# Materials kit list for Idaho

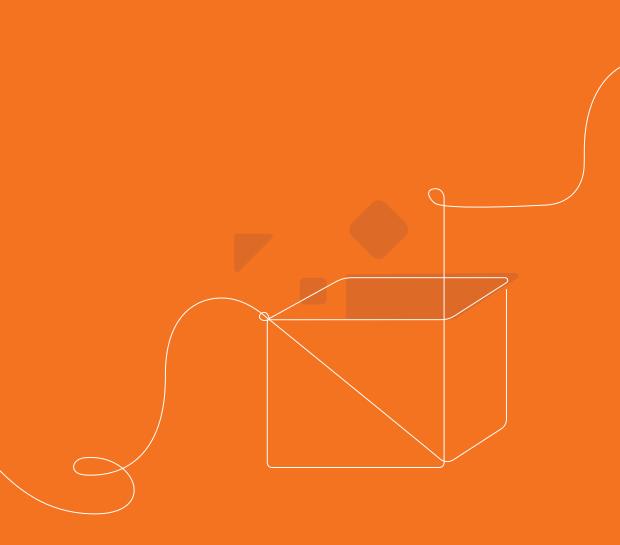


# Storing your hands-on kits

Hands-on learning is at the heart of Amplify Science, and is integrated into every unit.

For each hands-on activity, clear instructions are provided for the teacher, and materials are included in unit-specific kits that are packaged in tubs.

Please note that the number of tubs per grade level varies and ranges from 7–10 total tubs.





Grade Level	Number of units	Total number of tubs	Number of units requiring refills
Grade K	3	9	2
Grade 1	3	7	3
Grade 2	3	9	3
Grade 3	4	9	4
Grade 4	4	9	3
Grade 5	4	10	4

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### Starter Kit



#### Hands-on materials

Quantity	Description
12	sticky notes, 3" x 3", pad
24	hand lenses, plastic
10	masking tape, rolls
40	goggles, safety
20	trays, plastic
2	dishtubs

### Needs of Plants and Animals | Kindergarten



Materials in this unit are packaged in 3 boxes.

#### Hands-on materials

Quantity	Description
216	sticky notes, electric blue, 3" x 3"
72	sticky notes, black, 3" x 3"
4	trays, potting, plastic
250	cups, plastic, 9 oz
50	cups, plastic, 2 oz
216	elf sunflower seeds
1	grow light bulb
4	spray bottles
432	radish seeds
1	light timer
1	clamp lamp

#### Classroom materials

Quantity	Description
1	Investigating Monarchs, Big Book (24 pages/book)
1	A Plant in the Desert, Big Book (20 pages/book)
1	Handbook of Plants, Big Book (36 pages/book)
1	Above and Below, Big Book (20 pages/book)
-	Science Walk, Big Book (20 pages/book)
1	Habitat Pictures: Forest and Field of Weeds
2	
3 sets	Animals and their Foods cards (9 cards/set) Living
18 sets	Things Student cards (11 cards/set) Human Needs
18 sets	Student cards (12 cards/set)
6	Explanation Language Frame cards: set 1
5	Explanation Language Frame cards: set 2
2	Explanation Language Frame cards: set 3
2	Explanation Language Frame cards: set 4

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4	Explanation Language Frame cards: set 5
18 sets	Water in Habitat cards (4 cards/set)
19 sets	Mariposa Grove cards (2 cards/set)
16	Living/Nonliving Things cards
9	Animals Eating Station cards
6	Monarch Habitats chart cards
8	Animal Habitat Table cards
17	Food Sorting cards
12	Human Needs cards
2	Section headers: Key Concepts, Vocabulary
4	Chapter Questions cards
1	Unit Question card
11	Vocabulary cards

#### Student materials

<ol> <li>Milkweed and Monarchs Investigation Notebook (24 pages/book)</li> <li>Science Walk (20 pages/book)</li> <li>Investigating Monarchs (24 pages/book)</li> <li>A Plant in the Desert (20 pages/book)</li> <li>Handbook of Plants (36 pages/book)</li> </ol>	Quantity	Description
18 Investigating Monarchs (24 pages/book) 18 A Plant in the Desert (20 pages/book)	1	9
18 A Plant in the Desert (20 pages/book)	18	Science Walk (20 pages/book)
	18	Investigating Monarchs (24 pages/book)
18 Handbook of Plants (36 pages/book)	18	A Plant in the Desert (20 pages/book)
(2.2 ) (2.2 )	18	Handbook of Plants (36 pages/book)
18 Above and Below (20 pages/book)	18	Above and Below (20 pages/book)

<sup>\*</sup>What Does a Scientist Look Like?, pictured above, is not included in this kit.

### Pushes and Pulls | Kindergarten



Materials in this unit are packaged in 3 boxes.

#### Hands-on materials

Quantity	Description
73	cardboard boxes, 11" x 17" x 2", with slots
200	wooden sticks (tongue depressors)
1	cardboard box, 12" x 24" x 2"
93	baggies, plastic with zip
160	rubber bands (medium)
81	rubber bands (large)
24	rubber bands (small)
73	balls, table-tennis
73	binder clips, large
2	masking tape, rolls
1	peg board, 1' x 2'
18	nuts, large, metal
16	dowels, 2" long
1	ball, foam, 6"
18	marbles, flat
19	tennis balls
73	shoelaces

#### Classroom materials

Quantity	Description
1	Room 4 Solves a Problem, Big Book (28 pages/book)
1	A Busy Day in Pushville, Big Book (20 pages/book)
1	Talking About Forces, Big Book (20 pages/book)
1	Building with Forces, Big Book (20 pages/book)
1	Forces in Ball Games, Big Book (52 pages/book)
9	Pinball Machine Design Goals chart: Diagrams 1-9
5	What We Know About Forces chart: Icons 1-6
7	Explanation Language Frames cards: set 1
4	Explanation Language Frames cards: set 2
8	Explanation Language Frames cards: set 3
2	Explanation Language Frames cards: set 4
4	Explanation Language Frames cards: set 5



18 sets	Forces cards set: Headers (2 cards/set)
18 sets	Forces cards: small (8 cards/set)
73	Box Model mat 1: Long/Short
73	Box Model mat 2: left/right
73	Box Model mat 3: targets
8	Forces cards: large
2	Section headers: Key Concepts, Vocabulary
6	Chapter Questions cards
1	Unit Question card
9	Vocabulary cards

#### Student materials

Designing a Pinball Machine Investigation Notebook (28 pages/book)
A Busy Day in Pushville (20 pages/book)
Room 4 Solves a Problem (28 pages/book)
Talking About Forces (20 pages/book)
Forces in Ball Games (52 pages/book)
Building with Forces (20 pages/book)

### Sunlight and Weather | Kindergarten



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

Quantity	Description
8	vials with lids, plastic, 18 ml
36	rubber sheets, black, 3" x 6"
36	rubber sheets, white, 3" x 6"
18	thermometers, liquid crystal
2	clay, soft plasticine, 16 oz
9	light bulbs, 60 watt
1	glue, super, bottles
130	cups, plastic, 9 oz
2	gravel, cups
4	caps, bottle
9	clamp lamps
37	cups, paper

#### Classroom materials

Quantity	Description
1	Tornado! Predicting Severe Weather, Big Book (24 pages/book)
1	What Is the Weather Like Today?, Big Book (28 pages/book)
1	Getting Warm in the Sunlight, Big Book (20 pages/book)
1	Cool People in Hot Places, Big Book (24 pages/book)
1	Handbook of Models, Big Book (40 pages/book)
38	Playground Weather calendars and graphs Illustration cards
2	Nighttime and Daytime Illustration cards
4	Explanation Language Frame cards: set 1
4	Explanation Language Frame cards: set 2
4	Explanation Language Frame cards: set 3
2	Playground and Temperature Data images
2	Think and Walk Severe Weather cards



2	Think and Walk Temperature cards
3	Warming Over Time Graph labels
6	Colored Surfaces Graph labels
5	Think and Walk Weather cards
18	thermometer color strips
5	Types of Weather icons
2	Warming Graph labels
1	Sunlight Game card
3	Time of Day cards
2	Section headers: Key Concepts, Vocabulary
5	Chapter Questions cards
1	Unit Question card
10	Vocabulary cards

#### Student materials

Quantity	Description	
1	Solving Playground Problems Investigation Notebook (28 pages/book)	
18	Tornado! Predicting Severe Weather (24 pages/book)	
18	What Is the Weather Like Today? (28 pages/book)	
18	Getting Warm in the Sunlight (20 pages/book)	
18	Cool People in Hot Places (24 pages/book)	
18	Handbook of Models (40 pages/book)	

### **Animal and Plant Defenses** | Grade 1



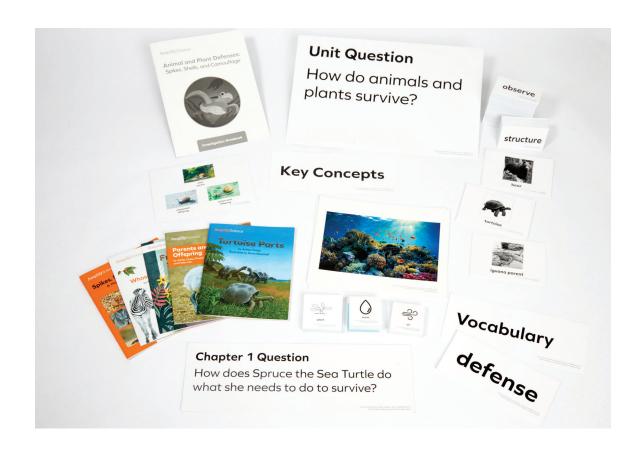
Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

Quantity	Description
72	game tokens, plastic, 1¼" diameter disc
40	tissue paper, sheets, various colors
37	cups, plastic, 16 oz
36	rings, binder, metal
150	cups, plastic, 2 oz
19	hair combs, plastic
73	cups, paper, 7 oz.
800	toothpicks, wooden
144	pencil-top erasers
2	clay, 16 oz

#### **Classroom materials**

Quantity	Description
1	Spikes, Spines, and Shells: A Handbook of Defenses, Big Book (52 pages/book)
1	Parents and Offspring, Big Book (28 pages/book)
1	Whose Lunch Is This?, Big Book (24 pages/book)
1	Tortoise Parts, Big Book (24 pages/book)
1	Frog Models, Big Book (24 pages/book)
1 set	Structure-Function Language Frames cards: set 1 (11 cards/set)
1 set	Structure-Function Language Frames cards: set 2 (6 cards/set)
1 set	Explanation Language Frames cards (4 cards/set)
18 sets	Parent and Offspring card set (5 cards/set)



Survival Game Need cards (12 cards/set)
Survival Game Role cards (4 cards/set)
Background Scene cards (9 cards/set)
Word Ring cards (9 cards/set)
section headers: Key Concepts, Vocabulary (2 cards/set)
Chapter Questions (4 cards/set)
Vocabulary cards
Unit Question

#### Student materials

Quantity	Description
1	Spikes, Shells, and Camouflage Investigation Notebook (24 pages/book)
18	Spikes, Spines, and Shells: A Handbook of Defenses (52 pages/book)
18	Parents and Offspring (28 pages/book)
18	Whose Lunch Is This? (24 pages/book)
18	Tortoise Parts (24 pages/book)
18	Frog Models (24 pages/book)

# **Light and Sound** | Grade 1



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

Quantity	Description		
4	lighting filters, sheets (representing tinted plastic)	19	flashlights, small
22	cardstocks, blue, sheets (representing cardboard)	2	flashlight, large
5	sticks, wooden (tongue depressors)	147	envelopes, small
19	cardstocks, white, sheets	50	acetate, sheets
1	rubber bands, super size	73	crayons, silver
72	envelopes, large manila	1	wax paper, roll
37	clips, binder, medium	73	crayons, black
9	clips, binder, large	24	batteries, AA
6	rings, binder, metal	73	crayons, gray
0	rubber bands, medium	22	foam, sheets
9	cups, plastic, 9 oz	1	foil, roll
	containers, plastic	1	string, 9 feet
3	cups, plastic, 2 oz		

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Quantity	Description
1	Engineering with Light and Sound, Big Book (44 pages/book)
1	Can You See in the Dark?, Big Book (28 pages/book)
1	What Made This Shadow?, Big Book (28 pages/book)
1	What Vibrates?, Big Book (28 pages/book)
1	Let's Test!, Big Book (20 pages/book)
1	Explanation Language Frames cards: set 1 (7 cards/set)
1	Explanation Language Frames cards: set 2 (3 cards/set)
1	Explanation Language Frames cards: set 3 (3 cards/set)
1	Explanation Language Frames cards: set 4 (4 cards/set)
1	Explanation Language Frames cards: set 5 (3 cards/set)
1 set	Results: Testing materials cards (8 cards/set)
1 set	Results: Let's Test! cards (6 cards/set)
1 set	Materials chart cards (15 cards/set)
18 sets	What Vibrates? bookmark (1 card/set)
18 sets	Shadow cards: small (12 cards/set)

1 set	Shadow cards: large (3 cards/set)
18 sets	Let's Test! Bookmark (1 card/set)
36 sets	Word Ring cards (8 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (8 cards/set)
1 set	Unit Question (1 card/set)

#### Student materials

Quantity	Description
1	Puppet-Theater Engineers Investigation Notebook (36 pages/book)
18	Engineering with Light and Sound (44 pages/book)
18	Can You See in the Dark? (28 pages/book)
18	What Made This Shadow? (28 pages/book)
18	What Vibrates? (28 pages/book)
18	Let's Test! (20 pages/book)

# Spinning Earth | Grade 1



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

	Quantity	Description
	50	stickers, round, removable, yellow, 3/4 inch
	50	stickers, round, removable, purple, 3/4 inch
	50	stickers, round, removable, orange, 3/4 inch
	50	stickers, round, removable, green, 3/4 inch
	50	stickers, round, removable, pink, 3/4 inch
	50	stickers, round, removable, red, 3/4 inch
	280	stickers, round, light blue, 1/2 inch
	2	paper, light blue, sheet (36" x 60")
	75	stickers, round, yellow, 1/2 inch
	280	stickers, round, black, 1/2 inch
	2	paper, black, sheet (36" x 24")
	12	baking cup, paper, white
	36	rings, binder, metal
	19	globes, inflatable
	1	stress ball, globe
	2	magnets, ring
	1	pump, hand



Quantity	Description
1	Patterns of Earth and Space (40 pages/book)
1	A Walk Through the Seasons (28 pages/book)
1	Nighttime Investigation (24 pages/book)
1	After Sunset (24 pages/book)
1	What Spins? (28 pages/book)
1 set	Interpretation Language Frame cards: Lesson 1.4 (8 cards/set)
1 set	Explanation Language Frame cards: Lesson 4.3 (6 cards/set)
1 set	Sky Observation cards (large) (10 cards/set)
1 set	Sun and Stars cards (2 cards/set)
36 sets	Word Ring cards (10 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (5 cards/set)
1 set	Vocabulary cards (10 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Investigating Patterns in the Sky Investigation Notebook (32 Pages / Book)
18	Patterns of Earth and Space (40 pages/book)
18	A Walk Through the Seasons (28 pages/book)
18	Nighttime Investigation (24 pages/book)
18	After Sunset (24 pages/book)
18	What Spins? (28 pages/book)

<sup>\*</sup>Space Explorers, pictured above, is not included in this kit.

### Plant and Animal Relationships | Grade 2



Materials in this unit are packaged in 3 boxes.

#### Hands-on materials

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Quantity	Description		
25	baggies, plastic with zip	80	beans, kidney
36	soil, nutrient rich, cups	100	seeds, radish
18	probability cubes (dice)	9	tape measures
6	cups, plastic, 16 oz	1	string, ball
60	seeds, elf sunflower	72	cotton balls
18	cups, plastic, 3 oz	300	beans, mung
9	plastic containers	100	seeds, beet
24	play clay, purple	36	beans, lima
36	seeds, sweet corn	1	flashlight
16	play clay, green	1	fan, small
16	play clay, blue	6	spoons
12	play clay, pink	25	acorns
100	seeds, marigold	5	tongs
100	seeds, alfalfa		

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Quantity	Description
18 sets	Bengal Tiger Reserve Sample Study site map (2015) (18 cards/set)
1 set	Concept Mapping cards: set 1 (large) (5 cards/set)
1 set	Concept Mapping cards: set 2 (large) (4 cards/set)
1 set	Concept Mapping cards: set 3 (large) (4 cards/set)
9 sets	Plant Parts cards (8 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards / set)
1 set	Chapter Questions
1 set	Vocabulary cards
1	Unit Question card
1 set	Key Concepts

#### Student materials

Quantity	Description
1	Investigating Systems in a Bengali Forest Investigation Notebook (84 pages/book)
18	Handbook of Habitats (52 pages/book)
18	A Plant Is a System (20 pages/book)
18	Investigating Seeds (28 pages/book)
18	My Nature Notebook (20 pages/book)
18	Habitat Scientist (24 pages/book)

### Properties of materials | Grade 2



Materials in this unit are packaged in 3 boxes.

#### Hands-on materials

Quantity	Description		
18	labels, pre-printed, cornstarch + water (not heated)	60	baggies, plastic with zip
18	labels, pre-printed, cornstarch + water (heated)	18	labels, pre-printed, salt
18	labels, pre-printed, gelatin + water	8	baking soda, containers
18	labels, pre-printed, flour + water	8	cornstarch, containers
18	labels, pre-printed, baking soda	6	gelatin powder, boxes
18	labels, pre-printed, cornstarch	1	beans, kidney, pound
18	labels, pre-printed, corn syrup	8	corn syrup, bottles
332	index cards, unlined, 4" x 6"	2	salt, kosher, boxes
550	sticks, craft, wooden, small	200	cups, plastic, 9 oz
550	sticks, craft, wooden, large	344	cups, paper, 3 oz
18	labels, pre-printed, Glue A	46	spoons, plastic
18	labels, pre-printed, Glue B	225	washers, metal
1	cinnamon powder, container	200	lids, plastic
18	labels, pre-printed, flour		



Quantity	Description
18 sets	Word Relationships cards: set 1 (2 cards/set)
18 sets	Word Relationships cards: set 2 (3 cards/set)
18 sets	Word Relationships cards: set 3 (3 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (13 cards/set)
1 set	Key Concepts (13 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Designing Glue Investigation Notebook (88 pages/book)
18	What If Rain Boots Were Made of Paper? (20 pages/book)
18	Handbook of Interesting Ingredients (40 pages/book)
18	Can You Change It Back? (28 pages/book)
18	Jess Makes Hair Gel (24 pages/book)
18	Jelly Bean Engineer (40 pages/book)

<sup>\*</sup>Ideas and Inventors, pictured above, not included in this kit.

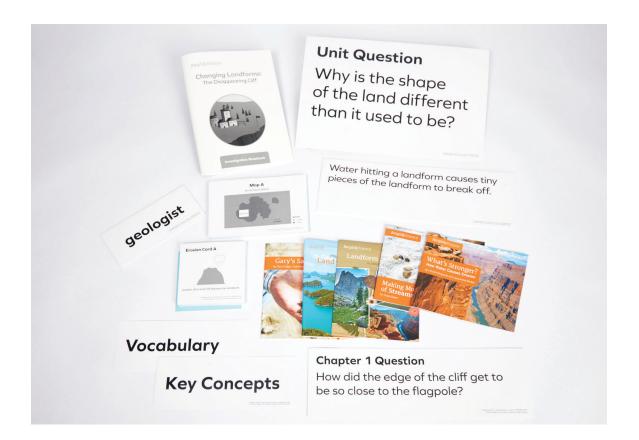
# **Changing Landforms** | Grade 2



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

Hands-on materials			
Description			
sand, rounded large (pebbles), multicolor, cups			
containers, plastic, clear, with lids			
sand, fine playground, tan, cups			
lid, for clear plastic jar			
baggies, plastic with zip			
sand, jagged, black, cups			
sand, kinetic, tan, boxes			
sand, jagged, tan, cups			
chalk, white, blocks			
index cards, 4" x 6"			
jar, clear plastic			
pom-poms, black			
bottles, spray			
rocks, pumice			
hard candies			



Quantity	Description
18 sets	Island Maps cards (4 cards/set)
12 sets	Erosion cards (8 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (11 cards/set)
1 set	Key Concepts (10 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	The Disappearing Cliff Investigation Notebook (92 pages/book)
18	What's Stronger? How Water Causes Erosion (24 pages/book)
18	Handbook of Land and Water (52 pages/book)
18	Making Models of Streams (20 pages/book)
18	Gary's Sand Journal (28 pages/book)
18	Landform Postcards (28 pages/book)

25

# **Balancing Forces** | Grade 3



Materials in this unit are packaged in 1 box.

#### Hands-on materials

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Quantity	Description			
18	cardboard tubes (toilet-paper rolls), 4" long, halved	18	cups, plastic, 16 oz	
20	clothespins, wood, with wire hinges,	108	index cards, 4" x 6"	
38	magnets, ring, north pole painted red	15	wooden craft sticks	
20	bags, plastic, quart, self-sealing	1	aluminum foil, roll	
10	fasteners (brads), brass plated	19	dominoes, plastic	
10	fasteners (brads), solid brass	10	steel wool pads	
38	hooks, with pointed screw tips	1	battery holder	
18	cardboard, pieces, 3.5" x 2"	38	blocks, wooden	
18	cardboard, pieces, 7" x 3.5"	10	washers, metal	
1	string, cotton, white, ball	10	spoons, steel	
1	wire, magnet, copper, roll	18	magnets, ball	
18	cardboard, pieces, 2" x 2"	2	batteries, D	
50	baggies, plastic with zip	200	paper clips	
1	sandpaper, small piece	1	bolt, iron	
19	balloons, medium size	20	twist ties	
18	balls, rubber, small			

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Quantity	Description
18 sets	Word Relationships cards: set 1 (8 cards/set)
18 sets	Word Relationships cards: set 2 (3 cards/set)
18 sets	Word Relationships cards: set 3 (3 cards/set)
18 sets	Word Relationships cards: set 4 (3 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (5 cards/set)
1 set	Vocabulary cards (12 cards/set)
1 set	Key Concepts (10 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Investigating Floating Trains Investigation Notebook (88 pages/book)
18	What My Sister Taught Me About Magnets (28 pages/book)
18	Explaining a Bridge (20 pages/book)
18	Handbook of Forces (36 pages/book)
18	Forces All Around (24 pages/book)
18	Hoverboard (20 pages/book)

### **Inheritance and Traits** | Grade 3



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

Quantity	Description
18	food coloring, red, bottles
324	stickers, round, blue
30	cups, plastic 16 oz.
324	stickers, round, red
18	food coloring sets
48	clay, yellow
48	clay, green
48	clay, red



Quantity	Description
9 sets	Word Relationships cards: set 2 (6 cards/set)
9 sets	Word Relationships cards: set 3 (4 cards/set)
9 sets	Word Relationship cards: set 1 (4 cards/set)
9 sets	Elk Mountain Pack Data cards (6 cards/set)
9 sets	Bison Valley Pack Data cards (6 cards/set)
9 sets	Fruit Fly Family Data cards (4 cards/set)
9 sets	Flamingo Family Data cards (4 cards/set)
9 sets	Sparrow Family Data cards (3 cards/set)
9 sets	Wolf Family Data cards (2 cards/set)
9 sets	Animal cards (10 cards/set)
1 set	Bear cards (20 cards/set)
18 sets	Bird cards (8 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (14 cards/set)
1 set	Key Concepts (10 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Variation in Wolves Investigation Notebook (104 pages/book)
18	How the Sparrow Learned Its Song (24 pages/book)
18	Blue Whales and Buttercups (28 pages/book)
18	Scorpion Scientist (28 pages/book)
18	Handbook of Traits (52 pages/book)
18	The Code (24 pages/book)

### **Environments and Survival** | Grade 3



Materials in this unit are packaged in 3 boxes.

#### Hands-on materials

Quantity	Description
1	tape, packing, clear, roll
800	straws, plastic, unwrapped
36	baggies, plastic with zip
36	cardstock, black, sheets
36	cardstock, white, sheets
36	cylinders, graduated
36	cups, plastic, 9 oz
36	masking tape, rolls
1224	wooden craft sticks
18	model pieces, blue
5	clay, blocks, 1 lb
18	probability cubes
36	droppers, plastic

18	model pieces, red
3	string, rolls
540	tokens, black
360	tokens, white
576	pipe cleaners
432	sticks, skill



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Quantity	Description
9 sets	Needs for Survival Environment cards (4 cards/set)
9 sets	Needs for Survival Organism cards (4 cards/set)
18 sets	Grove Snail Data cards: set 1 (4 cards/set)
18 sets	Grove Snail Data cards: set 2 (6 cards/set)
18 sets	Grove Snail Data cards: set (3 cards/set)
2 sets	Neck Test posters (6 sheets/set)
18 sets	Grove Snail cards (9 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (19 cards/set)
1 set	Key Concepts (9 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Snails, Robots, and Biomimicry Investigation Notebook (88 pages/book)
18	Mystery Mouths (28 pages/book)
18	Earthworms Underground (28 pages/book)
18	Biomimicry Handbook (44 pages/book)
18	Environment News (24 pages/book)
18	Cockroach Robots (24 pages/book)

<sup>\*</sup>Who Thinks About Structure?, pictured above, not included in this kit.

### Weather and Climate | Grade 3



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

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Quantit	y Description	
1	thermometer, indoor/outdoor, jumbo, wall mount	
9	containers, plastic, clear, rectangular	
150	sticky notes, yellow, 3" x 3"	
90	cubes, plastic, interlocking	
36	sticky notes, green, 3" x 3"	
36	index cards, blank, 4" x 6"	
500	sticky notes, pink, 3" x 3"	
288	straws, plastic, unwrapped	
50	baggies, plastic with zip	
720	tokens, plastic, yellow	
9	cups, plastic, 1/2 oz	
9	cups, plastic, 16 oz	
320	wooden craft sticks	
72	cups, plastic, 9 oz	
27	thermometers, small	
1	rain gauge	
2	screws	



Quantity	Description
18 sets	Evidence cards: Chapter 4 (7 cards/set)
1 set	Temperature chart cards (4 cards/set)
1 set	Orangutan Data cards (36 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (17 cards/set)
1 set	Key Concepts (9 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Establishing an Orangutan Reserve Investigation Notebook (84 pages/book)
18	What's Going On with the Weather? (24 pages/book)
18	Seeing the World Through Numbers (28 pages/book)
18	Dangerous Weather Ahead (28 pages/book)
18	World Weather Handbook (52 pages/book)
18	Sky Notebook (28 pages/book)

# **Energy Conversions** | Grade 4



Materials in this unit are packaged in  ${\color{red}1}$  box.

#### Hands-on materials

Hands-on materials		
Description		
light bulb, incandescent, 60 watt		
fan blades, plastic, small		
baggies, plastic with zip		
wires, with clip leads		
plates, paper, small		
wooden craft sticks		
wire, two-conductor		
cups, plastic, 2 oz		
cherry pitter		
LEDs, bicolor		
solar panels		
wire cutter		
clamp lamp		
buzzers		
motors		



Quantity	Description
1 set	Changes in Ergstown card (400 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (18 cards/set)
1 set	Key Concepts (9 cards/set)
1 set	Unit Question

#### Student materials

Quantity	Description
1	Blackout in Ergstown Investigation Notebook (100 pages/book)
18	Systems (28 pages/book)
18	Energy Past and Present (24 pages/book)
18	Sunlight and Showers (24 pages/book)
18	It's All Energy (52 pages/book)
18	Blackout! (24 pages/book)

<sup>\*</sup>Who Thinks About Systems, pictured above, not included in this kit.

# Vision and Light | Grade 4



Materials in this unit are packaged in 3 boxes.

#### Hands-on materials

Quantity	Description		
72	bags, plastic with zip, quart-size	9	bags, small muslin
2	lids, plastic for 16 oz container	36	balls, small pink
180	hook-and-loop strips, 3/4" wide	9	probability cubes
25	bags, plastic with zip, large	720	pom-poms, yellow
2	containers, plastic, 16 oz.	36	cardboard boxes
720	hook-and-loop dots, beige	2	cinnamon sticks
1	garlic powder, container	36	canisters, film
9	faux fur, 3"x3" pieces	72	pipe cleaners
65	cups, plastic, 9 oz	2	yarn, skeins
9	binder clips, large		
9	masking tape, rolls		



Quantity	Description
18 sets	Explanation cards: set 1 (3 cards/set)
18 sets	Explanation cards: set 2 (5 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (5 cards/set)
1 set	Vocabulary cards (19 cards/set)
1 set	Key Concepts (10 cards/set)
1 set	Unit Question

#### Student materials

Quantity	Description
1	Investigating Animal Eyes Investigation Notebook (108 pages/book)
18	Seeing Like a Shrimp and Smelling Like a Snake (28 pages/book)
18	Investigating Animal Senses (28 pages/book)
18	Handbook of Animal Eyes (52 pages/book)
18	I See What You Mean (28 pages/book)
18	Crow Scientist (20 pages/book)

### Earth's Features | Grade 4



Materials in this unit are packaged in 3 boxes.

#### Hands-on materials

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Quantity	Description	
2	plaster of Paris, powdered dry mix, 1.5 lb canisters	
1	Stream Table Erosion kit	
1	clay, non-drying, 16oz	
24	cups, plastic, 16 oz	
54	cups, plastic, 3 oz	
18	conglomerate rocks	
2	tray, stream table	
6	sand, 2.5 kg bags	
9	sandstone rocks	
18	plastic spoons	
12.5	gravel, cups	
4	buckets	
2	tubes	



Quantity	Description
9 sets	Evidence cards set 1 (3 cards/set)
9 sets	Evidence cards set 2 (4 cards/set)
9 sets	Evidence cards set 3 (5 cards/set)
9 sets	Fossil cards (2 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (16 cards/set)
1 set	Key Concepts (11 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Mystery in Desert Rocks Canyon Investigation Notebook (92 pages/book)
18	Through the Eyes of a Geologist (28 pages/book)
18	Arguing to Solve a Mystery (24 pages/book)
18	Fossil Hunter's Handbook (56 pages/book)
18	Clues from the Past (20 pages/book)
18	Rocky Wonders (28 pages/book)

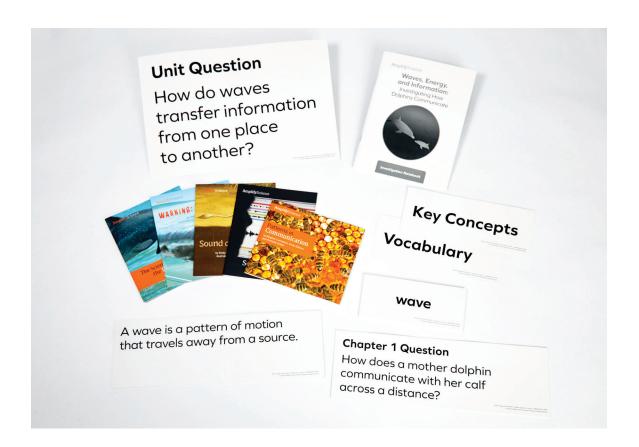
### Waves, Energy, and Information | Grade 4



Materials in this unit are packaged in 1 box.

#### Hands-on materials

Quantity	Description
80	straws, plastic, wrapped
1	rope, 72 feet
9	Slinkys



Quantity	Description
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (17 cards/set)
1	Unit Question card
1 set	Key Concepts

#### Student materials

Quantity	Description
1	Investigating How Dolphins Communicate Investigation Notebook (108 pages/book)
18	The Scientist Who Cracked the Dolphin Code (28 pages/book)
18	Patterns in Communication (48 pages/book)
18	Sound on the Move (28 pages/book)
18	Warning: Tsunami! (24 pages/book)
18	Seeing Sound (28 pages/book)

### Patterns of Earth and Sky | Grade 5



Materials in this unit are packaged in  $\frac{1}{2}$  box.

#### Hands-on materials

Quantity	Description
24	paper, white, sheets (11" x 17")
1	ball, 15 cm diameter
18	dots, sticky, yellow
9	balls, table tennis
18	dots, sticky, green
9	globes, inflatable
18	dots, sticky, blue
18	dots, sticky, red
1	map, world



Quantity	Description
9 sets	Word Relationship cards: set 1 (7 cards/set)
9 sets	Word Relationship cards: set 2 (7 cards/set)
18 sets	Explanation cards set (2 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (4 cards/set)
1 set	Vocabulary cards (16 cards/set)
1 set	Key Concepts (10 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Analyzing Stars on Ancient Artifacts Investigation Notebook (88 pages/book)
18	Handbook of Stars and Constellations (52 pages/book)
18	How Big Is Big? How Far Is Far? (28 pages/book)
18	Dog Days of Summer (20 pages/book)
18	Which Way Is Up? (28 pages/book)
18	Star Scientist (20 pages/book)

# **Modeling matter** | Grade 5



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

Quantity	Description		
1	acetone (nail polish remover), bottle	48	pepper, black, scoops
29	vials, small plastic jars with lid	8	oil, vegetable, cups
1	lid, plastic for 32 oz container	15	vinegar, white, cups
22	labels, preprinted: citric acid	96	cups, plastic, 3 oz
9	measuring spoons, half-teaspoon	98	wooden craft sticks
6	labels, preprinted: cornstarch	50	citric acid, scoops
40	paper, chromatography, strips	8	cups, plastic, 2 oz
6	labels, preprinted: lecithin	216	cups, paper, 3 oz
162	cups, plastic, clear, 9 oz.	2	pasta, penne, cups
2	pasta, elbow macaroni, cups	1	food coloring set
22	labels, preprinted: pepper	1	foam peanuts, cup
1	container, plastic, 32 oz.	2	pasta, orzo, cups
22	labels, preprinted: cumin	2	cornstarch, cups
6	labels, preprinted: flour	30	spoons, plastic
22	labels, preprinted: sugar	21	droppers, glass
60	lecithin, powder, scoops	12	balls, foam
1	marker, permanent, black	1	felt, piece
20	hook-and-loop fasteners	1	funnel
48	cumin, powder, scoops		

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Quantity	Description
9 sets	Word Relationships cards: set 1 (8 cards/set)
9 sets	Word Relationships cards: set 2 (8 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (3 cards/set)
1 set	Vocabulary cards (14 cards/set)
1 set	Key Concepts (11 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	The Chemistry of Food Investigation Notebook (96 pages/book)
18	Break It Down: How Scientists Separate Mixtures (28 pages/book)
18	Food Scientist's Handbook (52 pages/book)
18	Made of matter (28 pages/book)
18	Science You Can't See (28 pages/book) Solving
18	Dissolving (24 pages/book)

<sup>\*</sup>Who Thinks About Scale?, pictured above, not included in this kit.

# **The Earth System** | Grade 5



Materials in this unit are packaged in 2 boxes.

#### Hands-on materials

Quantity	Description		
20	lids, plastic for 16oz container	198	baking soda, bottles
1	phenol red concentrate, bottle	4	Styrofoam cups, 8 oz
18	labels: "phenol red + water"	36	plastic cups, 1/2 oz
18	graduated cylinders, 25 ml	92	cups, plastic, 9 oz
18	labels: "calcium chloride"	2	plastic wrap, rolls
218	baggies, plastic with zip	1	food coloring set
2	calcium chloride, bottles	1	inflatable globe
20	plastic containers, 16 oz	18	measuring spoons
72	tissue paper, 4"x4" squares	18	squeeze bottles
18	labels: "baking soda"	9	labels: "water"
30	lids, plastic for cup	20	wooden sticks
20	cups, plastic, 16 oz	18	droppers
2	aluminum foil, rolls		

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Quantity	Description
9 sets	Word Relationships cards: set 1 (4 cards/set)
9 sets	Word Relationships cards: set 2 (8 cards/set)
9 sets	Word Relationships cards: set 3 (6 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (5 cards/set)
1 set	Vocabulary cards (21 cards/set)
1 set	Key Concepts (14 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	Investigating Water Shortages Investigation Notebook (128 pages/book)
18	How the Earth System Explains Dinosaur Extinction (24 pages/book)
18	Water Shortages, Water Solutions (24 pages/book)
18	Chemical Reactions Everywhere (24 pages/book)
18	Drinking Cleopatra's Tears (28 pages/book)
18	Engineering Clean Water (20 pages/book)
18	Water Encyclopedia (52 pages/book)

### **Ecosystem Restoration** | Grade 5



Materials in this unit are packaged in 4 boxes.

#### Hands-on materials

Quantity	Description
	· · · · · · · · · · · · · · · · · · ·
10	containers, plastic, large, with lids
18	cubes, plastic, interlocking, green
360	cubes, plastic, interlocking, white
360	cubes, plastic, interlocking, blue
27	cubes, plastic, interlocking, red
2	soil, nutrient rich, bags
2	soil, nutrient poor, bags
50	baggies, plastic with zip
360	tokens, plastic, yellow
16	pipe cleaners, green
16	pipe cleaners, brown
18	wooden craft sticks
125	cups, plastic, 9 oz
1	seeds, alfalfa, cup
1.5	seeds, grass, cup
18	spoons, plastic
2	bottles, spray
1	yarn, ball
6	balloons



Quantity	Description
9 sets	Leaves and Roots game cards (28 cards/set)
1 set	Organism Name cards: set 1 (36 cards/set)
1 set	Organism Name cards: set 2 (36 cards/set)
9 sets	Evidence cards: Decomposers (6 cards/set)
18 sets	Leaves and Roots game board (1 card/set)
9 sets	Evidence cards: Animals (5 cards/set)
9 sets	Evidence cards: Plants (5 cards/set)
1 set	section headers: Key Concepts, Vocabulary (2 cards/set)
1 set	Chapter Questions (3 cards/set)
1 set	Vocabulary cards (19 cards/set)
1 set	Key Concepts (13 cards/set)
1	Unit Question card

#### Student materials

Quantity	Description
1	matter and Energy in a Rain Forest Investigation Notebook (92 pages/book)
18	Restoration Case Studies (56 pages/book)
18	Why Do Scientists Argue? (24 pages/book)
18	matter Makes It All Up (24 pages/book)
18	Energy Makes It All Go (28 pages/book)
18	Walk in the Woods (24 pages/book)