



INTEGRATED MODEL

Grades K-8

Program component list

authored by



Amplify Science
CALIFORNIA

Amplify.



Table of contents

Kindergarten

Needs of Plants and Animals	4
Pushes and Pulls	5
Sunlight and Weather	6

Grade 1

Animal and Plant Defenses	7
Light and Sound	8
Spinning Earth	9

Grade 2

Plant and Animal Relationships	10
Properties of Materials	11
Changing Landforms	12

Grade 3

Balancing Forces	13
Inheritance and Traits	14
Environments and Survival	15
Weather and Climate	16

Grade 4

Energy Conversions	17
Vision and Light	18
Earth's Features	19
Waves, Energy, and Information	20

Grade 5

Patterns of Earth and Sky	21
Modeling Matter	22
The Earth System	23
Ecosystem Restoration	24

Grade 6

Microbiome	25
Metabolism	26
Metabolism: Engineering Internship	27
Traits and Reproduction	28
Thermal Energy	29
Ocean, Atmosphere, and Climate	30
Weather Patterns	31
Earth's Changing Climate	32
Earth's Changing Climate: Engineering Internship	33

Grade 7

Geology on Mars	34
Plate Motion	35
Plate Motion: Engineering Internship	36
Rock Transformations	37
Phase Change	38
Phase Change: Engineering Internship	39
Chemical Reactions	40
Populations and Resources	41
Matter and Energy in Ecosystems	42

Grade 8

Harnessing Human Energy	43
Force and Motion	44
Force and Motion: Engineering Internship	45
Magnetic Fields	46
Light Waves	47
Earth, Moon, and Sun	48
Natural Selection	49
Natural Selection: Engineering Internship	50
Evolutionary History	51

Grade K

Needs of Plants and Animals

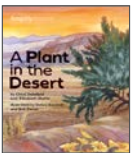
Print Teacher's Guide

978-1-64276-667-7

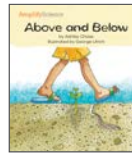


Student books — ISBNs below reflect 6-packs for each title

A Plant in the Desert
978-1-64089-987-2



Above and Below
978-1-64089-989-6



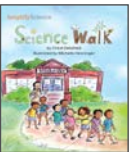
Handbook of Plants
978-1-64089-991-9



Investigating Monarchs
978-1-64089-993-3



Science Walk
978-1-64089-995-7



What Does a Scientist Look Like?
978-1-64276-065-1



Student Investigation Notebook

978-1-943228-92-8



Hands-on materials kit

978-1-64089-526-3

- Materials kit delivered in 3 boxes
- Refill kit available for consumable materials



Grade K

Pushes and Pulls

Print Teacher's Guide

978-1-64276-660-8



Student books — ISBNs below reflect 6-packs for each title

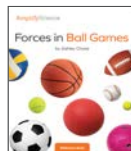
Building with Forces
978-1-64089-826-4



Busy Day in Pushville
978-1-64089-828-8



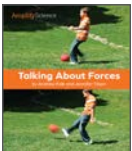
Forces in Ball Games
978-1-64089-829-5



Room 4 Solves a Problem
978-1-64089-827-1



Talking About Forces
978-1-64089-825-7



Student Investigation Notebook

978-1-943228-86-7



Hands-on materials kit

978-1-64089-515-7

- Materials kit delivered in 3 boxes
- Refill kit available for consumable materials



Grade K

Sunlight and Weather

Print Teacher's Guide

978-1-64276-674-5



Student books — ISBNs below reflect 6-packs for each title

Cool People in Hot Places
978-1-64089-977-3



Getting Warm in the Sunlight
978-1-64089-979-7



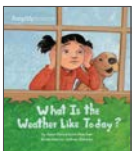
Handbook of Models
978-1-64089-981-0



Tornado! Predicting Severe Weather
978-1-64089-983-4



What is the Weather Like Today?
978-1-64089-985-8



Student Investigation Notebook

978-1-945192-80-7



Hands-on materials kit

978-1-64089-527-0

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 1

Animal and Plant Defenses

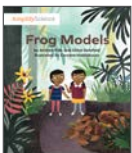
Print Teacher's Guide

978-1-64276-668-4



Student books — ISBNs below reflect 6-packs for each title

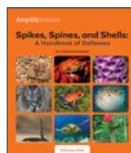
Frog Models
978-1-64089-947-6



Parents and Offspring
978-1-64089-949-0



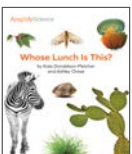
Spikes, Spines, and Shells:
A Handbook of Defenses
978-1-64089-951-3



Tortoise Parts
978-1-64089-953-7



Whose Lunch Is This?
978-1-64089-955-1



Student Investigation Notebook

978-1-945192-76-0



Hands-on materials kit

978-1-64089-528-7

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 1

Light and Sound

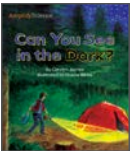
Print Teacher's Guide

978-1-64276-661-5



Student books — ISBNs below reflect 6-packs for each title

Can You See in the Dark?
978-1-64089-820-2



Engineering with
Light and Sound
978-1-64089-824-0



Let's Test!
978-1-64089-823-3



What Made This Shadow?
978-1-64089-821-9



What Vibrates?
978-1-64089-822-6



Student Investigation Notebook

978-1-943228-80-5



Hands-on materials kit

978-1-64089-516-4

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 1

Spinning Earth

Print Teacher's Guide

978-1-64276-675-2



Student books — ISBNs below reflect 6-packs for each title

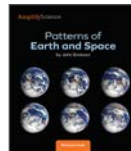
After Sunset
978-1-64089-939-1



Nighttime Investigation
978-1-64089-941-4



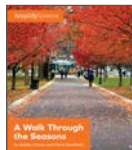
Patterns of Earth and Space
978-1-64089-943-8



Space Explorers
978-1-68391-205-7



A Walk Through the Seasons
978-1-64089-937-7



What Spins?
978-1-64089-945-2



Student Investigation Notebook

978-1-945192-88-3



Hands-on materials kit

978-1-64089-529-4

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 2

Plant and Animal Relationships

Print Teacher's Guide

978-1-64276-669-1



Student books — ISBNs below reflect 6-packs for each title

Habitat Scientist
978-1-64276-101-6



Handbook of Habitats
978-1-64276-103-0



Investigating Seeds
978-1-64276-105-4



My Nature Notebook
978-1-64276-107-8



A Plant is a System
978-1-64276-099-6



Student Investigation Notebook

978-1-943228-98-0



Hands-on materials kit

978-1-64089-530-0

- Materials kit delivered in 3 boxes
- Refill kit available for consumable materials



Grade 2

Properties of Materials

Print Teacher's Guide

978-1-64276-662-2



Student books — ISBNs below reflect 6-packs for each title

Can You Change It Back?
978-1-64089-819-6



The Handbook of
Interesting Ingredients
978-1-64089-817-2



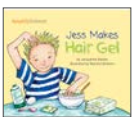
Ideas and Inventors
978-1-64276-067-5



Jelly Bean Engineer
978-1-64089-818-9



Jess Makes Hair Gel
978-1-64089-816-5



What if Rain Boots Were
Made of Paper?
978-1-64089-815-8



Student Investigation Notebook

978-1-943228-77-5



Hands-on materials kit

978-1-64089-517-1

- Materials kit delivered in 3 boxes
- Refill kit available for consumable materials



Grade 2

Changing Landforms

Print Teacher's Guide

978-1-64276-676-9

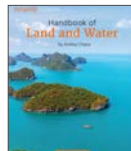


Student books — ISBNs below reflect 6-packs for each title

Gary's Sand Journal
978-1-64089-997-1



Handbook of Land and Water
978-1-64089-999-5



Landform Postcards
978-1-945192-99-9



Making Models of Streams
978-1-64276-095-8



What's Stronger? How Water
Causes Erosion
978-1-64276-097-2



Student Investigation Notebook

978-1-945192-82-1



Hands-on materials kit

978-1-64089-531-7

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 3

Balancing Forces

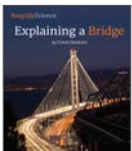
Print Teacher's Guide

978-1-64276-663-9



Student books — ISBNs below reflect 6-packs for each title

Explaining a Bridge
978-1-64089-810-3



Forces All Around
978-1-64089-811-0



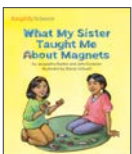
Handbook of Forces
978-1-64089-812-7



Hoverboard
978-1-64089-813-4



What My Sister Taught Me
About Magnets
978-1-64089-814-1



Student Investigation Notebook

978-1-943228-76-8



Hands-on materials kit

978-1-64089-518-8

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 3

Inheritance and Traits

Print Teacher's Guide

978-1-64276-670-7



Student books — ISBNs below reflect 6-packs for each title

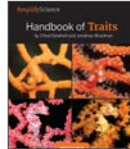
Blue Whales and Buttercups
978-1-64276-119-1



The Code
978-1-64276-127-6



Handbook of Traits
978-1-64276-121-4



How the Sparrow Learned
Its Song
978-1-64276-123-8



Scorpion Scientist
978-1-64276-125-2



Student Investigation Notebook

978-1-945192-78-4



Hands-on materials kit

978-1-64089-533-1

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 3

Environments and Survival

Print Teacher's Guide

978-1-64276-671-4



Student books — ISBNs below reflect 6-packs for each title

Biomimicry Handbook
978-1-64276-129-0



Cockroach Robots
978-1-64276-131-3



Earthworms Underground
978-1-64276-133-7



Environment News
978-1-64276-135-1



Mystery Mouths
978-1-64276-137-5



Who Thinks About Structure?
978-1-64089-890-5



Student Investigation Notebook

978-1-943228-94-2



Hands-on materials kit

978-1-64089-534-8

- Materials kit delivered in 3 boxes
- Refill kit available for consumable materials



Grade 3

Weather and Climate

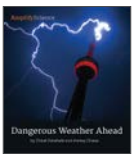
Print Teacher's Guide

978-1-64276-677-6

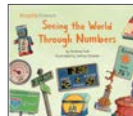


Student books — ISBNs below reflect 6-packs for each title

Dangerous Weather Ahead
978-1-64276-109-2



Seeing the World
Through Numbers
978-1-64276-111-5



Sky Notebook
978-1-64276-113-9



What's Going On with
the Weather?
978-1-64276-116-0



World Weather Handbook
978-1-64276-117-7



Student Investigation Notebook

978-1-945192-90-6



Hands-on materials kit

978-1-64089-532-4

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 4

Energy Conversions

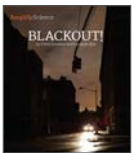
Print Teacher's Guide

978-1-64276-664-6



Student books — ISBNs below reflect 6-packs for each title

Blackout!
978-1-64089-803-5



Energy Past and Present
978-1-64089-801-1



It's All Energy
978-1-64089-804-2



Systems
978-1-64089-800-4



Sunlight and Showers
978-1-64089-802-8



Who Thinks About Systems?
978-1-64089-892-9



Student Investigation Notebook

978-1-943228-79-9



Hands-on materials kit

978-1-64089-519-5

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 4

Vision and Light

Print Teacher's Guide

978-1-64276-672-1

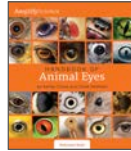


Student books — ISBNs below reflect 6-packs for each title

Crow Scientist
978-1-64089-967-4



Handbook of Animal Eyes
978-1-64089-969-8



I See What You Mean
978-1-64089-971-1



Investigating Animal Senses
978-1-64089-973-5



Seeing Like a Shrimp and
Smelling Like a Snake
978-1-64089-975-9



Student Investigation Notebook

978-1-943228-96-6



Hands-on materials kit

978-1-64089-537-9

- Materials kit delivered in 3 boxes
- Refill kit available for consumable materials



Grade 4

Earth's Features

Print Teacher's Guide

978-1-64276-678-3



Student books — ISBNs below reflect 6-packs for each title

Arguing to Solve a Mystery
978-1-64089-957-5



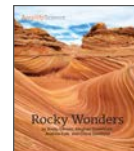
Clues from the Past
978-1-64089-959-9



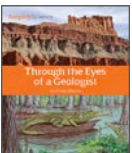
Fossil Hunter's Handbook
978-1-64089-961-2



Rocky Wonders
978-1-64089-963-6

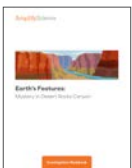


Through the Eyes of a Geologist
978-1-64089-965-0



Student Investigation Notebook

978-1-945192-86-9



Hands-on materials kit

978-1-64089-535-5

- Materials kit delivered in 3 boxes
- Refill kit available for consumable materials



Grade 4

Waves, Energy, and Information

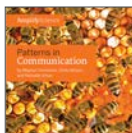
Print Teacher's Guide

978-1-64276-665-3



Student books — ISBNs below reflect 6-packs for each title

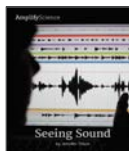
Patterns in Communication
978-1-64089-809-7



The Scientist Who Cracked
the Dolphin Code
978-1-64089-807-3



Seeing Sound
978-1-64089-808-0



Sound on the Move
978-1-64089-805-9



Warning: Tsunami!
978-1-64089-806-6



Student Investigation Notebook

978-1-943228-88-1



Hands-on materials kit

978-1-64089-520-1

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 5

Patterns of Earth and Sky

Print Teacher's Guide

978-1-64276-679-0



Student books — ISBNs below reflect 6-packs for each title

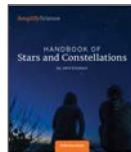
Dog Days of Summer
978-1-64089-905-6



How Big Is Big? How Far Is Far?
978-1-64089-909-4



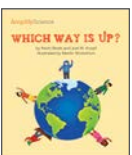
Handbook of Stars and Constellations
978-1-64089-907-0



Star Scientist
978-1-64089-911-7



Which Way Is Up?
978-1-64089-913-1



Student Investigation Notebook

978-1-945192-84-5



Hands-on materials kit

978-1-64089-538-6

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 5

Modeling Matter

Print Teacher's Guide

978-1-64276-666-0

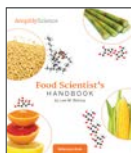


Student books — ISBNs below reflect 6-packs for each title

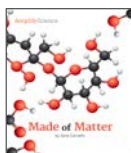
Break It Down
978-1-64089-796-0



Food Scientist's Handbook
978-1-64089-799-1



Made of Matter
978-1-64089-795-3



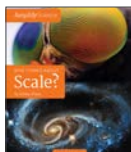
Science You Can't See
978-1-64089-797-7



Solving Dissolving
978-1-64089-798-4



Who Thinks About Scale?
978-1-68391-203-3



Student Investigation Notebook

978-1-943228-78-2



Hands-on materials kit

978-1-64089-521-8

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 5

The Earth System

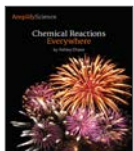
Print Teacher's Guide

978-1-64276-680-6



Student books — ISBNs below reflect 6-packs for each title

Chemical Reactions
Everywhere
978-1-64089-915-5



Drinking Cleopatra's Tears
978-1-64089-917-9



Engineering Clean Water
978-1-64089-919-3



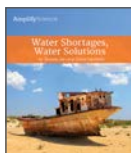
How the Earth System
Explains Dinosaur Extinction
978-1-64089-921-6



Water Encyclopedia
978-1-64089-923-0



Water Shortages,
Water Solutions
978-1-64089-925-4



Student Investigation Notebook

978-1-945192-92-0



Hands-on materials kit

978-1-64089-539-3

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 5

Ecosystem Restoration

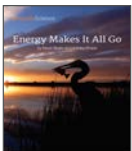
Print Teacher's Guide

978-1-64276-673-8



Student books — ISBNs below reflect 6-packs for each title

Energy Makes It All Go
978-1-64089-927-8



Matter Makes It All Up
978-1-64089-929-2



Restoration Case Studies
978-1-64089-931-5



Walk in the Woods
978-1-64089-933-9



Why Do Scientists Argue?
978-1-64089-935-3



Student Investigation Notebook

978-1-943228-90-4



Hands-on materials kit

978-1-64089-488-4

- Materials kit delivered in 4 boxes
- Refill kit available for consumable materials



Grade 6

Microbiome

Print Teacher's Guide

978-1-942010-90-6



Student Investigation Notebook with article compilation

978-1-64276-883-1



Hands-on materials kit

978-1-64089-489-1

- Materials kit delivered in 1 box



Grade 6

Metabolism

Print Teacher's Guide

978-1-942010-91-3



Student Investigation Notebook with article compilation

978-1-64276-889-3



Hands-on materials kit

978-1-64089-490-7

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 6

Metabolism: Engineering Internship

Print Teacher's Guide

978-1-942010-92-0



Student Investigation Notebook with article compilation

978-1-947002-94-4

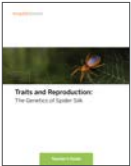


Grade 6

Traits and Reproduction

Print Teacher's Guide

978-1-942010-93-7



Student Investigation Notebook with article compilation

978-1-64276-919-7



Hands-on materials kit

978-1-64089-494-5

- Materials kit delivered in 1 box



Grade 6

Thermal Energy

Print Teacher's Guide

978-1-942010-85-2



Student Investigation Notebook with article compilation

978-1-64276-915-9



Hands-on materials kit

978-1-64089-504-1

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 6

Ocean, Atmosphere, and Climate

Print Teacher's Guide

978-1-64276-631-8



Student Investigation Notebook with article compilation

978-1-64276-899-2



Hands-on materials kit

978-1-64089-512-6

- Materials kit delivered in 2 boxes
- Refill kit available for consumable materials



Grade 6

Weather Patterns

Print Teacher's Guide

978-1-64276-632-5



Student Investigation Notebook with article compilation

978-1-64276-847-3



Hands-on materials kit

978-1-64089-510-2

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 6

Earth's Changing Climate

Print Teacher's Guide

978-1-942010-79-1



Student Investigation Notebook with article compilation

978-1-64089-873-8



Hands-on materials kit

978-1-64089-507-2

- Materials kit delivered in 1 box



Grade 6

Earth's Changing Climate: Engineering Internship

Print Teacher's Guide

978-1-942010-80-7



Student Investigation Notebook with article compilation

978-1-64089-874-5



Hands-on materials kit

978-1-64089-508-9

- Materials kit delivered in 1 box



Grade 7

Geology on Mars

Print Teacher's Guide

978-1-942010-99-9



Student Investigation Notebook with article compilation

978-1-64333-021-1



Hands-on materials kit

978-1-64089-506-5

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 7

Plate Motion

Print Teacher's Guide

978-1-64276-627-1



Student Investigation Notebook with article compilation

978-1-64276-905-0



Hands-on materials kit

978-1-64089-509-6

- Materials kit delivered in 1 box



Grade 7

Plate Motion: Engineering Internship

Print Teacher's Guide

978-1-64276-628-8



Student Investigation Notebook with article compilation

978-1-64089-868-4



Hands-on materials kit

978-1-64089-514-0

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 7

Rock Transformations

Print Teacher's Guide

978-1-64276-629-5



Student Investigation Notebook with article compilation

978-1-64276-911-1



Hands-on materials kit

978-1-64089-513-3

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 7

Phase Change

Print Teacher's Guide

978-1-942010-86-9



Student Investigation Notebook with article compilation

978-1-64276-901-2



Hands-on materials kit

978-1-64089-498-3

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 7

Phase Change: Engineering Internship

Print Teacher's Guide

978-1-942010-87-6



Student Investigation Notebook with article compilation

978-1-947002-89-0



Hands-on materials kit

978-1-64089-499-0

- Materials kit delivered in 1 box

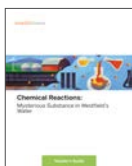


Grade 7

Chemical Reactions

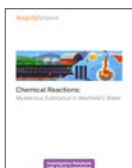
Print Teacher's Guide

978-1-942010-88-3



Student Investigation Notebook with article compilation

978-1-64276-681-3



Hands-on materials kit

978-1-64089-503-4

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 7

Populations and Resources

Print Teacher's Guide

978-1-942010-94-4



Student Investigation Notebook with article compilation

978-1-64276-909-8



Hands-on materials kit

978-1-64089-491-4

- Materials kit delivered in 1 box
- Refill kit available for consumable materials

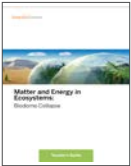


Grade 7

Matter and Energy in Ecosystems

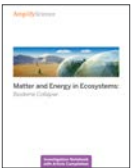
Print Teacher's Guide

978-1-942010-95-1



Student Investigation Notebook with article compilation

978-1-64276-887-9



Hands-on materials kit

978-1-64089-493-8

- Materials kit delivered in 1 box

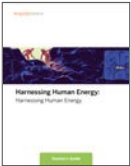


Grade 8

Harnessing Human Energy

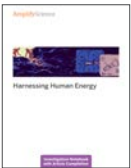
Print Teacher's Guide

978-1-942010-81-4



Student Investigation Notebook with article compilation

978-1-64276-879-4



Hands-on materials kit

978-1-64089-497-6

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 8

Force and Motion

Print Teacher's Guide

978-1-942010-82-1



Student Investigation Notebook with article compilation

978-1-64276-877-0



Hands-on materials kit

978-1-64089-500-3

- Materials kit delivered in 1 box



Grade 8

Force and Motion: Engineering Internship

Print Teacher's Guide

978-1-942010-83-8



Student Investigation Notebook with article compilation

978-1-947002-78-4



Hands-on materials kit

978-1-64089-502-7

- Materials kit delivered in 1 box
- Refill kit available for consumable materials



Grade 8

Magnetic Fields

Print Teacher's Guide

978-1-942010-84-5



Student Investigation Notebook with article compilation

978-1-64276-893-0



Hands-on materials kit

978-1-64089-501-0

- Materials kit delivered in 1 box

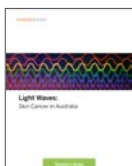


Grade 8

Light Waves

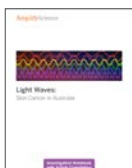
Print Teacher's Guide

978-1-942010-89-0



Student Investigation Notebook with article compilation

978-1-64276-881-7



Hands-on materials kit

978-1-64089-505-8

- Materials kit delivered in 1 box



Grade 8

Earth, Moon, and Sun

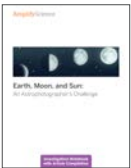
Print Teacher's Guide

978-1-64276-630-1



Student Investigation Notebook with article compilation

978-1-64276-873-2



Hands-on materials kit

978-1-64089-511-9

- Materials kit delivered in 1 box



Grade 8

Natural Selection

Print Teacher's Guide

978-1-942010-96-8



Student Investigation Notebook with article compilation

978-1-64276-895-4



Hands-on materials kit

978-1-64089-492-1

- Materials kit delivered in 1 box



Grade 8

Natural Selection: Engineering Internship

Print Teacher's Guide

978-1-942010-97-5



Student Investigation Notebook with article compilation

978-1-947002-99-9



Hands-on materials kit

978-1-64089-496-9

- Materials kit delivered in 1 box



Grade 8

Evolutionary History

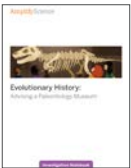
Print Teacher's Guide

978-1-942010-98-2



Student Investigation Notebook with article compilation

978-1-64276-869-5



Hands-on materials kit

978-1-64089-495-2

- Materials kit delivered in 1 box



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

Amplify.



THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY