

Observing Nature Next Generation Grade PK	Observing Nature Pathways Grade PK
<b>58 sessions (entire school year)</b>	<b>58 sessions (entire school year)</b>
<b>Investigation 1: Trees</b>	<b>Investigation 1: Trees</b>
Part 1: Getting to Know Trees	Part 1: Getting to Know Trees
Part 2: Following Trees through the Seasons	Part 2: Following Trees through the Seasons
<b>Investigation 2: Leaves</b>	<b>Investigation 2: Leaves</b>
Part 1: Grouping Leaves	Part 1: Grouping Leaves
Part 2: Comparing Leaf Shapes	Part 2: Comparing Leaf Shapes
Part 3: Comparing Leaf Sizes	Part 3: Comparing Leaf Sizes
Part 4: Matching Leaves	Part 4: Matching Leaves
Part 5: Displaying Pressed Leaves	Part 5: Displaying Pressed Leaves
<b>Investigation 3: Earth Materials</b>	<b>Investigation 3: Earth Materials</b>
Part 1: Exploring River Rocks	Part 1: Exploring River Rocks
Part 2: Soil Painting	Part 2: Soil Painting
Part 3: Changes to Water	Part 3: Changes to Water
Part 4: Recycling Materials	Part 4: Recycling Materials
<b>Investigation 4: Isopods</b>	<b>Investigation 4: Isopods</b>
Part 1: Getting to Know Isopods	Part 1: Getting to Know Isopods
Part 2: Sorting Isopods	Part 3: Sorting Isopods
Part 3: Observing Isopods Move	Part 4: Observing Isopods Move
Part 4: Plants and Animals Living Together	Part 2: Homes for Plants and Animals
<b>Investigation 5: Wood</b>	<b>Investigation 5: Wood</b>
Part 1: Getting to Know Wood	Part 1: Getting to Know Wood
Part 2: Putting Water on Wood	Part 2: Putting Water on Wood
Part 3: Changing Wood by Sanding	Part 3: Changing Wood by Sanding
Part 4: Exploring Sawdust and Shavings	Part 4: Exploring Sawdust and Shavings
Part 5: Making Plywood	Part 5: Making Plywood

<b>Trees and Weather Next Generation Grade K Earth Science</b>	<b>Trees and Weather Pathways Grade K Earth Science</b>
<b>NGSS Performance Expectations addressed:</b> K-ESS2-1, K-ESS2-2, K-ESS3-1, K-ESS3-2, K-LS1-1, K-PS3-1, K-2-ETS1-2	<b>NGSS Performance Expectations addressed:</b> K-ESS2-1, K-ESS2-2, K-ESS3-1, K-ESS3-2, K-LS1-1, K-PS3-1
	<b>22 sessions (plus 3 optional sessions)</b>
<b>Investigation 1: Observing Trees</b>	<b>Investigation 1: Observing Trees</b>
Part 1: Observing Schoolyard Trees	Part 1: Observing Schoolyard Trees
Part 2: Tree Parts	Part 2: Tree Parts
Part 3: Tree Puzzles	
Part 4: Tree-Silhouette Cards	
Part 5: Adopt Schoolyard Trees	Part 3: Adopt Schoolyard Trees
Part 6: A Tree Comes to Class	Part 4: A Tree Comes to Class
<b>Investigation 2: Observing Leaves</b>	<i>Side Trip 1: Observing Leaves</i>
Part 1: Leaf Walk	
Part 2: Leaf Shapes	
Part 3: Comparing Leaves	
Part 4: Matching Leaf Silhouettes	
Part 5: Leaf Books	
<b>Investigation 3: Observing Weather</b>	<b>Investigation 2: Observing Weather</b>
Part 1: Weather Calendar	Part 1: Weather Calendar
Part 2: Recording Temperature	Part 2: Recording Temperature
Part 3: Wind Direction	Part 3: Wind Direction
<b>Investigation 4: Trees through the Seasons</b>	<b>Investigation 3: Trees Through the Seasons</b>
Part 1: Fall: What Comes from Trees?	
Part 2: Fall: Food from Trees	
Part 3: Fall: Visiting Adopted Trees	Part 1: In Fall: Visiting Adopted Trees
Part 4: Winter: Evergreen Hunt	
Part 5: Winter: Twigs	
Part 6: Winter: Visiting Adopted Trees	Part 2: In Winter: Visiting Adopted Trees
Part 7: Spring: Forcing Twigs	
Part 8: Spring: Bark Hunt	
Part 9: Spring: Visiting Adopted Trees	Part 3: In Spring: Visiting Adopted Trees

*\*Side Trips are optional activities*

Developed at:

**The Lawrence  
Hall of Science**  
UNIVERSITY OF CALIFORNIA, BERKELEY®

Published & distributed by:

 **Delta Education®**  
 **School Specialty®**

May 2024

Materials and Motion Next Generation Grade K Physical Science	Materials and Forces Pathways Grade K Physical Science
NGSS Performance Expectations addressed: K-PS2-1, K-PS2-2, K-PS3-1, K-PS3-2, K-ESS3-3, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3	NGSS Performance Expectations addressed: K-ESS2-2, K-ESS3-3, K-PS2-1, K-PS2-2, K-PS3-1, K-PS3-2, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3
~52 sessions	22 sessions (plus 3 optional sessions)
<b>Investigation 1: Getting to Know Wood</b>	<b>Investigation 1: Getting to Know Materials</b>
	Part 1: The Effect of Sunlight
Part 1: Observing Wood	Part 2: Finding Out about Wood
Part 2: Wood and Water	
Part 3: Testing a Raft	<i>Inv 2, Side Trip 1: Testing a Wooden Raft</i>
Part 4: Sanding Wood	
Part 5: Sawdust and Shavings	
Part 6: Making Particleboard	
Part 7: Making Plywood	
<b>Investigation 2: Getting to Know Paper</b>	
Part 1: Paper Hunt	Inv 1, Part 3: Finding Out about Paper
Part 2: Using Paper	
Part 3: Paper and Water	
Part 4: Paper Recycling	
Part 5: Papier-Mache	
<b>Investigation 3: Getting to Know Fabric</b>	<b>Investigation 2: Engineering Structures</b>
Part 1: Feely Boxes and Fabric Hunt	Inv 1, Part 4: Finding Out about Fabric
Part 2: Taking Fabric Apart	
Part 3: Water and Fabric	
Part 4: Graphing Fabric Uses	
Part 5: Reuse and Recycle Resources	Part 3: Reuse and Recycle Resources
Part 6: Building Structures	Part 1: Building Structures
	Part 2: Humans and the Environment (NEW)
<b>Investigation 4: Getting Things to Move</b>	<b>Investigation 3: Getting Things to Move</b>
Part 1: Pushes and Pulls	Part 1: Pushes and Pulls
Part 2: Colliding Objects	Part 2: Colliding Objects
Part 3: Rolling Outdoors	Part 3: Rolling Outdoors
Part 4: Balloon Rockets	

\*Side Trips are optional activities

<b>Animals Two by Two Next Generation Grade K Life Science</b>	<b>Animals Two by Two Pathways Grade K Life Science</b>
<b>NGSS Performance Expectations addressed: K-LS1-1, K-ESS2-2, K-ESS3-1</b>	<b>NGSS Performance Expectations addressed: K-LS1-1, K-ESS2-2, K-ESS3-1</b>
<b>~32 sessions</b>	<b>20 sessions (plus 4 optional sessions)</b>
<b>Investigation 1: Goldfish and Guppies</b>	<b>Investigation 1: Designing Aquariums</b>
Part 1: The Structure of Goldfish	Part 1: Observing Goldfish and Guppies
Part 2: Caring for Goldfish	
Part 3: Goldfish Behavior	
Part 4: Comparing Guppies to Goldfish	
Part 5: Comparing Schoolyard Birds	Inv 4, Part 1: Comparing Birds
<b>Investigation 2: Water and Land Snails</b>	
Part 1: Observing Water Snails	Part 2: Observing Water Snails
Part 2: Shells	
Part 3: Land Snails	
<b>Investigation 3: Big and Little Worms</b>	<b>Investigation 2: Worms and Isopods</b>
Part 1: The Structure of Redworms	Part 1: Observing Redworms
Part 2: Redworm Behavior	Part 2: Redworm Habitats
Part 3: Comparing Redworms to Night Crawlers	
<b>Investigation 4: Pill Bugs and Sow Bugs</b>	
Part 1: Isopod Observations	Part 3: Observing Isopods
Part 2: Identifying Isopods	
Part 3: Isopod Movement	
	<i>Side Trip 1: Isopod Movement</i>
	<b>Investigation 3: Designing Terrariums</b>
Part 4: Animals Living Together	Part 1: Animals and Plants Living Together
	<b>Investigation 4: Schoolyard Birds</b>
	Part 2: Changes Caused by Animals (NEW)

*\*Side Trips are optional activities*

Developed at:

**The Lawrence  
Hall of Science**  
UNIVERSITY OF CALIFORNIA, BERKELEY®

Published & distributed by:

 **Delta Education®**  
 **School Specialty®**

December 2024

<b>Air and Weather Next Generation Grade 1 Earth Science</b>	<b>Changes in the Sky Pathways Grade 1 Earth Science</b>
<b>NGSS Performance Expectations addressed:</b> 2-PS1-1, K-ESS2-1, K-ESS3-3, 1-ESS1-1, 1-ESS1-2, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3	<b>NGSS Performance Expectations addressed:</b> 1-ESS1-1, 1-ESS1-2
<b>42 sessions</b>	<b>18 sessions</b>
<b>Investigation 1: Exploring Air</b>	<b>N/A</b>
Part 1: Air Is There	
Part 2: Parachutes	<i>Inv 1, Side Trip 1: Parachutes and Kites</i>
Part 3: Pushing on Air	
Part 4: Air and Water	
Part 5: Balloon Rockets	
<b>Investigation 2: Observing the Sky</b>	<b>Investigation 1: Sunrise and Sunset</b>
Part 1: Weather Calendars	
Part 2: Measuring Temperature and Daylight	Inv 1, Part 3: Measuring Temperature and Daylight
Part 3: Watching Clouds	
	<b>Investigation 2: Moonrise and Moonset</b>
Part 4: Observing the Moon	Inv 2, Part 1: Observing the Moon
	Inv 1, Part 1: Observing the Daytime Sky (NEW)
	Inv 1, Part 2: Sun and Shadows (NEW)
<b>Investigation 3: Wind Explorations</b>	<b>N/A</b>
Part 1: Bubbles in the Wind	
Part 2: Wind Speed	
Part 3: Pinwheels	
Part 4: Wind Vanes	<i>Inv 1, Side Trip 1: Parachutes and Kites</i>
Part 5: Kites	
<b>Investigation 4: Looking for Change</b>	<b>Investigation 3: Patterns Throughout the Year</b>
Part 1: Change over a Month	
Part 2: Daylight through the Year	Inv 3, Part 1: Daylight Through the Seasons
Part 3: Comparing the Seasons	Inv 2, Part 2: Moon Patterns

*\*Side Trips are optional activities*

Developed at:

**The Lawrence  
Hall of Science**  
UNIVERSITY OF CALIFORNIA, BERKELEY®

Published & distributed by:

 **Delta Education®**  
 **School Specialty®**

August 2024

<b>Sound and Light Next Generation Grade 1 Physical Science</b>	<b>Sound and Light Pathways Grade 1 Physical Science</b>
<b>NGSS Performance Expectations addressed:</b> 1-PS4-1, 1-PS4-2, 1-PS4-3, 1-PS4-4, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3	<b>NGSS Performance Expectations addressed:</b> 1-PS4-1, 1-PS4-2, 1-PS4-3, 1-PS4-4, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3
<b>28 sessions</b>	<b>22 sessions (plus 7 optional sessions)</b>
<b>Investigation 1: Sound and Vibrations</b>	<b>Investigation 1: Sound and Vibrations</b>
Part 1: Making Sounds	Part 1: Making Sounds
Part 2: Hearing Sounds	Part 2: Hearing Sounds
Part 3: Outdoor Sounds	<i>Side Trip 1: Outdoor Sounds</i>
<b>Investigation 2: Changing Sound</b>	<b>Investigation 2: Using Sound</b>
Part 1: Changing Volume	
Part 2: Changing Pitch	
Part 3: Spoon-Gong Systems	Part 1: Spoon-Gong Systems
Part 4: Sound Challenges	Part 2: Sound Challenges
<b>Investigation 3: Light and Shadows</b>	<b>Investigation 3: Light and Materials</b>
Part 1: Making Shadows	Part 1: Making Shadows
Part 2: Sun and Shadows	<i>Side Trip 2: Outdoor Shadows</i>
Part 3: Light and Materials	Part 2: Light and Materials
<b>Investigation 4: Light and Mirrors</b>	<b>Investigation 4: Eyes and Vision</b>
Part 1: Mirrors and Light Beams	
Part 2: Reflections	Part 1: Reflections
Part 3: Eyes and Seeing	Part 2: Seeing with Light
Part 4: Designing with Light	Part 3: Designing with Light

*\*Side Trips are optional activities*

Developed at:

**The Lawrence  
Hall of Science**  
UNIVERSITY OF CALIFORNIA, BERKELEY®

Published & distributed by:

 **Delta Education®**  
 **School Specialty®**

May 2024

Plants and Animals Next Generation Grade 1 Life Science	Plants and Animals Pathways Grade 1 Life Science
NGSS Performance Expectations addressed: 1-LS1-1, 1-LS1-2, 1-LS3-1, K-2-ETS1-2	NGSS Performance Expectations addressed: 1-LS1-1, 1-LS1-2, 1-LS3-1, K-2-ETS1-1, K-2-ETS1-2
43 sessions	22 sessions (plus 5 Side Trip sessions)
<b>Investigation 1: Grass and Grain Seeds</b>	<b>Investigation 1: Young Plants</b>
Part 1: Lawns	Part 1: Growing Ryegrass and Alfalfa
Part 2: Mowing the Lawn	
Part 3: Wheat	Part 2: Growing Wheat
Part 4: Variation in Plants and Animals	<i>Side Trip 1: Schoolyard Plant Survey</i>
<b>Investigation 2: Stems</b>	
Part 1: Rooting Stem Cuttings	<i>Side Trip 2: Plant Stem Cuttings and Bulbs (Inv 2)</i>
Part 2: Spuds	
Part 3: New Plants from Cuttings	
<b>Investigation 3: Terrariums</b>	<b>Investigation 2: Terrarium Habitats</b>
Part 1: Setting Up Terrariums	Part 1: Observing Terrariums
Part 2: Animals in the Terrarium	
	Part 2: Animals and Their Young (NEW)
Part 3: Habitat Match	
Part 4: Squirrel Behavior	<i>Side Trip 3: Squirrel Behavior</i>
<b>Investigation 4: Growth and Change</b>	<b>Investigation 3: Learning from Nature</b>
	Part 1: Using Nature to Problem-Solve (NEW)
Part 1: Planting Bulbs	
Part 2: Planting Roots	
Part 3: Plant and Animal Growth	

\*Side Trips are optional activities

<b>Pebbles, Sand, and Silt Next Generation Grade 2 Earth Science</b>	<b>Water and Landforms Pathways Grade 2 Earth Science</b>
<b>NGSS Performance Expectations addressed:</b> 2-PS1-1, 2-PS1-2, 2-ESS1-1, 2-ESS2-1, 2-ESS2-2, 2-ESS2-3, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3	<b>NGSS Performance Expectations addressed:</b> 2-PS1-1, 2-ESS1-1, 2-ESS2-1, 2-ESS2-2, 2-ESS2-3, K-2-EST1-3
<b>43 sessions</b>	<b>22 sessions (plus 2 optional sessions)</b>
<b>Investigation 1: First Rocks</b>	<b>Investigation 1: Rocks</b>
Part 1: Three Rocks	Part 1: Weathering Rocks
Part 2: Washing Three Rocks	
Part 3: First Sorting	
Part 4: Start a Rock Collection	
Part 5: Sorting Activities	
<b>Investigation 2: River Rocks</b>	<b>Investigation 2: Soil</b>
Part 1: Screening River Rocks	Inv 1, Part 2: Classifying Rocks by Size
Part 2: River Rocks by Size	
Part 3: Sand and Silt	Inv 2, Part 1: Sand and Silt
Part 4: Exploring Clay and Landforms	
<b>Investigation 3: Using Rocks</b>	<b>Investigation 3: Changes to Landforms (NEW)</b>
Part 1: Rocks in Use	<i>(Inv 1) Side Trip 1: Rocks in Use</i>
Part 2: Observing Sandpaper	
Part 3: Sand Sculptures	
Part 4: Clay Beads	
Part 5: Making Bricks	
	Part 1: Erosion (NEW)
	Part 2: Fast and Slow Earth Events (NEW)
<b>Investigation 4: Soil and Water</b>	<b>Investigation 4: Water and Land</b>
Part 1: Homemade Soil	Inv 2, Part 2: Homemade Soil
Part 2: Local Soil	<i>(Inv 2) Side Trip 2: Local Soil</i>
Part 3: Natural Sources of Water	Inv 4, Part 1: Natural Sources of Water
Part 4: Land and Water	
	Inv 4, Part 2: Describing Water and Landforms

*\*Side Trips are optional activities*

Developed at:

**The Lawrence  
Hall of Science**  
UNIVERSITY OF CALIFORNIA, BERKELEY®

Published & distributed by:

 **Delta Education®**  
 **School Specialty®**

August 2024



<b>Solids and Liquids Next Generation Grade 2 Physical Science</b>	<b>Solids and Liquids Pathways Grade 2 Physical Science</b>
<b>NGSS Performance Expectations addressed: 2-PS1-1, 2-PS1-2, 2-PS1-3, 2-PS1-4, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3</b>	<b>NGSS Performance Expectations addressed: 2-PS1-1, 2-PS1-2, 2-PS1-3, 2-PS1-4, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3</b>
<b>41 sessions</b>	<b>22 sessions (plus 4 optional sessions)</b>
<b>Investigation 1: Solids</b>	<b>Investigation 1: Solids</b>
Part 1: Solid Objects	Part 1: Solid Objects
Part 2: Solid Materials	Part 2: Solid Materials
Part 3: Group Solid Objects	
Part 4: Construct with Solids	Part 3: Construct with Solids
Part 5: Outdoor Solids	
<b>Investigation 2: Liquids</b>	<b>Investigation 2: Liquids</b>
Part 1: Liquids in Bottles	Part 1: Liquids in Bottles
Part 2: Properties of Liquids	Part 2: Properties of Liquids
Part 3: Liquid Level	
Part 4: Puddles	
	Part 3: Comparing Solids and Liquids
<b>Investigation 3: Bits and Pieces</b>	
Part 1: Solids in Containers	
Part 2: Separating Soup Mix	
Part 3: Solids in Bottles	
Part 4: Beads and Screens	
Part 5: Spills	
<b>Investigation 4: Solids, Liquids, and Water</b>	<b>Investigation 3: Changes to Solids and Liquids</b>
Part 1: Solids and Water	Part 1: Mixing Solids and Liquids with Water
Part 2: Liquids and Water	
Part 3: Toothpaste Investigation	<i>Side Trip 1: Toothpaste Investigation</i>
Part 4: Changing Properties	Part 2: Changing Properties
Part 5: Tea Time	
	Part 3: Reversible or Not

*\*Side Trips are optional activities*

Developed at:

**The Lawrence  
Hall of Science**  
UNIVERSITY OF CALIFORNIA, BERKELEY®

Published & distributed by:

 **Delta Education®**  
 **School Specialty®**

May 2024

Insects and Plants Next Generation Grade 2 Life Science	Insects and Plants Pathways Grade 2 Life Science
NGSS Performance Expectations addressed: 3-LS1-1, 2-LS2-1, 2-LS2-2, 2-LS4-1, K-2-ETS1-1, K-2-ETS1-2, K-2-ETS1-3	NGSS Performance Expectations addressed: 2-LS2-1, 2-LS2-2, 2-LS4-1, K-2-ETS1-2
74 sessions	22 sessions (plus 9 optional sessions)
<b>Investigation 1: Mealworms</b>	<b>Investigation 1: Habitats</b>
Part 1: Mealworms	Part 1: Observing Mealworms
	Part 2: Comparing Habitats (NEW)
Part 2: Larva, Pupa, Adult	Part 3: Mealworm Growth and Changes
Part 3: Life Cycle	
<b>Investigation 2: Brassica Seeds</b>	<b>Investigation 2: Planting Seeds</b>
Part 1: Planting Brassica	
Part 2: Observing Brassica Growth	Part 1: Observing Brassica Growth
	Part 2: Plant Lab Growth (NEW)
	Part 3: Seed Movement (NEW)
Part 3: Plant Life Cycle	
Part 4: Planting Outdoors	Side Trip 2: Planting Outdoors
<b>Investigation 3: Milkweed Bugs</b>	
Part 1: Eggs	
Part 2: Habitats	
Part 3: Growing Milkweed Bugs	
Part 4: Insect Search	Inv 1, Side Trip 1: Schoolyard Insect Search
<b>Investigation 4: Silkworms</b>	N/A
Part 1: Eggs and Larvae	
Part 2: Silkworm Structures	
Part 3: Pupae and Adults	
Part 4: Plant Eaters	
<b>Investigation 5: Butterflies</b>	<b>Investigation 3: Diversity of Life</b>
Part 1: Caterpillars	
Part 2: Chrysalises	
Part 3: Adult Butterflies	Part 1: Butterflies
Part 4: Flower Powder	Part 2: Flower Powder

\*Side Trips are optional activities

Developed at:

**The Lawrence  
Hall of Science**  
UNIVERSITY OF CALIFORNIA, BERKELEY®

Published & distributed by:

 **Delta Education®**  
 **School Specialty®**

October 2024