

MACMILLAN/McGRAW-HILL SCIENCE: A CLOSER LOOK

Kindergarten

TO

ALASKA SCIENCE PERFORMANCE STANDARDS

And

GRADE LEVEL EXPECTATIONS

Grade 3

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Alaska Science Performance Standards and Grade Level Expectations Grade 3	Correlation of the Macmillan/McGraw-Hill Science Program to Alaska Science Performance Standards and Grade Level Expectations for Grade 3	
	Teacher’s Edition Units, Chapters, Lessons, or Activities	Teacher’s Edition Page Numbers
Science Performance Standards (Grade Level Expectations) Grade 3		
A1—Science as Inquiry and Process		
<p>SA Students develop an understanding of the processes and applications of scientific inquiry.</p> <p>SA1 Students develop an understanding of the processes of science used to investigate problems, design and conduct repeatable scientific investigations, and defend scientific arguments.</p> <p>SA2 Students develop an understanding that the processes of science require integrity, logical reasoning, skepticism, openness, communication, and peer review.</p> <p>SA3 Students develop an understanding that culture, local knowledge, history, and interaction with the environment contribute to the development of scientific knowledge, and local applications provide opportunity for understanding scientific concepts and global issues.</p>		
Grade 3		
The student develops an understanding of the processes of science by:		
[3] SA1.1 asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring and communicating.	<u>Be a Scientist/Inquiry Investigation</u>	
	Unit A: Life Science - Plants	
	Observing Stems	30
	Window Box Wonder	38
	Planting Seeds	44
	Matching Leaves	52
	Plant Part Soup	58
	Unit B: Life Science - Animals	
	Animal Habitat	68
	Animal Homes	76
	Bug Collection	82
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	Wormy Behavior	102
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	Sampling Soil	130
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	Make It Rain!	144
	Getting Water	150
	Conserve Water	158
	Recycling Center	164
	Unit D: Earth Science - Weather and Sky	
	Wind Effects	176
	Observe Clouds	182
	Nature Walk	188
	The Night Sky	196
	Change Shadows	202
	Unit E: Physical Science - Exploring Matter	
	Making Paper	216
	Sculpture Fun	222
	Pinching Pots	228
	Make It Float	236
	Unit F: Physical Science - Moving Right Along	
	Pull with a Pulley	246
	Sliding and Rolling	254
	All Fall Down	260
	Sound Cylinders	266
	Moving Clips	272

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3] SA1.2 observing and describing their world to answer simple questions.	<u>Be a Scientist</u>	
	Weather Activities	6, 7
	The Five Senses Activities: Sorting Apples	12
	Living Things Activities	18, 19
	<u>Unit A: Life Science - Plants</u>	
	Be a Math Wiz: Find a Match	27
	Be a Scientist/Inquiry Investigation: Observing Stems	30
	Centers: Art (Root Prints), Cooking (Mashed Potatoes)	31
	Be a Scientist/Inquiry Investigation: Window Box Wonder	38
	Circle Time: Sprouting Seeds	40
	Be a Scientist/Inquiry Investigation: Planting Seeds	44
	Be a Writer: Favorite Flower	47
	Be a Scientist/Inquiry Investigation: Matching Leaves	52
	Centers: Music (Take a Look), Art (Leaf Rubbings)	53
	Circle Time: Feely Box	54
	Be a Math Wiz: Counting Peas	55
	Be a Scientist/Inquiry Investigation: Plant Part Soup	58
	Centers: Art (Play Dough Plants)	59
	<u>Unit B: Life Science - Animals</u>	
	Be a Scientist/Inquiry Investigation: Animal Habitat	68
	Animal Homes	76
	Bug Collection	82
	Reptile Guest	88
Be a Math Wiz: How Many Birds?	91	
Be a Scientist/Inquiry Investigation: Bird Feeder	96	
Growing Animals	110	
Centers: Cooking (Banana Smoothies)	117	

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	Circle Time: See-Through to Soil	130
	Be a Scientist/Inquiry Investigation: Sampling Soil	131
	Centers: Art (Beautiful Roots)	132
	Circle Time: My Rock	137
	Centers: Art (Rock Collages)	144
	Be a Scientist/Inquiry Investigation: Make It Rain!	145
	Centers: Music (Let's Look)	151
	Music (Water All Around)	152
	Circle Time: Plants are Resources	159
	Centers: Art (Water Colors), Library (Read About Natural Resources)	161
	Be a Reader: Read the Big Book	
	<u>Unit D: Earth Science - Weather and Sky</u>	170
	Circle Time: What's the Weather?	171
	Be a Reader: Read the Big Book, Be a Math Wiz: Weather Match	176
	Be a Scientist/Inquiry Investigation: Wind Effects	177
	Centers: Water Table (Boats on the Water)	182
	Be a Scientist/Inquiry Investigation: Observe Clouds	183
	Centers: Art (Paint the Clouds)	185
	Be a Reader: Read the Big Book	188
	Be a Scientist/Inquiry Investigation: Nature Walk	190
	Circle Time: Day Sky/Night Sky	196
	Be a Scientist/Inquiry Investigation: The Night Sky	197
	Centers: Music (What Do You See?)	198
	Circle Time: Guess the Object	199
	Be a Math Wiz: Measure Shadows	202
	Be a Scientist/Inquiry Investigation: Change Shadows	203
	Centers: Art (Shadow Puppets)	
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<i>Continued from previous page...</i>	<u>Unit E: Physical Science - Exploring Matter</u>	
	Circle Time: Fold It	212
	Be a Reader: Read the Big Book	213
	Be a Scientist/Inquiry Investigation: Making Paper	216
	Circle Time: Feely Box	218
	Centers: Drawing and Writing (My Tool Book), Water Table (Floating Boats)	223
	Circle Time: Feel Clay	224
	Be a Math Wiz: Clay Patterns	225
	Be a Scientist/Inquiry Investigation: Pinching Pots	228
	Centers: Drawing and Writing (Drawing Clay)	229
	Circle Time: Altered States	230
	Be a Math Wiz: Weighing Water	231
	Be a Scientist/Inquiry Investigation: Make It Float	236
	Centers: Music (Water, Steam, and Ice), Cooking (Ice Pops)	237
	<u>Unit F: Physical Science - Moving Right Along</u>	
	Be a Reader: Read the Big Book	243
	Be a Scientist/Inquiry Investigation: Pull with a Pulley	246
	Centers: Music (Roll Along!)	247
	Circle Time: Make It Move	248
	Be a Scientist/Inquiry Investigation: Sliding and Rolling	254
	Centers: Drawing and Writing (Push and Pull), Blocks (Does It Roll?), Art (Push/Pull Mural)	255
	Be a Writer: Up in the Sky	257
	Be a Scientist/Inquiry Investigation: All Fall Down	260
	Circle Time: Sound Detective	262
	Be a Math Wiz: Sound Patterns	263
	Be a Scientist/Inquiry Investigation: Sound Cylinders	266
	Circle Time: Try Magnets	268
	Be a Reader: Read the Big Book, Be a Math Wiz: Paper Clip Chains	269
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	Centers: Drawing and Writing (Pulling Through), Art (Make Your Own)	273
	<u>Science Handbook</u>	
	Choosing Seeds, Planting	TR3
	Sprouting Seeds, Taking Care	TR4
	Earthworms	TR5
	Guinea Pigs, Fish	TR6
	Temperature	TR8
	<u>Health Handbook</u>	
	Body Tracing	TR10
	Healthy Menu	TR12
	Keep It Safe	TR14
	Play It Safe	TR15
The student will demonstrate an understanding of the attitudes and approaches to scientific inquiry by:		
[3] SA2.1 answering, "how do you know?" questions with reasonable answers.	<u>Be a Scientist/Inquiry Investigation</u>	
	Unit A: Life Science - Plants	
	Observing Stems	30
	Window Box Wonder	38
	Planting Seeds	44
	Matching Leaves	52
	Plant Part Soup	58
	Unit B: Life Science - Animals	
	Animal Habitat	68
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	Unit C: Earth Science - Our Earth, Our Home	
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	Unit D: Earth Science - Weather and Sky	
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The student demonstrates an understanding that interactions with the environment provide an opportunity for understanding scientific concepts by:		
3] SA3.1 observing local conditions that determine which plants and/or animals survive. (L)	<u>Unit A: Life Science - Plants</u> Circle Time: Make a Plant, Observe a Plant Be a Reader: Read the Big Book Lesson 2: What do plants need to live? Lesson 2: How are they alike? How are they different? Be a Scientist/Inquiry Investigation: Window Box Wonder Centers: Dramatic Play (Be a Gardener) Lesson 3: How do plants grow? Be a Scientist/Inquiry Investigation: Planting Seeds Centers: Music (In My Garden), Blocks (Block Garden) Assessment: Plant Parts and Needs <u>Unit B: Life Science – Animals</u> Lesson 1: Which animals could you see in this park? Circle Time: Pet Care Be a Writer: Make a Pet Book Lesson 2: What do animals need to live? Lesson 2: How are these animals alike? How are they different? Centers: Music (Animals Need) Be a Scientist/Inquiry Investigation: Bug Collection Centers: Blocks (Bug Homes), Drawing and Writing (Bug Stories) Lesson 5: What helps these birds fly? Circle Time: People Staying Safe Review Together: Plants and Animals Working Together <u>Science Handbook:</u> Introduce Plants: Choosing Seeds, Planting, Sprouting Seeds, Taking Care Introduce Animals: Earthworms, Hermit Crabs, Guinea Pigs, Fish	26, 32 33 34, 35 37 38 39 43 44 45 60, 61 67 70 71 72, 73 74, 75 77 82 83 92, 93 98 120 TR3, TR4 TR5, TR6

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Science Performance Standards (Grade Level Expectations) Grade 3 B1— Concepts of Physical Science		
<p>SB Students develop an understanding of the concepts, models, theories, universal principles, and facts that explain the physical world.</p> <p>SB1 Students develop an understanding of the characteristic properties of matter and the relationship of these properties to their structure and behavior.</p> <p>SB2 Students develop an understanding that energy appears in different forms, can be transformed from one form to another, can be transferred or moved from one place or system to another, may be unavailable for use, and is ultimately conserved.</p> <p>SB3 Students develop an understanding of the interactions between matter and energy, including physical, chemical, and nuclear changes, and the effects of these interactions on physical systems.</p> <p>SB4 Students develop an understanding of motions, forces, their characteristics and relationships, and natural forces and their effects.</p>		
The student demonstrates an understanding of the structure and properties of matter by:		
[3] SB1.1 classifying matter according to physical properties (i.e., color, size, shape, weight, texture, flexibility).	<u>Unit E: Physical Science - Exploring Matter</u> Vocabulary Activities: Change Matter, Exploring Matter Exploring Matter: I see... Circle Time: Fold It Be a Reader: Read the Big Book Lesson 1: How can we change paper and cloth? Circle Time: Feely Box Be a Math Wiz: Sorting Screws Centers: Drawing and Writing (My Tool Book) Circle Time: Feel Clay Lesson 3: What can we do with clay? Be a Scientist/Inquiry Investigation: Pinching Pots Circle Time: Altered States Be a Math Wiz: Weighing Water Lesson 4: Where is the water? Lesson 4: Does it sink or float? Be a Scientist/Inquiry Investigation: Make It Float Centers: Music (Water, Steam, and Ice), Water Table (Salt and Float), Cooking (Ice Pops) Assessment: Properties of Matter	210E 210, 211 212 213 214, 215 218 219 223 224 226, 227 228 230 231 232, 233 234, 235 236 237 238, 239
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<i>Continued from previous page...</i>	<u>Unit F: Physical Science - Moving Right Along</u> Vocabulary Activities: Help children understand what a magnet does. Be a Math Wiz: Rollers and Sliders Be a Scientist/Inquiry Investigation: Sliding and Rolling Centers: Drawing and Writing (Push and Pull), Blocks (Does It Roll?), Art (Push/Pull Mural) Be a Scientist/Inquiry Investigation: All Fall Down Circle Time: Try Magnets Be a Reader: Read the Big Book, Be a Writer: Magnetic Walk Lesson 5: What do you notice about the magnets? Centers: Drawing and Writing (Pulling Through) Assessment: Things Move and Make Sounds Review Together: Matter and Motion	240J 249 254 255 260 268 269 270, 271 273 274, 275 276
The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by:		
[3] SB2.1 classifying materials as insulators or conductors (i.e., fur, metal, wood, plastic) and identifying their applications.	Refer to Grades 2 and 3.	
The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by:		
[3] SB3.1 recognizing that temperature changes cause changes in phases of substances (e.g., ice changing to liquid, water changing to water vapor, and vice versa).	<u>Unit E: Physical Science - Exploring Matter</u> Lesson 4: Investigate Water, Circle Time: Altered States Where is the water?, Develop Vocabulary, Science Facts, Think and Talk Take a Trip: Water Watching, Think and Talk Centers: Music (Water, Steam, and Ice), Cooking (Ice Pops) Performance Assessment: Properties of Matter	230 232, 233 235 237 238
The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by:		
[3] SB4.2 recognizing that objects can be moved without being touched (e.g., using magnets, falling objects, static electricity). <i>Continued on next page...</i>	<u>Unit F: Physical Science - Moving Right Along</u> What makes these toys move?, Science Facts: Force and Motion (Force of Gravity, Center of Gravity), Think and Talk Lesson 3: Ups and Downs, Circle Time: Toss Up	252, 253 256

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Science Performance Standards (Grade Level Expectations) Grade 3		
C1—Concepts of Life Science		
<p>SC Students develop an understanding of the concepts, models, theories, facts, evidence, systems, and processes of life science.</p> <p>SC1 Students develop an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution.</p> <p>SC2 Students develop an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms.</p> <p>SC3 Students develop an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy.</p>		
The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection and biological evolution by:		
[3] SC1.1 sorting Alaskan plants and/or animals using physical characteristics (e.g., leaves, beaks) (L)	Opportunities to address: <u>Unit A: Life Science - Plants</u> Circle Time: Sorting Plants How are these leaves alike? How are they different?, Science Facts: Leaf Types, Take a Trip: Nature Walk How are these flowers alike? How are they different?, Science Facts Be a Scientist/Inquiry Investigation: Matching Leaves Centers: Music (Take a Look), Art (Leaf Rubbings) <u>Unit B: Life Science - Animals</u> Animals: During Reading, After Reading, Write on It Circle Time: Are They Animals?	46 48-49 50-51 52 59 62-63 64
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[3] SC1.2 describing how some traits (e.g., claws, teeth, camouflage) of living organisms have helped them survive as a species.	<u>Be a Scientist</u> Investigate Weather: What do you see? The Five Senses: What can you do with apples? <u>Unit A: Life Science - Plants</u> Circle Time: Make a Plant Be a Reader: Read the Big Book Lesson 1: What are the parts of plants? Be a Scientist/Inquiry Investigation: Observing Stems Movement: Trees Lesson 3: How do plants grow? Assessment: Plant Parts and Needs <u>Unit B: Life Science - Animals</u> Circle Time: Be a Bug Lesson 3: How are these bugs alike? How are they different? Lesson 4: What do you notice about these reptiles? Be a Scientist/Inquiry Investigation: Reptile Guest Circle Time: Be a Bird Be a Reader: Read the Big Book, Be a Writer: Animals in Motion Lesson 5: What helps these birds fly? Lesson 5: What helps these animals move? Centers: Music (Animals in Motion!), Art (Fish Watercolors) Be a Reader: Read the Big Book, Be a Writer	5 10-11 26 27 28, 29 30 31 42, 43 60, 61 78 80, 81 86, 87 88 90 91 92, 93 94, 95 97 99
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The student demonstrates an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms by:		
[3] SC2.1 sorting animals and plants into groups based on appearance and behaviors.	<u>Unit A: Life Science - Plants</u> Circle Time: Sorting Plants How are these leaves alike? How are they different?, Science Facts: Leaf Types, Take a Trip: Nature Walk How are these flowers alike? How are they different?, Science Facts Be a Scientist/Inquiry Investigation: Matching Leaves Centers: Music (Take a Look), Art (Leaf Rubbings) <u>Unit B: Life Science - Animals</u> Animals: During Reading, After Reading, Write on It Circle Time: Are They Animals? Be a Reader: Read the Big Book, Be a Math Wiz: Find and Graph Animals Centers: Movement (How They Move) Be a Math Wiz: Our Pets Think and Talk How are these bugs alike? How are they different? Circle Time: Reptile or Not? What do you notice about these reptiles? Circle Time: Be a Bird What helps these birds fly? What helps these animals move? Centers: Music (Animals in Motion!)	46 48-49 50-51 52 59 62-63 64 65 69 71 75 80-81 84 86-87 90 92-93 94-95 97

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[3] SC2.2 observing and comparing external features of plants and of animals that may help them grow, survive, and reproduce.	<u>Be a Scientist</u> The Five Senses: What can you do with apples? <u>Unit A: Life Science - Plants</u> Circle Time: Make a Plant Be a Reader: Read the Big Book Lesson 1: What are the parts of plants? Be a Scientist/Inquiry Investigation: Observing Stems Movement: Trees Lesson 3: How do plants grow? Assessment: Plant Parts and Needs <u>Unit B: Life Science - Animals</u> Circle Time: Be a Bug Lesson 3: How are these bugs alike? How are they different? Lesson 4: What do you notice about these reptiles? Be a Scientist/Inquiry Investigation: Reptile Guest Circle Time: Be a Bird Be a Reader: Read the Big Book, Be a Writer: Animals in Motion Lesson 5: What helps these birds fly? Lesson 5: What helps these animals move? Centers: Music (Animals in Motion!), Art (Fish Watercolors) Be a Reader: Read the Big Book, Be a Writer Lesson 6: What helps these animals stay safe? Centers: Art (Camouflage Collage), Sand Table (Make a Desert) Be a Reader: Read the Big Book	10-11 26 27 28, 29 30 31 42, 43 60, 61 78 80, 81 86, 87 88 90 91 92, 93 94, 95 97 99 100, 101 103 105

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The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by:		
[3] SC3.1 identifying and sorting examples of living and nonliving things in the local environment. (L)	<u>Be a Scientist</u> Living Things: What do you see in this Science Center? Living Things Activities: Living and Nonliving <u>Unit A: Life Science - Plants</u> Lesson 2: How are they alike? How are they different?	16, 17 18 36, 37
[3] SC3.2 organizing a simple food chain of familiar plants and animals. (L)	<u>Unit A: Life Science - Plants</u> Lesson 5: What plant parts do we eat? Be a Scientist/Inquiry Investigation: Plant Part Soup <u>Unit B: Life Science - Animals</u> Lesson 2: What do animals need to live?	56-57 58 72
Science Performance Standards (Grade Level Expectations) Grade 3		
D1—Concepts of Earth Science		
SD Students develop an understanding of the concepts, processes, theories, models, evidence, and systems of earth and space sciences. SD1 Students develop an understanding of Earth's geochemical cycles. SD2 Students develop an understanding of the origins, ongoing processes, and forces that shape the structure, composition, and physical history of the Earth. SD3 Students develop an understanding of the cyclical changes controlled by energy from the sun and by Earth's position and motion in our solar system. SD4 Students develop an understanding of the theories regarding the evolution of the universe.		
The student demonstrates an understanding of geochemical cycles by:		
[3] SD1.1 recognizing that most rocks are composed of combinations of different substances.	<u>Unit C: Earth Science - Our Earth, Our Home</u> Science Vocabulary: All About Rocks Unit Project: Rock Museum Circle Time: My Rock Be a Reader: Read the Big Book Lesson 2: How are these rocks alike? How are they different? Be a Scientist/Inquiry Investigation: Sorting Rocks	124E 124F 132 133 134, 135 136
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[3] SD1.2 describing the water cycle to show that water circulates through the crust, oceans, and atmosphere of Earth.	<u>Unit C: Earth Science - Our Earth, Our Home</u> Lesson 4: How can water change the earth? Centers: Music (Water All Around), Drawing and Writing (Hello, Ocean) <u>Unit E: Physical Science - Exploring Matter</u> Circle Time: Altered States Lesson 4: Where is the water?	148-149 151 230 232-233
The student demonstrates an understanding of the forces that shape Earth by:		
[3] SD2.1 identifying and comparing a variety of Earth's land features (i.e., rivers, deltas, lakes, glaciers, mountains, valleys, and islands).	<u>Unit C: Earth Science - Our Earth, Our Home</u> Science Vocabulary: All About Rocks Vocabulary Activities: Help children learn what an ocean is. Our Earth, Our Home Circle Time: High Places, Low Places Be a Reader: Read the Big Book Lesson 3: What makes these places different? Lesson 3: How do volcanoes change the earth? Be a Scientist/Inquiry Investigation: Make It Rain! Centers: Music (Let's Look) Circle Time: Swim to the Circle Be a Reader: Read the Big Book Lesson 4: How can water change the earth? Centers: Music (Water All Around), Drawing and Writing (Hello, Ocean) Assessment: Geographic Features	124E 124J 124-125 138 139 140, 141 142, 143 144 145 146 147 148, 149 151 166, 167

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The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth's position and motion in our solar system by:		
[3] SD3.1 using recorded weather patterns (e.g., temperature, cloud cover, or precipitation) to make reasonable predictions. (L)	<u>Be a Scientist</u> Weather Activities: Watching Weather <u>Unit D: Earth Science - Weather and Sky</u> Science Leveled Reader: <i>Clouds</i> Think and Talk, Take a Trip: Windy Day Be a Scientist/Inquiry Investigation: Wind Effects Centers: Movement (Wild Weather), Water Table (Boats on the Water) What do you notice about these clouds? What happens in each season? Be a Scientist/Inquiry Investigation: Nature Walk Science Handbook: Temperature	6 168C 175 176 177 180-181 186-187 188 TR8
The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by:		
3] SD4.1 recognizing that objects appear smaller the farther away they are.	<u>Unit D: Earth Science - Weather and Sky</u> Centers: Music (What Do You See?) Additional Opportunities to address: Circle Time: Day Sky/Night Sky Be a Reader: Read the Big Book (<i>The Night Sky</i>) What do you see in the night sky?	197 190 191 194-195
[3] SD4.2 recognizing that objects have properties, locations, and movements that can be observed and described.	<u>Unit D: Earth Science - Weather and Sky</u> Circle Time: Day Sky/Night Sky Be a Reader: Read the Big Book Lesson 4: How does the sky change? Lesson 4: What do you see in the night sky? Be a Scientist/Inquiry Investigation: The Night Sky Centers: Music (What Do You See?), Art (Sky Collages)	190 191 192, 193 194, 195 196 197
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<i>Continued from previous page...</i>	Circle Time: Guess the Object Be a Math Wiz: Measure Shadows Lesson 5: What makes shadows? Why do they change? Be a Scientist/Inquiry Investigation: Change Shadows Centers: Music (My Shadow), Blocks (Towering Shadows) Summative Assessment	198 199 200, 201 202 203 205
[3] SD4.3 recognizing and using appropriate instruments of magnification (e.g., binoculars and telescopes). (L)	<u>Unit D: Earth Science - Weather and Sky</u> Centers: Music (What Do You See?)	197
Science Performance Standards (Grade Level Expectations) Grades 3-5 E1—Science and Technology		
<p>SE Students develop an understanding of the relationships among science, technology, and society.</p> <p>SE1 Students develop an understanding of how scientific knowledge and technology are used in making decisions about issues, innovations, and responses to problems and everyday events.</p> <p>SE2 Students develop an understanding that solving problems involves different ways of thinking, perspectives, and curiosity that lead to the exploration of multiple paths that are analyzed using scientific, technological, and social merits.</p> <p>SE3 Students develop an understanding of how scientific discoveries and technological innovations affect and are affected by our lives and cultures.</p>		
The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by:		
[3] SE1.1 identifying local problems and discussing solutions. (L)	<u>Unit C: Earth Science - Our Earth, Our Home</u> Lesson 5: How do we use these resources? Lesson 5: How do we use water? Be a Scientist/Inquiry Investigation: Conserve Water Centers: Library (Read About Natural Resources) Circle Time: What's Recycled? Be a Reader: Read the Big Book, Be a Writer: School Recycling Lesson 6: How can we reuse things? Be a Scientist/Inquiry Investigation: Recycling Center Centers: Drawing and Writing ("Do It!" Posters), Technology (Earth)	154, 155 156, 157 158 159 160 161 162, 163 164 165

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The student demonstrates an understanding that solving problems involves different ways of thinking, perspectives, and curiosity by:		
[3] SE2.1 identifying local tools and materials used in everyday life. (L)	<u>Unit C: Earth Science - Our Earth, Our Home</u> Circle Time: Plants are Resources Be a Writer: These are Made from Trees Lesson 5: How do we use these resources? Lesson 5: How do we use water? Be a Scientist/Inquiry Investigation: Conserve Water Centers: Library (Read About Natural Resources) Circle Time: What's Recycled? Be a Reader: Read the Big Book, Be a Writer: School Recycling Lesson 6: How can we reuse things? Be a Scientist/Inquiry Investigation: Recycling Center Centers: Drawing and Writing ("Do It!" Posters), Technology (More About Our Earth) <u>Unit E: Physical Science - Exploring Matter</u> Lesson 2: How can we use wood and metal? Lesson 3: What can we do with clay? <u>Unit F: Physical Science - Moving Right Along</u> Lesson 1: How do we use wheels? Be a Scientist/Inquiry Investigation: Pull with a Pulley Centers: Music (Roll Along!)	152 153 154, 155 156, 157 158 159 160 161 162, 163 164 165 220, 221 226, 227 244-245 246 247
The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by:		
[3] SE3.1 listing the positive and negative effects of a single technological development in the local community (e.g., fish trap, fish wheel, four-wheeler, computer). (L)	Refer to grades 1, 2 and 3.	

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<i>Continued from previous page...</i>	Be a Scientist/Inquiry Investigation: Observing Stems	30	
	Centers: Art (Root Prints), Cooking (Mashed Potatoes)	31	
	Be a Scientist/Inquiry Investigation: Window Box Wonder	38	
	Circle Time: Sprouting Seeds	40	
	Be a Scientist/Inquiry Investigation: Planting Seeds	44	
	Be a Writer: Favorite Flower	47	
	Be a Scientist/Inquiry Investigation: Matching Leaves	52	
	Centers: Music (Take a Look), Art (Leaf Rubbings)	53	
	Circle Time: Feely Box	54	
	Be a Math Wiz: Counting Peas	55	
	Be a Scientist/Inquiry Investigation: Plant Part Soup	58	
	Centers: Art (Play Dough Plants)	59	
	<u>Unit B: Life Science - Animals</u>		
	Be a Scientist/Inquiry Investigation: Animal Habitat	68	
	Animal Homes	76	
	Bug Collection	82	
	Reptile Guest	88	
	Be a Math Wiz: How Many Birds?	91	
	Be a Scientist/Inquiry Investigation: Bird Feeder	96	
	Growing Animals	110	
	Centers: Cooking (Banana Smoothies)	117	
	<u>Unit C: Earth Science - Our Earth, Our Home</u>		
	Circle Time: See-Through to Soil	126	
	Be a Scientist/Inquiry Investigation: Sampling Soil	130	
	Centers: Art (Beautiful Roots)	131	
	Circle Time: My Rock	132	
	Centers: Art (Rock Collages)	137	
	Be a Scientist/Inquiry Investigation: Make It Rain!	144	
	Centers: Music (Let's Look)	145	
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	Circle Time: Plants are Resources	152	
	Centers: Art (Water Colors), Library (Read About Natural Resources)	159	
	Be a Reader: Read the Big Book	161	
	<u>Unit D: Earth Science - Weather and Sky</u>		
	Circle Time: What's the Weather?	170	
	Be a Reader: Read the Big Book, Be a Math Wiz: Weather Match	171	
	Be a Scientist/Inquiry Investigation: Wind Effects	176	
	Centers: Water Table (Boats on the Water)	177	
	Be a Scientist/Inquiry Investigation: Observe Clouds	182	
	Centers: Art (Paint the Clouds)	183	
	Be a Reader: Read the Big Book	185	
	Be a Scientist/Inquiry Investigation: Nature Walk	188	
	Circle Time: Day Sky/Night Sky	190	
	Be a Scientist/Inquiry Investigation: The Night Sky	196	
	Centers: Music (What Do You See?)	197	
	Circle Time: Guess the Object	198	
	Be a Math Wiz: Measure Shadows	199	
	Be a Scientist/Inquiry Investigation: Change Shadows	202	
	Centers: Art (Shadow Puppets)	203	
	<u>Unit E: Physical Science - Exploring Matter</u>		
	Circle Time: Fold It	212	
	Be a Reader: Read the Big Book	213	
	Be a Scientist/Inquiry Investigation: Making Paper	216	
	Circle Time: Feely Box	218	
	Centers: Drawing and Writing (My Tool Book), Water Table (Floating Boats)	223	
	Circle Time: Feel Clay	224	
	Be a Math Wiz: Clay Patterns	225	
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<i>Continued from previous page...</i>	Be a Scientist/Inquiry Investigation: Pinching Pots Centers: Drawing and Writing (Drawing Clay) Circle Time: Altered States Be a Math Wiz: Weighing Water Be a Scientist/Inquiry Investigation: Make It Float Centers: Music (Water, Steam, and Ice), Cooking (Ice Pops)	228 229 230 231 236 237
	<u>Unit F: Physical Science - Moving Right Along</u> Be a Reader: Read the Big Book Be a Scientist/Inquiry Investigation: Pull with a Pulley Centers: Music (Roll Along!) Circle Time: Make It Move Be a Scientist/Inquiry Investigation: Sliding and Rolling Centers: Drawing and Writing (Push and Pull), Blocks (Does It Roll?), Art (Push/Pull Mural) Be a Writer: Up in the Sky Be a Scientist/Inquiry Investigation: All Fall Down Circle Time: Sound Detective Be a Math Wiz: Sound Patterns Be a Scientist/Inquiry Investigation: Sound Cylinders Circle Time: Try Magnets Be a Reader: Read the Big Book, Be a Math Wiz: Paper Clip Chains Be a Scientist/Inquiry Investigation: Moving Clips Centers: Drawing and Writing (Pulling Through), Art (Make Your Own)	243 246 247 248 254 255 257 260 262 263 266 268 269 272 273
The student demonstrates an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base by:		
[3] SG4.1 asking questions about the natural world.	<u>Be a Scientist/Inquiry Investigation</u> Unit A: Life Science - Plants Observing Stems Window Box Wonder	30 38
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	Ask an Expert	116
	Unit C: Earth Science - Our Earth, Our Home	
	Sampling Soil	130
	Sorting Rocks	136
	Make It Rain!	144
	Getting Water	150
	Conserve Water	158
	Recycling Center	164
	Unit D: Earth Science - Weather and Sky	
	Wind Effects	176
	Observe Clouds	182
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	Change Shadows	202
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	Making Paper	216
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	Unit F: Physical Science - Moving Right Along	
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	Sliding and Rolling	254
	All Fall Down	260
	Sound Cylinders	266
	Moving Clips	272