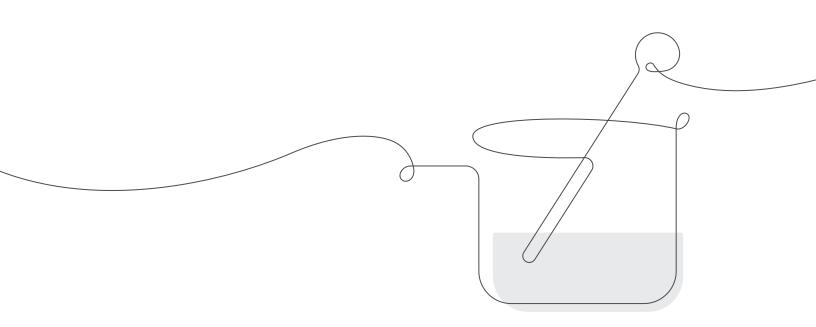
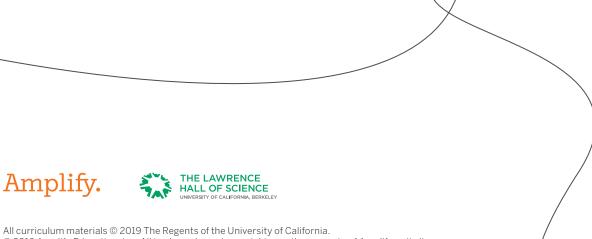
# Teacher-provided materials







# Table of contents

Chemical Reactions	4
Earth's Changing Climate	5
Earth's Changing Climate Engineering Internship	6
Earth, Moon, and Sun	7
Evolutionary History	8
Force and Motion	9
Force and Motion Engineering Internship	10
Geology on Mars	11
Harnessing Human Energy	12
Light Waves	13
Magnetic Fields	14
Matter and Energy in Ecosystems	15
Metabolism	16
Metabolism Engineering Internship	17
Microbiome	18
Natural Selection	19
Natural Selection Engineering Internship	20
Ocean, Atmosphere, and Climate	21
Phase Change	22
Phase Change Engineering Internship	23
Plate Motion	24
Plate Motion Engineering Internship	25
Populations and Resources	26
Rock Transformations	27
Thermal Energy	28
Traits and Reproduction	29
Weather Patterns	30

# Chemical Reactions:

# Mysterious Substance in Westfield's Water

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Chemical Reactions unit

Quantity	Description	Used in lesson
40	optional: alcohol wipes*	2.1
2	beakers, 1 liter	2.1
40	optional: clipboards	4.3
20 sets	colored pencils (orange, purple, blue, light blue, red, yellow, tan, green, dark green)	2.3, 3.4, 4.2
40	optional: goggles, safety, child size**	1.2, 1.3, 2.1
1	optional: goggles, safety, adult size	2.1
20	lenses, magnifying, hand**	1.2, 1.3
1	marker, wide tip	throughout
1	optional: paper, chart, sheet	1.4
300	paper clips	1.6, 2.2, 3.3, 4.1, 4.2
1 pair	scissors	throughout
1	spoon, plastic	2.1
1	tape, masking, roll* **	throughout
10	trays, plastic**	1.2, 1.3, 2.1

<sup>\*</sup>consumable item

4 | AmplifyScience Teacher-provided materials | 4

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Earth's Changing Climate: Vanishing Ice

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Earth's Changing Climate unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.3
40	optional: envelopes, manila, large*	4.1
1	markers, set	1.4, 2.3
1	marker, wide tip	throughout
1	paper, chart, sheet*	1.4
60	paper, scratch, sheets*	1.3, 1.4, 2.7
640	paper clips	throughout
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Earth's Changing Climate Engineering Internship: Rooftops for Sustainable Cities

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Earth's Changing Climate Engineering Internship unit

Quantity	Description	Used in lesson
20	calculators	1, 6
10	colored pencils (or markers), packs	10
20	highlighters (or markers or colored pencils), green	4, 5, 6, 8
20	highlighters (or markers or colored pencils), red	5, 6, 2008
20	highlighters (or markers or colored pencils), yellow	5, 6, 2008
1	marker, dry erase	throughout
1	marker, wide tip	throughout
10 of each	"3 additional surfaces" (e.g., paper towel, brown paper bag, white paper towel, aluminum foil, desk, concrete, grass)	1
10	paper, 8.5" x 11", sheets*	1
10	paper, 12" x 18", sheets*	10
1	optional: paper, chart, sheet	1
10	rulers	1
1	tape, masking, rolls* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Earth, Moon, and Sun: An Astrophotographer's Challenge

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Earth, Moon, and Sun unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.2
1	optional: extension cord	1.3, 2.2, 2.4, 3.1
1	marker, dry erase	throughout
80	paperclips*	4.1
1	masking tape, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# **Evolutionary History:** Advising a Paleontology Museum

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Evolutionary History unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.3
4	markers, dry-erase	throughout
4	markers, wide tip	throughout
6	paper, chart, sheets*	1.2, 2.1
2	paper clips, box*	throughout
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Force and Motion: Docking Failure in Space

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for Force and Motion unit

Quantity	Description	Used in lesson
40	calculators	2.1
40	envelopes, letter size*	4.1
1	marker, fine point, permanent	1.2, 1.4, 1.6, 2.1
1	marker, wide tip	1.2, 1.4
20	metersticks	1.4, 1.6, 2.1
60	paper, scratch, sheets*	1.1, 1.4, 2.5, 3.3, 4.4
120	paper clips*	1.4, 3.3, 4.1
1	scissors or paper cutter	4.1
40	tape, paste, or glue sticks	4.3
1	tape, masking, roll* **	throughout
20	trays, plastic**	1.2, 1.4, 2.1, 3.2
40	optional: clipboards	4.2
1	optional: digital scale	3.2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Force and Motion Engineering Internship: Delivering Pods for Emergency Supplies

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Force and Motion Engineering Internship unit

Quantity	Description	Used in lesson
1	tarp (optional)	2
20	highlighters, green	5, 6
20	highlighters, pink	6
20	highlighters, yellow	6
1	marker, wide tip	throughout
2 rolls	masking tape* **	throughout
2 sheets	paper, chart (optional)*	1, 6
55 sheets	paper, scratch*	8, 10
10	scissors	2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Geology on Mars

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Geology on Mars unit

Quantity	Description	Used in lesson
3	books or boxes	2.2, 2.3
1	optional: broom, dustpan, and/or mop	2.2, 2.3
1	marker, wide tip	1.3, 2.1
2	paper, chart, sheets	1.3, 2.1
200	paper clips	throughout
1	optional: plastic wrap, roll*	2.2, 2.3
1	stapler	2.2, 2.3
1	tape, masking, roll* **	throughout
2	optional: towels	2.2, 2.3
20	lenses, hand**	3.2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Harnessing Human Energy

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Harnessing Human Energy unit

Quantity	Description	Used in lesson
10	binder clips*	3.2
1	lamp, desk or clamp, with lightbulb	1.2
1	marker, wide tip	1.4
1	paper, chart, sheet	1.4
53	paper, sheets, 8.5" x 14" (or 8.5" x 11")*	3.2
80	paper clips	2.2, 2.3, 3.3
10	pennies*	3.2
11	scissors	3.2
1	stapler	3.2
1	tape, masking, roll* **	throughout
11	trays, plastic**	1.2, 3.2
many	rubber bands, assorted sizes	3.2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Light Waves: Skin Cancer in Australia

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Light Waves unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.2
20 sets	optional: colored pencils or crayons: red, orange, yellow, green, blue, indigo (dark purple), violet (light purple)	4.1
1	optional: glue	1.2
40	highlighters, yellow	1.4, 2.4, 3.6
10	optional: index cards*	2.1
1	masking tape, roll* **	throughout
1	paper towels, roll*	3.1
40	optional: rulers	3.6
1	scissors	1.2, 2.1, 3.1
10	plastic trays **	1.2, 2.1, 3.1
40	paper clips*	4.1

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Magnetic Fields: Launching a Spacecraft

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Magnetic Fields unit

Quantity	Description	Used in lesson
120	colored pencils, markers, or crayons, 2–3 colors	1.3, 1.5, 2.4, 3.3
40	envelopes, large*	4.1, 4.2
1	marker, wide tip	throughout
1	masking tape, roll* **	throughout
20	nickels	1.2
3	paper, chart, sheets*	1.2, 1.6
20	pennies	1.2
10	plastic trays**	2.2, 3.1
1	scissors (or paper cutter)	4.1, 4.2
10	rubber bands, thin	2.2, 3.1
40	optional: clipboards	4.3

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Matter and Energy in Ecosystems: Biodome Collapse

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Matter and Energy in Ecosystems unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.2
40	envelopes*	4.1, 4.2, 4.3
1	glue, bottle	4.3
1	marker, wide tip	throughout
1	optional: paper, chart, sheet	1.2
1	scissors or paper cutter	4.1
1	tape, masking, roll* **	throughout
20	trays, plastic**	3.2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Metabolism:

# Making the Diagnosis

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Metabolism unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.3
90	envelopes*	2.1, 2.6, 4.1
20	glue sticks	4.3
40	goggles, safety**	3.2
15	index cards, 4" x 6"*	2.1
15	optional: magnets	4.1, 4.2
1	marker, permanent	2.1
1	marker, dry-erase	throughout
1	paper, chart, sheet	1.3
160	paper clips, large*	4.2
1	punch, 1-hole	2.1
1	scissors	throughout
1	tape, masking, roll* **	throughout
10	trays, plastic**	3.2

<sup>\*</sup>consumable item

16 | Amplify Science Teacher-provided materials | 16

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Metabolism Engineering Internship: Health Bars for Disaster Relief

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Metabolism Engineering Internship unit

Quantity	Description	Used in lesson
1	marker, dry-erase	throughout
1	marker, wide tip	throughout
2	paper, chart, sheets	1, 3
1	sticky notes, 3" x 3", pad* **	3
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

## Microbiome

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Microbiome unit

Quantity	Description	Used in lesson
22	binder clips, small	1.2, 2.6
1	chart paper, sheets*	2.1
20	envelopes, any size (optional)*	throughout
2	masking tape, rolls**	throughout
80	markers (or colored pencils), any color	1.2
1	marker, dry-erase	throughout
1	meterstick (optional)	1.2
60	paper clips, large*	throughout
20	rulers, metric (optional)	1.3
1	scissors	1.2
1	string, piece, 15–20 feet*	1.2
10 rolls	tape, clear, rolls*	1.2, 1.3, 2.6

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Natural Selection: Poisonous Newts

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Natural Selection unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.2
40	optional: envelopes, large*	4.1
1	marker, wide tip	throughout
1	paper, chart, sheet*	1.6
1	paper clips, box*	4.1
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Natural Selection Engineering Internship: Fighting Drug-Resistant Malaria

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Natural Selection Engineering Internship unit

Quantity	Description	Used in lesson
20	highlighters, green	5, 6
20	highlighters, pink	6
20	highlighters, yellow	6
1	marker, dry erase	throughout
1	marker, wide tip	throughout
20	markers, blue	2
20	markers, green	2
20	markers, purple	2
3	optional: paper, chart, sheets	1, 2, 6
50	paper, scratch, sheets*	8, 10
20	paperclips	2
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Ocean, Atmosphere, and Climate: Cold Years in New Zealand

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Ocean, Atmosphere, and Climate unit

Quantity	Description	Used in lesson
1	box cutter or scissors	1.3
2	cards, index 4" x 6"	1.3
40	optional: clipboards	4.2
1	clock or timing device	2.3
40	envelopes, letter size*	4.1
40	markers or colored pencils, blue	4.1
40	markers or colored pencils, red	4.1
1	marker, fine point, permanent	1.3, 2.3
1	marker, wide tip, black	1.2
1	masking tape, roll* **	throughout
2	paper, chart, sheets*	throughout
125	paper clips*	4.1
1	paper towels, roll*	3.2
2	pitchers or pouring device	2.3, 3.2
1	scissors or paper cutter	3.4, 4.1
40	tape, paste, or glue sticks	4.3
10	trays, plastic**	2.3
1	water source, hot and cold	2.3, 3.2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Phase Change:

# Titan's Disappearing Lakes

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Phase Change unit

Quantity	Description	Used in lesson
40	clipboard (optional)	4.3
40	goggles, safety**	1.3
1	hot water source (electric kettle)	1.3
1	marker, dry erase (or chalk)	throughout
1	marker, wide tip	throughout
1	masking tape, roll* **	throughout
3	paper, chart, sheets*	throughout
60	paper clips	2.3, 4.2
1	paper towels, roll*	3.2
20	pencils	3.2
20	trays, plastic**	1.3, 3.2, 3.3
20	lenses, hand, plastic, 3x**	1.3

<sup>\*</sup>consumable item

22 | Amplify Science Teacher-provided materials | 22

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Phase Change Engineering Internship: Portable Baby Incubators

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Phase Change Engineering Internship unit

Quantity	Description	Used in lesson
10	clocks/timers	2
1	heat source (bunsen burner/range/hot plate/kettle) for boiling water	2
20	highlighters, pink	6
20	highlighters, yellow	6
1	marker, wide-tip	throughout
20	markers (or colored pencils), packs	10
41	markers/colored pencils/highlighters, green	3, 5, 2006
41	markers/colored pencils/highlighters, orange	3
4	optional: paper, chart, sheets*	1, 3, 4, 6
40	optional: paper, scratch, sheets*	10
1	pot, cooking, 4 liters	2
1	masking tape, roll* **	throughout
4	water, liters	2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Plate Motion:

# Mystery of the Mesosaurus Fossils

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Plate Motion unit

Quantity	Description	Used in lesson
40	optional: calculators	3.1, 3.4
20	chairs or tables	2.3
40	optional: clipboards	4.2
40	optional: envelopes, large*	4.1
40	glue sticks	1.4, 2.4, 3.3
20	paper, 8.5" x 11", sheets*	3.3
40	optional: paper, scratch, sheets*	3.4
140	paper clips*	2.1, 3.1, 4.1
1	paper towels, roll*	1.3
40	scissors	1.4, 2.4, 3.3
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Plate Motion Engineering Internship: Tsunami Warning Systems

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Plate Motion Engineering Internship unit

Quantity	Description	Used in lesson
20	optional: calculators	6
20	colored pencils (or markers), green	3
20	colored pencils (or markers), red	3
20	colored pencils (or markers), yellow	3
20	highlighters, green	5, 6
20	highlighters, pink	6
20	highlighters, yellow	6
1	marker, dry-erase	throughout
1	marker, permanent	2, 6
2	optional: paper, chart, sheets	1, 6
10	paper, scratch, sheets*	10
1	paper towels, roll*	2
1	ruler	2
1	scissors	2, 10
1	tape, masking, roll* **	throughout
8	water, liters*	2
1	optional: water pitcher	2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Populations and Resources: Too Many Moon Jellies

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Populations and Resources unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.3
46	optional: envelopes, large*	2.6, 4.1
1	marker, wide-tip, black	throughout
1	marker, permanent	2.2
1	microwave or electric kettle	2.2
175	paper clips, large*	2.7, 3.4, 4.1, 4.2
1	tape, masking, roll* **	throughout
10	trays, plastic**	2.2
1	pitcher (at least 1 liter capacity)	2.2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# **Rock Transformations:** Geologic Puzzle of the Rockies and Great Plains

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Rock Transformations unit

Quantity	Description	Used in lesson
40	optional: clipboards	3.3, 4.3
1	hammer	1.4
several	heavy books	1.4
20	lenses, hand, plastic, 3x**	1.2, 1.4
20	markers, permanent	1.4
1	marker, wide-tip	throughout
1	measuring spoon, tablespoon	1.4
1	paper clips, box*	1.5, 4.1, 4.2
1	tape, masking, roll* **	throughout
10	trays, plastic**	1.2, 1.4

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Thermal Energy: Using Water to Heat a School

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Thermal Energy unit

Quantity	Description	Used in lesson
40	optional: calculators	throughout
40	optional: clipboards	4.2
40	optional: envelopes, large*	4.1
400	game board tokens, miscellaneous (i.e., coins, small sticky notes, bits of paper)	2.7
1	marker, permanent	1.2, 3.3
300	optional: paper, scratch, sheets*	throughout
1	paper towels, roll*	1.2, 3.3
2	paperclips, boxes*	2.1, 2.5, 3.4, 4.1
1	optional: stapler	4.1
1	stopwatch or timer	3.3
1	tape, masking, roll* **	throughout
20	trays, plastic**	1.2, 3.3
1	water source, hot and cold	1.2, 3.3
25	bags, plastic with zip	2.4, 3.2

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Traits and Reproduction: The Genetics of Spider Silk

The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Traits and Reproduction unit

Quantity	Description	Used in lesson
40	optional: clipboards	4.2
10	envelopes	2.2
1	marker, dry-erase	throughout
1	marker, wide tip	throughout
1	optional: paper, chart, sheet*	1.2
1	paper clips, box	2.2, 4.1
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased

# Weather Patterns: Severe Storms in Galetown

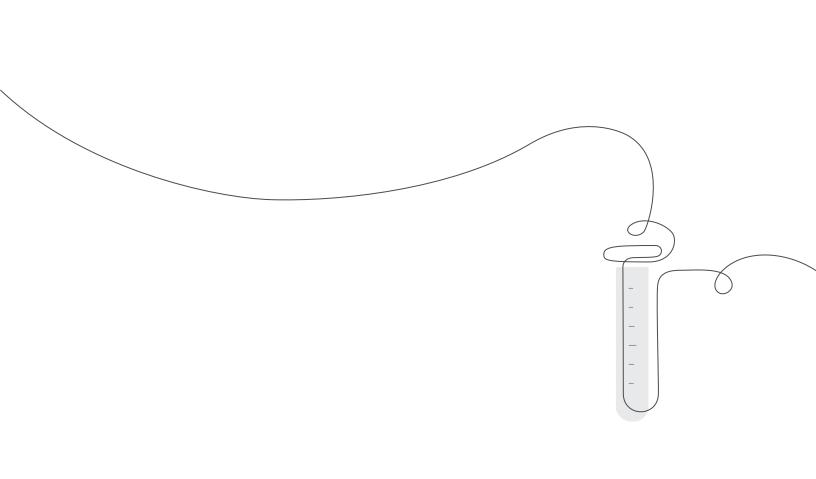
The quantities listed are what you will need to provide to teach the unit once for a class of 40 students. Please note that you will need to replenish the consumable items after each class use.

### Materials to be provided by the teacher for the Weather Patterns unit

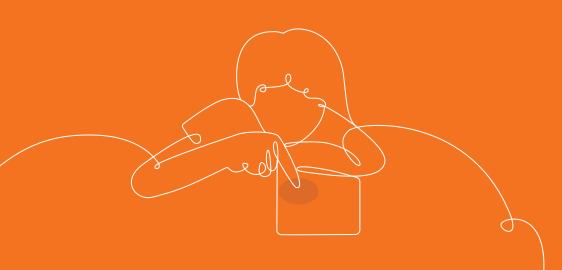
Quantity	Description	Used in lesson
5	bags of ice*	1.3
40	optional: clipboards	4.3
1	cooler, large, with lid	1.3
40	envelopes, large*	4.1
1	hair-dryer	2.1
10	ice packs	1.3
20	markers, permanent	throughout
1	marker, wide tip	throughout
1	paper, chart, sheet	3.2
1	paper clips, box*	1.6, 2.4, 2.6, 3.2, 4.1, 4.2
1	tape, clear, roll*	2.1
1	tape, masking, roll* **	throughout

<sup>\*</sup>consumable item

<sup>\*\*</sup>included in the Amplify Science Starter Kit, if purchased



# For more information on Amplify Science, visit amplify.com/science.



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