

First Grade Science Content Standards and Objectives

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| Standard 1: | Nature of Science | |
| SC.S.1.1 | <p>Students will</p> <ul style="list-style-type: none"> • demonstrate an understanding of the history and nature of science as a human endeavor encompassing the contributions of diverse cultures, scientists, and careers. • demonstrate the abilities and understanding necessary to do scientific inquiry. <p>demonstrate the ability to think and act as scientists by engaging in active inquiries and investigations, while incorporating hands-on activities.</p> | |
| Objectives | Students will | PLT Activity and Page |

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| <p>SC.O.1.1.01</p> | <p>ask questions about themselves and their world.</p> | <p>#1 The Shape of Things p. 17 #2 Get in Touch with Trees p. 20 #3 Peppermint Beetle p. 23 #4 Sounds Around p. 26 #13 We All Need Trees p. 65 #16 Pass The Plants, Please p. 77 #18 Tale of the Sun p. 86 #20 Environmental Exchange Box p. 92 #21 Adopt A Tree p. 97 #22 Trees as Habitats p.102 #24 Nature's Recyclers p.108 #25 Birds and Worms p.111 #27 Every Tree for Itself p.117 #30 Three Cheers for Trees p.130 #31 Plant a Tree p.132 #32 A Forest of Many Uses p.135 #36 Pollution Search p.153 #39 Energy Sleuths p.167 #41 How Plants Grow p.179 #46 Schoolyard Safari p.197 #47 Are Vacant Lots Vacant? p.200 #48 Field, Forest, and Stream p.203 #51 Make Your Own Paper p.224 #53 On the Move p.232 #54 I'd Like to Visit a Place Where... p.236 #61 The Closer You Look p.263 #62 To Be a Tree p.269 #64 Looking at Leaves p.273 #67 How Big is Your Tree? p.284 #70 Soil Stories p.297 #76 Tree Cookies p.327 #77 Trees in Trouble p.332 #78 Signs of Fall p.337 #81 Living with Fire p.350</p> |
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| SC.O.1.1.02 | discuss the lives and discoveries of scientists after listening to stories about their lives and discoveries. | |
| SC.O.1.1.03 | demonstrate curiosity, initiative and creativity by questioning observations of changes in the environment (e.g., life cycles, motion of celestial objects, or sun and shadow). | #2 Get in Touch with Trees p. 20 #4 Sounds Around p. 26 #18 Tale of the Sun p. 86 #24 Nature's Recyclers p.108 #27 Every Tree for Itself p.117 #39 Energy Sleuths p.167 #41 How Plants Grow p.179 #46 Schoolyard Safari p.197 #48 Field, Forest, and Stream p.203 #61 The Closer You Look p.263 #76 Tree Cookies p.327 #78 Signs of Fall p.337 |
| SC.O.1.1.04 | use scientific instruments and everyday materials to investigate the natural world (e.g., hand lens, balance, magnets, thermometer, seeds, or rocks). | #1 The Shape of Things p. 17 #2 Get in Touch with Trees p. 20 #3 Peppermint Beetle p. 23 #13 We All Need Trees p. 65 #20 Environmental Exchange Box p. 92 #22 Trees as Habitats p.102 #24 Nature's Recyclers p.108 #39 Energy Sleuths p.167 #41 How Plants Grow p.179 #47 Are Vacant Lots Vacant? p.200 #48 Field, Forest, and Stream p.203 #64 Looking at Leaves p.273 #70 Soil Stories p.297 #76 Tree Cookies p.327 |

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| SC.O.1.1.05 | use safe and proper techniques for handling, manipulating and caring for science materials (e.g., follow safety rules, maintain a clean work area, or treat living organisms humanely). | #3 Peppermint Beetle p. 23 #21 Adopt A Tree p. 97 #22 Trees as Habitats p.102 #24 Nature's Recyclers p.108 #41 How Plants Grow p.179 #47 Are Vacant Lots Vacant? p.200 #64 Looking at Leaves p.273 #70 Soil Stories p.297 #87 Earth Manners p.378 |
| SC.O.1.1.06 | collect, record and compare information using a variety of classification systems (e.g., ordering, sorting, or sequencing) and using a variety of communication techniques (e.g., sketches, pictographs, or models). | #4 Sounds Around p. 26 #13 We All Need Trees p. 65 #16 Pass The Plants, Please p. 77 #20 Environmental Exchange Box p. 92 #25 Birds and Worms p.111 #27 Every Tree for Itself p.117 #32 A Forest of Many Uses p.135 #39 Energy Sleuths p.167 #41 How Plants Grow p.179 #47 Are Vacant Lots Vacant? p.200 #48 Field, Forest, and Stream p.203 #53 On the Move p.232 #62 To Be a Tree p.269 #76 Tree Cookies p.327 |
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| Standard 2: | Content of Science | |
| SC.S.1.2 | Students will <ul style="list-style-type: none"> demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives. demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences. apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences. | |
| Objectives | Students will | PLT Activity and Page |

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| SC.O.1.2.01 | classify objects as living or non-living. | #8 The Forest Of S.T. Shrew p. 40 #21 Adopt A Tree p. 97 #22 Trees as Habitats p.102 #31 Plant a Tree p.132 #46 Schoolyard Safari p.197 #48 Field, Forest, and Stream p.203 |
| SC.O.1.2.02 | identify that most living things need water, food, light and air. | #18 Tale of the Sun p. 86 #21 Adopt A Tree p. 97 #22 Trees as Habitats p.102 #24 Nature's Recyclers p.108 #27 Every Tree for Itself p.117 #31 Plant a Tree p.132 #39 Energy Sleuths p.167 #41 How Plants Grow p.179 #43 Have Seeds, Will Travel p.185 #46 Schoolyard Safari p.197 #77 Trees in Trouble p.332 |
| SC.O.1.2.03 | describe changes in life cycle of living organisms. | #8 The Forest Of S.T. Shrew p. 40 #21 Adopt A Tree p. 97 #24 Nature's Recyclers p.108 #27 Every Tree for Itself p.117 #41 How Plants Grow p.179 #43 Have Seeds, Will Travel p.185 #78 Signs of Fall p.337 #79 Tree Lifecycle p.341 |
| SC.O.1.2.04 | identify the parts of growing plants as they develop. | #41 How Plants Grow p.179 #43 Have Seeds, Will Travel p.185 #62 To Be a Tree p.269 #63 Tree Factory p.269 #64 Looking at Leaves p.273 #79 Tree Lifecycle p.341 |

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| SC.O.1.2.05 | depict movement of living things in air, water and on land. (e.g., birds flying, fish swimming, or worms burrowing in soil). | #18 Tale of the Sun p. 86 #46 Schoolyard Safari p.197 #47 Are Vacant Lots Vacant? p.200 |
| SC.O.1.2.06 | recognize that materials are composed of smaller parts that may be seen with a magnifier. | #41 How Plants Grow p.179 |
| SC.O.1.2.07 | recognize that materials can be recycled and used again, sometimes in different forms. | #13 We All Need Trees p. 65 #24 Nature's Recyclers p.108 #51 Make Your Own Paper p.224 #87 Earth Manners p.378 |
| SC.O.1.2.08 | recognize that water can change from one form to another and give examples of changes. | |
| SC.O.1.2.09 | predict and investigate the buoyancy of objects in water. | |
| SC.O.1.2.10 | classify objects as magnetic or non-magnetic. | |
| SC.O.1.2.11 | observe and record shadows at different times of the day. | |
| SC.O.1.2.12 | describe the changes in the motion of objects (e.g., slowing down, speeding up, or curving). | |
| SC.O.1.2.13 | demonstrate that sounds are produced by vibrations. | |
| SC.O.1.2.14 | observe, identify and record changes in weather and effects on living organisms. | #2 Get in Touch with Trees p. 20 #27 Every Tree for Itself p.117 #39 Energy Sleuths p.167 #41 How Plants Grow p.179 #48 Field, Forest, and Stream p.203 #70 Soil Stories p.297 #77 Trees in Trouble p.332 |
| SC.O.1.2.15 | recognize that the sun, moon, and stars appear to move. | |
| SC.O.1.2.16 | observe and discuss the importance of objects in the day and night sky. | #39 Energy Sleuths p.167 #78 Signs of Fall p.337 |
| SC.O.1.2.17 | use a model to compare land and water features on the Earth. | #20 Environmental Exchange Box p. 92 |

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| SC.O.1.2.18 | identify important uses of air. | #22 Trees as Habitats p.102 #24 Nature's Recyclers p.108 #27 Every Tree for Itself p.117 #31 Plant a Tree p.132 #36 Pollution Search p.153 #41 How Plants Grow p.179 #46 Schoolyard Safari p.197 #53 On the Move p.232 #81 Living with Fire p.350 |
| SC.O.1.2.19 | investigate and compare the properties of soil (e.g., sand, clay, or humus). | #31 Plant a Tree p.132 #41 How Plants Grow p.179 #46 Schoolyard Safari p.197 #70 Soil Stories p.297 #77 Trees in Trouble p.332 |
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| Standard 3: | Application of Science | |
| S.C.S.1.3 | <p>Students will</p> <ul style="list-style-type: none"> • identify how the parts of a system interact, • recognize and use models as representations of real things, • demonstrate the ability to distinguish between natural and man-made objects, • Listen and be tolerant of different viewpoints while working in collaborative groups, and <p>demonstrate the ability to evaluate the impact of different points of view on health, population, resources and environment practices.</p> | |
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| SC.O.1.3.01 | identify that systems are made of parts that interact with one another. | #8 The Forest Of S.T. Shrew p. 40 #22 Trees as Habitats p.102 #27 Every Tree for Itself p.117 #31 Plant a Tree p.132 #32 A Forest of Many Uses p.135 #36 Pollution Search p.153 #41 How Plants Grow p.179 #43 Have Seeds, Will Travel p.185 #46 Schoolyard Safari p.197 #47 Are Vacant Lots Vacant? p.200 #49 Tropical Treehouse p.207 #63 Tree Factory p.269 #78 Signs of Fall p.337 |
| SC.O.1.3.02 | use models as representations of real things. | #51 Make Your Own Paper p.224 #53 On the Move p.232 #63 Tree Factory p.269 #76 Tree Cookies p.327 #79 Tree Lifecycle p.341 |
| SC.O.1.3.03 | distinguish between natural and man-made objects. | #51 Make Your Own Paper p.224 |
| SC.O.1.3.04 | listen to and be tolerant of different viewpoints while working in collaborative groups. | #18 Tale of the Sun p. 86 #31 Plant a Tree p.132 #36 Pollution Search p.153 #48 Field, Forest, and Stream p.203 #49 Tropical Treehouse p.207 #53 On the Move p.232 |

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| SC.O.1.3.05 | develop respect and responsibility for the environment by engaging in conservation practices (e.g., recycling, or trash clean-up). | #13 We All Need Trees p. 65 #31 Plant a Tree p.132 #32 A Forest of Many Uses p.135 #36 Pollution Search p.153 #39 Energy Sleuths p.167 #53 On the Move p.232 #54 I'd Like to Visit a Place Where... p.236 #87 Earth Manners p.378 |
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