.1; 1.E.1.1
- Second Grade: 2.G.1.1; 2.G.1.2; 2.G.3.1; 2.G.6.1; 2.G.6.2; 2.E.1.1
- Third Grade: 3.C.3.1; 3.C.4.2; 3.G.1.1; 3.G.2.1; 3.E.1.1; 3.E.5.1
- Fourth Grade: 4.C.3.1; 4.G.3.1; 4.E.1.1
- Fifth Grade: 5.C.1.2; 5.G.2.1; 5.G.2.2; 5.G.6.1; 5.E.1.1; 5.E.1.2
- Sixth Grade: 6.C.1.2; 6.C.1.3; 6.C.5.1; 6.E.4.1
- Eighth Grade: N/A

Language Arts Standards:
- Kindergarten: K.W.1; K.L.1; K.SL.1; K.SL.3; K.SL.4; K.SL.5; K.SL.6
- First Grade: 1.W.1; 1.L.1; 1.SL.1; 1.SL.3; 1.SL.4; 1.SL.5; 1.SL.6
- Second Grade: 2.L.1; 2.L.3; 2.SL.1; 2.SL.3; 2.SL.4; 2.SL.6; 2.W.1
- Third Grade: 3.L.1; 3.L.3; 3.SL.1; 3.SL.3; 3.SL.4; 3.SL.6; 3.W.1
- Fourth Grade: 4.L.1; 4.L.3; 4.SL.1; 4.SL.3; 4.SL.4; 4.SL.6; 4.W.1
- Fifth Grade: 5.W.1; 5.L.1; 5.L.3; 5.SL.1; 5.SL.3; 5.SL.4
- Sixth Grade: 6.W.1; 6.L.1; 6.L.3; 6.SL.1; 6.SL.3; 6.SL.4
- Seventh Grade: 7.W.1; 7.L.1; 7.L.3; 7.SL.1; 7.SL.3
• Eighth Grade: 8.W.1; 8.L.1; 8.L.3; 8.SL.1

Visual Arts Standards:

• Kindergarten: K.VA.CR.1.1
• First Grade: 1.VA.CR.1.1
• Second Grade: 2.VA.CR.1.1
• Third Grade: 3.VA.CR.1.1
• Fourth Grade: 4.VA.CR.1.1
• Fifth Grade: 5.VA.CR.1.1
• Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 21

Adopt a Tree, page 97

Objectives: Students will describe a chosen tree using personal observation and investigation and organize information about the tree

Students will identify relationships between their tree and other organisms

Grade Levels: Part A: K-2; Part B: 3-8

Subject Areas: Science, Math, Language Arts, Visual Arts, Social Studies

Science Standards:

- Kindergarten: K-LS1-1; K-ESS2-1; K-ESS3-1
- First Grade: 1-LS1-1; 1-LS3-1
- Second Grade: 2-LS2-1; 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-5; MS-LS1-6

Math Standards:

- Kindergarten: K.CC.3; K.CC.5; K.CC.6; K.MD.1; K.MD.2; K.G.1
- First Grade: 1.MD.4; 1.G.1
- Second Grade: 2.MD.1; 2.MD.4
- Third Grade: 3.G.1
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade: N/A
- Seventh Grade: N/A
- Eighth Grade: N/A

Language Arts Standards:

- Kindergarten: K.W.2; K.W.5; K.W.8; K.L.1; K.L.2; K.SL.1; K.SL.3; K.SL.4; K.SL.5; K.SL.6
- First Grade: 1.W.2; 1.W.5; 1.W.8; 1.L.1; 1.L.2; 1.SL.1; 1.SL.3; 1.SL.4; 1.SL.5
- Second Grade: 2.W.2; 2.W.5; 2.W.8; 2.L.1; 2.L.2; 2.L.3; 2.SL.1; 2.SL.3; 2.SL.4; 2.SL.5
- Fourth Grade: 4.L.1; 4.L.2; 4.L.3; 4.SL.1; 4.SL.4; 4.W.1; 4.W.8
- Fifth Grade: 5.L.1; 5.L.2; 5.L.3; 5.SL.1; 5.SL.4; 5.W.2; 5.W.8
- Sixth Grade: 6.L.1; 6.L.2; 6.L.3; 6.SL.1; 6.SL.4; 6.W.2; 6.W.8
- Seventh Grade: 7.W.2; 7.W.4; 7.L.1; 7.L.2; 7.L.3; 7.SL.1
- Eighth Grade: 8.W.2; 8.W.4; 8.L.1; 8.L.2; 8.L.3; 8.SL.1
Visual Arts Standards:

- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1

Social Studies Standards:

- Kindergarten: K.G.1.2; K.G.3.1
- First Grade: 1.G.3.1; 1.G.6.1
- Second Grade: 2.G.6.2
- Third Grade: N/A
- Fourth Grade: 4.G.3.1
- Fifth Grade: N/A
- Sixth Grade: N/A
- Seventh Grade: 7.G.4.1; 7.G.6.1
- Eighth Grade: N/A
Activity 22

Trees as Habitats, page 102

Objectives: Students will describe ways animals and plants depend on trees for survival and, in turn, influence the trees

Students will identify interrelationships between the organisms using the tree

Grade Levels: Part A: K-2; Part B: 3-8; Variation: 3-8

Subject Areas: Science, Math, Social Studies, Visual Arts

Science Standards:

- Kindergarten: K-LS1-1; K-ESS2-2; K-ESS3-1; K-ESS3-3
- First Grade: 1-LS1-1; 1-LS1-2
- Second Grade: 2-LS1-2; 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS2-1; 3-LS3-2; 3-LS4-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS1-6; MS-LS2-1; MS-LS2-2; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6; MS-ESS3-3; MS-ESS3-4

Math Standards:

- Kindergarten: K.CC.3; K.CC.4; K.CC.6; K.MD.3
- First Grade: 1.MD.4
- Second Grade: 2.OA.4; 2.MD.10
- Third Grade: 3.MD.3
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade: 6.SP.4; 6.SP.5
- Seventh Grade: 7.SP.2; 7.SP.4
- Eighth Grade: N/A

Social Studies Standards:

- Kindergarten: K.G.3.1; K.G.6.1
- First Grade: 1.G.6.1
- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade: 3.G.2.1; 3.E.1.1
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.1; 5.G.2.2; 5.G.2.3
- Sixth Grade: N/A
- Eighth Grade: N/A
Visual Arts Standards:

- Kindergarten: K.VA.CR.1.1; K.VA.CR.2.1
- First Grade: 1.VA.CR.1.1; 1.VA.CR.2.1
- Second Grade: 2.VA.CR.1.1; 2.VA.CR.2.1
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.1.2; 3.VA.CR.2.1
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2; 4.VA.CR.2.1
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.1.2; 5.VA.CR.2.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1; 6-8.VA.CR.1.2; 6-8.VA.CR.2.1
Activity 23  

The Fallen Log, page 105  

**Objectives:** Students will identify some of the organisms that live in, on, and under fallen logs and explain how those organisms depend on the dead wood for survival.

Students will describe the process of decomposition.

**Grade Levels:** 4-8

**Subject Areas:** Science, Visual Arts

**Science Standards:**
- Fourth Grade: 4-LS1-1; 4-LS1-2  
- Fifth Grade: 5-LS2-1  
- Sixth Grade-Eighth Grade: MS-LS1-6; MS-LS1-7; MS-LS2-1; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6

**Visual Arts Standards:**
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2; 4.VA.CR.2.1  
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.1.2; 5.VA.CR.2.1  
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1; 6-8.VA.CR.1.2; 6-8.VA.CR.2.1
Activity 24

Nature’s Recyclers, page 108

Objectives: Students will understand and describe the process of decomposition

Students will explain the function of scavengers and decomposers

Students will devise an experiment to find out what sow bugs eat and what their role is in the ecosystem

Grade Levels: 1-6

Subject Areas: Science, Language Arts

Science Standards:

• First Grade: 1-LS1-2
• Second Grade: 2-LS4-1
• Third Grade: 3-LS1-1; 3-LS2-1; 3-LS3-2; 3-LS4-3; 3-LS4-4
• Fourth Grade: 4-LS1-1; 4-LS1-2
• Fifth Grade: 5-LS2-1
• Sixth Grade: MS-LS1-6; MS-LS1-7; MS-LS2-1; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6

Language Arts Standards:

• First Grade: 1.W.2; 1.W.3; 1.W.8; 1.L.1; 1.L.2
• Second Grade: 2.W.2; 2.W.3; 2.W.8; 2.L.1; 2.L.2
• Fifth Grade: 5.W.2; 5.W.3; 5.W.4; 5.W.7; 5.L.1; 5.L.2; 5.L.3
Activity 25

Birds and Worms, page 111

Objectives: Students will demonstrate their knowledge of how camouflage is used for protection and survival

Grade Levels: K-6

Subject Areas: Science, Math, Physical Education

Science Standards:
- Kindergarten: K-LS1-1; K-ESS2-2; K-ESS3-1
- First Grade: 1-LS1-1; 1-LS3-1
- Second Grade: 2-LS4-1
- Third Grade: 3-LS2-1; 3-LS3-1; 3-LS3-2; 3-LS4-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1; 4-LS1-2
- Fifth Grade: 5-LS2-1
- Sixth Grade: MS-LS2-1; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6

Math Standards:
- Kindergarten: K.CC.1-6; K.MD.3
- First Grade: 1.OA.1; 1.OA.5; 1.MD.4
- Second Grade: 2.OA.2; 2.OA.4
- Third Grade: N/A
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade: N/A

Physical Education Standards:
- Kindergarten: S1.E1.K
- First Grade: S1.E1.1
- Second Grade: S1.E1.2
- Third Grade: S1.E1.3
- Fourth Grade: S1.E1.4
- Fifth Grade: S1.E1.5
- Sixth Grade: S2.M1.6
Activity 26

Dynamic Duos, page 113

Objectives: Students will understand the different types of symbiotic relationships that exist between different organisms

Students will describe how partners in these relationships affect one another

Grade Levels: 5-8

Subject Areas: Science, Language Arts

Science Standards:

- Fifth Grade: N/A
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS1-6; MS-LS2-1; MS-LS2-2; MS-LS2-4; MS-LS2-5; MS-LS3-2; MS-LS4-4; MS-LS4-6

Language Arts Standards:

- Fifth Grade: 5.RL.1; 5.W.4; 5.W.5; 5.W.7; 5.W.8; 5.W.9; 5.L.1; 5.L.2; 5.SL.1; 5.SL.2; 5.SL.4
- Seventh Grade: 7.RL.1; 7.W.4; 7.W.5; 7.W.7; 7.W.8; 7.W.9; 7.L.1; 7.L.2; 7.SL.1; 7.SL.2; 7.SL.4
- Eighth Grade: 8.RL.1; 8.W.4; 8.W.5; 8.W.7; 8.W.8; 8.W.9; 8.L.1; 8.L.2; 8.SL.1; 8.SL.2; 8.SL.4
Activity 27

Every Tree for Itself, page 117

Objectives: Students will simulate how trees compete for their essential needs
Students will describe how varying amounts of light, water, and nutrients affect a tree’s growth

Grade Levels: K-8

Subject Areas: Science, Math

Science Standards:
- Kindergarten: K-PS3-1; K-PS3-2; K-LS1-1; K-ESS2-2; K-ESS3-1; K-ESS3-3
- First Grade: 1-LS1-1; 1-ESS1-2
- Second Grade: 2-LS2-1; 2-LS4-1
- Third Grade: 3-LS2-1; 3-LS3-2; 3-LS4-2; 3-LS4-3; 3-LS4-4; 3-ESS2-2; 3-ESS3-1
- Fourth Grade: 4-LS1-1; 4-ESS3-2
- Fifth Grade: 5-LS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-5; MS-LS1-6; MS-LS2-1-5; MS-LS4-4; MS-LS4-6; MS-ESS3-3; MS-ESS3-4

Math Standards:
- Kindergarten: K.CC.5; K.CC.6; K.MD.1-3
- First Grade: 1.MD.1; 1.MD.2; 1.MD.4
- Second Grade: 2.MD.1; 2.MD.3; 2.MD.4; 2.MD.9
- Third Grade: 3.MD.4
- Fourth Grade: 4.MD.1
- Fifth Grade: N/A
- Sixth Grade: N/A
- Seventh Grade: N/A
- Eighth Grade: N/A
Activity 28

Air Plants, page 120

Objectives: Students will demonstrate and describe the general process of photosynthesis

Grade Levels: 3-6

Subject Areas: Science, Math

Science Standards:

- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1; 4-LS1-2
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade: MS-LS1-5; MS-LS1-6; MS-LS1-7; MS-LS2-1-5

Math Standards:

- Third Grade: N/A
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade: N/A
Objectives: Students will explore how variations in water, light, and temperature affect plant growth

Students will describe how precipitation and geography can affect the plant and animal species that are found in a particular region

Grade Levels: 6-8

Subject Areas: Science, Math, Social Studies

Science Standards:
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS1-6; MS-LS2-1; MS-LS2-3; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6

Math Standards:
- Sixth Grade: 6.SP.1-3; 6.SP.5
- Seventh Grade: 7.SP.1-4; 7.SP.8
- Eighth Grade: N/A

Social Studies Standards:
- Sixth Grade: N/A
- Eighth Grade: N/A
Objectives: Students will describe the benefits of trees in their community

Grade Levels: 1-4

Subject Areas: Science, Social Studies, Visual Arts

Science Standards:
- First Grade: 1-LS1-1
- Second Grade: N/A
- Third Grade: 3-LS4-4
- Fourth Grade: 4-ESS3-1; 4-ESS3-2

Social Studies Standards:
- First Grade: 1.G.3.1; 1.G.6.1
- Second Grade: 2.G.1.2; 2.G.6.1; 2.G.6.2
- Third Grade: N/A
- Fourth Grade: 4.G.3.1

Visual Arts Standards:
- First Grade: 1.VA.CR.1.1; 1.VA.CN.10.1.A
- Second Grade: 2.VA.CR.1.1; 2.VA.CA.10.1.A
- Third Grade: 3.VA.CR.1.1; 3.VA.CN.10.1.A
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CN.10.1.A
Activity 31

*Plant a Tree, page 132*

**Objectives:** Students will identify ways that urban trees enrich our lives

Students will determine how people care for urban trees and identify areas in the community that would benefit from having more trees

Students will organize and execute a class tree-planting project in a local area

**Grade Levels:** 1-8

**Subject Areas:** Science, Social Studies

Science Standards:

- First Grade: N/A
- Second Grade: N/A
- Third Grade: N/A
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade-Eighth Grade: N/A

Social Studies Standards:

- First Grade: 1.G.3.1; 1.G.6.1
- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade: N/A
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.2; 5.G.2.3
- Sixth Grade: N/A
- Eighth Grade: N/A
Activity 32
A Forest of Many Uses, page 135

Objectives: Students will identify ways in which people use forest resources

Students will explore how forests are managed to satisfy a variety of human and environmental needs

Grade Levels: Part A: 1-4; Part B: 5-8

Subject Areas: Science, Social Studies, Math, Visual Arts

Science Standards:
- First Grade: N/A
- Second Grade: 2-LS4-1
- Third Grade: 3-LS3-2; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-1; MS-LS2-4; MS-LS2-5; MS-ESS3-3; MS-ESS3-4

Social Studies Standards:
- First Grade: 1.G.6.1
- Second Grade: 2.G.1.2; 2.G.3.1; 2.G.6.1; 2.G.6.2
- Third Grade: N/A
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.1; 5.G.2.2; 5.G.6.1
- Sixth Grade: N/A
- Eighth Grade: N/A

Math Standards: N/A

Visual Arts Standards:
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 33

Forest Consequences, page 138

Objectives: Students will evaluate the options for managing or using a piece of forested land
Students will make a land use decision and explore the consequences of their decision

Grade Levels: 6-8

Subject Areas: Science, Social Studies, Language Arts

Science Standards:
- Sixth Grade-Eighth Grade: MS-LS1-5; MS-LS2-1; MS-LS2-2; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6; MS-ESSE-3; MS-ESS3-4

Social Studies Standards:
- Sixth Grade: 6.C.1.2; 6.C.5.1
- Eighth Grade: N/A

Language Arts Standards:
Activity 34

Who Works in this Forest? Page 144

Objectives: Students will explore a variety of jobs that are directly related to forest resources

Students will describe how various professionals work together to care for forests

Grade Levels: 3-6

Subject Areas: Science, Social Studies

Science Standards:

- Third Grade: 3-LS4-4
- Fourth Grade: 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-1; MS-LS2-4; MS-LS2-5; MS-LS4-5; MS-ESS3-3; MS-ESS3-4

Social Studies Standards:

- Third Grade: N/A
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.C.3.2; 5.C.4.1; 5.C.5.3; 5.G.2.2; 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.5.2; 7.G.5.3; 7.G.6.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.5.1
Activity 35

Loving it Too Much, page 147

**Objectives:** Students will explain how park visitors and activities both inside and outside park boundaries affect ecosystems within national and local parks

Students will offer possible solutions to problems facing national and local parks

**Grade Levels:** 6-8

**Subject Areas:** Science, Language Arts, Social Studies, Math

**Science Standards:**
- Sixth Grade-Eighth Grade: MA-ESS3-3; MS-ESS3-4

**Language Arts Standards:**
- Sixth Grade: 6.SL.1-4
- Seventh Grade: 7.SL.1-4
- Eighth Grade: 8.SL.1-4

**Social Studies Standards:**
- Sixth Grade: 6.C.1.2; 6.C.1.3; 6.C.5.1
- Seventh Grade: 7.G.1.1; 7.G.3.1; 7.G.3.2; 7.G.4.1; 7.G.5.3; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.5.1

**Math Standards:**
- Sixth Grade: 6.SP.2-5
- Seventh Grade: 7.SP.1; 7.SP.3; 7.SP.4
- Eighth Grade: 8.SP.1-4
Activity 36

Pollution Search, page 153

Objectives: Students will identify forms of pollution and describe the effects that various pollutants can have on people, wildlife, and plants
Students will describe relationships between various forms of pollution and human actions

Grade Levels: Part A: 2-6; Part B: K-2

Subject Areas: Science, Social Studies, Math

Science Standards:
- Kindergarten: K-ESS2-2; K-ESS3-1; K-ESS3-3
- First Grade: N/A
- Second Grade: N/A
- Third Grade: 3-LS4-4
- Fourth Grade: 4-ESS3-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade: MS-ESS3-3-5

Social Studies Standards:
- Kindergarten: K.C.2.1; K.G.3.1; K.G.6.1
- First Grade: 1.G.6.1
- Second Grade: 2.G.3.1; 2.G.6.1; 2.G.6.2
- Third Grade: 3.C.4.2; 3.C.4.3
- Fourth Grade: 4.G.3.1; 4.E.1.1
- Fifth Grade: 5.C.4.1; 5.C.5.1; 5.G.2.3; 5.G.6.1
- Sixth Grade: N/A

Math Standards: N/A
Activity 37

*Reduce, Reuse, Recycle, page 159*

**Objectives:** Students will analyze the amount of solid waste that they generate over time
Students will describe what happens to various types of waste when it’s discarded
Students will develop and implement a plan for reducing the amount of solid waste in their community

**Grade Levels:** 5-8

**Subject Areas:** Science, Social Studies, Math

**Science Standards:**
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3; MS-ESS3-4

**Social Studies Standards:**
- Fifth Grade: 5.C.4.1; 5.C.5.1
- Sixth Grade: 6.C.5.1
- Seventh Grade: 7.G.7.3
- Eighth Grade: 8.C.4.2; 8.C.4.3

**Math Standards:**
- Fifth Grade: N/A
- Sixth Grade: 6.SP.1-5
- Seventh Grade: 7.SP.1-6
- Eighth Grade: N/A
Objectives: Students will monitor how much water they use in a day
Students will describe how water is wasted and why it is important to conserve it
Students will design, implement, and evaluate a water conservation plan

Grade Levels: 4-8

Subject Areas: Science, Social Studies, Math

Science Standards:
- Fourth Grade: 4-ESS3-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-1; MS-LS2-4; MS-ESS3-3-5

Social Studies Standards:
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.1-3; 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.5.3; 7.G.6.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: N/A

Math Standards:
- Fourth Grade: 4.MD.4
- Fifth Grade: N/A
- Sixth Grade: 6.SP.4-5
- Seventh Grade: 7.SP.3-4
- Eighth Grade: 8.SP.1-4
Activity 39

Energy Sleuths, page 167

Objectives: Students will identify different energy sources
Students will discuss the pros and cons of various energy sources from economic, social, and environmental perspectives
Students will describe some of the ways people use energy in their daily lives

Grade Levels: Part A: K-3; Part B/C: 4-8

Subject Areas: Science, Social Studies

Science Standards:
- Kindergarten: K-ESS3-3
- First Grade: N/A
- Second Grade: N/A
- Third Grade: N/A
- Fourth Grade: 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-PS1-3; MS-ESS3-1-5

Social Studies Standards:
- Kindergarten: K.G.6.1
- First Grade: 1.G.6.1
- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade: N/A
- Fourth Grade: N/A
- Fifth Grade: 5.G.2.2; 5.G.2.3; 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.6.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: N/A
Objectives: Students will describe the environmental changes that have occurred in their community
Students will discuss whether those changes have been positive or negative for the community
Students will discuss ways to address negative changes

Grade Levels: 4-8

Subject Areas: Science, Social Studies, Language Arts

Science Standards:
- Fourth Grade: 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-PS1-3; MS-LS2-1; MS-ESS3-3-5

Social Studies Standards:
- Fourth Grade: 4.H.2.2; 4.H.3.1; 4.H.4.1; 4.H.4.2; 4.G.3.1
- Fifth Grade: 5.G.2.1-3; 5.G.6.1
- Sixth Grade: N/A
- Eighth Grade: N/A

Language Arts Standards:
- Fourth Grade: 4.L.1-3; 4.SL.1; 4.SL.3; 4.SL.4; 4.W.3; 4.W.4; 4.W.7-9
- Fifth Grade: 5.L.1-3; 5.SL.1; 5.SL.3; 5.SL.4; 5.W.3; 5.W.4; 5.W.7-9
- Seventh Grade: 7.L.1-3; 7.SL.1; 7.SL.3; 7.SL.4; 7.W.3; 7.W.4; 7.W.7-9
- Eighth Grade: 8.L.1-3; 8.SL.1; 8.SL.3; 8.SL.4; 8.W.3; 8.W.4; 8.W.7-9
Activity 41

*How Plants Grow, page 179*

**Objectives:** Students will set up an experiment to determine what factors are necessary for plant growth

Students will measure and compare plant growth under different environmental conditions

**Grade Levels:** 4-8; Variation: K-2

**Subject Areas:** Science, Math, Language Arts, Visual Arts

Science Standards:
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS1-1
- Sixth Grade-Eighth Grade: MS-LS1-4-6; MS-LS2-3; MS-LS4-6

Math Standards:
- Fourth Grade: 4.MD.1; 4.MD.4
- Fifth Grade: 5.MD.1; 5.MD.2
- Sixth Grade: 6.SP.1; 6.SP.4; 6.SP.5
- Seventh Grade: 7.SP.1-4
- Eighth Grade: 8.SP.1

Language Arts Standards:
- Fourth Grade: 4.W.4; 4.W.7; 4.W.8; 4.SL.1; 4.SL.4
- Fifth Grade: 5.SL.1; 5.SL.4; 5.W.4; 5.W.7; 5.W.8
- Seventh Grade: 7.W.4; 7.W.7; 7.W.8; 7.SL.1; 7.SL.4
- Eighth Grade: 8.W.4; 8.W.7; 8.W.8; 8.SL.1; 8.SL.4

Visual Arts Standards:

N/A
Activity 42

Sunlight and Shades of Green, page 182

Objectives: Students will test the effects of lack of sunlight on plant leaves

Students will describe the process of photosynthesis and how it enables a plant to survive

Grade Levels: 3-8

Subject Areas: Science, Language Arts

Science Standards:

- Third Grade: 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: N/A
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade-Eighth Grade: MS-LS1-5-7; MS-LS2-3

Language Arts Standards:

- Third Grade: 3.W.2; 3.W.4; 3.W.7; 3.W.8; 3.SL.1; 3.SL.4
- Fourth Grade: 4.W.2; 4.W.4; 4.W.7; 4.W.8; 4.SL.1; 4.SL.4
- Fifth Grade: 5.W.2; 5.W.4; 5.W.7; 5.W.8; 5.SL.1; 5.SL.4
- Sixth Grade: 6.W.2; 6.W.4; 6.W.7; 6.W.8; 5.SL.1; 5.SL.4
- Seventh Grade: 7.SL.1; 7.SL.4; 7.W.2; 7.W.4; 7.W.7; 7.W.8
- Eighth Grade: 8.SL.1; 8.SL.4; 8.W.2; 8.W.4; 8.W.7; 8.W.8
Activity 43

Have Seeds Will Travel, page 185

Objectives: Students will sort or classify plant seeds they have collected
Students will identify varying methods of seed dispersal
Students will model or design seeds that use varying methods of dispersal

Grade Levels: K-8

Subject Areas: Science, Visual Arts

Science Standards:
- Kindergarten: K-LS1-1
- First Grade: 1-LS1-2; 1-LS3-1
- Second Grade: 2-LS2-2; 2-LS4-1
- Third Grade: 3-LS3-1; 3-LS3-2; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: N/A
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-2

Visual Arts Standards:
- Kindergarten: K.VA.CR.1.1; K.VA.PR.4.1
- First Grade: 1.VA.CR.1.1; 1.VA.PR.4.1
- Second Grade: 2.VA.CR.1.1; 2.VA.PR.4.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 44

*Water Wonders, page 188*

**Objectives:** Students will describe the various components of the water cycle and the path a water molecule might take on its way through this cycle

Students will explain how the water cycle is important to living things

Students will describe how plants affect the movement of water in a watershed

**Grade Levels:** 4-8

**Subject Areas:** Science, Language Arts, Social Studies

Science Standards:

- Fourth Grade: 4-ESS2-1; 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-5; MS-LS2-1; MS-LS2-3; MS-LS2-4; MS-LS4-6; MS-ESS2-1; MS-ESS2-4; MS-ESS3-3; MS-ESS3-4

Language Arts Standards:

- Fourth Grade: 4.W.3-5; 4.W.7; 4.L.1-3; 4.L.6; 4.SL.1; 4.SL.4
- Fifth Grade: 5.W.3-5; 5.W.7; 5.L.1-3; 5.L.6; 5.SL.1
- Sixth Grade: 6.W.3-5; 6.W.7; 6.L.1-3; 6.L.6; 6.SL.1
- Seventh Grade: 7.W.3-5; 7.W.7; 7.L.1-3; 7.L.6; 7.SL.1
- Eighth Grade: 8.W.3-5; 8.L.1-3; 8.L.6; 8.SL.1

Social Studies Standards:

- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.4.1; 7.G.7.1
- Eighth Grade: N/A
Objectives: Students will understand that ecosystems are made up of interdependent organisms and other components

Grade Levels: 4-8

Subject Areas: Science, Language Arts, Visual Arts

Science Standards:
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS1-7; MS-LS2-1-4; MS-LS4-4; MS-LS4-6

Language Arts Standards:
- Fourth Grade: 4.SL.1; 4.SL.3
- Fifth Grade: 5.SL.1; 5.SL.3
- Sixth Grade: 6.SL.1; 6.SL.3
- Seventh Grade: 7.SL.1; 7.SL.3
- Eighth Grade: 8.SL.1; 8.SL.3

Visual Arts Standards:
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1; 6-8.VA.CR.1.2
Objectives: Students will identify signs of animals living in the schoolyard

Students will describe ways the school environment provides suitable habitat for animals living there

Grade Levels: K-5

Subject Areas: Science, Language Arts, Visual Arts

Science Standards:

- Kindergarten: K-LS1-1; K-ESS2-2; K-ESS3-1
- First Grade: 1-LS1-1; 1-LS1-2
- Second Grade: 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS2-1; 3-LS3-1; 3-LS3-2; 3-LS4-2-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1; 5-ESS3-1

Language Arts Standards:

- Kindergarten: K.SL.1; K.SL.3-5; K.W.2; K.W.7
- First Grade: 1.SL.1; 1.SL.3-5; 1.W.2; 1.W.7
- Second Grade: 2.SL.1; 2.SL.3-5; 2.W.2; 2.W.7
- Third Grade: 3.SL.1; 3.SL.3-5; 3.W.2; 3.W.7
- Fourth Grade: 4.SL.1; 4.SL.3-5; 4.W.2; 4.W.7
- Fifth Grade: 5.SL.1; 5.SL.3-5; 5.W.2; 5.W.7

Visual Arts Standards:

- Kindergarten: K.VA.CR.1.1; K.VA.CR.3.1
- First Grade: 1.VA.CR.1.1; 1.VA.CR.3.1
- Second Grade: 2.VA.CR.1.1; 2.VA.CR.3.1
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.3.1
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.3.1
- Fifth Grade: 5.VA.CR.1.1
Activity 47

Are Vacant Lots Vacant? page 200

Objectives: Students will describe plants and animals that live at and around the study site.

Students will give examples of and describe ecological relationships between biotic and abiotic elements at the study site.

Grade Levels: 4-8

Subject Areas: Science, Math, Visual Arts

Science Standards:

- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-5; MS-LS2-1-5; MS-LS4-4; MS-LS4-6

Math Standards: N/A

Visual Arts Standards:

- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 48

*Field, Forest, and Stream, page 203*

**Objectives:** Students will describe similarities and differences they observe in the non-living (abiotic) and living (biotic) components in three ecosystems.

Students will identify ways that abiotic components of an ecosystem affect the biotic components.

**Grade Levels:** 4-8

**Subject Areas:** Science, Math

Science Standards:

- Fourth Grade: 4-LS1-1; 4-LS1-2
- Fifth Grade: 5-LS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-5; MS-LS2-1-5; MS-LS4-4; MS-LS4-6

Math Standards:

- Fourth Grade: 4.MD.4
- Fifth Grade: 5.MD.2
- Sixth Grade: 6.SP.1-3; 6.SP.5
- Seventh Grade: 7.SP.1; 7.SP.4
- Eighth Grade: 8.SP.4
Activity 49

Tropical Treehouse, page 207

Objectives: Students will describe plants and animals that inhabit tropical rainforests, including neotropical migratory birds.

Students will analyze an issue involving the rights of native inhabitants of a tropical rainforest.

Grade Levels: Part A: 3-6; Part B: 4-8; Part C: 6-8

Subject Areas: Science, Social Studies, Language Arts, Performing Arts, Visual Arts

Science Standards:
- Third Grade: 3-LS4-3; 3-LS4-4; 3-ESS2-1; 3-ESS2-2
- Fourth Grade: 4-LS1-1; 4-ESS2-2; 4-ESS3-1
- Fifth Grade: 5-ESS2-2; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-1-5; MS-LS4-6; MS-ESS2-6; MS-ESS3-3-5

Social Studies Standards:
- Third Grade: 3.C.3.1; 3.E.1.1; 3.E.5.1
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.C.1.2; 5.C.1.3; 5.G.2.1; 5.G.2.2; 5.G.6.1; 5.E.1.1
- Sixth Grade 6.E.4.1; 6.E.4.3
- Eighth Grade: 8.C.1.2; 8.C.1.3

Language Arts Standards:
- Fourth Grade: 4.L.1-3; 4.L.6; 4.SL.1; 4.SL.3-6; 4.W.2; 4.W.4; 4.W.7; 4.W.8
- Fifth Grade: 5.L.1-3; 5.L.6; 5.SL.1; 5.SL.3-6; 5.W.2; 5.W.4; 5.W.7; 5.W.8

Performing Arts Standards:
- Third Grade: 3.TH.CR.1.1-3; 3.TH.CR.2.1; 3.TH.CR.3.1
- Fourth Grade: 4.TH.CR.1.1-3; 4.TH.CR.2.1; 4.TH.CR.3.1
- Fifth Grade: 5.TH.CR.1.1; 5.TH.CR.1.2; 5.TH.CR.2.1; 5.TH.CR.3.1
- Sixth Grade-Eighth Grade: 6-8.TH.CR.1.1-3; 6-8.TH.CR.2.1

Visual Arts Standards:
- Third Grade: 3.VA.CR.1.1; 3.VA.CR.2.1; 3.VA.CR.3.1
- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.2.1; 4.VA.CR.3.1
- Fifth Grade: 5.VA.CR.1.1; 5.VA.CR.2.1; 5.VA.CR.3.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1; 6-8.VA.CR.2.1; 6-8.VA.CR.3.1
Objectives: Students will experience the analysis and decision-making involved in managing forest land

Students will understand that any land-use decision has a number of consequences for people, wildlife, and plants

Grade Levels: 7-8

Subject Areas: Science, Math, Social Studies

Science Standards:
- Seventh Grade-Eighth Grade: MS-LS1-5; MS-LS2-1-5; MS-LS4-4; MS-LS4-6; MS-ESS3-3-5

Math Standards:
- Seventh Grade: 7.NS.2; 7.NS.3; 7.EE.2-4; 7.SP.1; 7.SP.5-7
- Eighth Grade: 8.SP.1; 8.SP.4

Social Studies Standards:
- Seventh Grade: 7.G.3.2; 7.G.3.3; 7.G.4.2; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.1.3
Activity 51

Make Your Own Paper, page 224

Objectives: Students will describe the steps of the paper-making process and identify the elements and outputs of the process

Grade Levels: 1-8

Subject Areas: Science, Social Studies, Language Arts, Visual Arts

Science Standards:
- First Grade: N/A
- Second Grade: N/A
- Third Grade: N/A
- Fourth Grade: 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Social Studies Standards:
- First Grade: 1.G.6.1; 1.E.1.1
- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade: 3.E.1.1
- Fourth Grade: N/A
- Fifth Grade: 5.G.6.1; 5.E.1.1
- Sixth Grade: 6.C.5.1
- Seventh Grade: 7.G.5.3; 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.4.3; 8.C.5.1

Language Arts Standards:
- First Grade: 1.L.1; 1.SL.1; 1.SL.3; 1.SL.4
- Second Grade: 2.L.1; 2.SL.1; 2.SL.3; 2.SL.4
- Third Grade: 3.L.1; 3.SL.1; 3.SL.3; 3.SL.4
- Fourth Grade: 4.L.1; 4.SL.1; 4.SL.3; 4.SL.4
- Fifth Grade: 5.L.1; 5.SL.1; 5.SL.3; 5.SL.4
- Sixth Grade: 6.L.1; 6.SL.1; 6.SL.3; 6.SL.4
- Seventh Grade: 7.L.1; 7.SL.1; 7.SL.3; 7.SL.4
- Eighth Grade: 8.L.1; 8.SL.1; 8.SL.3; 8.SL.4

Visual Arts Standards:
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
• Fourth Grade: 4.VA.CR.1.1
• Fifth Grade: 5.VA.CR.1.1
• Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 52

*A Look at Aluminum, page 228*

**Objectives:** Students will understand the environmental impacts of producing new aluminum and recycling aluminum products

Students will describe the steps involved in both creating and recycling an aluminum can

**Grade Levels:** 5-8

**Subject Areas:** Science, Social Studies

Science Standards:

- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Social Studies Standards:

- Fifth Grade: 5.G.6.1; 5.E.1.1
- Sixth Grade: 6.C.5.1
- Seventh Grade: 7.G.5.3; 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.4.3; 8.C.5.1
Activity 53

On the Move, page 232

Objectives: Students will understand the needs and benefits of transportation systems in their community and beyond

Students will design or propose a practical and efficient transportation system for the future

Grade Levels: 4-8

Subject Areas: Science, Math, Social Studies, Visual Arts

Science Standards:
- Fourth Grade: 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Math Standards:
- Fourth Grade: 4.OA.1-3; 4.NBT.1; 4.NBT.5; 4.MD.2
- Fifth Grade: 5.OA.2; 5.NBT.5; 5.NBT.7
- Sixth Grade: 6.EE.2; 6.EE.3; 6.EE.9
- Seventh Grade: 7.NS.3; 7.EE.1-4
- Eighth Grade: N/A

Social Studies Standards:
- Fourth Grade: N/A
- Fifth Grade: 5.G.6.1; 5.E.1.1
- Sixth Grade: 6.C.5.1
- Seventh Grade: 7.G.5.3; 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.4.3; 8.C.5.1

Visual Arts Standards:
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 54

I’d Like to Visit A Place Where...

Objectives: Students will describe the characteristics of their favorite recreational area

Students will explain the importance of recreational areas to people and other living things

Students will conduct a project at a local park to improve a habitat or enhance its suitability to people

Grade Levels: Part A: K-3; Parts B&C: 4-8

Subject Areas: Science, Social Studies, Language Arts, Physical Education, Visual Arts

Science Standards:
- Kindergarten: K-ESS3-3
- First Grade: N/A
- Second Grade: 2-LS4-1
- Third Grade: 3-LS4-3; 3-LS4-4
- Fourth Grade: N/A
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-1; MS-LS2-2; MS-LS2-5; MS-LS4-6; MS-ESS3-3-5

Social Studies Standards:
- Kindergarten: K.G.6.1
- First Grade: 1.G.6.1
- Second Grade: 2.C.3.1; 2.G.6.1; 2.G.6.2; 2.E.1.1
- Third Grade: 3.C.3.1; 3.C.3.2; 3.C.4.2; 3.C.4.3
- Fourth Grade: 4.C.3.1; 4.G.3.1
- Fifth Grade: 5.C.1.2; 5.C.1.3; 5.C.3.2; 5.C.4.1; 5.C.5.1; 5.G.2.3; 5.G.6.1
- Sixth Grade: 6.C.1.2; 6.C.1.3; 6.C.5.1
- Seventh Grade: 7.G.3.2; 7.G.5.3; 7.G.6.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.4.2; 8.C.4.3; 8.C.5.1

Language Arts Standards:
- Kindergarten: K.W.1-5; K.W.8; K.L.1-3; K.L.6; K.SL.1-4
- First Grade: 1.W.1-5; 1.W.8; 1.L.1-3; 1.L.6; 1.SL.1-4
- Second Grade: 2.W.1-5; 2.W.8; 2.L.1-3; 2.L.6; 2.SL.1-4
- Third Grade: 3.W.1-5; 3.W.8; 3.L.1-3; 3.L.6; 3.SL.1-4
- Fourth Grade: 4.W.1-5; 4.W.8; 4.L.1-3; 4.L.6; 4.SL.1-4
- Fifth Grade: 5.W.1-5; 5.W.8; 5.L.1-3; 5.L.6; 5.SL.1-4
- Sixth Grade: 6.W.1-5; 6.W.8; 6.L.1-3; 6.L.6; 6.SL.1-4
- Seventh Grade: 7.W.1-5; 7.W.8; 7.L.1-3; 7.L.6; 7.SL.1-4
- Eighth Grade: 8.W.1-5; 8.W.8; 8.L.1-3; 8.L.6; 8.SL.1-4

Physical Education Standards:
- Kindergarten: K.S2.E3; K.S2.E4; K.S3.E1
- First Grade: 1.S2.E3; 1.S2.E4; K.S3.E1
- Second Grade: 2.S2.E3; 2.S2.E4; 2.S3.E1
- Fourth Grade: 4.S2.E3; 4.S2.E4; 4.S3.E1
- Fifth Grade: 5.S2.E3; 5.S2.E4; 4.S3.E1
- Sixth Grade-Eighth Grade: N/A

Visual Arts Standards:
- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 55

Planning the Ideal Community, page 239

Objectives: Students will understand the importance of a community’s resources and how they provide for the well-being of its residents

Grade Levels: 4-8

Subject Areas: Social Studies, Language Arts, Visual Arts

Social Studies Standards:
- Fourth Grade: 4.C.3.1; 4.E.3.1; 4.E.5.1
- Fifth Grade: 5.C.1.3; 5.C.4.1; 5.C.5.1; 5.E.1.1; 5.E.1.2; 5.E.5.1
- Sixth Grade: 6.C.1.2; 6.C.5.1; 6.E.4.1; 6.E.4.3
- Seventh Grade: 7.E.4.3; 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.1.3

Language Arts Standards:
- Fourth Grade: 4.W.7; 4.W.8; 4.L.1; 4.L.3; 4.SL.1
- Fifth Grade: 5.W.7; 5.W.8; 5.L.1; 5.L.3; 5.SL.1
- Sixth Grade: 6.W.7; 6.W.8; 6.L.1; 6.L.3; 6.SL.1
- Seventh Grade: 7.W.7; 7.W.8; 7.L.1; 7.L.3; 7.SL.1
- Eighth Grade: 8.W.7; 8.W.8; 8.L.1; 8.L.3; 8.SL.1

Visual Arts Standards:
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 56

We Can Work It Out, page 241

Objectives: Students will develop an understanding of how communities solve problems and make decisions

Grade Levels: 5-8

Subject Areas: Social Studies, Language Arts, Visual Arts

Social Studies Standards:

- Fifth Grade: 5.C.1.2; 5.C.1.3; 5.C.3.1; 5.C.4.1; 5.C.5.1-3
- Sixth Grade: 6.C.1.2; 6.C.1.3; 6.C.5.1; 6.E.4.1
- Seventh Grade: 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.4.1; 8.C.4.3; 8.C.5.1; 8.C.5.2

Language Arts Standards:

- Fifth Grade: 5.W.7; 5.W.8; 5.L.1; 5.L.3; 5.SL.1
- Sixth Grade: 6.W.7; 6.W.8; 6.L.1; 6.L.3; 6.SL.1
- Seventh Grade: 7.W.7; 7.W.8; 7.L.1; 7.L.3; 7.SL.1
- Eighth Grade: 8.W.7; 8.W.8; 8.L.1; 8.L.3; 8.SL.1

Visual Arts Standards:

- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1


Activity 57

_Democracy in Action, page 245_

**Objectives:** Students will examine personal opinions or preconceived notions of two citizen groups, special-interest groups, or government agencies involved in the same issues.

Students will compare their opinions to what they find out about the groups through team conducted research.

Students will explain ways students can become involved in the civic action process through participation in such groups.

**Grade Levels:** 5-8

**Subject Areas:** Social Studies, Visual Arts

Social Studies Standards:

- Fifth Grade: 5.C.1.2; 5.C.1.3; 5.C.3.1; 5.C.4.1; 5.C.5.1-3
- Sixth Grade: 6.C.1.2; 6.C.1.3; 6.C.5.1; 6.E.4.1
- Seventh Grade: 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.4.1; 8.C.4.3; 8.C.5.1; 8.C.5.2

Visual Arts Standards:

- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 58

There Ought to Be a Law, page 249

Objectives: Students will determine why groups make rules
Students will propose a new law and describe the process needed to put it in place

Grade Levels: 4-8

Subject Areas: Social Studies, Language Arts, Visual Arts

Social Studies Standards:

- Fourth Grade: 4.C.3.1; 4.E.1.1; 4.E.3.1
- Fifth Grade: 5.C.1.2; 5.C.1.3; 5.C.3.1; 5.C.4.1; 5.C.5.1-3
- Sixth Grade: 6.C.1.2; 6.C.1.3; 6.C.5.1; 6.E.4.1
- Seventh Grade: 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.4.1; 8.C.4.3; 8.C.5.1; 8.C.5.2

Language Arts Standards:

- Fourth Grade: 4.W.7; 4.W.8; 4.L.1; 4.L.3; 4.SL.1
- Fifth Grade: 5.W.7; 5.W.8; 5.L.1; 5.L.3; 5.SL.1
- Sixth Grade: 6.W.7; 6.W.8; 6.L.1; 6.L.3; 6.SL.1
- Seventh Grade: 7.W.7; 7.W.8; 7.L.1; 7.L.3; 7.SL.1
- Eighth Grade: 8.W.7; 8.W.8; 8.L.1; 8.L.3; 8.SL.1

Visual Arts Standards:

- Fourth Grade: 4.VA.CR.1.1; 4.VA.CR.1.2
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Objectives: Students will analyze some of the ways that ideas and opinions are expressed through word choice

Students will understand and demonstrate the differences between objective and subjective writing

Grade Levels: 6-8

Subject Areas: Social Studies, Language Arts, Visual Arts, Performing Arts

Social Studies Standards:

- Sixth Grade: 6.H.5.1-3; 6.C.5.1
- Seventh Grade: N/A
- Eighth Grade: 8.C.4.3; 8.C.5.1; 8.C.5.2

Language Arts Standards:

- Seventh Grade: 7.RI.1; 7.RI.2; 7.RI.4-9; 7.W.1; 7.W.2; 7.W.4; 7.W.5; 7.W.7-9; 7.L.1-6; 7.SL.1-4
- Eighth Grade: 8.RI.1; 8.RI.2; 8.RI.4-9; 8.W.1; 8.W.2; 8.W.4; 8.W.5; 8.W.7-9; 8.L.1-6; 8.SL.1-4

Visual Arts:

- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1; 6-8.VA.CR.1.2

Performing Arts:

- Sixth Grade-Eighth Grade: 6-8.TH.PR.4.1; 6-8.TH.PR.4.2
Activity 60

Publicize It! Page 256

Objectives: Students will plan and carry out a service learning project
Students will use the media to create public awareness about the project

Grade Levels: 5-8

Subject Areas: Science, Social Studies, Language Arts, Visual Arts, Performing Arts

Science Standards:
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Social Studies Standards:
- Fifth Grade: 5.C.1.2; 5.C.1.3; 5.C.4.1; 5.C.5.1-3
- Sixth Grade: 6.C.5.1
- Seventh Grade: N/A
- Eighth Grade: 8.C.4.3; 8.C.5.1; 8.C.5.2

Language Arts Standards:
- Fifth Grade: 5.W.1; 5.W.2; 5.W.4-9; 5.L.1-6; 5.SL.1-4
- Sixth Grade: 6.W.1; 6.W.2; 6.W.4-9; 6.L.1-6; 6.SL.1-4
- Seventh Grade: 7.W.1; 7.W.2; 7.W.4-9; 7.L.1-6; 7.SL.1-4
- Eighth Grade: 8.W.1; 8.W.2; 8.W.4-9; 8.L.1-6; 8.SL.1-4

Visual Arts Standards:
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1

Performing Arts Standards:
- Fifth Grade: 5.TH.PR.4.1; 5.TH.PR.4.2
- Sixth Grade-Eighth Grade: 6-8.TH.PR.4.1; 6-8.TH.PR.4.2
Activity 61
The Closer You Look, page 263

Objectives: Students will understand how observation increases knowledge of tree structure and form

Grade Levels: K-6

Subject Areas: Science, Language Arts, Visual Arts

Science Standards:
- Kindergarten: K-LS1-1
- First Grade: 1-LS1-1; 1-LS1-2; 1-LS3-1
- Second Grade: 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: N/A
- Sixth Grade: MS-LS1-5; MS-LS2-1; MS-LS2-2; MS-LS2-5; MS-LS4-4

Language Arts Standards:
- Kindergarten: K.SL.1; K.SL.3; K.SL.4; K.SL.6
- First Grade: 1.SL.1; 1.SL.3; 1.SL.4; 1.SL.6
- Second Grade: 2.SL.1; 2.SL.3; 2.SL.4; 2.SL.6
- Third Grade: 3.SL.1; 3.SL.3; 3.SL.4; 3.SL.6
- Fourth Grade: 4.SL.1; 4.SL.3; 4.SL.4; 4.SL.6
- Fifth Grade: 5.SL.1; 5.SL.3; 5.SL.4; 5.SL.6
- Sixth Grade: 6.SL.1; 6.SL.3; 6.SL.4; 6.SL.6

Visual Arts Standards:
- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade: 6.VA.CR.1.1
Activity 62

To Be a Tree, page 253

Objectives: Students will learn the structure and function of tree parts

Grade Levels: K-4

Subject Areas: Science, Language Arts, Visual Arts, Performing Arts

Science Standards:
- Kindergarten: K-LS1-1
- First Grade: 1-LS1-1; 1-LS3-1
- Second Grade: 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-2-4
- Fourth Grade: 4-LS1-1

Language Arts Standards:
- Kindergarten: K.SL.1; K.SL.3; K.SL.4; K.SL.6
- First Grade: 1.SL.1; 1.SL.3; 1.SL.4; 1.SL.6
- Second Grade: 2.SL.1; 2.SL.3; 2.SL.4; 2.SL.6
- Third Grade: 3.SL.1; 3.SL.3; 3.SL.4; 3.SL.6
- Fourth Grade: 4.SL.1; 4.SL.3; 4.SL.4; 4.SL.6

Visual Arts Standards:
- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1

Performing Arts Standards:
- Kindergarten: K.TH.PR.4.1
- First Grade: 1.TH.PR.4.1
- Second Grade: 2.TH.PR.4.1
- Third Grade: 3.TH.PR.4.1
- Fourth Grade: 4.TH.PR.4.1
Activity 63

Tree Factory, page 269

Objectives: Students will understand the structure of a tree and how different parts of a tree help the tree function

Grade Levels: 3-6

Subject Areas: Science, Physical Education, Performing Arts

Science Standards:
- Third Grade: 3-LS3-1; 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1
- Sixth Grade: MS-LS1-4; MS-LS1-5; MS-LS1-6; MS-LS2-1; MS-LS2-2; MS-LS2-4; MS-LS4-4

Physical Education Standards:
- Third Grade: S1.E1.3; S1.E2.3; S2.E1.3
- Fourth Grade: S1.E1.4; S1.E2.4; S2.E1.4
- Fifth Grade: S1.E1.5; S1.E2.5; S2.E1.5
- Sixth Grade: N/A

Performing Arts Standards:
- Third Grade: 3.TH.PR.4.1
- Fourth Grade: 4.TH.PR.4.1
- Fifth Grade: 5.TH.PR.4.1
- Sixth Grade: 6.TH.PR.4.1
Activity 64

Looking at Leaves, page 273

Objectives: Students will understand how leaf shapes, sizes, and other characteristics vary from plant to plant

Grade Levels: K-4

Subject Areas: Science, Visual Arts

Science Standards:

- Kindergarten: K-LS1-1
- First Grade: 1-LS1-2; 1-LS3-1
- Second Grade: 2-LS2-2; 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-2-4
- Fourth Grade: 4-LS1-1

Visual Arts Standards:

- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
Activity 65

*Bursting Buds, page 277*

**Objectives:** Students will describe the stages that leaf buds go through as the leaves develop throughout the year

**Grade Levels:** K-6

**Subject Areas:** Science, Visual Arts, Math

Science Standards:

- Kindergarten: K-LS1-1
- First Grade: 1-LS1-1; 1-LS1-2; 1-LS3-1
- Second Grade: 2-LS2-2; 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-2-4
- Fourth Grade: 4-LS1-1; 4-LS1-2
- Fifth Grade: 5-LS2-1
- Sixth Grade: MS-LS1-4-6; MS-LS2-1-5; MS-LS4-6

Visual Arts Standards:

- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade: 6.VA.CR.1.1

Math Standards:

- Kindergarten: K.CC.4-6; K.MD.1-3
- First Grade: 1.OA.2; 1.MD.4
- Second Grade: 2.OA.4; 2.MD.10
- Third Grade: 3.OA.2; 3.MD.3; 3.MD.4
- Fourth Grade: 4.OA.5; 4.MD.4
- Fifth Grade: 5.OA.3; 5.MD.2
- Sixth Grade: 6.EE.9; 6.SP.4; 6.SP.5
Activity 66

*Germinating Giants, page 279*

**Objectives:** Students will develop an understanding of measurement and scale of trees

Students will recognize that plants have developed different seed structures to meet different needs

**Grade Levels:** 4-6

**Subject Areas:** Science, Math

Science Standards:

- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade: MS-LS1-4-7; MS-LS2-1-5; MS-LS3-2; MS-LS4-4

Math Standards:

- Fourth Grade: 4.OA.4; 4.OA.5; 4.NBT.1; 4.NBT.4-6; 4.NF.1; 4.NF.3-5; 4.MD.4
- Fifth Grade: 5.OA.2; 5.OA.3; 5.NBT.5-6; 5.NF.2-7; 5.MD.2
- Sixth Grade: 6.RP.1-3; 6.NS.1-4; 6.EE.2-3; 6.EE.5-9; 6.SP.4-5
Activity 67

How Big Is Your Tree? page 284

Objectives: Students will be able to explain how and why people use standard units of measure

Students will measure trees in a systematic, consistent way

Grade Levels: 4-8

Subject Areas: Science, Math, Social Studies

Science Standards:
- Fourth Grade: 4-LS1-1-2
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade-Eighth Grade: MS-LS1-4-7; MS-LS2-1-5; MS-LS3-2; MS-LS4-4

Math Standards:
- Fourth Grade: 4.OA.4; 4.OA.5; 4.NBT.1; 4.NBT.4-6; 4.NF.1; 4.NF.3-5; 4.MD.4
- Fifth Grade: 5.OA.2; 5.OA.3; 5.NBT.5-6; 5.NF.2-7; 5.MD.2
- Sixth Grade: 6.RP.1-3; 6.NS.1-4; 6.EE.2-3; 6.EE.5-9; 6.SP.4-5
- Seventh Grade: 7.RP.1-3; 7.NS.1-3
- Eighth Grade: 8.EE.8; 8.F.1-2

Social Studies Standards:
- Fourth Grade: 4.G.3.1; 4.E.5.1
- Fifth Grade: 5.C.1.3; 5.C.3.2; 5.C.5.1; 5.G.2.2; 5.G.6.1
- Sixth Grade: 6.C.1.3; 6.C.5.1; 6.E.4.1
- Eighth Grade: 8.C.4.3; 8.C.5.1
Activity 68

*Name That Tree, page 288*

**Objectives:** Students will identify several trees using various physical characteristics

**Grade Levels:** 2-8

**Subject Areas:** Science, Physical Education

Science Standards:

- Second Grade: 2-LS2-1; 2-LS2-2; 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade-Eighth Grade: MS-LS1-4-7; MS-LS2-1-5; MS-LS4-4; MS-LS4-6

Physical Education Standards:

- Second Grade: 2.S2.E3; 2.S2.E4; 2.S3.E1
- Fourth Grade: 4.S2.E3; 4.S2.E4; 4.S3.E1
- Fifth Grade: 5.S2.E3; 5.S2.E4; 5.S3.E1
- Sixth Grade-Eighth Grade: N/A
Activity 69

*Forest for the Trees, page 291*

**Objectives:** Students will understand how forest resources are managed to provide products and other benefits

**Grade Levels:** 4-8

**Subject Areas:** Science, Math, Social Studies

Science Standards:
- Fourth Grade: N/A
- Fifth Grade: N/A
- Sixth Grade-Eighth Grade: MS-LS1-5; MS-LS2-1-5; MS-LS4-4; MS-LS4-6; MS-ESS3-3-4

Math Standards:
- Fourth Grade: 4.OA.2-4; 4.NBT.4
- Fifth Grade: 5.OA.3; 5.NBT.1
- Sixth Grade: 6.RP.1; 6.NS.2
- Seventh Grade: 7.NS.1; 7.EE.3
- Eighth Grade: N/A

Social Studies Standards:
- Fourth Grade: N/A
- Fifth Grade: 5.G.2.1-3; 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.5.3; 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: N/A
Objectives: Students will investigate the physical characteristics of various soils and use the results to predict appropriate land use.

Grade Levels: Part A: K-4; Part B: 5-8

Subject Areas: Science, Math, Social Studies

Science Standards:
- Kindergarten: K-LS1-1
- First Grade: 1-LS1-2; 1-LS3-1
- Second Grade: 2-LS2-1; 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-3-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS1-1; 5-LS2-1
- Sixth Grade-Eighth Grade: MS-LS1-4-6; MS-LS2-1-5; MS-LS4-4; MS-LS4-6

Math Standards:
- Kindergarten: N/A
- First Grade: N/A
- Second Grade: N/A
- Third Grade: N/A
- Fourth Grade: N/A
- Fifth Grade: 5.OA.3
- Sixth Grade: 6.SP.1-3
- Seventh Grade: 7.SP.1-4
- Eighth Grade: N/A

Social Studies Standards:
- Kindergarten: K.G.3.1; K.G.6.1
- First Grade: 1.G.6.1
- Second Grade: 2.G.6.1-2
- Third Grade: 3.G.2.1
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.1-3; 5.G.6.1
- Sixth Grade: N/A
- Eighth Grade: N/A
Activity 71

Watch on Wetlands, page 303

Objectives: Students will investigate a wetland ecosystem
Students will analyze the issues and opinions relating to the management and protection of wetlands

Grade Levels: 7-8

Subject Areas: Science, Social Studies, Language Arts, Performing Arts

Science Standards:
- Seventh Grade-Eighth Grade: MS-LS1-4-6; MS-LS2-1-5; MS-LS4-1; MS-LS4-4; MS-LS4-6; MS-ESS3-3-5

Social Studies Standards:
- Eighth Grade: N/A

Language Arts Standards:
- Seventh Grade: 7.W.1-2; 7.W.4-5; 7.W.7-9; 7.L.1-4; 7.SL.1-4
- Eighth Grade: 8.W.1-2; 8.W.4-5; 8.W.7-9; 8.L.1-4; 8.SL.1-4

Performing Arts Standards:
- Seventh Grade-Eighth Grade: 7-8.TH.PR.4.1
Activity 72

Air We Breathe, page 308

Objectives: Students will identify various types of indoor air pollutants and their sources
Students will understand how various pollutants can be harmful to people’s health
Students will take action to improve indoor air quality

Grade Levels: 6-8

Subject Areas: Science, Language Arts

Science Standards:
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-4; MS-LS4-6; MS-ESS3-3-5

Language Arts Standards:
- Sixth Grade: 6.W.1-2; 6.W.4-5; 6.W.7-9; 6.L.1-4; 6.SL.1-4
- Seventh Grade: 7.W.1-2; 7.W.4-5; 7.W.7-9; 7.L.1-4; 7.SL.1-4
- Eighth Grade: 8.W.1-2; 8.W.4-5; 8.W.7-9; 8.L.1-4; 8.SL.1-4
Activity 73

Waste Watchers, page 314

Objectives: Students will identify ways to save energy in their daily lives
Students will explain how saving energy can reduce air pollution

Grade Levels: 4-8

Subject Areas: Science, Math, Social Studies

Science Standards:
- Fourth Grade: 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-4; MS-LS4-6; MS-ESS3-3-5

Math Standards: N/A

Social Studies Standards:
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.1-3; 5.G.6.1
- Sixth Grade: N/A
- Eighth Grade: N/A
Activity 74

*People, Places, Things, page 318*

**Objectives:** Students will investigate and describe the people, places, and things that make up their own community

**Grade Levels:** K-3

**Subject Areas:** Social Studies

Social Studies Standards:

- Kindergarten: K.G.3.1
- First Grade: 1.C.3.1; 1.G.3.1; 1.E.1.1
- Second Grade: 2.C.2.1; 2.C.3.1; 2.C.3.2; 2.G.1.2; 2.G.3.1; 2.G.6.1; 2.G.6.2; 2.E.11.
- Third Grade: 3.C.2.2; 3.C.3.1; 3.C.3.2; 3.C.4.1-3; 3.G.2.1; 3.E.1.1
Activity 75

Tipi Talk, page 320

Objectives: Students will understand that people use natural materials to construct their shelters and that dwellings reflect a society’s way of life

Grade Levels: 4-8

Subject Areas: Science, Social Studies, Visual Arts

Science Standards:

- Fourth Grade: 4-ESS3-1; 4-ESS3-2
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Social Studies Standards:

- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.2; 5.G.2.3; 5.G.5.1; 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.3.1-3; 7.G.4.2; 7.G.5.3; 7.G.7.3
- Eighth Grade: N/A

Visual Arts Standards:

- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VAV.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 76

Tree Cookies, page 327

Objectives: Students will examine cross-sections of trees

Students will infer from a tree’s rings what environmental conditions might have occurred in its life

Students will correlate the time it takes a tree to grow with events in human history

Grade Levels: 3-8

Subject Areas: Science, Social Studies, Visual Arts, Language Arts

Science Standards:

- Third Grade: 3.LS1.1; 3.LS3.2; 3.LS4.1; 3.LS4.4
- Fourth Grade: 4.LS1.1
- Fifth Grade: N/A
- Sixth Grade-Eighth Grade: MS.LS1.5; MS.LS2.4; MS.LS4.1-2

Social Studies Standards: N/A

Visual Arts Standards:

- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1

Language Arts Standards:

- Third Grade: 3.SL.1-4; 3.W.3-4; 3.W.7-8
- Fourth Grade: 4.SL.1-4; 4.W.3-4; 4.W.7-8
- Fifth Grade: 5.SL.1-4; 5.W.3-4; 5.W.7-8
- Sixth Grade 6.SL.1-4; 6.W.3-4; 6.W.7-8
- Seventh Grade: 7.SL.1-4; 7.W.3-4; 7.W.7-8
- Eighth Grade: 8.SL.1-4; 8.SL.3-4; 8.SL.7-8
Activity 77

Trees in Trouble, page 332

Objectives: Students will recognize symptoms of unhealthy trees and describe possible causes

Students will perform investigations to determine the effects of crowding, acidic precipitation, or fertilizers on plant growth

Grade Levels: Part A: 1-8; Part B: 4-8

Subject Areas: Science, Math, Social Studies, Language Arts, Performing Arts

Science Standards:

- First Grade: N/A
- Second Grade: 2-LS2-1; 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS1-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-4-6; MS-LS2-1; MS-LS2-4-5; MS-LS4-4; MS-LS4-6; MS-ESS3-3-4

Math Standards:

- Fourth Grade: 4.MD.1
- Fifth Grade: N/A
- Sixth Grade 6.SP.1-3
- Seventh Grade: 7.SP.1
- Eighth Grade: N/A

Social Studies Standards:

- First Grade: N/A
- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade-Sixth Grade: N/A
- Seventh Grade: 7.G.4.1; 7.G.5.3; 7.G.7.3
- Eighth Grade: N/A

Language Arts Standards:

- First Grade: 1.L.1-3; 1.L.6; 1.SL.1-4; 1.W.2; 1.W.4-5; 1.W.7-8
- Second Grade: 2.L.1-3; 2.L.6; 2.SL.1-4; 2.W.2; 2.W.4-5; 2.W.7-8
- Third Grade: 3.L.1-3; 3.L.6; 3.SL.1-4; 3.W.2; 3.W.4-5; 3.W.7-8
- Fourth Grade: 4.L.1-3; 4.L.6; 4.SL.1-4; 4.W.2; 4.W.4-5; 4.W.7-8
- Fifth Grade: 5.L.1-3; 5.L.6; 5.SL.1-4; 5.W.2; 5.W.4-5; 5.W.7-8
- Sixth Grade 6.L.1-3; 6.L.6; 6.SL.1-4; 6.W.2; 6.W.4-5; 6.W.7-8
- Seventh Grade: 7.L.1-3; 7.L.6; 7.SL.1-4; 7.W.2; 7.W.4-5; 7.W.7-8
• Eighth Grade: 8.L.1-3; 8.L.6; 8.SL.1-4; 8.W.2; 8.W.4-5; 8.W.7-8

Performing Arts Standards:

• First Grade: 1.TH.PR.4.1
• Second Grade: 2.TH.PR.4.1
• Third Grade: 3.TH.PR.4.1
• Fourth Grade: 4.TH.PR.4.1
• Fifth Grade: 5.TH.PR.4.1
• Sixth Grade-Eighth Grade: 6-8.TH.PR.4.1
Activity 78

*Signs of Fall, page 337*

**Objectives:** Students will identify and describe the signs of fall they observe outside.

Students will understand why leaves of deciduous trees change color in the fall.

**Grade Levels:** Part A: K-5; Part B: 3-6

**Subject Areas:** Science, Language Arts, Visual Arts

Science Standards:
- Kindergarten: N/A
- First Grade: 1-ESS1-2
- Second Grade: 2-LS4-1
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-3; 3-ESS2-1
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1
- Sixth Grade: MS-LS1-6; MS-LS2-1; MS-ESS3-5

Language Arts Standards:
- Third Grade: 3.L.1-3; 3.L.6; 3.SL.1-4; 3.W.2; 3.W.4-5; 3.W.7-8
- Fourth Grade: 4.L.1-3; 4.L.6; 4.SL.1-4; 4.W.2; 4.W.4-5; 4.W.7-8
- Fifth Grade: 5.L.1-3; 5.L.6; 5.SL.1-4; 5.W.2; 5.W.4-5; 5.W.7-8

Visual Arts Standards:
- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade: 6-8.VA.CR.1.1
Activity 79

Tree Lifecycle, page 341

Objectives: Students will diagram the lifecycle of a tree to show their understanding of that lifecycle and the tree’s role in the ecosystem throughout its life

Grade Levels: 3-6

Subject Areas: Science, Language Arts, Visual Arts, Performing Arts

Science Standards:
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS1-1
- Sixth Grade: MS-LS1-4-6; MS-LS2-1; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6

Language Arts Standards:
- Fourth Grade: 4.L.1-3; 4.L.6; 4.SL.1-4; 4.W.3; 4.W.4-5; 4.W.7-8
- Fifth Grade: 5.L.1-3; 5.L.6; 5.SL.1-4; 5.W.3; 5.W.4-5; 5.W.7-8

Visual Arts Standards:
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade: 6-8.VA.CR.1.1

Performing Arts Standards:
- Third Grade: 3.TH.PR.4.1
- Fourth Grade: 4.TH.PR.4.1
- Fifth Grade: 5.TH.PR.4.1
- Sixth Grade: 6-8.TH.PR.4.1
Activity 80

Nothing Succeeds Like Succession, page 345

Objectives: Students will explore basic relationships between species diversity and ecosystem changes

Students will identify successional stages in ecosystems based on plant and animal species

Students will draw conclusions about the process of succession based on study test plots in different stages of succession

Grade Levels: Part A: 3-6, Parts B and C: 4-8

Subject Areas: Science, Math, Language Arts, Visual Arts

Science Standards:
- Third Grade: 3-LS1-1; 3-LS3-1; 3-LS3-2; 3-LS4-3; 3-LS4-4
- Fourth Grade: 4-LS1-1
- Fifth Grade: 5-LS2-1
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1-5; MS-LS4-4; MS-LS4-6

Math Standards: N/A

Language Arts Standards:
- Third Grade: 3.L.1-3; 3.L.6; 3.SL.1-4; 3.W.2; 3.W.4-5; 3.W.7-8
- Fourth Grade: 4.L.1-3; 4.L.6; 4.SL.1-4; 4.W.2; 4.W.4-5; 4.W.7-8
- Fifth Grade: 5.L.1-3; 5.L.6; 5.SL.1-4; 5.W.2; 5.W.4-5; 5.W.7-8
- Sixth Grade 6.L.1-3; 6.L.6; 6.SL.1-4; 6.W.2; 6.W.4-5; 6.W.7-8
- Seventh Grade: 7.L.1-3; 7.L.6; 7.SL.1-4; 7.W.2; 7.W.4-5; 7.W.7-8
- Eighth Grade: 8.L.1-3; 8.L.6; 8.SL.1-4; 8.W.2; 8.W.4-5; 8.W.7-8

Visual Arts Standards:
- Third Grade:3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 81

Living with Fire, page 350

Objectives: Students will describe the three elements of the fire triangle and explain how eliminating one or more of them can help prevent or control a fire.

Students will describe ways to reduce the risk to homes of wildland fire.

Grade Levels: Parts A and B: 4-8; Part C: K-2

Subject Areas: Science, Social Studies

Science Standards:

- Kindergarten: N/A
- First grade: N/A
- Second Grade: N/A
- Fourth Grade: 4-LS1-2; 4-ESS3-2
- Fifth Grade: 5-LS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-3; MS-LS2-4; MS-LS4-4; MS-LS4-6; MS-ESS3-3; MS-ESS3-5

Social Studies Standards:

- Kindergarten: N/A
- First grade: N/A
- Second Grade: N/A
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.3; 5.G.6.1
- Sixth Grade: N/A
- Seventh Grade: 7.G.4.1; 7.G.5.3; 7.G.6.1; 7.G.7.3
- Eighth Grade: N/A
Activity 82

Resource-Go-Around, page 355

Objectives: Students will gain insight into the various sources of natural resources, the processes by which natural resources are turned into products, and the energy needed to make the products we use.

Grade Levels: 4-8

Subject Areas: Science, Social Studies

Science Standards:

- Fourth Grade: 4-ESS3-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3; MS-ESS3-4

Social Studies Standards:

- Fourth Grade: 4.E.3.1
- Fifth Grade: 5.E.1.1
- Sixth Grade: 6.E.4.3
- Seventh Grade: 7.E.4.2; 7.E.4.4
- Eighth Grade: N/A
Activity 83

_A Peek at Packaging, page 360_

**Objectives:** Students will identify different purposes of packaging, the pros and cons of certain packaging, and which packaging is recyclable and biodegradable

**Grade Levels:** 5-8

**Subject Areas:** Science, Social Studies, Visual Arts

Science Standards:
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3; MS-ESS3-4

Social Studies Standards:
- Fifth Grade: 5.E.1.1; 5.E.1.2; 5.E.2.1; 5.E.5.1
- Sixth Grade: 6.E.4.1-3
- Seventh Grade: 7.E.4.1; 7.E.4.2; 7.E.4.4
- Eighth Grade: 8.E.4.3

Visual Arts Standards:
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Objectives: Students will examine and analyze trends in CO2 levels
Students will learn how an increase in temperature can affect ecosystems
Students will identify ways to reduce the amount of CO2 they generate

Grade Levels: 6-8

Subject Areas: Science, Math, Social Studies, Language Arts

Science Standards:
- Sixth Grade-Eighth Grade: MS-ESS3-2-5

Math Standards:
- Sixth Grade: 6.EE.2; 6.EE.6; 6.EE.9; 6.SP.5
- Seventh Grade: 7.RP.2; 7.RP.3; 7.EE.3
- Eighth Grade: 8.EE.5; 8.EE.6; 8.F.1-5

Social Studies Standards:
- Sixth Grade: 6.H.1.2; 6.H.4.1-3
- Seventh Grade: 7.G.3.2; 7.G.4.2; 7.G.6.1; 7.G.7.3
- Eighth Grade: N/A

Language Arts Standards:
- Seventh Grade: 7.RL.1; 7.W.1; 7.W.2; 7.W.4; 7.W.7-9; 7.L.1; 7.L.6; 7.SL.1; 7.SL.3; 7.SL.4
- Eighth Grade: 8.RL.1; 8.W.1; 8.W.2; 8.W.4; 8.W.7-9; 8.L.1; 8.L.6; 8.SL.1; 8.SL.3; 8.SL.4
Objectives: Students will gain knowledge about the differences in fuel economy between different vehicles
Students will explain strategies for reducing the amount of fuel used by vehicles

Grade Levels: 5-8

Subject Areas: Science, Math, Social Studies

Science Standards:
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Math Standards:
- Fifth Grade: 5.MD.2
- Sixth Grade: 6.EE.9; 6.SP.2-5
- Seventh Grade: 7.EE.4; 7.SP.1-5
- Eighth Grade: 8.SP.1-4

Social Studies Standards:
- Fifth Grade: 5.C.4.1; 5.C.5.1-3
- Sixth Grade: 6.C.5.1
- Seventh Grade: 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.4.3; 8.C.5.1
Activity 86

Our Changing World, page 375

Objectives: Students will understand the connections among the world’s natural resources, energy use, and human activities

Students will analyze a global environmental issue

Grade Levels: 5-8

Subject Areas: Science, Social Studies, Language Arts

Science Standards:

- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Social Studies Standards:

- Fifth Grade: 5.C.4.1; 5.C.5.1-3
- Sixth Grade: 6.C.5.1
- Seventh Grade: 7.G.6.1; 7.G.7.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: 8.C.1.2; 8.C.4.3; 8.C.5.1

Language Arts Standards:

- Fifth Grade: 5.L.1; 5.L.3; 5.L.4; 5.L.6; 5.SL.1-4
- Sixth Grade: 6.L.1; 6.L.3; 6.L.4; 6.L.6; 6.SL.1-4
- Seventh Grade: 7.L.1; 7.L.3; 7.L.4; 7.L.6; 7.SL.1-4
- Eighth Grade: 8.L.1; 8.L.3; 8.L.4; 8.L.6; 8.SL.1-4
Activity 87
Earth Manners, page 378

Objectives: Students will express appropriate ways to treat living things and to act in forests, parks, and other natural areas

Students will express their own rules for proper manners outside

Grade Levels: K-4

Subject Areas: Science, Social Studies, Language Arts, Visual Arts

Science Standards:
- Kindergarten: K-ESS2-2; K-ESS3-1; K-ESS3-3
- First Grade: N/A
- Second Grade: N/A
- Third Grade: N/A
- Fourth Grade: 4-ESS3-1

Social Studies Standards:
- Kindergarten: K.C.2.1
- First Grade: 1.G.6.1
- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade: 3.C.3.1; 3.C.3.2; 3.C.4.2; 3.C.4.3
- Fourth Grade: 4.G.3.1

Language Arts Standards:
- Kindergarten: K.L.1-3; K.L.6; K.SL.1; K.SL.6; K.W.1; K.W.4; K.W.7
- First Grade: 1.L.1-3; 1.L.6; 1.SL.1; 1.SL.6; 1.W.1; 1.W.4; 1.W.7
- Second Grade: 2.L.1-3; 2.L.6; 2.SL.1; 2.SL.6; 2.W.1; 2.W.4; 2.W.7
- Fourth Grade: 4.L.1-3; 4.L.6; 4.SL.1; 4.SL.6; 4.W.1; 4.W.4; 4.W.7

Visual Arts Standards:
- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
Activity 88

*Life on the Edge, page 382*

**Objectives:** Students will understand the habitat components that organisms need to survive

Students will research an endangered, threatened, or rare species and give a persuasive media presentation on preserving that organism’s needs

**Grade Levels:** 4-8

**Subject Areas:** Science, Social Studies

Science Standards:

- Fourth Grade: 4-LS1-2; 4-ESS3-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1; MS-LS2-4; MS-LS2-5; MS-LS4-4; MS-LS4-6; MS-ESS3-3-5

Social Studies Standards:

- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.2; 5.G.2.3; 5.G.6.1
- Sixth Grade 6.C.1.2; 6.C.5.1
- Eighth Grade: N/A
Activity 89

Trees for Many Reasons, page 387

Objectives: Students will discuss and analyze fictional stories related to natural resources

Students will determine whether the main ideas of the stories build a case for the conservation and wise use of natural resources

Grade Levels: Part A: 2-8, Part B: 6-8

Subject Areas: Science, Social Studies, Language Arts

Science Standards:

- Second Grade: N/A
- Third Grade: 3-LS4-4
- Fourth Grade: 4-ESS3-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-4; MS-ESS3-3-5

Social Studies Standards:

- Second Grade: 2.G.6.1; 2.G.6.2
- Third Grade: N/A
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.2; 5.G.2.3
- Sixth Grade N/A
- Seventh Grade: 7.G.5.3; 7.G.6.1; 7.G.7.3; 7.E.4.4
- Eighth Grade: N/A

Language Arts Standards:

- Second Grade: 2.RI.1-6; RI.9; 2.L.1-3; 2.SL.1-4; 2.W.3-5; 2.W.7-9
- Third Grade: 3.RI.1-6; RI.9; 3.L.1-3; 3.SL.1-4; 3.W.3-5; 3.W.7-9
- Fourth Grade: 4.RI.1-6; RI.9; 4.L.1-3; 4.SL.1-4; 4.W.3-5; 4.W.7-9
- Fifth Grade: 5.RI.1-6; RI.9; 5.L.1-3; 5.SL.1-4; 5.W.3-5; 5.W.7-9
- Sixth Grade: 6.RI.1-6; RI.9; 6.L.1-3; 6.SL.1-4; 6.W.3-5; 6.W.7-9
- Seventh Grade: 7.RI.1-6; RI.9; 7.L.1-3; 7.SL.1-4; 7.W.3-5; 7.W.7-9
- Eighth Grade: 8.RI.1-6; RI.9; 8.L.1-3; 8.SL.1-4; 8.W.3-5; 8.W.7-9
Activity 90

Native Ways, page 389

Objectives: Students will explore some traditional American Indian attitudes with respect to the land and its resources

Grade Levels: 4-8

Subject Areas: Science, Social Studies, Language Arts

Science Standards:
- Fourth Grade: 4-ESS3-1
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS2-4; MS-ESS3-3-5

Social Studies Standards:
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.G.2.1-3; 5.G.5.1; 5.G.6.1
- Sixth Grade: N/A
- Eighth Grade: N/A

Language Arts Standards:
- Fourth Grade: 4.RI.1-4; 4.RI.6; 4.RI.8; 4.RI.9; 4.L.1; 4.L.3; 4.L.6; 4.SL.1-4
- Fifth Grade: 5.RI.1-4; 5.RI.6; 5.RI.8; 5.RI.9; 5.L.1; 5.L.3; 5.L.6; 5.SL.1-4
- Sixth Grade: 6.RI.1-4; 6.RI.6; 6.RI.8; 6.RI.9; 6.L.1; 6.L.3; 6.L.6; 6.SL.1-4
- Seventh Grade: 7.RI.1-4; 7.RI.6; 7.RI.8; 7.RI.9; 7.L.1; 7.L.3; 7.L.6; 7.SL.1-4
- Eighth Grade: 8.RI.1-4; 8.RI.6; 8.RI.8; 8.RI.9; 8.L.1; 8.L.3; 8.L.6; 8.SL.1-4
Activity 91

_In the Good Old Days, page 396_

**Objectives:** Students will learn how people’s personal experiences and place in history affect their attitudes towards the environment

Students will become familiar with authors who have helped shape the way Americans think about the environment

**Grade Levels:** 6-8

**Subject Areas:** Science, Social Studies, Visual Arts, Language Arts

Science Standards:
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Social Studies Standards:
- Sixth Grade: 6.C.1.2; 6.C.1.3; 6.C.5.1
- Seventh Grade: 7.G.3.2; 7.G.4.2; 7.G.7.1; 7.G.7.3
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.4.3; 8.C.5.1; 8.C.5.2

Visual Arts Standards:
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1

Language Arts Standards:
- Sixth Grade: 6.RI.1-4; 6.RI.6; 6.RI.8; 6.RI.9; 6.L.1; 6.L.3; 6.L.6; 6.SL.1-4
- Seventh Grade: 7.RI.1-4; 7.RI.6; 7.RI.8; 7.RI.9; 7.L.1; 7.L.3; 7.L.6; 7.SL.1-4
- Eighth Grade: 8.RI.1-4; 8.RI.6; 8.RI.8; 8.RI.9; 8.L.1; 8.L.3; 8.L.6; 8.SL.1-4
Activity 92

A Look at Lifestyles, page 401

Objectives: Students will understand that the items and resources we use meet our basic needs, maintain our way of life, and provide us with luxuries

Students will compare their own lifestyle with those of traditional American Indians and early pioneers

Grade Levels: 5-8

Subject Areas: Science, Social Studies, Language Arts, Performing Arts

Science Standards:
- Fifth Grade: 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-ESS3-3-5

Social Studies Standards:
- Fifth Grade: 5.H.2.1; 5.H.2.4; 5.H.3.1; 5.H.5.1; 5.H.5.2; 5.G.2.1; 5.G.2.2; 5.G.5.1
- Sixth Grade: 6.H.3.1; 6.H.4.3; 6.H.5.3
- Eighth Grade: 8.H.5.2

Language Arts Standards:
- Fifth Grade: 5.RI.1-4; 5.RI.6; 5.RI.8; 5.RI.9; 5.L.1; 5.L.3; 5.L.6; 5.SL.1-4
- Sixth Grade: 6.RI.1-4; 6.RI.6; 6.RI.8; 6.RI.9; 6.L.1; 6.L.3; 6.L.6; 6.SL.1-4
- Seventh Grade: 7.RI.1-4; 7.RI.6; 7.RI.8; 7.RI.9; 7.L.1; 7.L.3; 7.L.6; 7.SL.1-4
- Eighth Grade: 8.RI.1-4; 8.RI.6; 8.RI.8; 8.RI.9; 8.L.1; 8.L.3; 8.L.6; 8.SL.1-4

Performing Arts Standards:
- Fifth Grade: 5.TH.PR.4.1
- Sixth Grade-Eighth Grade: 6-8.TH.PR.4.1
Activity 93

*Paper Civilizations, page 407*

**Objectives:** Students will summarize changes in both technology and culture as they explore the history of papermaking

**Grade Levels:** 5-8

**Subject Areas:** Social Studies, Language Arts, Visual Arts

Social Studies Standards:

- Fifth Grade: 5.E.1.1
- Sixth Grade: 6.E.4.1; 6.E.4.3
- Seventh Grade: 7.E.4.4
- Eighth Grade: N/A

Language Arts Standards:

- Fifth Grade: 5.RL.1; 5.RL.2; 5.W.4; 5.W.7; 5.W.8; 5.L.1-4; 5.SL.1; 5.SL.4; 5.SL.5
- Seventh Grade: 7.RL.1; 7.RL.2; 7.W.4; 7.W.7; 7.W.8; 7.L.1-4; 7.SL.1; 7.SL.4; 7.SL.5
- Eighth Grade: 8.RL.1; 8.RL.2; 8.W.4; 8.W.7; 8.W.8; 8.L.1-4; 8.SL.1; 8.SL.4; 8.SL.5

Visual Arts Standards:

- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 94

*By the Rivers of Babylon, page 411*

**Objectives:** Students will analyze how an ancient civilization changed over time and explain possible causes for that change

Students will apply environmental lessons learned from past civilizations to understand current environmental problems

**Grade Levels:** 6-8

**Subject Areas:** Science, Social Studies

Science Standards:

- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1-5; MS-LS4-1; MS-LS4-2; MS-LS4-4; MS-LS4-6; MS-ESS3-3; MS-ESS3-4

Social Studies Standards:

- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.5.1; 8.C.5.2; 8.E.4.3
Activity 95

Did You Notice? page 414

Objectives: Students will investigate changes in their local environment over the course of time

Students will summarize those changes in the form of a timeline

Grade Levels: K-8; Part B: 3-8

Subject Areas: Social Studies, Language Arts, Visual Arts

Social Studies Standards:

- Kindergarten: K.H.1.1; K.G.6.1; K.E.1.1
- First Grade: 1.H.1.1; 1.H.1.2; 1.G.6.1
- Second Grade: 2.H.1.1; 2.G.6.1; 2.G.6.2
- Third Grade: 3.H.2.3; 3.C.3.1; 3.C.3.2; 3.C.4.2; 3.E.1.1
- Fourth Grade: 4.G.3.1
- Fifth Grade: 5.H.1.1; 5.C.4.1; 5.C.5.3; 5.G.2.1-3; 5.G.5.1; 5.G.6.1
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.5.1; 8.C.5.2; 8.E.4.3

Language Arts Standards:

- Third Grade: 3.L.1-3; 3.L.6; 3.SL.1-5; 3.W.1-9
- Fourth Grade: 4.L.1-3; 4.L.6; 4.SL.1-5; 4.W.1-9
- Fifth Grade: 5.L.1-3; 5.L.6; 5.SL.1-5; 5.W.1-9
- Sixth Grade: 6.L.1-3; 6.L.6; 6.SL.1-5; 6.W.1-9
- Seventh Grade: 7.L.1-3; 7.L.6; 7.SL.1-5; 7.W.1-9
- Eighth Grade: 8.L.1-3; 8.L.6; 8.SL.1-5; 8.W.1-9

Visual Arts Standards:

- Kindergarten: K.VA.CR.1.1
- First Grade: 1.VA.CR.1.1
- Second Grade: 2.VA.CR.1.1
- Third Grade: 3.VA.CR.1.1
- Fourth Grade: 4.VA.CR.1.1
- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1
Activity 96

Improve Your Place, page 418

Objectives: Students will identify ways they can improve their local area

Students will create and carry out a plan to improve the area

Grade Levels: 5-8

Subject Areas: Science, Social Studies, Visual Arts

Science Standards:

- Fifth Grade: 5-LS2-1; 5-ESS3-1
- Sixth Grade-Eighth Grade: MS-LS1-4; MS-LS1-5; MS-LS2-1-5; MS-LS4-1; MS-LS4-2; MS-LS4-4; MS-LS4-6; MS-ESS3-3; MS-ESS3-4

Social Studies Standards:

- Fifth Grade: 5.H.1.1; 5.C.4.1; 5.C.5.3; 5.G.2.1-3; 5.G.5.1; 5.G.6.1
- Eighth Grade: 8.C.1.2; 8.C.1.3; 8.C.5.1; 8.C.5.2; 8.E.4.3

Visual Arts Standards:

- Fifth Grade: 5.VA.CR.1.1
- Sixth Grade-Eighth Grade: 6-8.VA.CR.1.1