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K–8 Integrated Course Model

# Materials Kit List



THE LAWRENCE  
HALL OF SCIENCE  
UNIVERSITY OF CALIFORNIA, BERKELEY



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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	dish tubs

# Needs of Plants and Animals | Kindergarten



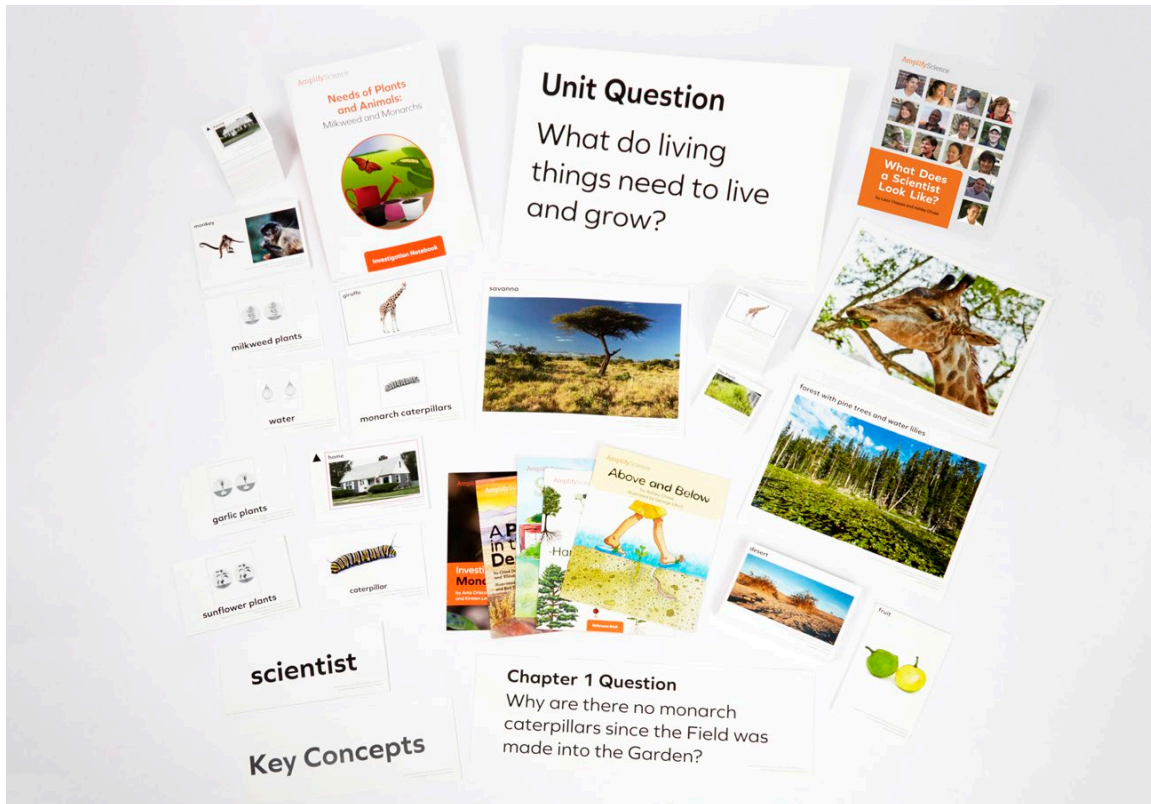
Materials in this unit are packaged in 3 boxes.

## 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	<i>What Does a Scientist Look Like?</i> , Big Book (40 pages/book)
1	<i>Investigating Monarchs</i> , Big Book (24 pages/book)
1	<i>A Plant in the Desert</i> , Big Book (20 pages/book)
1	<i>Handbook of Plants</i> , Big Book (36 pages/book)
1	<i>Above and Below</i> , Big Book (20 pages/book)
1	<i>Science Walk</i> , Big Book (20 pages/book)
2	Habitat Pictures: Forest and Field of Weeds
3 sets	Animals and their Foods cards (9 cards/set)
18 sets	Living Things Student cards (11 cards/set)
18 sets	Human Needs 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



#### Student materials

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

Quantity	Description
1	Milkweed and Monarchs Investigation Notebook (24 pages/book)
18	<i>What Does a Scientist Look Like?</i> (40 pages/book)
18	<i>Investigating Monarchs</i> (24 pages/book)
18	<i>A Plant in the Desert</i> (20 pages/book)
18	<i>Handbook of Plants</i> (36 pages/book)
18	<i>Above and Below</i> (20 pages/book)
18	<i>Science Walk</i> (20 pages/book)

# Pushes and Pulls | Kindergarten



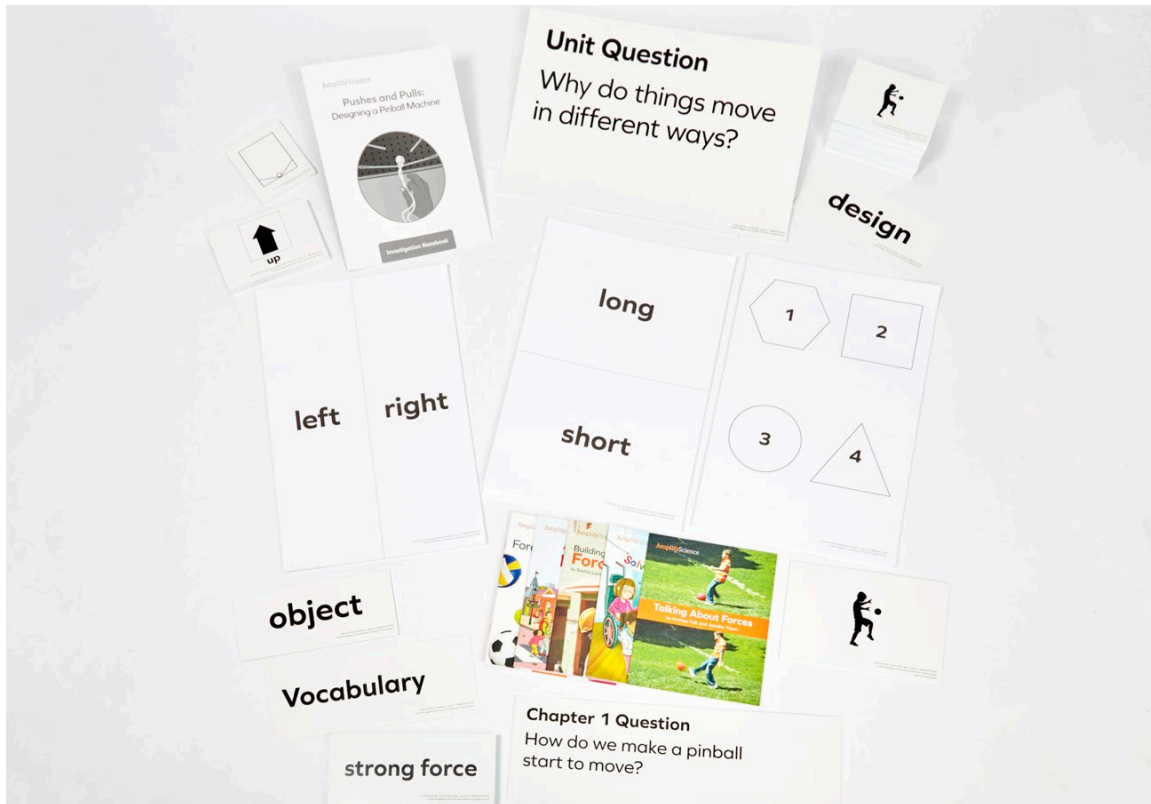
Materials in this unit are packaged in 3 boxes.

## 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	<i>Room 4 Solves a Problem</i> , Big Book (28 pages/book)
1	<i>A Busy Day in Pushville</i> , Big Book (20 pages/book)
1	<i>Talking About Forces</i> , Big Book (20 pages/book)
1	<i>Building with Forces</i> , Big Book (20 pages/book)
1	<i>Forces in Ball Games</i> , 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



#### Student materials

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

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



# Sunlight and Weather | Kindergarten



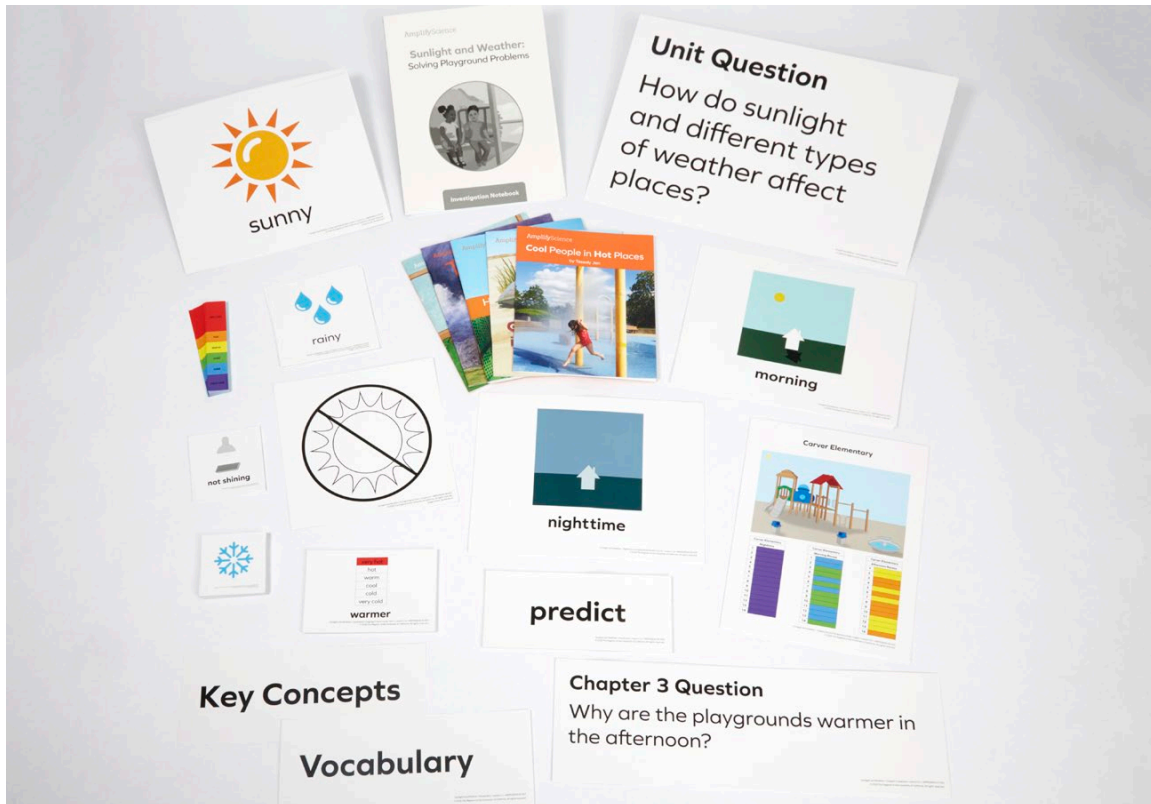
Materials in this unit are packaged in 2 boxes.

## 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	<i>Tornado! Predicting Severe Weather</i> , Big Book (24 pages/book)
1	<i>What Is the Weather Like Today?</i> , Big Book (28 pages/book)
1	<i>Getting Warm in the Sunlight</i> , Big Book (20 pages/book)
1	<i>Cool People in Hot Places</i> , Big Book (24 pages/book)
1	<i>Handbook of Models</i> , 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



#### Student materials

		Quantity	Description
2	Think and Walk Temperature cards	1	Solving Playground Problems Investigation Notebook (28 pages/book)
3	Warming Over Time Graph Labels	18	<i>Tornado! Predicting Severe Weather</i> (24 pages/book)
6	Colored Surfaces Graph Labels	18	<i>What Is the Weather Like Today?</i> (28 pages/book)
5	Think and Walk Weather cards	18	<i>Getting Warm in the Sunlight</i> (20 pages/book)
18	thermometer color strips	18	<i>Cool People in Hot Places</i> (24 pages/book)
5	Types of Weather Icons	18	<i>Handbook of Models</i> (40 pages/book)
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		

# Animal and Plant Defenses | Grade 1



Materials in this unit are packaged in 2 boxes.

Hands-on materials		Classroom materials	
Quantity	Description	Quantity	Description
72	game tokens, plastic, 1¼" diameter disc	1	<i>Spikes, Spines, and Shells: A Handbook of Defenses</i> , Big Book (52 pages/book)
40	tissue paper, sheets, various colors	1	<i>Parents and Offspring</i> , Big Book (28 pages/book)
37	cups, plastic, 16 oz	1	<i>Whose Lunch Is This?</i> , Big Book (24 pages/book)
36	rings, binder, metal	1	<i>Tortoise Parts</i> , Big Book (24 pages/book)
150	cups, plastic, 2 oz	1	<i>Frog Models</i> , Big Book (24 pages/book)
19	hair combs, plastic	1 set	Structure-Function Language Frames Cards: Set 1 (11 cards/set)
73	cups, paper, 7 oz.	1 set	Structure-Function Language Frames Cards: Set 2 (6 cards/set)
800	toothpicks, wooden	1 set	Explanation Language Frames Cards (4 cards/set)
144	pencil-top erasers	18 sets	Parent and Offspring Card Set (5 cards/set)
2	clay, 16 oz		





#### Student materials

9 set	Survival Game Need Cards (12 cards/set)
9 set	Survival Game Role Cards (4 cards/set)
1 set	Background Scene Cards (9 cards/set)
36 sets	Word Ring 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
1 set	Unit Question

Quantity	Description
1	Spikes, Shells, and Camouflage Investigation Notebook (24 pages/book)
18	<i>Spikes, Spines, and Shells: A Handbook of Defenses</i> (52 pages/book)
18	<i>Parents and Offspring</i> (28 pages/book)
18	<i>Whose Lunch Is This?</i> (24 pages/book)
18	<i>Tortoise Parts</i> (24 pages/book)
18	<i>Frog Models</i> (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
19	clips, binder, large	24	batteries, AA
36	rings, binder, metal	73	crayons, gray
20	rubber bands, medium	22	foam, sheets
19	cups, plastic, 9 oz	1	foil, roll
5	containers, plastic	1	string, 9 feet
8	cups, plastic, 2 oz		



# 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



#### Classroom materials

Quantity	Description
1	<i>Patterns of Earth and Space</i> (40 pages/book)
1	<i>A Walk Through the Seasons</i> (28 pages/book)
1	<i>Nighttime Investigation</i> (24 pages/book)
1	<i>Space Explorers</i> (40 pages/book)
1	<i>After Sunset</i> (24 pages/book)
1	<i>What Spins?</i> (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	<i>Patterns of Earth and Space</i> (40 pages/book)
18	<i>A Walk Through the Seasons</i> (28 pages/book)
18	<i>Nighttime Investigation</i> (24 pages/book)
18	<i>Space Explorers</i> (40 pages/book)
18	<i>After Sunset</i> (24 pages/book)
18	<i>What Spins?</i> (28 pages/book)



# Plant and Animal Relationships | Grade 2



Materials in this unit are packaged in 3 boxes.

## Hands-on materials

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		



### Classroom materials

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	<i>Handbook of Habitats</i> (52 pages/book)
18	<i>A Plant Is a System</i> (20 pages/book)
18	<i>Investigating Seeds</i> (28 pages/book)
18	<i>My Nature Notebook</i> (20 pages/book)
18	<i>Habitat Scientist</i> (24 pages/book)

# Properties of Materials | Grade 2

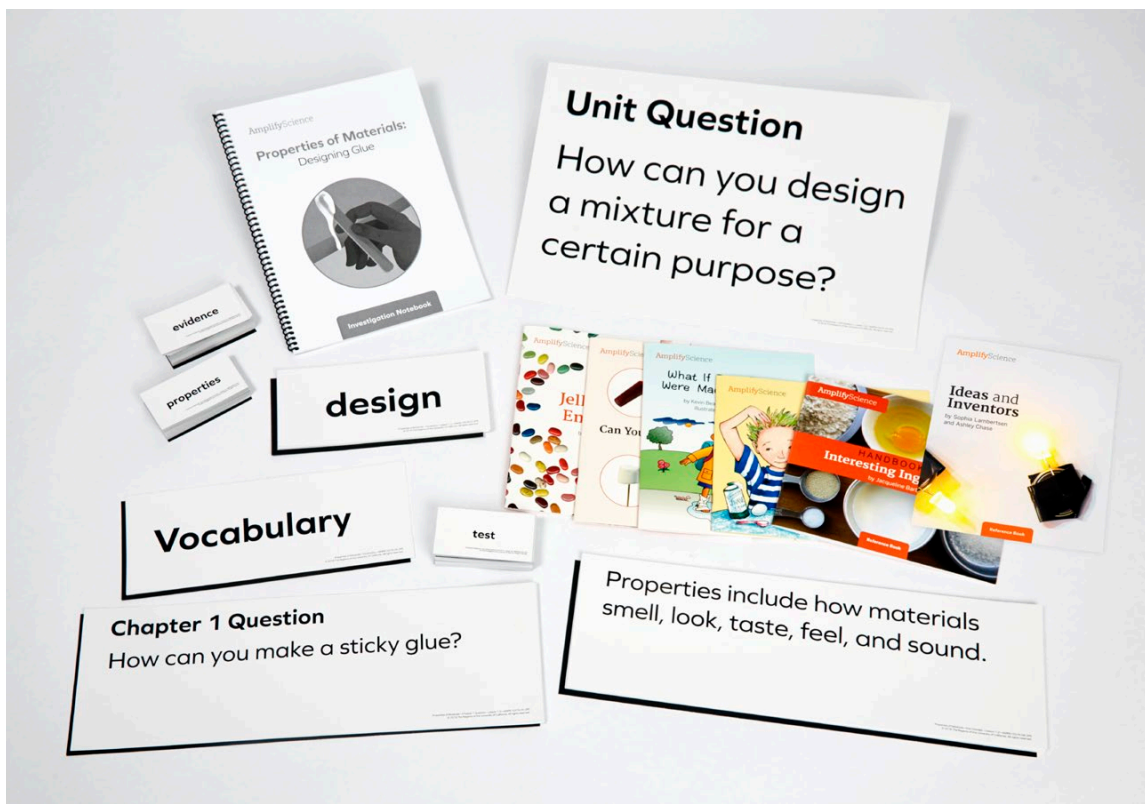


Materials in this unit are packaged in 3 boxes.

## 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		





#### Classroom materials

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	<i>What If Rain Boots Were Made of Paper?</i> (20 pages/book)
18	<i>Handbook of Interesting Ingredients</i> (40 pages/book)
18	<i>Can You Change It Back?</i> (28 pages/book)
18	<i>Ideas and Inventors</i> (44 pages/book)
18	<i>Jelly Bean Engineer</i> (40 pages/book)
18	<i>Jess Makes Hair Gel</i> (24 pages/book)

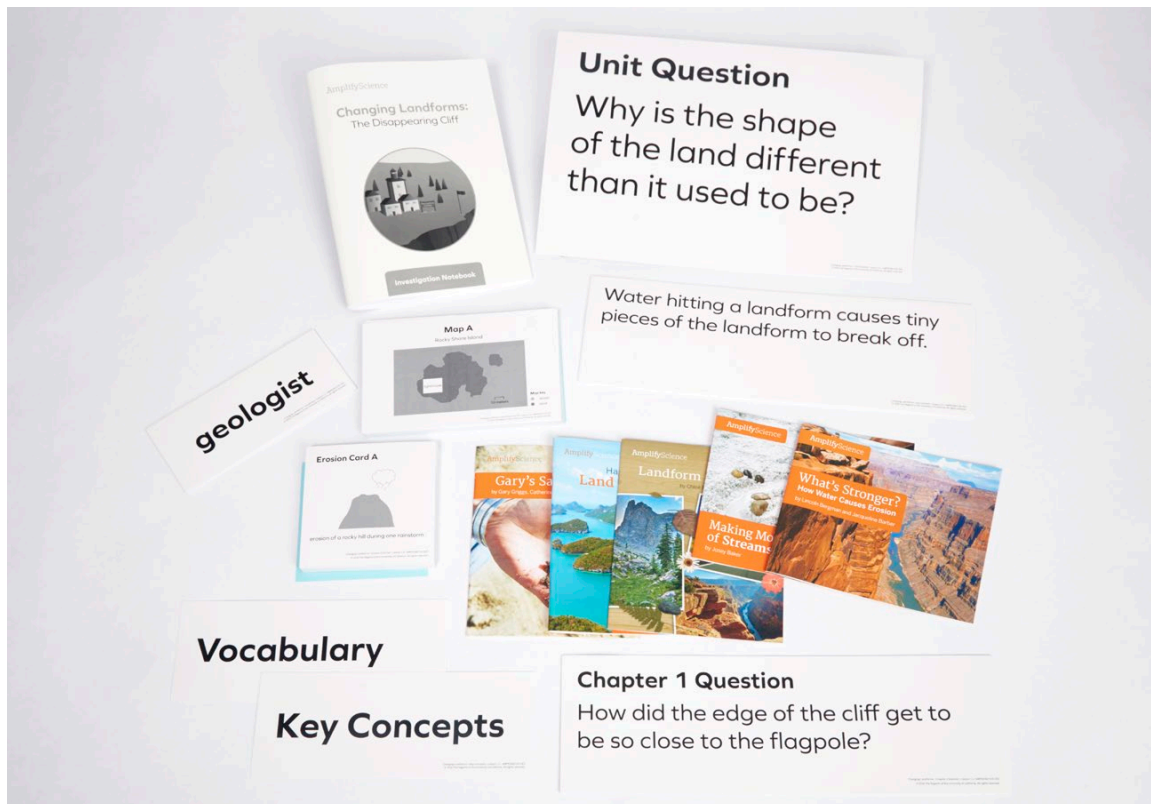
## Changing Landforms | Grade 2



Materials in this unit are packaged in 2 boxes.

### Hands-on materials

Quantity	Description
2	sand, rounded large (pebbles), multicolor, cups
18	containers, plastic, clear, with lids
3	sand, fine playground, tan, cups
1	lid, for clear plastic jar
72	baggies, plastic with zip
2	sand, jagged, black, cups
2	sand, kinetic, tan, boxes
2	sand, jagged, tan, cups
4	chalk, white, blocks
74	index cards, 4" x 6"
1	jar, clear plastic
500	pom-poms, black
9	bottles, spray
18	rocks, pumice
16	hard candies



#### Classroom materials

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	<i>What's Stronger? How Water Causes Erosion</i> (24 pages/book)
18	<i>Handbook of Land and Water</i> (52 pages/book)
18	<i>Making Models of Streams</i> (20 pages/book)
18	<i>Gary's Sand Journal</i> (28 pages/book)
18	<i>Landform Postcards</i> (28 pages/book)

# Balancing Forces | Grade 3



Materials in this unit are packaged in 1 box.

## Hands-on materials

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		



#### Classroom materials

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	<i>What My Sister Taught Me About Magnets</i> (28 pages/book)
18	<i>Explaining a Bridge</i> (20 pages/book)
18	<i>Handbook of Forces</i> (36 pages/book)
18	<i>Forces All Around</i> (24 pages/book)
18	<i>Hoverboard</i> (20 pages/book)



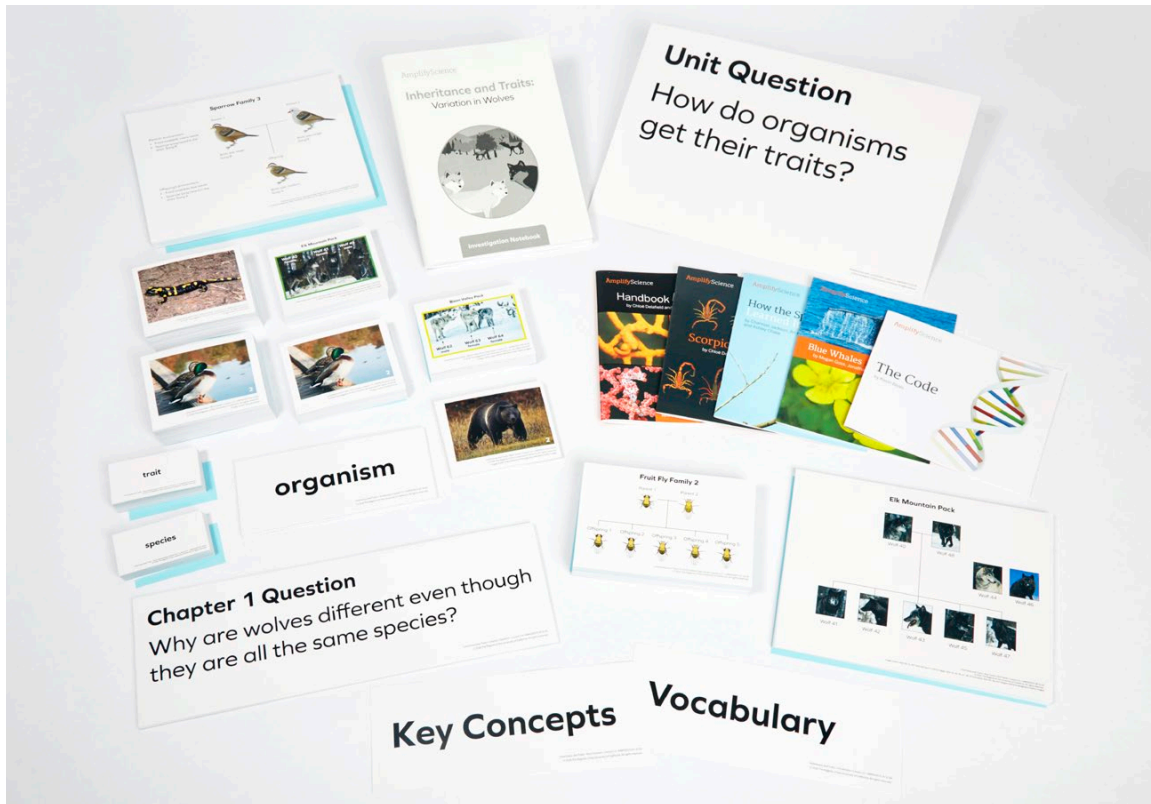
# Inheritance and Traits | Grade 3



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



#### Classroom materials

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	<i>How the Sparrow Learned Its Song</i> (24 pages/book)
18	<i>Blue Whales and Buttercups</i> (28 pages/book)
18	<i>Scorpion Scientist</i> (28 pages/book)
18	<i>Handbook of Traits</i> (52 pages/book)
18	<i>The Code</i> (24 pages/book)

# Environments and Survival | Grade 3

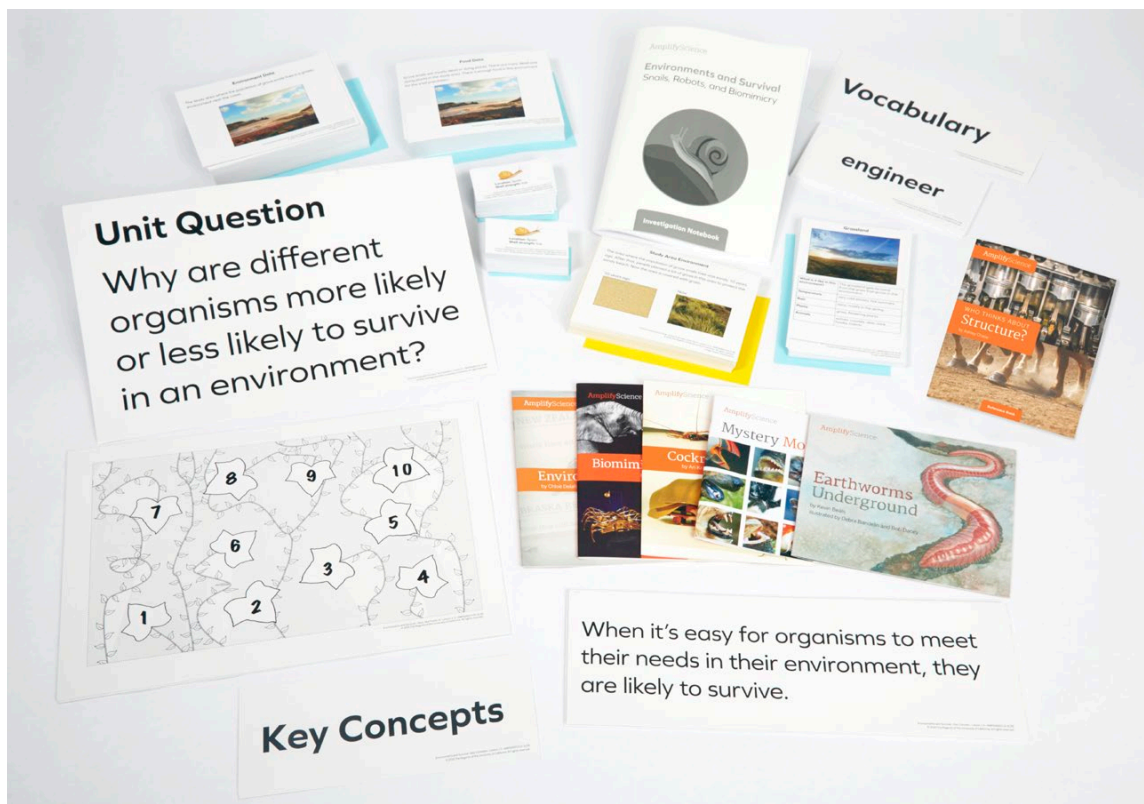


Materials in this unit are packaged in 3 boxes.

## Hands-on materials

Quantity	Description		
1	tape, packing, clear, roll	18	model pieces, red
800	straws, plastic, unwrapped	3	string, rolls
36	baggies, plastic with zip	540	tokens, black
36	cardstock, black, sheets	360	tokens, white
36	cardstock, white, sheets	576	pipe cleaners
36	cylinders, graduated	432	sticks, skill
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		





#### Classroom materials

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 (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	<i>Who Thinks About Structure?</i> (44 pages/book)
18	<i>Earthworms Underground</i> (28 pages/book)
18	<i>Biomimicry Handbook</i> (44 pages/book)
18	<i>Environment News</i> (24 pages/book)
18	<i>Cockroach Robots</i> (24 pages/book)
18	<i>Mystery Mouths</i> (28 pages/book)

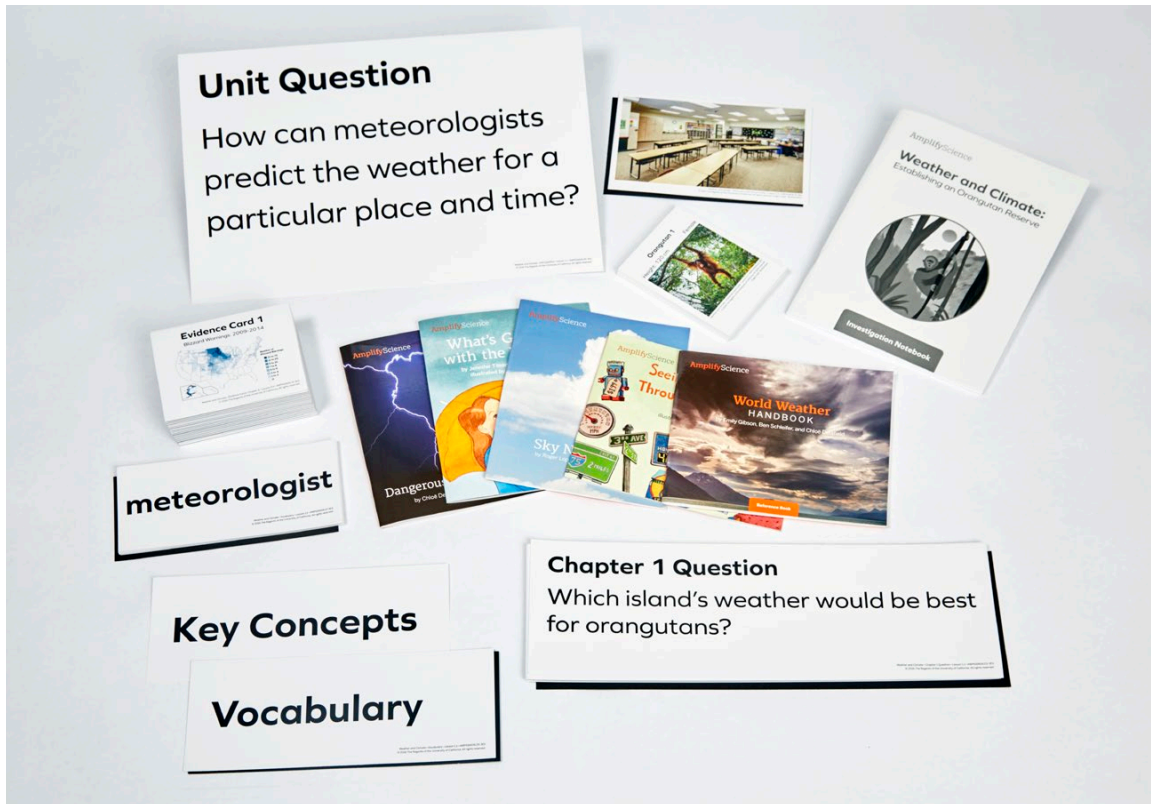
## Weather and Climate | Grade 3



Materials in this unit are packaged in 2 boxes.

## Hands-on materials

Quantity	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



#### Classroom materials

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	<i>What's Going On with the Weather?</i> (24 pages/book)
18	<i>Seeing the World Through Numbers</i> (28 pages/book)
18	<i>Dangerous Weather Ahead</i> (28 pages/book)
18	<i>World Weather Handbook</i> (52 pages/book)
18	<i>Sky Notebook</i> (28 pages/book)

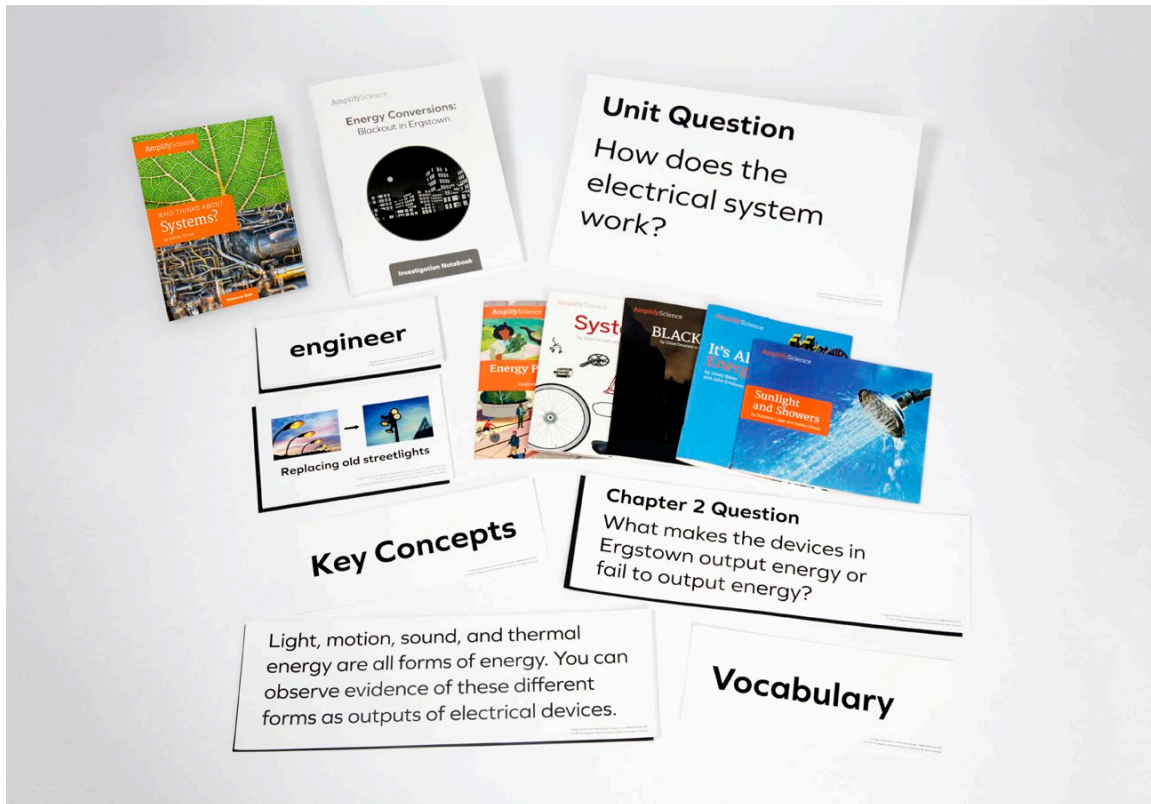
## Energy Conversions | Grade 4



Materials in this unit are packaged in 1 box.

## Hands-on materials

Quantity	Description
1	light bulb, incandescent, 60 watt
18	fan blades, plastic, small
15	baggies, plastic with zip
18	wires, with clip leads
125	plates, paper, small
400	wooden craft sticks
1	wire, two-conductor
100	cups, plastic, 2 oz
1	cherry pitter
9	LEDs, bicolor
9	solar panels
1	wire cutter
1	clamp lamp
9	buzzers
18	motors



#### Classroom materials

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	<i>Who Thinks About Systems</i> (44 pages/book)
18	<i>Energy Past and Present</i> (24 pages/book)
18	<i>Sunlight and Showers</i> (24 pages/book)
18	<i>It's All Energy</i> (52 pages/book)
18	<i>Blackout!</i> (24 pages/book)
18	<i>Systems</i> (28 pages/book)

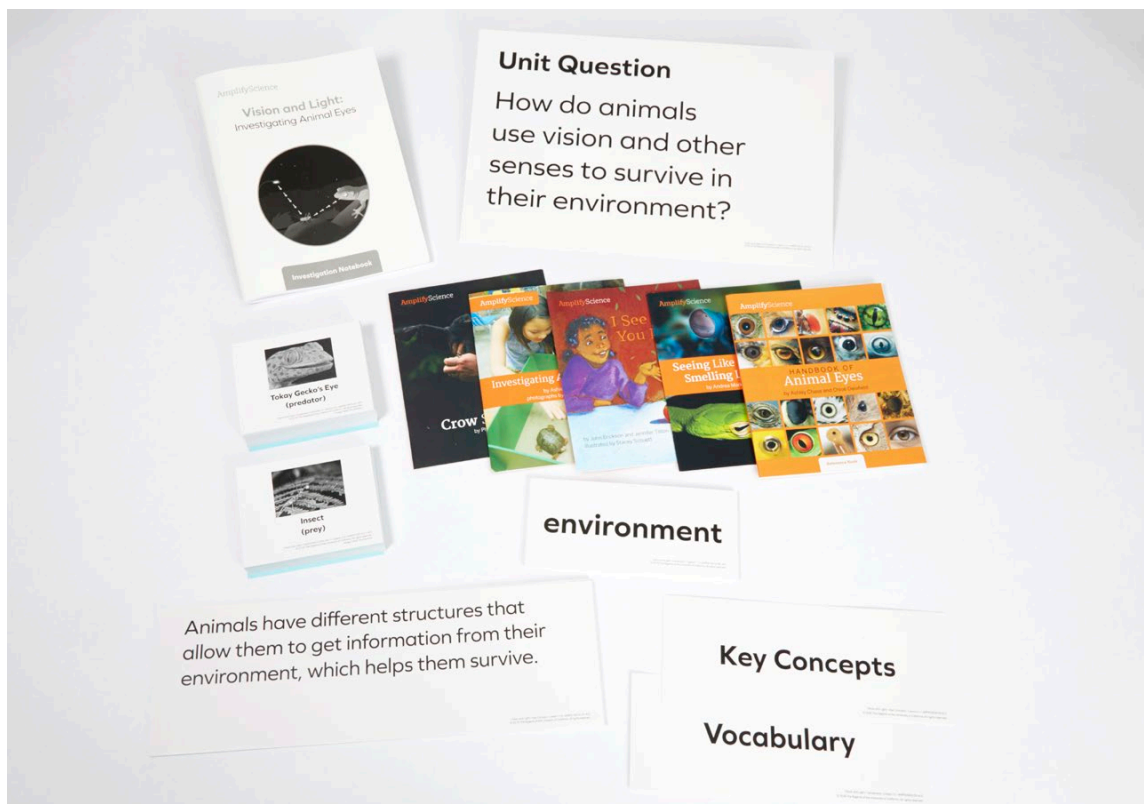




Materials in this unit are packaged in 3 boxes.

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		



#### Classroom materials

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	<i>Seeing Like a Shrimp and Smelling Like a Snake</i> (28 pages/book)
18	<i>Investigating Animal Senses</i> (28 pages/book)
18	<i>Handbook of Animal Eyes</i> (52 pages/book)
18	<i>I See What You Mean</i> (28 pages/book)
18	<i>Crow Scientist</i> (20 pages/book)



Materials in this unit are packaged in 3 boxes.

Hands-on materials

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





#### Classroom materials

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

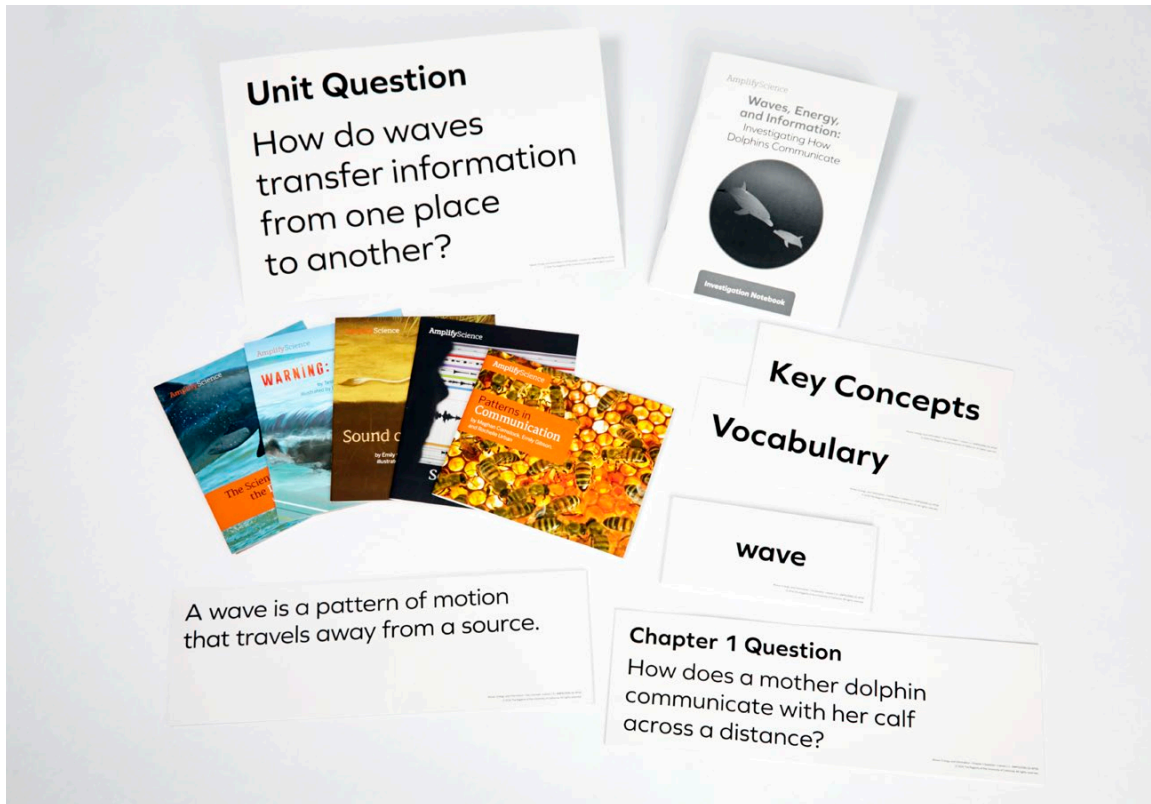
#### Student materials

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



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
80	straws, plastic, wrapped
1	rope, 72 feet
9	Slinkys



#### Classroom materials

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	<i>The Scientist Who Cracked the Dolphin Code</i> (28 pages/book)
18	<i>Patterns in Communication</i> (48 pages/book)
18	<i>Sound on the Move</i> (28 pages/book)
18	<i>Warning: Tsunami!</i> (24 pages/book)
18	<i>Seeing Sound</i> (28 pages/book)

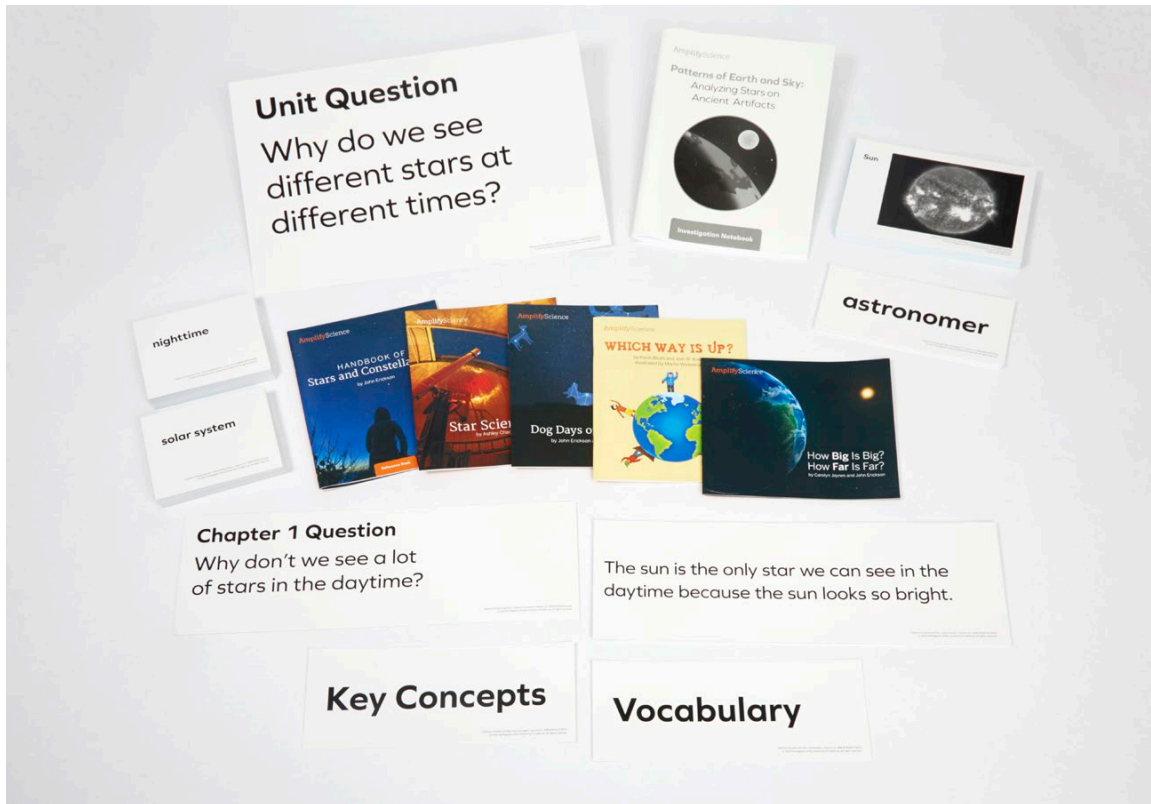
# Patterns of Earth and Sky | Grade 5



Materials in this unit are packaged in 1 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



#### Classroom materials

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	<i>Handbook of Stars and Constellations</i> (52 pages/book)
18	<i>How Big Is Big? How Far Is Far?</i> (28 pages/book)
18	<i>Dog Days of Summer</i> (20 pages/book)
18	<i>Which Way Is Up?</i> (28 pages/book)
18	<i>Star Scientist</i> (20 pages/book)



# Modeling Matter | Grade 5

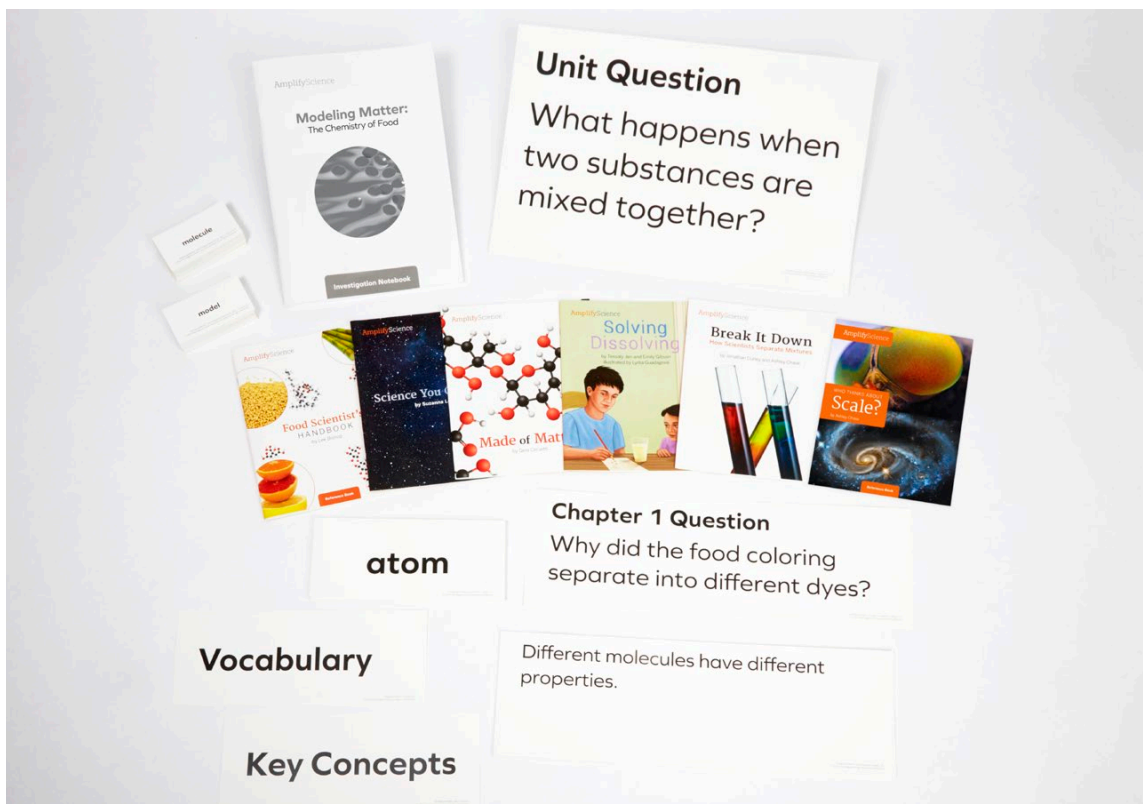


Materials in this unit are packaged in 2 boxes.

## 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		





#### Classroom materials

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	<i>Break It Down: How Scientists Separate Mixtures</i> (28 pages/book)
18	<i>Food Scientist's Handbook</i> (52 pages/book)
18	<i>Who Thinks About Scale?</i> (48 pages/book)
18	<i>Science You Can't See</i> (28 pages/book)
18	<i>Solving Dissolving</i> (24 pages/book)
18	<i>Made of Matter</i> (28 pages/book)

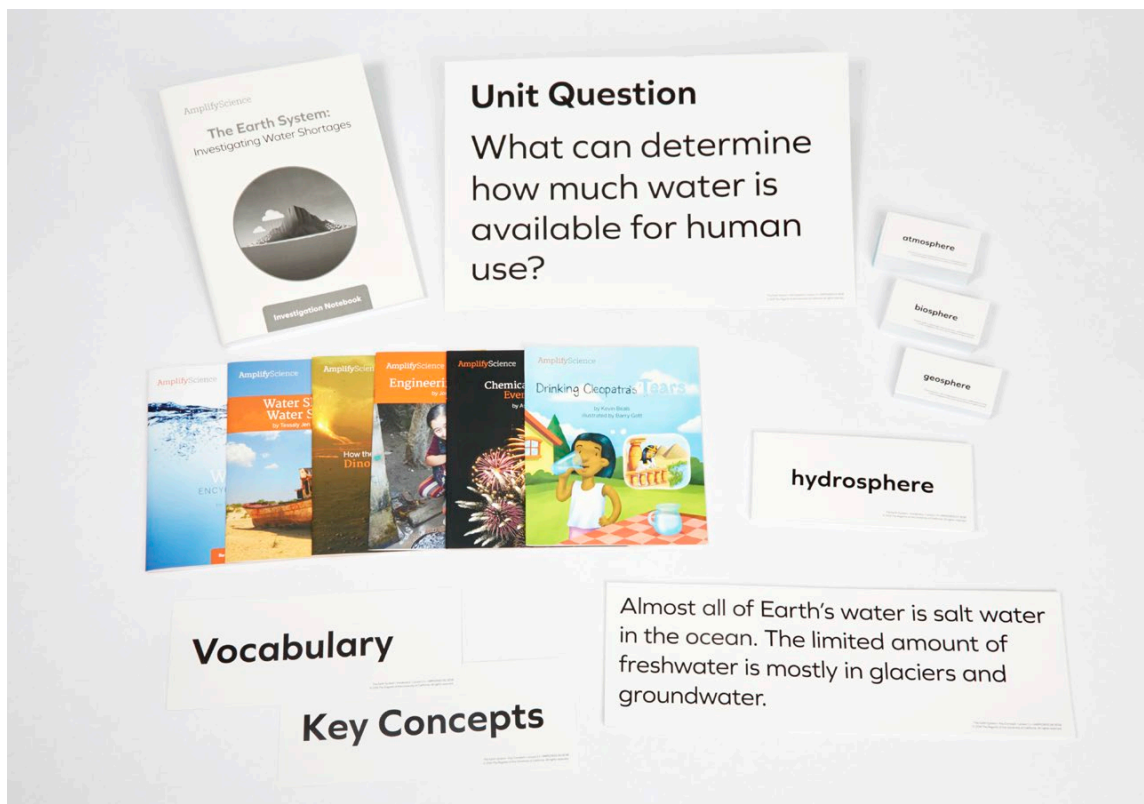
# The Earth System | Grade 5



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, 4x4 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		



#### Classroom materials

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	<i>How the Earth System Explains Dinosaur Extinction</i> (24 pages/book)
18	<i>Water Shortages, Water Solutions</i> (24 pages/book)
18	<i>Chemical Reactions Everywhere</i> (24 pages/book)
18	<i>Drinking Cleopatra's Tears</i> (28 pages/book)
18	<i>Engineering Clean Water</i> (20 pages/book)
18	<i>Water Encyclopedia</i> (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



#### Classroom materials

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)



## Metabolism | Grade 6

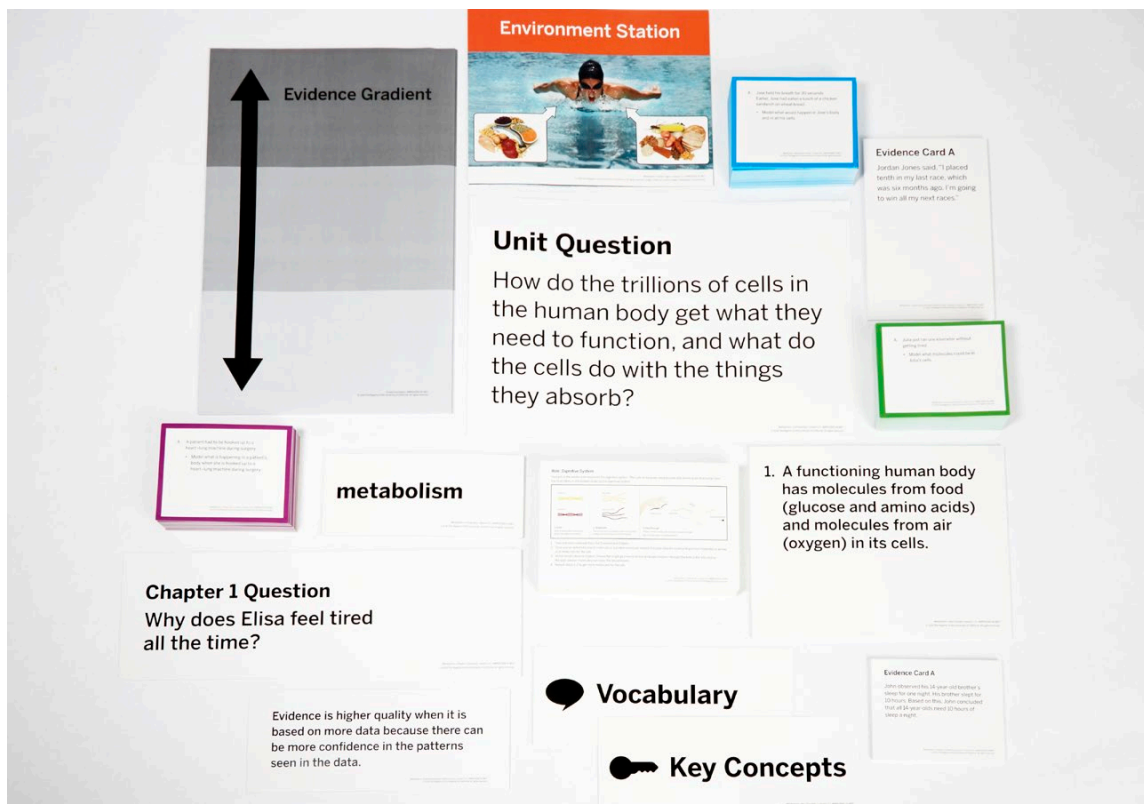


Materials in this unit are packaged in 1 box.

### Hands-on materials

Quantity	Description
10	bottles, 60 mL, filled with phenol red
1	calcium chloride, container
10	cylinders, graduated, 25 mL
50	baggies, plastic with zip
1	baking soda, container
150	pipe cleaners, purple
75	pipe cleaners, yellow
200	pipe cleaners, green
1	measuring spoon
1	stopwatch





### Classroom materials

Quantity	Description		
15	Science Seminar Evidence cards, large	20	Blue Group Key cards
20 sets	Purple Group cards (4 cards/set)	6	Heart Failure cards
20 sets	Green Group cards (4 cards/set)	6	station signs
20 sets	Blue Group cards (4 cards/set)	2	Key Concepts and Vocabulary headers
2	Evidence Comparison cards	4	Chapter Questions cards
10 sets	Role cards (6 cards/set)	1	Evidence Criterion card
20	Evidence Gradients cards	1	Unit Question card
5	Elisa's Evidence cards	11	Key Concepts cards
20	Purple Group Key cards	11	Vocabulary cards
20	Green Group Key cards		

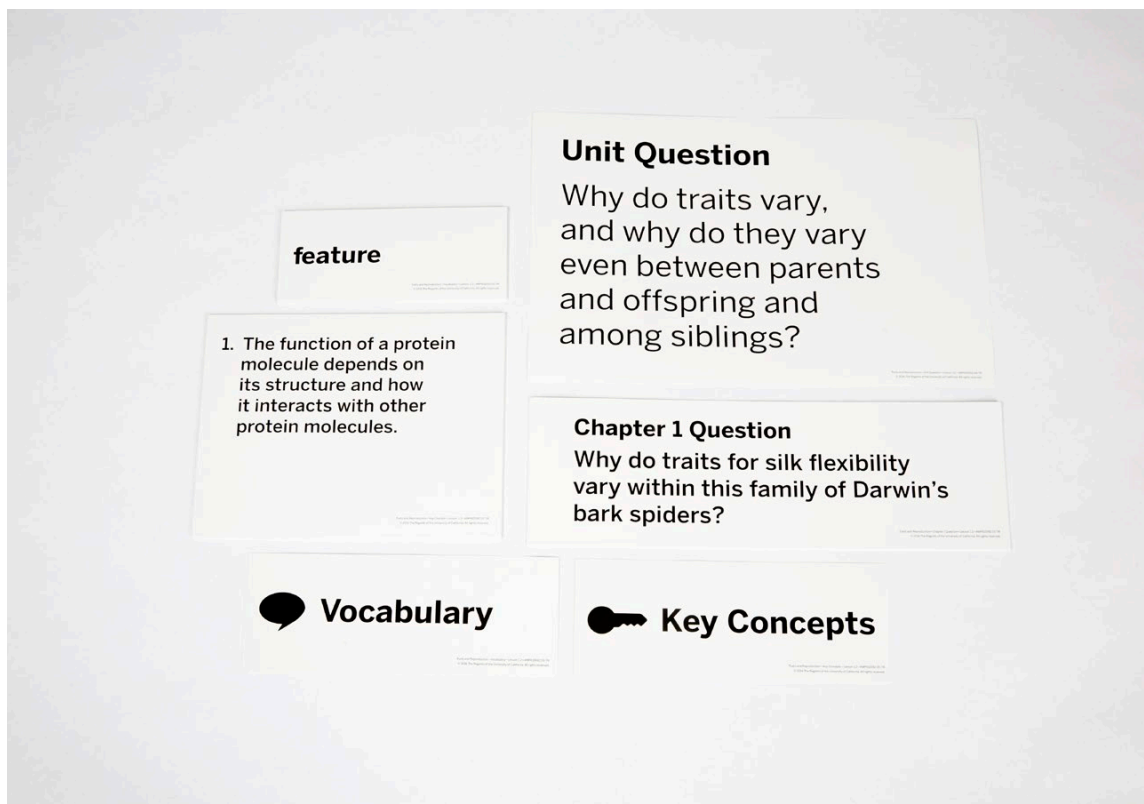
## Traits and Reproduction | Grade 6



Materials in this unit are packaged in 1 box.

### Hands-on materials

Quantity	Description
1	K'Nex, intermediate Math and Geometry kit
30	baggies, plastic with zip



### Classroom materials

Quantity	Description
2	Key Concepts and Vocabulary card headers
4	Chapter Questions cards
12	Key Concepts sheets
1	Unit Question card
13	Vocabulary cards

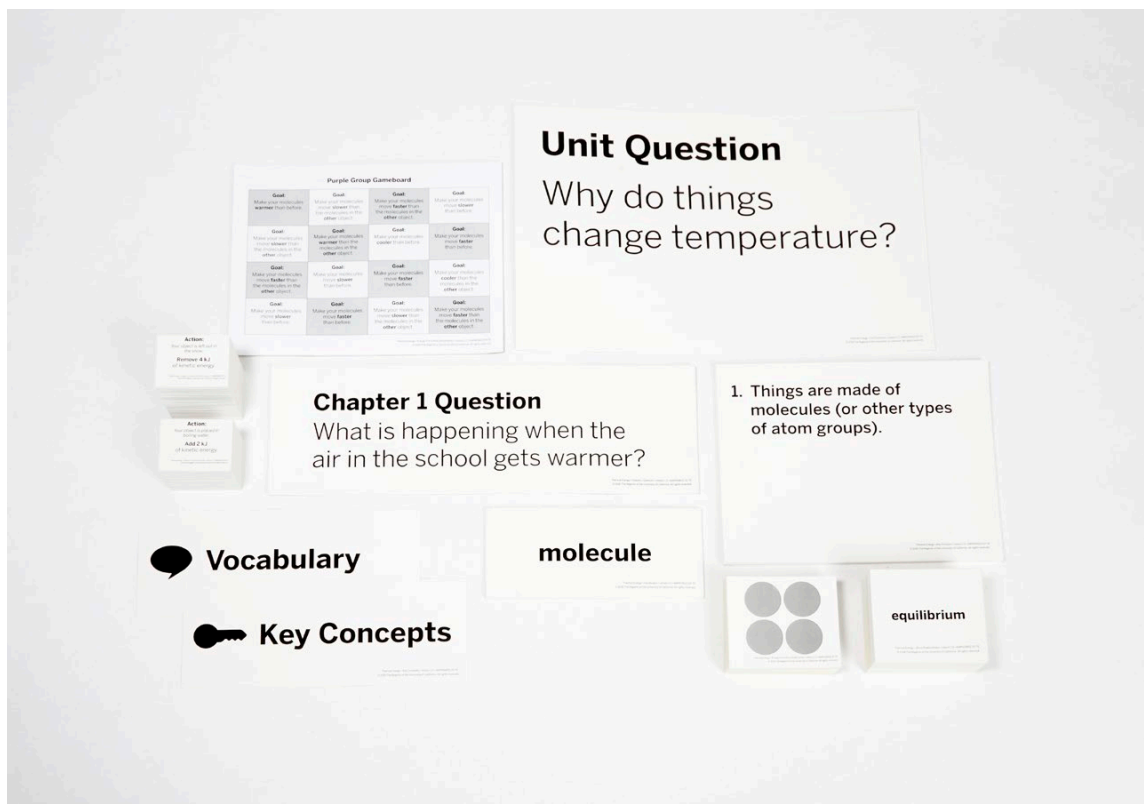
## Thermal Energy | Grade 6



Materials in this unit are packaged in 1 box.

### Hands-on materials

Quantity	Description
2	cylinders, graduated, 500 mL
2	deli containers, plastic
1 set	food coloring set
42	cups, plastic, 16 oz
2	pitchers, plastic
20	thermometers
1000	energy cubes



### Classroom materials

Quantity	Description
20 sets	Energy 3-in-a-Row Blue Action cards (16 cards/set)
20 sets	Energy 3-in-a-Row Action cards (16 cards/set)
20 sets	Word Relationships cards Set 1 (4 cards/set)
20 sets	Word Relationships cards Set 2 (6 cards/set)
20 sets	Energy 3-in-a-Row Object cards (3 cards/set)
20	Energy 3-in-a-Row Game boards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Unit Question card
14	Key Concepts cards
11	Vocabulary cards

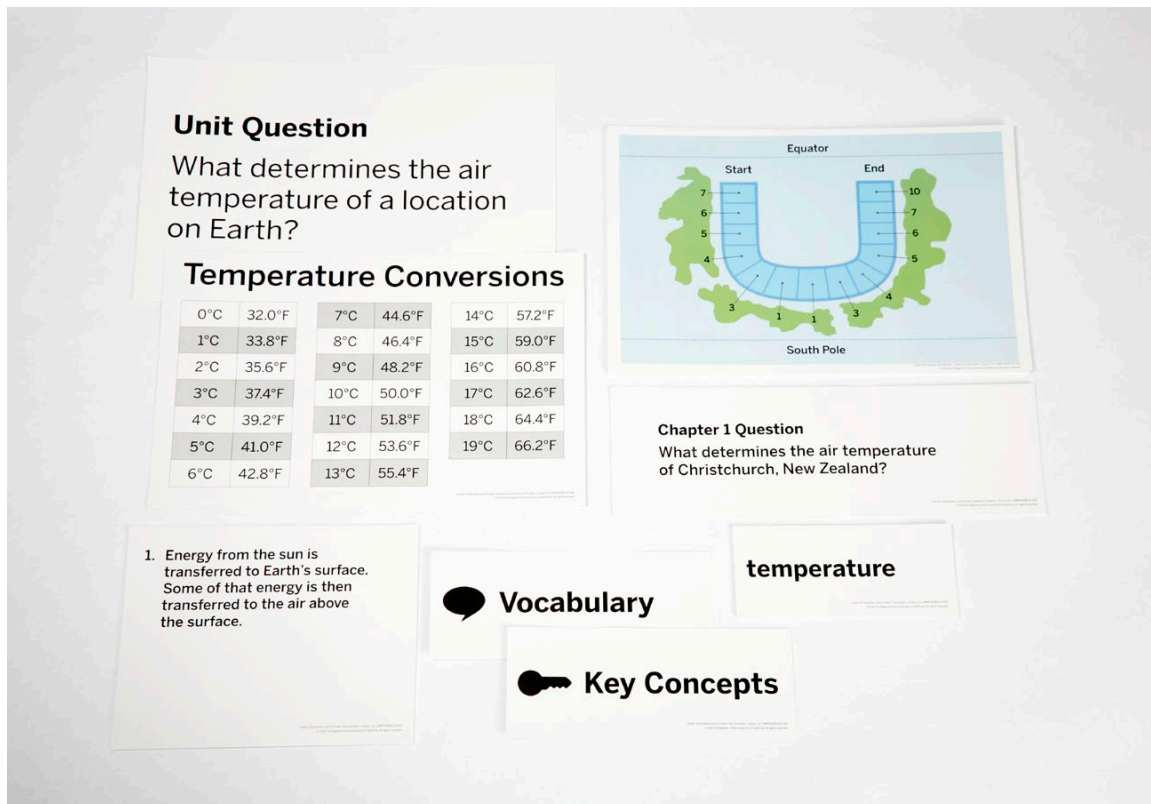


Materials in this unit are packaged in 2 boxes.

Hands-on materials

Quantity	Description
1	light bulb, incandescent, 150 watt
70	stickers, small, white, circular
14	baggies, plastic with zip
201	straws, flexible, wrapped
20	plastic lids, for 9 oz cup
1500	tokens, yellow, stacking
2	cups, plastic, 9 oz
20	cups, foam, 8 oz
18	probability dice
1	pepper, shaker
11	tanks, plastic
6	rocks, black
20	thermometers
1	ring stand
1	clamp lamp





### Classroom materials

Quantity	Description
1	Temperature Conversion Poster
14	Ocean Currents Game Boards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
8	Key Concepts cards
1	Unit Question card
9	Vocabulary cards

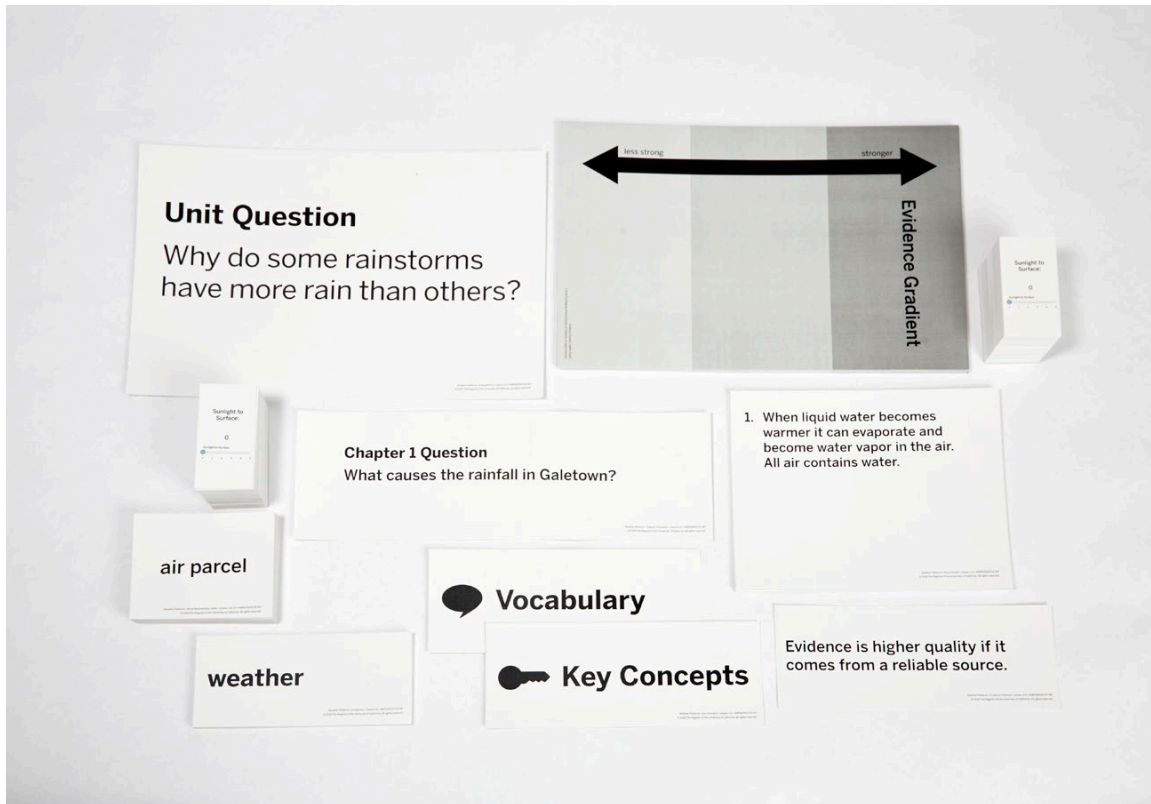
## Weather Patterns | Grade 6



Materials in this unit are packaged in 1 box.

### Hands-on materials

Quantity	Description
20	straws, plastic, unwrapped
100	baggies, plastic with zip
5	plastic dry cleaner bags
30	dropper tips
20	syringes



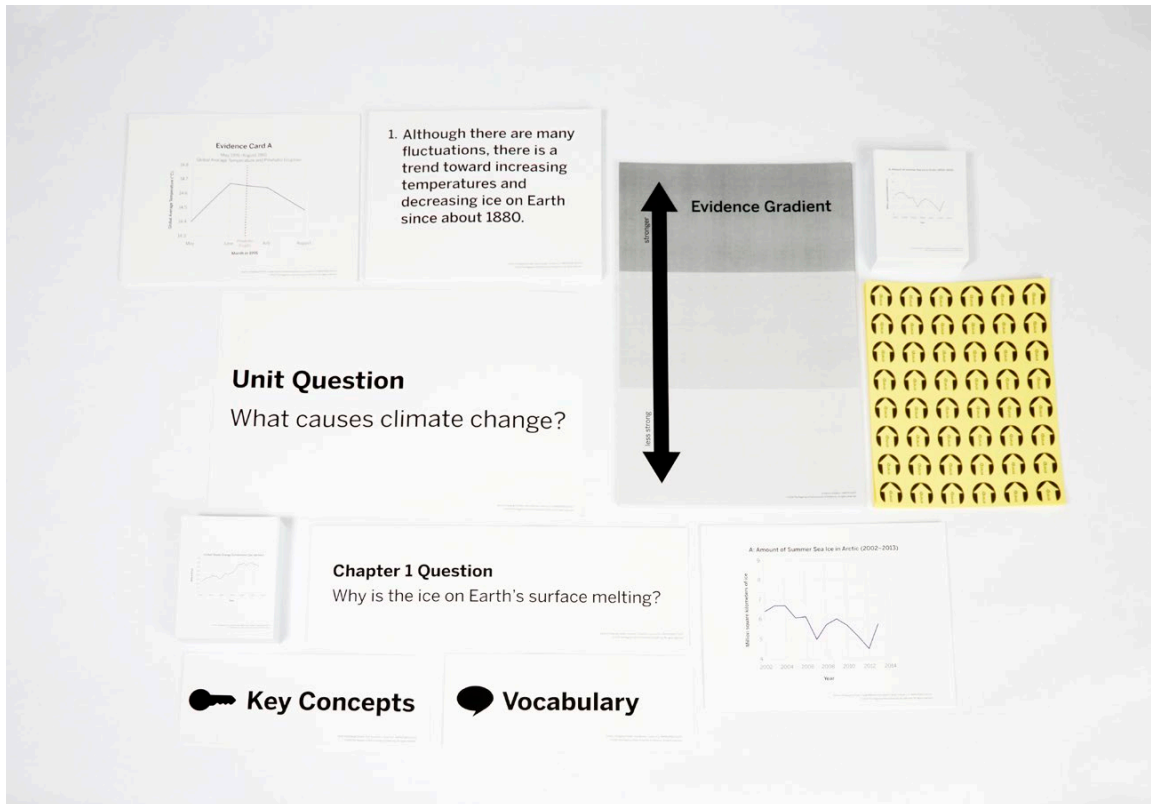
### Classroom materials

Quantity	Description
15 sets	Making It Rain with Jet Streams cards (60 cards/set)
15 sets	Reaching the Target cards (36 cards/set)
10 sets	Word Relationships cards (6 cards/set)
15 sets	Making it Rain cards (54 cards/set)
1	Temperature Conversion Chart
40	Evidence Gradient cards
2	Key Concepts and Vocabulary cards
4	Chapter Questions cards
1	Evidence Criterion card
11	Key Concepts cards
1	Unit Question card
15	Vocabulary cards



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
21	baggies, plastic with zip
420	energy token cards
640	paper clips



### Classroom materials

Quantity	Description
20 sets	Human Activities Evidence cards (4 cards/set)
20 sets	Melting Ice Evidence cards (3 cards/set)
3	Large Melting Ice Evidence cards
10	Large Volcano Evidence cards
20	Evidence Gradient cards
2	Key Concepts and Vocabulary card headers
1	Evidence Criterion card
4	Chapter Questions cards
1	Unit Question card
16	Key Concepts cards
16	Vocabulary cards

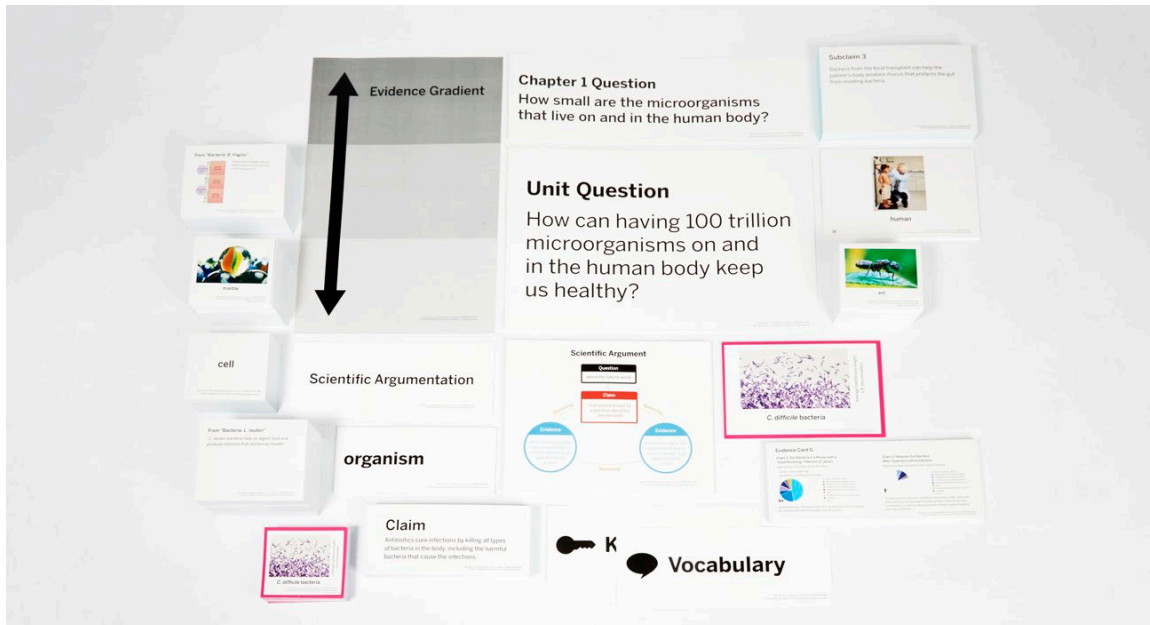


Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
10	felt, black, 12"x 20" pieces
2	cables with alligator clips
10	protectors, page, glossy
1	light bulb, 60 watt
1	fan blades, plastic
1	electric motor
5	light meters
1	solar panel
1	clamp lamp



# Microbiome | Grade 6



Materials in this unit are packaged in 1 box.

## Classroom materials

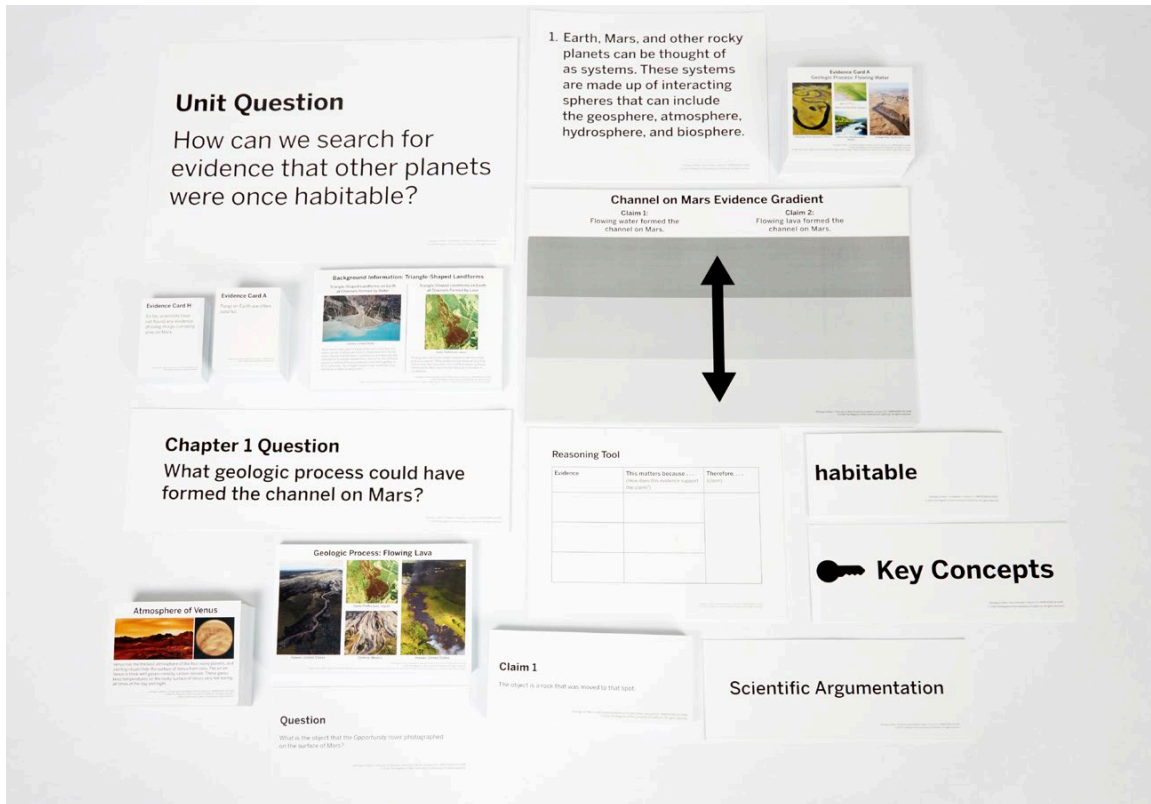
Quantity	Description		
1	Components of a Written Scientific Argument card	20 sets	Bacteria Evidence cards (10 cards/set)
3	Argumentation Sentence Starters cards	20 sets	Word Relationships cards (6 cards/set)
2	Evaluating Evidence Criterion cards	20	Antibiotics Evidence cards (Cards G)
1	Scientific Argumentation Purpose	20 sets	Scale cards: Set #1 (16 cards/set)
1	Scientific Argumentation Label	20 sets	Scale cards: Set #2 (3 cards/set)
1	Scientific Argument Diagram	2	Bacteria Evidence cards, large
1	Evaluating Evidence Label	20	Evidence Gradient sheets
1	Evidence Gradient cards	19	Scale cards, large
1	Reasoning Tool	2	Key Concepts and Vocabulary headers
20 sets	Antibiotics Claim and Relevant/Irrelevant Headers (3 cards/set)	2	Chapter Questions cards
20 sets	Antibiotics Evidence cards (Cards A-F) (10 cards/set)	1	Unit Question card
20 sets	Bacteria Evidence Subclaims cards (2 cards/set)	10	Key Concepts cards
1	Bacteria Evidence Subclaim 2, large card	11	Vocabulary cards

# Geology on Mars | Grade 7



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
1	clay, non-drying, 16 oz
20	rock samples, basalt
2	trays, stream table
20	conglomerate rocks
4	sand, 2.5 kg bags
1	stream table kit
20	lenses, hand
2	clamp lamps
2	tubing, 4ft
4	buckets



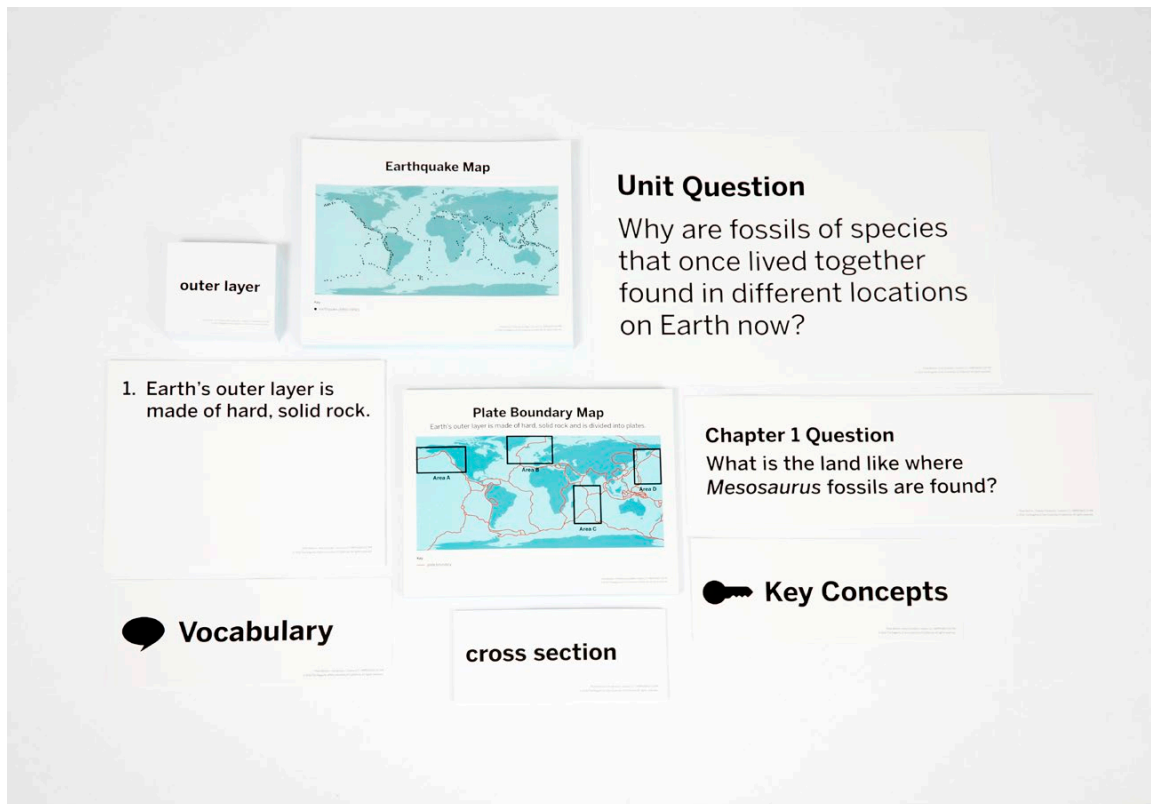
### Classroom materials

Quantity	Description		
2	Scientific Argumentation Label and Scientific Argumentation Purpose cards	20 sets	Jelly Donut Evidence cards: Set 2 (4 cards/set)
3	Evaluating Evidence Label and Evaluating Evidence Criterion cards	10 sets	Comparing Rocky Planets cards (16 cards/set)
1	components of a Written Scientific Argument card	21 sets	Channel on Mars Evidence cards (6 cards/set)
3	Argumentation Sentence Starter cards	21 sets	Background Information cards (2 cards/set)
1	Scientific Argument Diagram	20 sets	Geologic Processes cards (2 cards/set)
1	Evidence Gradient	2	Key Concepts and Vocabulary cards headers
1	Reasoning Tool	3	Chapter Questions cards
20 sets	Jelly Donut Question and Claim cards (3 cards/set)	1	Unit Question cards
21	Channel on Mars Evidence Gradient student sheets	5	Key Concepts cards
20 sets	Jelly Donut Evidence cards: Set 1 (7 cards/set)	10	Vocabulary cards



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
40	transparencies, blank, 8.5" x 11", sheets
40	wet-erase markers, black
20	Silly Putty, containers
40	wet-erase markers, red
20	cubes, 1", plastic
20	towels



### Classroom materials

Quantity	Description
10 sets	Word Relationship Cards: Set 1 (4 cards/set)
10 sets	Word Relationship Cards: Set 2 (2 cards/set)
20	Plate Boundary Map Cards
20	Earthquake Map Cards
2	Key Concepts and Vocabulary Cards headers
4	Chapter Questions Cards
9	Key Concepts Cards
1	Unit Question Card
14	Vocabulary Cards

## Plate Motion: Engineering Internship | Grade 7

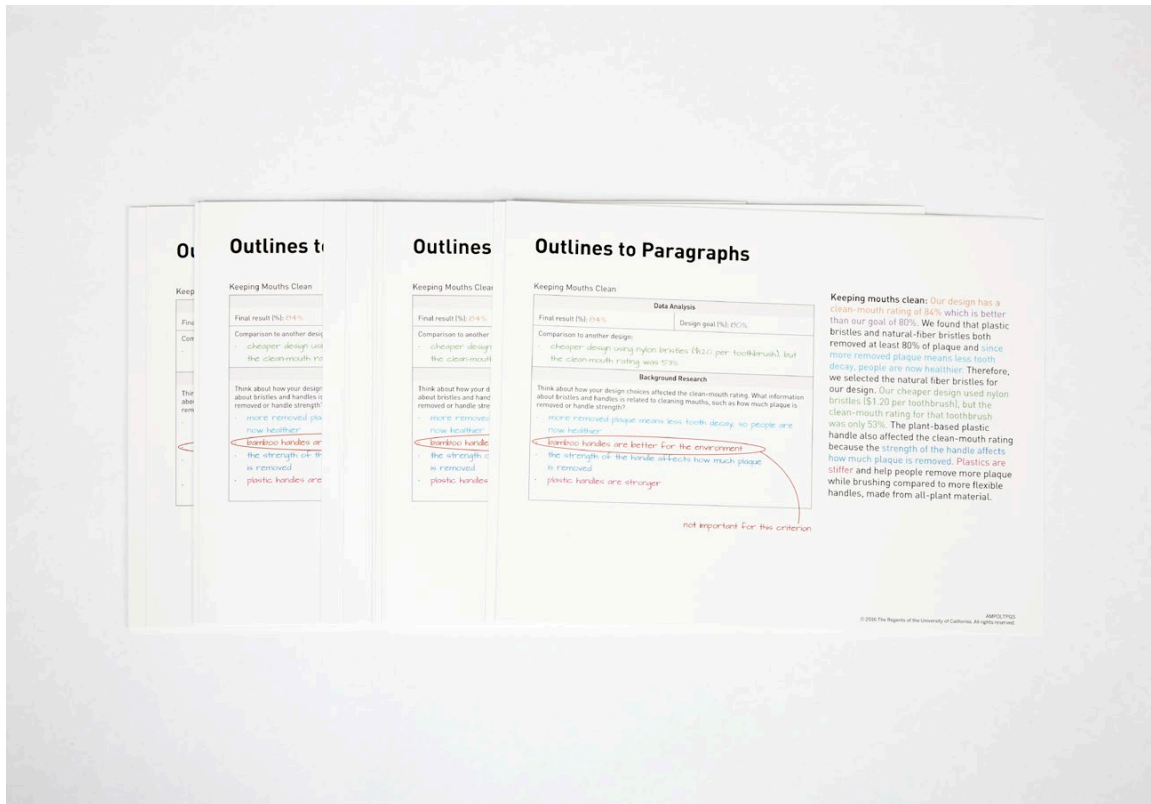


Materials in this unit are packaged in 1 box.

### Hands-on materials

Quantity	Description
8	transparencies, blank, 8.5" x 11", sheets
64	plastic buildings, miniature
2	tape, packing, clear, rolls
200	straws, flexible, wrapped
8	paint trays





## Classroom materials

### Quantity Description

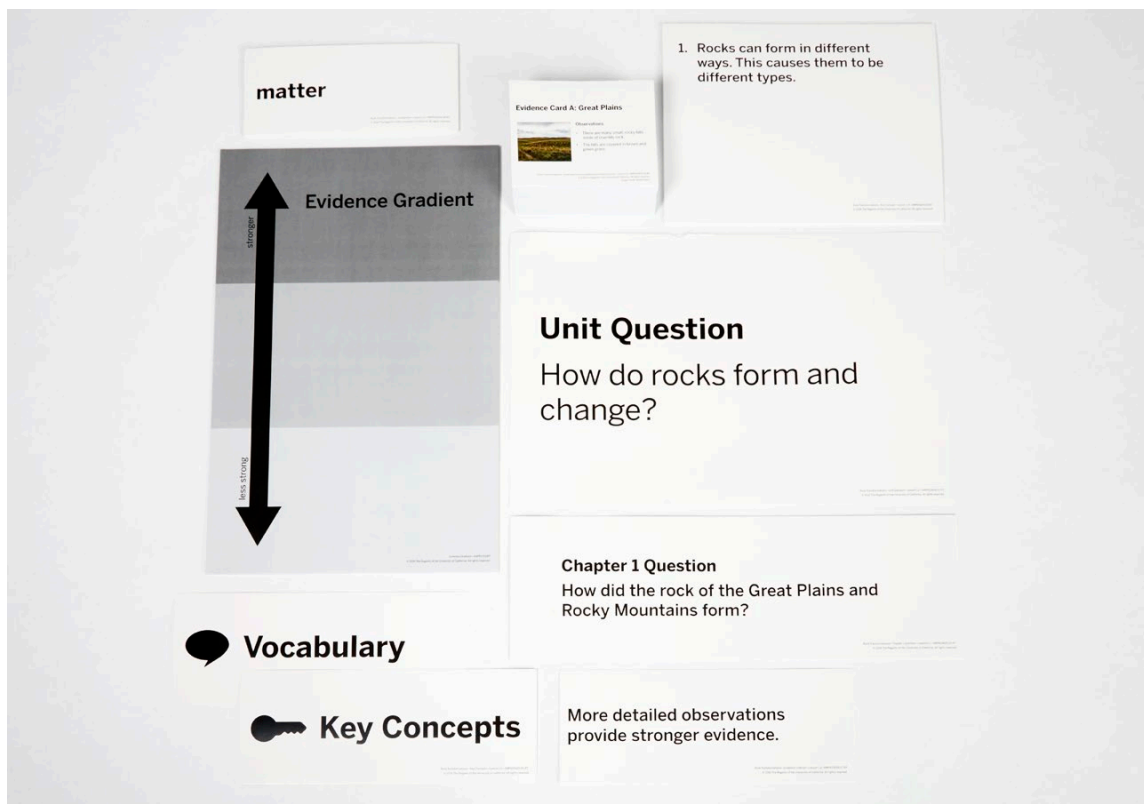
20 outlines to paragraphs sheets

# Rock Transformations | Grade 7



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
10	rock sets: granite, bassalt, sandstone, conglomerate
3	baggies, plastic with zip, gallon
20	lids, for plastic containers
20	containers, plastic, clear
200	cups, plastic, 3 oz
10	conglomerate rocks
300	hard candies
10 sets	sandstone
10 sets	granite
10 sets	basalt
40	dice



### Classroom materials

Quantity	Description
20 sets	Great Plains and Rocky Mountains Evidence cards (8 cards/set)
20	Evidence Gradient cards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Evidence Criterion card
1	Unit Question card
11	Key Concepts cards
15	Vocabulary cards

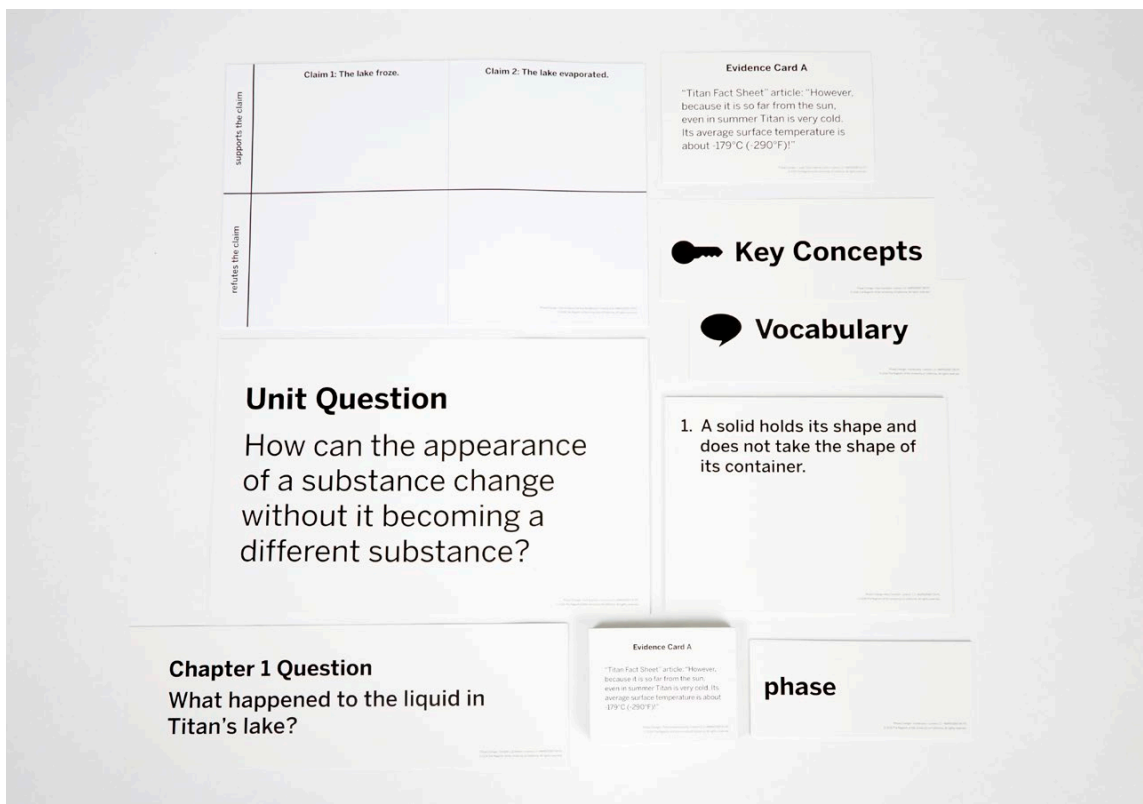
## Phase Change | Grade 7



Materials in this unit are packaged in 1 box.

### Hands-on materials

Quantity	Description
120	marbles, magnetic, low-strength
20	containers, plastic clamshell
500	Isopropanol alcohol, bottles
2	cylinders, graduated, 50 mL
50	cups, plastic, 9 oz
10	cups, foam, 8 oz
40	dropper bottles
1	scale, digital
20	lenses, hand



### Classroom materials

Quantity	Description
20	Titan Evidence Sorting Background Cards
20 sets	Titan Evidence Cards (4 cards/set)
4	Large Titan Evidence Cards
2	Key Concepts and Vocabulary Cards headers
4	Chapter Questions Cards
16	Key Concepts Cards
1	Unit Question Card
8	Vocabulary Cards

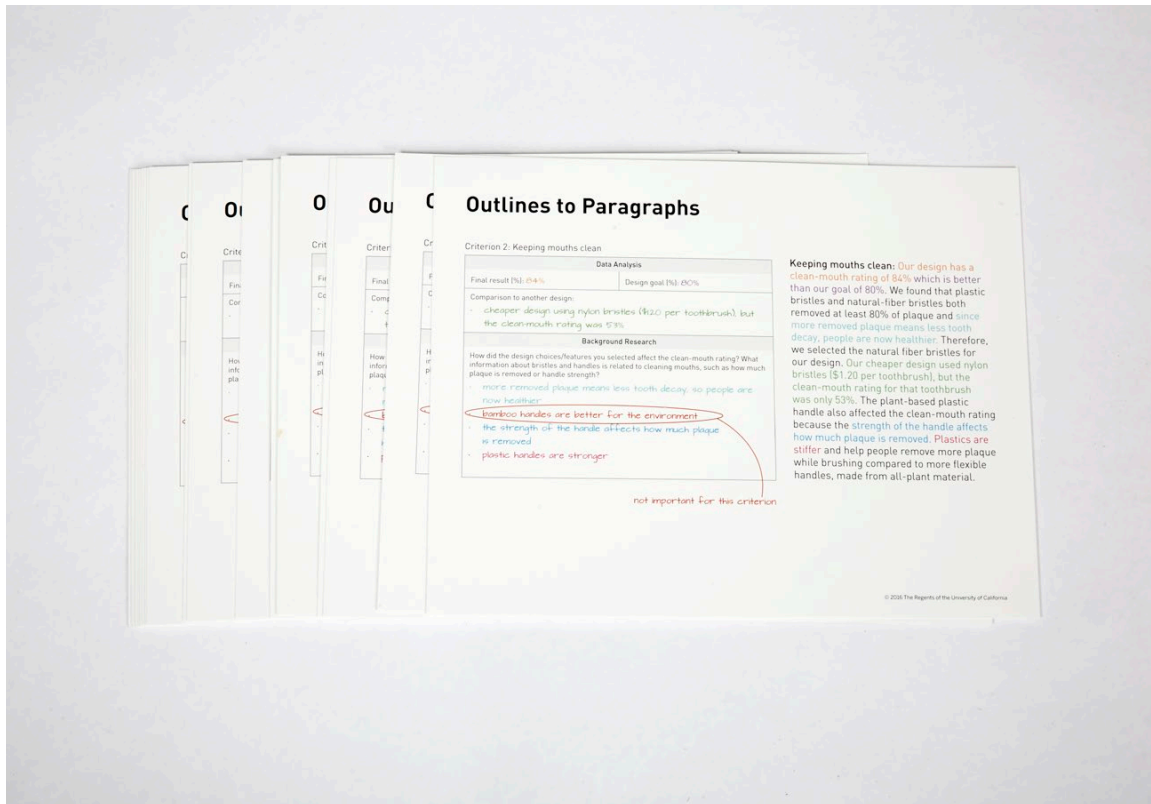
# Phase Change: Engineering Internship | Grade 7



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
50	handwarmers
1	tongs





### Classroom materials

Quantity	Description
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20	Outlines to Paragraphs sheets
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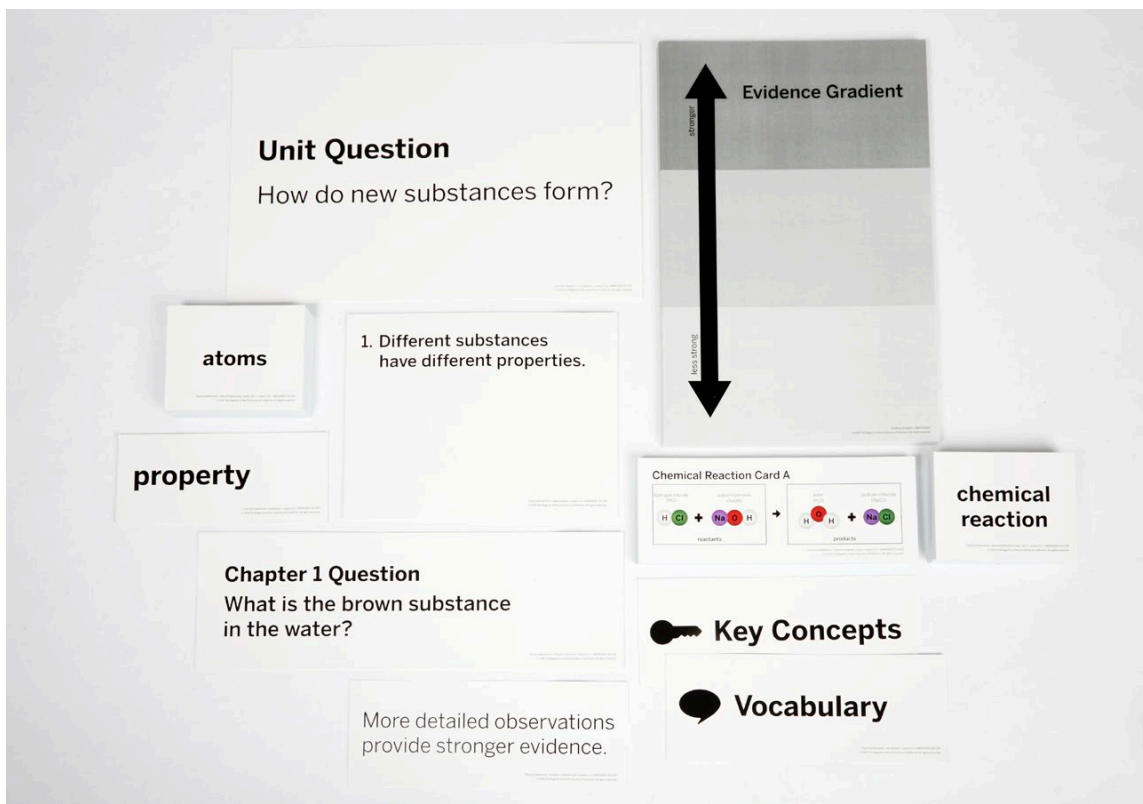
# Chemical Reactions | Grade 7



Materials in this unit are packaged in 1 box.

## Hands-on materials

Quantity	Description		
184	labels for vials ["pipe substance" (30), "fertilizer" (30), "reddish-brown substance" (10), "sample 1" (10), "sample 2" (10), "sample 3" (10), "sample 4" (10), "well water" (1), "water from pipes" (1), "calcium chloride" (11), "sodium carbonate" (11), "product" (50)]	160	tokens (plastic), green
164	sodium carbonate powder, anhydrous, grams	160	tokens (plastic), white
10	sodium chloride (table salt), tbsp	140	tokens (plastic), blue
1	cylinder, graduated, 25 mL	20	tokens (plastic), gray
10	potassium chloride powder, tbsp	11	sodium nitrate powder, tbsp
72	vials, plastic, with lid	200	tokens (plastic), red
240	tokens (plastic), purple	150	cups, plastic, 9 oz
20	tokens (plastic), yellow	11	Iron oxide granules, tbsp
164	calcium chloride, grams	1	measuring spoon
1	funnel (plastic), small	10	graphite powder, tbsp
120	tokens (plastic), amber	1	measuring cup
		10	Iron filings, tbsp
		10	cornstarch, tbsp



### Classroom materials

Quantity	Description
20 sets	Word Relationships cards: Set 1 (4 cards/set)
20 sets	Word Relationships cards: Set 2 (4 cards/set)
20 sets	Chemical Reaction cards (2 cards/set)
20	Evidence Gradient cards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Evidence Criterion card
9	Key Concepts cards
1	Unit Question card
9	Vocabulary cards

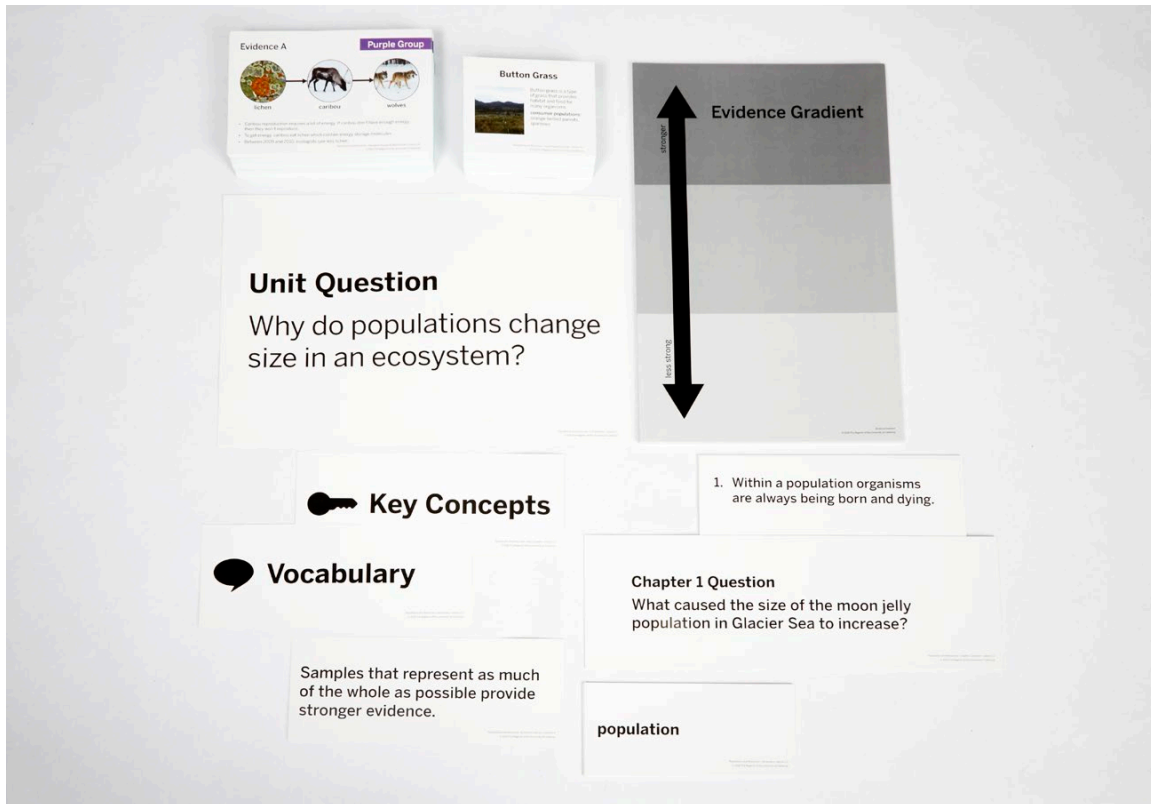
# Populations and Resources | Grade 7



Materials in this unit are packaged in 1 box.

## Hands-on materials

Quantity	Description
20	measuring spoons, 1 tablespoon
10	cylinders, graduated, 50 mL
60	sugar, white, granulated, tsp
250	cups, plastic, 16 oz
150	wooden craft sticks
20	cups, plastic, 9 oz
520	tokens, plastic
200	yeast, baker's, tbsp
1	thermometer



### Classroom materials

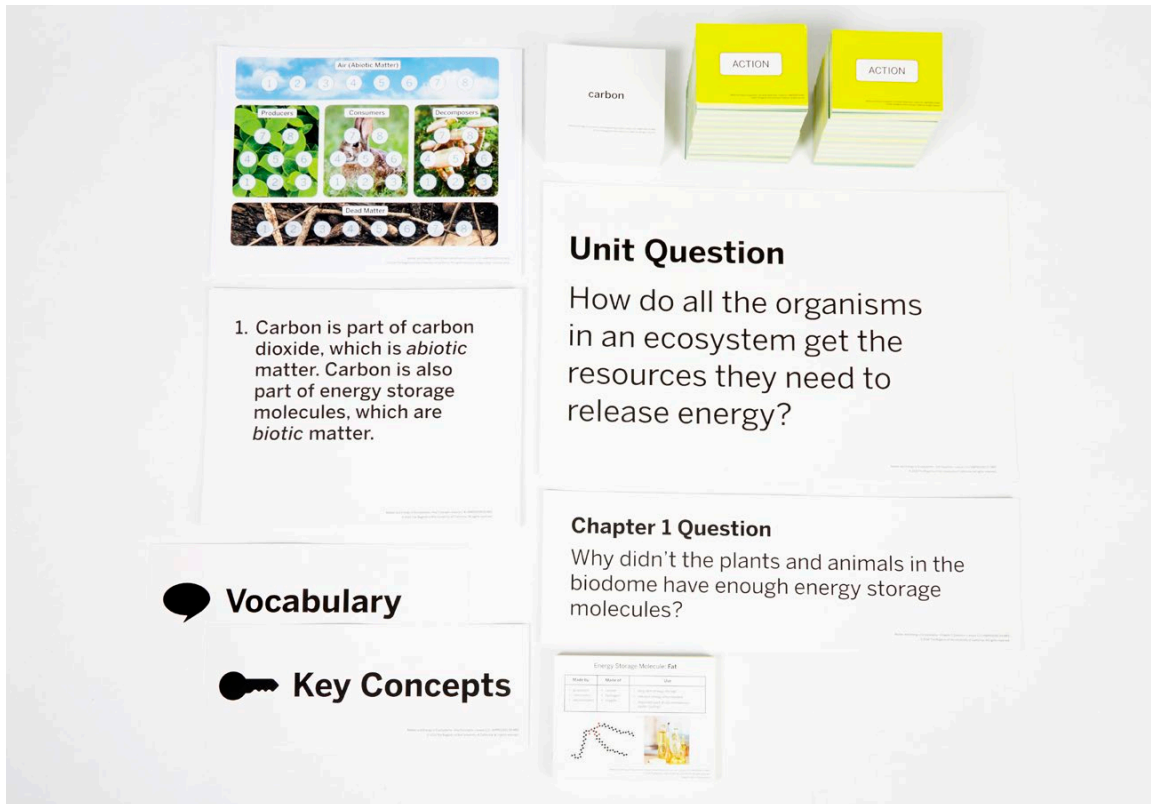
Quantity	Description
20 sets	Population Puzzles Evidence cards (6 cards/set)
14 sets	Island Population cards (9 cards/set)
20	Evidence Gradient cards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Evidence Criterion card
1	Unit Question card
11	Key Concepts cards
11	Vocabulary cards



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
600	carbon tokens
470	paper clips





### Classroom materials

Quantity	Description
10 sets	Energy Storage Molecules cards (4 cards/set)
10 sets	Word Relationships card set (12 cards/set)
20 sets	Carbon Game cards (27 cards/set)
20	Carbon Game boards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Unit Question card
13	Vocabulary cards
10	Key Concepts

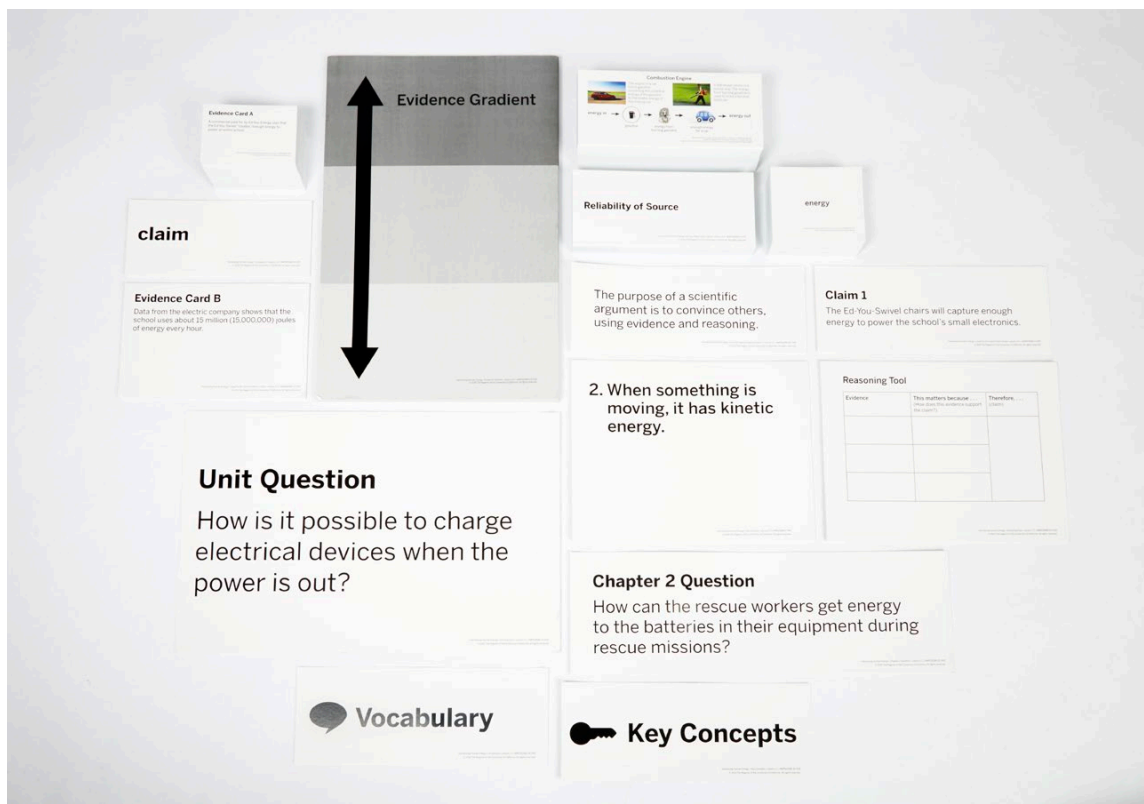
# Harnessing Human Energy | Grade 8



Materials in this unit are packaged in 1 box.

## Hands-on materials

Quantity	Description
20	cables with alligator clips
51	vials, plastic, with lid
10	generators, hand-crank
100	brads, brass plated
10	fan blades, plastic
50	springs, assorted
10	electric motors
1	string, 600 ft
10	battery holder
2	toys, wind-up
1	solar panels
10	batteries, D
20	rubber bands
1	clamp lamp



### Classroom materials

Quantity	Description	Quantity	Description
2	Scientific Argumentation Label and Scientific Argumentation Purpose cards	20 sets	Word Relationships cards (5 cards/set)
2	Evaluating Evidence Label and Evaluating Evidence Criterion cards	8	Large Ed-You-Swivel Evidence cards
1	components of a Written Scientific Argument card	21 sets	Energy Source cards (7 cards/set)
2	Scientific Argumentation Sentence Starters cards	20	Evidence Gradient student sheets
1	Argumentation Sentence Starters card	3	Large Ed-You-Swivel Claim cards
1	Scientific Argument Diagram	2	Key Concepts and Vocabulary cards headers
1	Evidence Gradient	3	Chapter Questions cards
1	Reasoning Tool	1	Unit Question card
20 sets	Ed-You-Swivel Evidence cards (8 cards/set)	5	Key Concepts cards
20 sets	Ed-You-Swivel Claim cards (3 cards/set)	11	Vocabulary cards

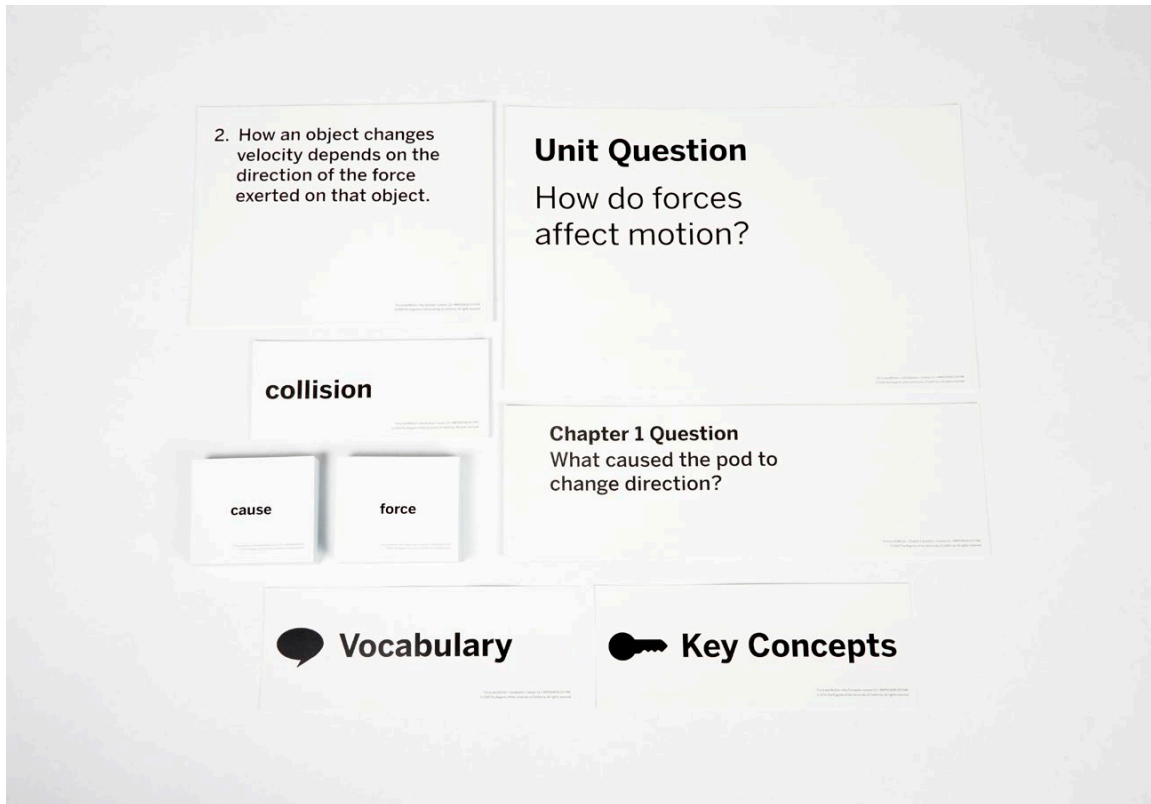
# Force and Motion | Grade 8



Materials in this unit are packaged in 1 box.

## Hands-on materials

Quantity	Description
40	spring-loaded toilet paper roll holder/spring launchers
20	rulers, 12", center groove
20	balls, table tennis
40	balls, rubber
20	stopwatches
20	balls, golf
40	jar lids



### Classroom materials

Quantity	Description
20 sets	1.4 Word Relationships cards (4 cards/set)
20 sets	3.3 Word Relationships cards (4 cards/set)
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Unit Question card
7	Key Concepts cards
9	Vocabulary cards



Materials in this unit are packaged in 1 box.

Hands-on materials

Quantity	Description
50	deli container, rectangular
100	straws, plastic, unwrapped
15	baggies, plastic with zip
2	string (200 ft/set)
25	steel wool pads
2	scales, digital
100	coffee filters
100	pipe cleaners
40	foam peanuts
500	cotton balls
500	twist ties



### Outlines to Paragraphs

Keeping Mouths Clean

Data Analysis	
Final result (%): 64%	Design goal (%): 80%

Comparison to another design:

- cheaper design using nylon bristles (\$1.20 per toothbrush), but the clean-mouth rating was 53%

Background Research

Think about how your design choices affected the clean-mouth rating. What information about bristles and handles is related to cleaning mouths, such as how much plaque is removed or handle strength?

- more removed plaque means less tooth decay, so people are now healthier
- bamboo handles are better for the environment
- the strength of the handle affects how much plaque is removed
- plastic handles are stronger

not important for this criterion

**Keeping mouths clean:** Our design has a clean-mouth rating of 64% which is better than our goal of 80%. We found that plastic bristles and natural-fiber bristles both removed at least 80% of plaque and since more removed plaque means less tooth decay, people are now healthier. Therefore, we selected the natural fiber bristles for our design. Our cheaper design used nylon bristles (\$1.20 per toothbrush), but the clean-mouth rating for that toothbrush was only 53%. The plant-based plastic handle also affected the clean-mouth rating because the strength of the handle affects how much plaque is removed. Plastics are stiffer and help people remove more plaque while brushing compared to more flexible handles, made from all-plant material.

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Classroom materials

Quantity	Description
20	Outlines to Paragraphs sheets

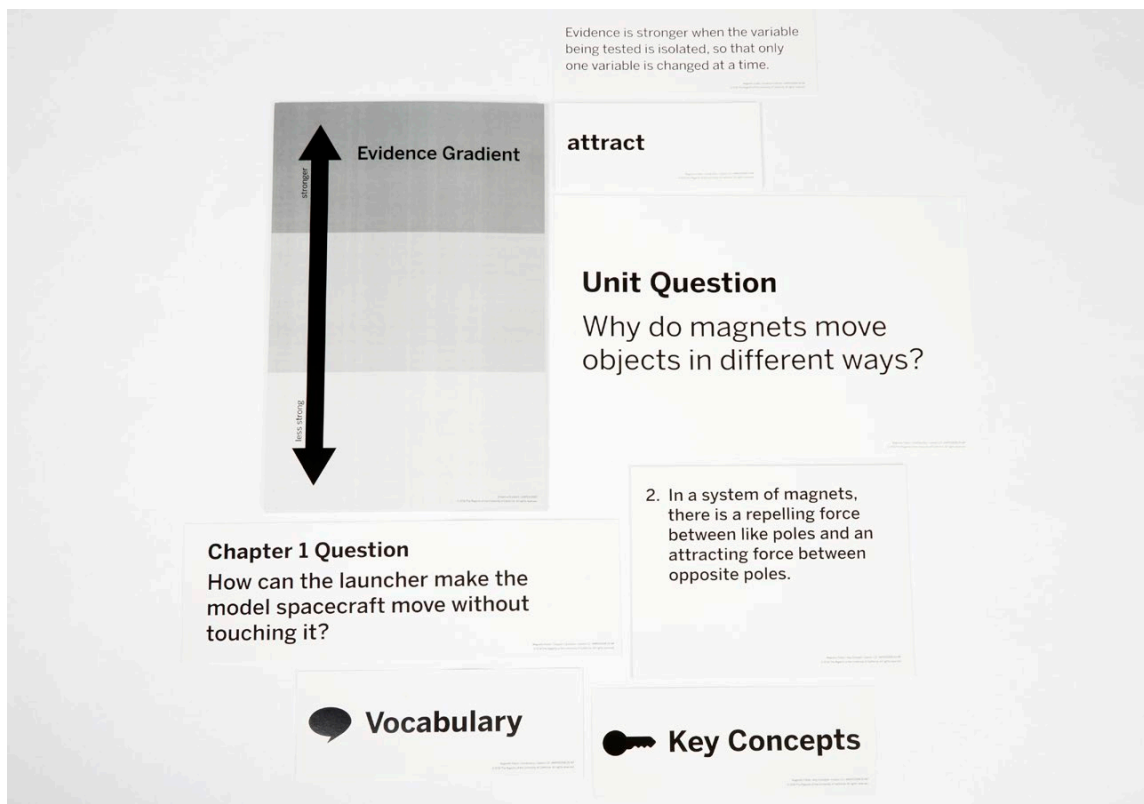
# Magnetic Fields | Grade 8



Materials in this unit are packaged in 1 box.

## Hands-on materials

Quantity	Description
30	baggies, plastic with zip
20	wooden craft sticks
1	aluminum foil, roll
20	compression springs
20	strong magnets
20	weak magnets
10	rubber balls
20	magnet bars
100	paper clips
10	pom poms
20	rulers



### Classroom materials

Quantity	Description
20	Evidence Gradient cards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Evidence Criterion card
8	Key Concepts cards
1	Unit Question card
16	Vocabulary cards

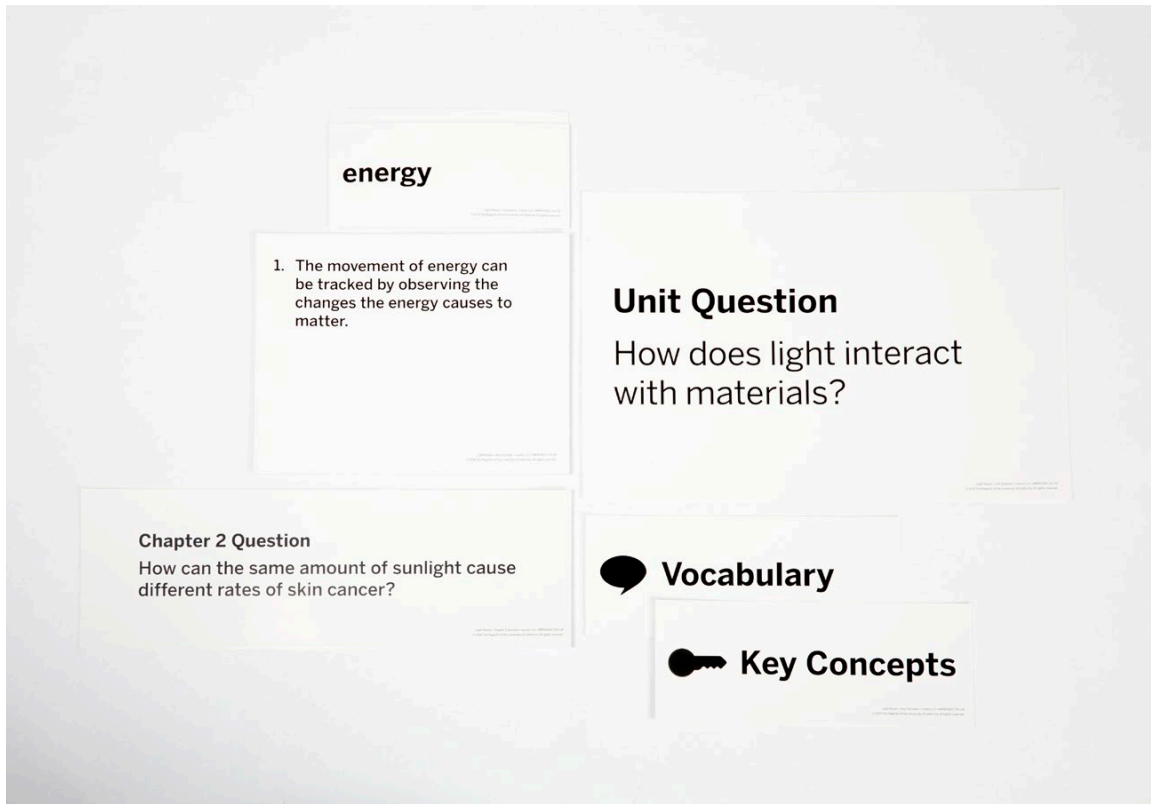
## Light Waves | Grade 8



Materials in this unit are packaged in 1 box.

### Hands-on materials

Quantity	Description
20	cubes, red and green (10 of each color)
1	liquid crystal paper, sheet
10	flashlights, UV (LED bulb)
1	transparency paper, sheet
10	flashlights, incandescent
20	stars, glow-in-the-dark
80	beads, color-changing
1	light bulb, 60 watt
10	toys, solar-powered
10	bottles, spray
10	laser pointers
5	pipe cleaners
20	binder clips
2	thermometers
1	clamp lamp
10	mirrors



#### Classroom materials

Quantity	Description
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Unit Question card
12	Key Concepts cards
10	Vocabulary cards

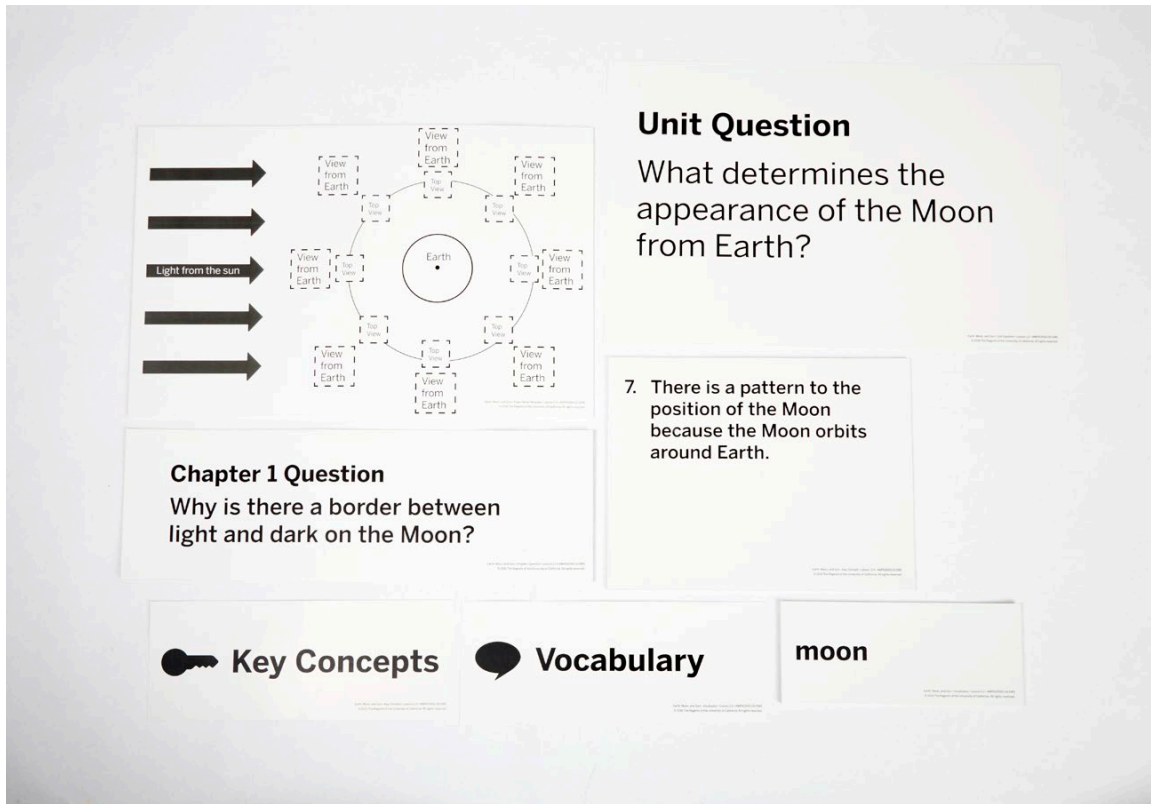
# Earth, Moon, and Sun | Grade 8



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
40	isosceles triangles cut from transparency
1	light bulb, 60 watt
41	spheres, foam
41	chopsticks
1	clamp lamp





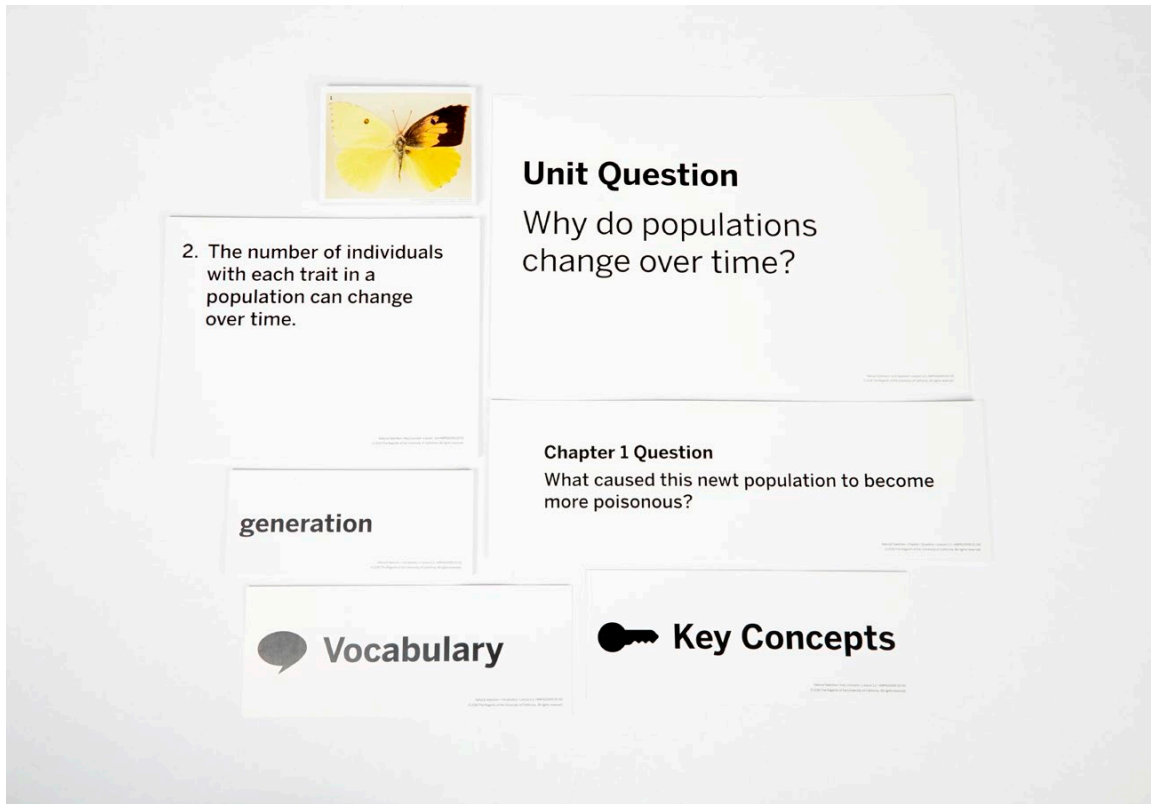
#### Classroom materials

Quantity	Description
10	Moon Phases Paper Model Templates
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
12	Key Concepts cards
1	Unit Question card
9	Vocabulary cards



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
100	bags, plastic with zip, quart-size
20	bags, plastic with zip, large
500	counting cubes, purple
500	counting cubes, green
500	counting cubes, blue



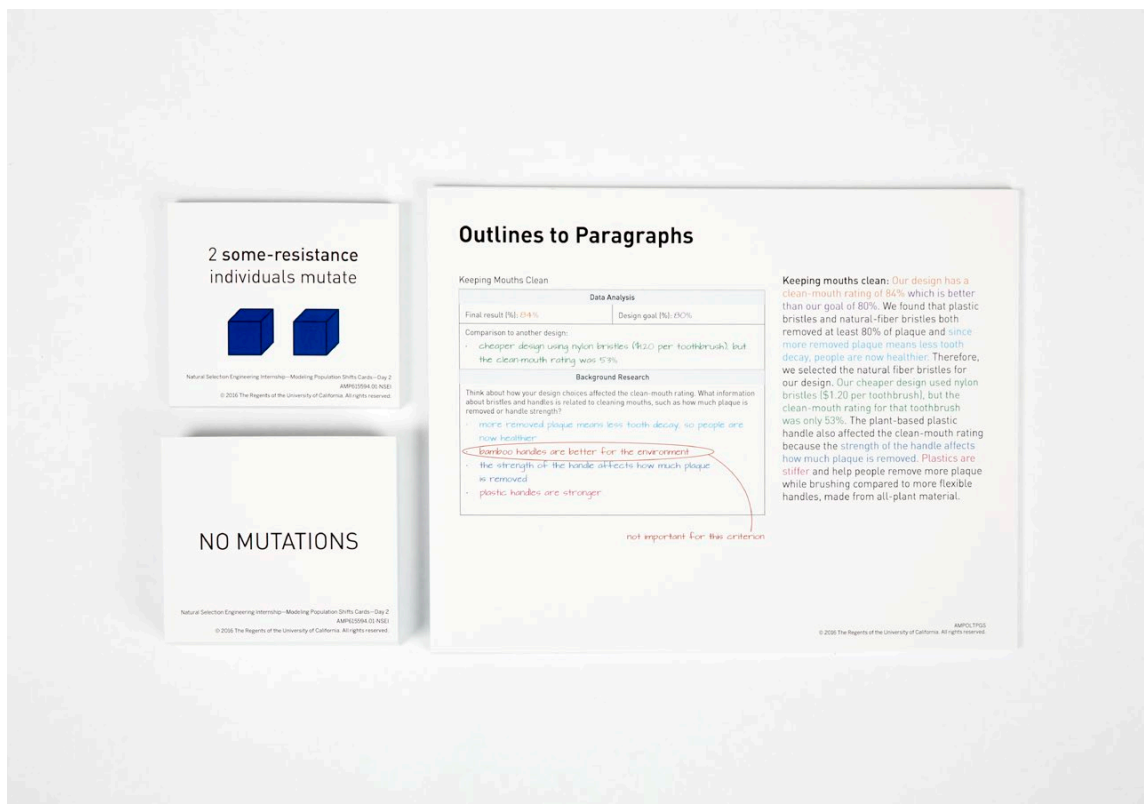
#### Classroom materials

Quantity	Description
2 sets	Butterfly Population Cards (20 cards/set)
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
12	Key Concepts cards
1	Unit Question card
15	Vocabulary cards



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
20	drawstring bags, non-transparent, small
20	bags, plastic with zip, quart-size
3	bags, plastic with zip, large
500	counting cubes, purple
500	counting cubes, green
500	counting cubes, blue



## Classroom materials

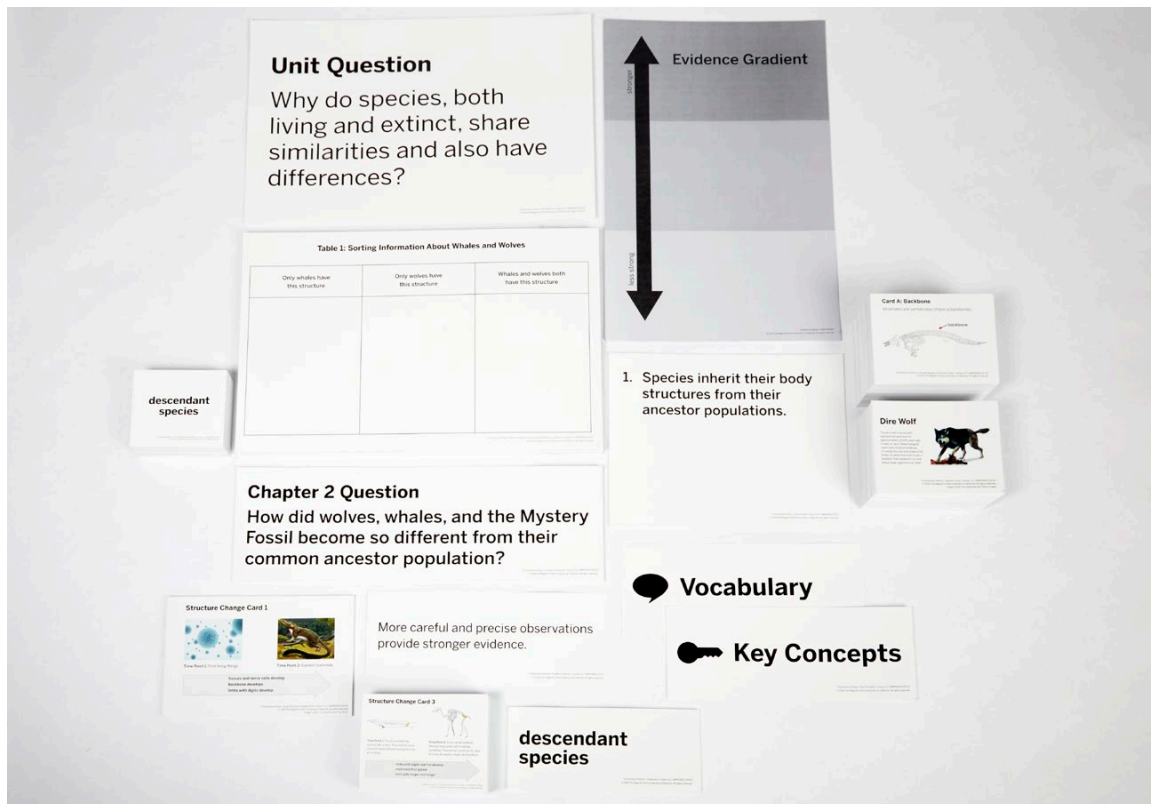
Quantity	Description
20 sets	Modeling Population Shifts Cards (6 cards/set)
20	outlines to Paragraphs sheets



Materials in this unit are packaged in 1 box.

Hands-on materials	
Quantity	Description
1	K'Nex Intermediate Math and Geometry kit
20	baggies, plastic with zip





### Classroom materials

Quantity	Description
10 sets	Word Relationships cards: Set 1 (5 cards/set)
10 sets	Word Relationships cards: Set 2 (6 cards/set)
20 sets	Comparing Body Structure cards (10 cards/set)
20 sets	Structure Change cards (6 cards/set)
20	Comparing Evidence Tables (Table 1)
20	Comparing Evidence Tables (Table 2)
6	Large Structure Change cards
20 sets	Species cards (9 cards/set)
20	Evidence Gradient cards
9	Large Species cards
2	Key Concepts and Vocabulary cards headers
4	Chapter Questions cards
1	Evidence Criterion card
1	Unit Question card
7	Key Concepts cards
11	Vocabulary cards

Amplify.



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