

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
3D Scientific Torso	3D Scientific Torso of the human body with removable organs.	2384
Agar Kit	This kit includes disposable petri dishes and instant agar for growing cultures. The kit consists of one container of materials.	1267
Air & Water	Air and water are pervasive and essential elements of the biosphere. This kit helps students identify the presence of air and water and develop an understanding of the importance of each. The hands-on approach allows the students to see, hear, smell, taste and touch their way through a variety of enlightening activities. This kit consists of two containers of materials.	1369
Air Track Kit	Experiments on Motion in a Straight line, Inertial and Gravitational Mass, Measuring the Acceleration due to Gravity, Force and Motion, Momentum Changes in Explosion, Collisions (elastic/inelastic), Energy Conservation in collisions, the glider and the falling mass and oscillation. It consists of an air track and one container of materials.	1126
Algebra - Math in a Nutshell	Find and study patterns; manipulate variables to solve equations; become familiar with properties, ordered pairs, and inequalities. (Grades 3-4)	3175
Algebra sets	15 algebra sets	2985
Angle Rulers		2984
Assorted Ball Set	This kit consists of 5 sets of 12 balls that may be used with any activity requiring such materials.	1462
Astronomy Kit	The activities in this unit allow students to explore their world beyond earth. The sun, the nine planets of the solar system, the stars, and the forces which determine the position of these bodies in space.	1396
Base 10 Sets	15 sets of base ten sets to be used with counting and multiplying	2999
Bell, Buzzer, & Switch Kit	This kit allows students to wire bells, buzzers and switches in small groups or individually.	1359
Biltmore Cruiser Sticks	Biltmore sticks are used to determine the number of 16' logs in a tree, diameter and board footage. This consists of one container of materials.	1451
Botanical Rubbing Plates	This kit helps students learn how different plants look by using the rubbing plates to make different plants.	3166
Calorimeter		1456
Car-Multi Purpose	This car may be used to demonstrate motion in many settings.	2208

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
CE-MIST A Poet, A Potter, A Slave: What David Drake Can Teach Us	<p>Dave the Potter lived in Edgefield, South Carolina in the 1800s. It was quite unusual for a slave to be literate, but Dave was, and he inscribed distinctive couplets on his pots. In this unit, eighth grade students will learn about Dave and read examples of his poetry, such as:</p> <p>Dave belongs to Mr. Miles Where the oven bakes & the pot biles 31 July 1840</p> <p>In Language Arts, the students will write their own couplets, as well as a RAFT and an argument for or against the institution of slavery. In Science, the students will participate in a Tabletop Archaeology mini-excavation dig; in Art, they will work with clay and glaze. Essential questions in this unit include: Why was slavery so common throughout the South? What is the importance of literacy? Where was David Drake's position (as a human, as a commodity)? What was David Drake's perspective on slavery? How does one assign value to a David Drake pot? Literature circle books (4 copies of each) include <i>Chains</i>, <i>To Be a Slave</i>, <i>If You Lived When There Was Slavery in the Time of America</i>, <i>Daily Life in a Southern Plantation 1853</i>, <i>War Comes to Willy Freeman</i>, <i>Christmas In The Big House: Christmas in the Quarters</i>, and <i>Fredrick Douglass: The Last Day of Slavery</i>. The unit's text set includes single copies of <i>Awakening the Heart: Exploring Poetry in Elementary and Middle School</i>, <i>Dave the Potter: Artist, Poet, Slave</i>, <i>Circling the Savannah: Cultural Landmarks of the Central Savannah River Area</i>, <i>Glazes from Natural Sources</i>, <i>Raised in Clay: The Southern Pottery Tradition</i>, <i>Rocks and Minerals</i>, <i>Carolina Clay: The Life and Legend of the Slave Potter Dave</i>, <i>The Afro-American Tradition in the Decorative Arts</i>, and <i>Hands-On Archaeology: Real-Life Activities for Kids</i>.</p>	3280
CE-MIST Ancient Egypt	<p>The students will research the climate of ancient Egypt, look for simple machines in ancient Egyptian inventions, and research the structures, processes, and classification of the papyrus plant. They will design an Egyptian temple using line and rotational symmetry, and will construct a pyramid and measure its sides, angles, and surface area. They will read a novel and write a narrative from King Tut's point of view, create an illustrated alphabet of Egyptian hieroglyphics, and design an Egyptian death mask. Designed for Grade 6</p>	3271

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CE-MIST Ancient Greece	<p>Students in Grade 6 will learn about Pythagoras, explore prime numbers and geometry, and solve math problems using π. They will examine Greek and Latin root words, conduct research, and create a travel brochure about ancient Greece. In science, they will create a classroom greenhouse and learn to classify plants using the Linnaean system of kingdom, phylum, class, order, family, genus, and species. Students will explore Essential Questions such as, Why is it important to learn about ancient civilizations? How did the ancient Greeks influence mathematics, science, and literature? This TILT includes a wide variety of multileveled children's literature. Literature circle books (4 copies each) include <i>The Lightning Thief</i>, <i>Hour of the Olympics</i>, <i>How to Be an Ancient Greek Athlete</i>, <i>I Wonder Why Greeks Built Temples</i>, <i>Ancient Greek Women</i>, <i>D'Aulaire's Book of Greek Myths</i>, and <i>You Wouldn't Want to Be a Slave in Ancient Greece</i>. This unit's text set includes a Timeline poster, a DVD, and five read-aloud books related to Mathematics. NOTE: The Ancient Rome TILT includes an expanded 3-part set of Greek and Roman mythology.</p>	3274
CE-MIST Ancient Rome	<p>Sixth grade students will examine the rise and fall of ancient Rome and explore its impact on present society. They will read novels set in ancient Rome while analyzing the elements of historical fiction. They will have the opportunity to write a play using one of the scenes from the novel. In Math, students will explore Roman numerals and create scale models of Roman architecture. In Science, students will create models of Roman aqueducts. Several videos are available to help students to understand the rise and fall of ancient Rome and its impact on today's world. Essential Questions for this unit include: Can you evaluate the reasons for the rise and fall of Rome? How is today's water system similar or different from that of the Romans? What are modern uses for Roman numerals? What are the similarities and differences between Roman currency and American currency?</p>	3275

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CE-MIST Books for Children in Spanish and English (Libros para Niños en Español e Inglés)	The trunk has 92 books (4 copies each of these 23 books) 500 Palabras Nuevas Para Ti, Abuelo, Burro's Tortillas, Las tortillas del burro, The Cat in the Hat: In English and Spanish, Charlotte's Web, La Telarana de Carlota = Charlotte's Web, Cinderella/Cenicienta, The Dog Who Loved Tortillas/La Perrita Que Le Encantaban Las Tortillas, Las Empanadas Que Hacia la Abuela, Jorge El Curioso y La Pinata / Curious George Pinata Party Spanish/English Bilingual Edition (Cgtv Reader) (First Edition, Bilingual), Peter Pan, Pinocchio/Pinocho, The Princess and the Pea/La Princesa del Guisante, Puss in Boots/El Gato Con Botas, River Beds: Sleeping in the World's Rivers, Los lechos: Durmiendo en los ríos del mundo, Sleeping Beauty/La Bella Durmiente, Upside Down and Backwards/De Cabeza y Al Reves, The Velveteen Rabbit/El Conejo de Terciopelo, Water Beds: Sleeping in the Ocean, Camas de agua: durmiendo en el océano, The Wizard of Oz/El Mago de Oz	3285
CE-MIST Heading West	Fourth graders will step back in time to explore the history of Westward Expansion in the United States. Students will conduct research using both print and non-print resources to gather information about the pioneers' motivations for traveling west, what the journey was like, and how their lives as well as the country were impacted. Students will also participate in a Pioneer Simulation. They will "travel" in wagon families and make decisions on their journey so they can experience the hardships and daily life of the pioneers who traveled west. The class will also read <i>Dear Levi: Letters from the Overland Trail</i> , a historical fiction novel about a 10 year old's journey west during this time. In Art, students will create an authentic looking pioneer journal including illustrations of their journey. In Music, they will sing songs sung by pioneer children. In PE, they will play games that pioneer children played, such as sticks and hoops, marbles, and knee tag. The unit culminates with a research project and a Pioneer Day celebration	3272

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CE-MIST James Legare, Poet and Inventor	<p>In this unit, students in Grade 6 will explore major themes and dominant images in American Romantic poetry. They will analyze South Carolina poet James Matthews Legare's work to uncover poetic devices and figurative language including similes, metaphors, personification, hyperbole, onomatopoeia, alliteration, stanzas, rhyme scheme, repetition, and refrain. Because James Matthews Legare invented a product called the in the life of the poets the essence of the middle ages and secret</p>	3276
CE-MIST Medieval Time (The Middle Ages)	<p>The students will research scientists, mathematicians, and explorers of the Renaissance. They will create and display a series of "Wanted" posters featuring these famous people and their inventions, such as Johannes Gutenberg's printing press. They will make their own paper and ink (or use calligraphy pens) and write using Old English Script. The students will also construct and label a model castle, calculate the castle's perimeter and area, and record the number of faces, edges, and vertices of three-dimensional shapes found in their castles. They will read a novel, dramatize scenes in the book through small group skits, and write narrative essays from the point of view of a knight, a serf, a peasant, a manor lord, or a monarch. Designed for 6th grade.</p>	3266

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CE-MIST Mission Impossible: The Vietnam War	<p>Students in Grade 7 will learn about the history of the Vietnam War while wrestling with difficult questions such as, Do the ends justify the means? Did the United States' use of chemical weapons to destroy the enemy in Vietnam justify the health effects caused by exposure to Agent Orange in Southeast Asia? The students will also review a Time Magazine article about forest defoliation, analyze a political cartoon, examine US pop culture of the 1960s and 1970s, interview a Vietnam vet, and participate in a debate. Literature circle books (4 copies each) include <i>How Tiger Got His Stripes: A Folktale from Vietnam</i>, <i>Children of the Dragon: Selected Tales from Vietnam</i>, <i>The Dragon Prince: Stories and Legends from Vietnam</i>, and <i>Vietnam A to Z: Discover the colorful culture of Vietnam</i>. This unit includes daily pre-writing and writing activities, hands-on activities, an Eco-Tag game, and a portfolio assessment rubric.</p>	3278
CE-MIST Native American Culture	<p>Eighth grade students will look at the night sky through the eyes of various Native American tribes— Navajo, Shoshoni, Cherokee, Hopi, and others— and learn how the stars ushered in the seasons and how, from their viewpoint, they explained the various phenomena of nature. How were they- and how are WE- affected by the characteristics, structures, and predictable motions of celestial bodies? Students will then analyze the scientific accuracy of ancient North American Indian observations using the read aloud, <i>Living the Sky: The Cosmos of the American Indian</i>. Students will explore ancient and modern solar science while using an interactive research exercise website. In Social Studies, they will analyze photographs, use maps, conduct research, create flip folders and present brochures. They will discover how the culture of the Catawba, Cherokee, and Yemassee Indians of South Carolina affected the relationships and settlement of our state by Europeans. In Language Arts, they will evaluate an article about myths and stereotypes of Native Americans, identify figurative language used in a novel, and make connections between texts. In Art, the students will analyze Native American art, work with clay, and create a Native American Mask. NOTE: This TILT includes clay and glaze, which is very heavy and is packaged separately.</p>	3279

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CE-MIST Shake, Rattle, and Roll	The students will read personal accounts of the Great Charleston Earthquake of 1886 and respond to images of the earthquake's damage. They will analyze and graph seismograph readings and determine the epicenter of an earthquake. They will research and create brochures about earthquake safety. They will create a pop-up book showcasing the clothing, transportation, communications, art, and music in Charleston, South Carolina in 1886, examining the political, economic, and social conditions of the time. They will also explore the Gullah culture and learn how to dance the Charleston! Designed for 8th grade.	3265
CE-MIST South Carolina Culture & the Cold War (Option 2)	The students will examine the music, slang expressions, technology, and culture of the 1950's in South Carolina. Road maps, newspaper articles, vintage films, video clips, and other nonfiction resources will be used. The students will also read and analyze science fiction literature, poetry, and song lyrics as they explore Cold War culture. The film "Displaced: The Unexpected Fallout from the Cold War" will be used to show the impact of the construction of the Savannah River Site in Aiken County. Working in small groups, students will calculate and compare the number and percentages of populations displaced by SRS, measure and calculate the distance required for relocation from Ellenton to New Ellenton, and design a new town from scratch, drawing a town map to scale. Students will also learn about nuclear energy production and will write a persuasive essay describing their personal beliefs about nuclear power.	3284
CE-MIST South Carolina Culture & the Cold War	The students will examine the music, slang expressions, technology, and culture of the 1950's in South Carolina. Road maps, newspaper articles, vintage films, video clips, and other nonfiction resources will be used. The students will also read and analyze science fiction literature, poetry, and song lyrics as they explore Cold War culture. The film "Displaced: The Unexpected Fallout from the Cold War" will be used to show the impact of the construction of the Savannah River Site in Aiken County. Working in small groups, students will calculate and compare the number and percentages of populations displaced by SRS, measure and calculate the distance required for relocation from Ellenton to New Ellenton, and design a new town from scratch, drawing a town map to scale. Students will also learn about nuclear energy production and will write a persuasive essay describing their personal beliefs about nuclear power. Designed for 8th grade.	3268

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CE-MIST Our Great Nation	Fourth graders will research and discover the ideals and people that established our great nation. The class will read <i>A is for America</i> and <i>John Adams Speaks for Freedom</i> to make connections and ask questions about topics covered in text. Students will research different topics about America using text and Internet sources. They will create skits and act out the roles of early leaders of our nation, learn how Benjamin Franklin discovered electricity, and create parallel and series circuits. They will also create a classroom constitution using quill pens and inkwells; use a printing press method to print the Preamble to the Constitution; and compare the Articles of Confederation and the Constitution.	3283
CE-MIST The Great Wall of China	In this unit, sixth graders will explore Essential Questions such as, Why did ancient Chinese civilizations grow along the Yellow River? How did Emperor Qin defend China from other countries? How did the ancient Chinese construct the Great Wall? Why is the Great Wall of China visible from space? The students will use maps and actual measurements of remaining structures of the Great Wall to calculate scaled proportions. They will research the types of tools and simple machines used by peasants to build the Great Wall, and then build their own models using K-Nex and modeling clay. They will also work with Chinese tangrams; learn about contributions of the ancient Chinese to modern art; create comic strips using Chinese calligraphy; and perform traditional Chinese dances. They will compare ancient Chinese homes, transportation, dress, family life, and celebrations to modern day South Carolina. This unit includes literature circle books and 30 copies of <i>Ancient China: Kids Discover</i> , as well as a traditional Chinese peasant dress and hat for the teacher to wear!	3273

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CE-MIST The Holocaust	<p>The students will read and respond to different types of text including memoirs, autobiographies, essays, speeches, and historical fiction about WWII and the Holocaust. They will compare different genres and identify propaganda techniques. Working together in small groups, they will interpret maps, a timeline of events, and music associated with the concentration camps. They will calculate the square footage of a boxcar and physically demonstrate how much space 120 passengers would have had on the train. They will research the number of Jews killed in Poland, the USSR, Hungary, and Germany and will use this data to create box-plot and circle graphs. They will research the three main diseases that plagued the Jewish Ghettos and relate that to the functions and interconnections of the major human body systems. The culminating project will be a "Wall" created by the students; each student will place personal items in a box, representing items of value that would have been confiscated by the Nazis. The shoeboxes will be painted grey, identified only by a number, and stacked to create a wall. Designed for 7th grade.</p>	3267
CE-MIST The Roaring Twenties	<p>This Roaring 20s unit is intended to enrich and enhance 7th grade through the use of cross-curricular activities. All standards fall within the 3rd quarter Aiken County Public Schools' pacing guide. Each of the standards are woven together to craft an atmosphere of educational creativity.</p> <p>All courses will focus on the same time era. While ELA is reading the Great Gatsby, Art will be learning about artwork from the same time period. Art will also do a project that focuses on advertising in the 1930s. This advertisement will be created while students are reading the Great Gatsby. Students must use people, places, and ideas from the novel, must focus on key events from the novel, must meet the needs of characters from the novel, and must use a quote from the novel. Before students read the novel in English class, they will receive a short introduction to the author in math class, where they will calculate the expenditures of Fitzgerald and his family, and determine how much money, in today's dollars, the couple spent.</p>	3282

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
CE-MIST The Triangle Shirtwaist Factory Fire & The Industrial Revolution	Seventh grade students explore Essential Questions such as, What were the causes of the Industrial Revolution and how did it change the course of history? What was the cost of a safe work environment and equal wages? Who were the heroes of the Industrial Revolution? In Math, the students will create a timeline of events after watching video segments about the terrible factory fire. They will design graphs and tables that are representative of workers' pay scales, work shifts, and labor conditions. In Science, the students will investigate safety procedures, create posters, and perform skits. In Social Studies, the students will explore the changes in farming that resulted from the shift from agriculture to industry, brainstorm a concept web on the Industrial Revolution, and create a Top Ten List explaining why Great Britain was first industrialized. In Language Arts, the students will read literature circle novels, use interactive notebooks, write RAFTs, and design T-shirts. Literature circle books (4 copies of each) in this unit include <i>Fire at the Triangle Factory</i> , <i>Smokestacks and Spinning Jennys: Industrial Revolution</i> , <i>Kids on Strike</i> , <i>Ashes of Roses</i> , <i>Industrial Revolution from Muscles to Machines</i> , <i>Uprising</i> , and <i>The Locket: Surviving the Triangle Shirtwaist Fire</i> .	3277
Centimeter Cubes		
Chemistry Equipment	Various items to use in a Chemistry Lab. Includes test tubes with racks, chemplates, 12 watch glasses, stir sticks, and litmus paper.	1784
Circuit Board Demonstrator Kit	Learn about simple, series, and parallel circuits. Conduct a three way bulb study to observe the flow of electricity.	1373
Clinometer Kit	20 Sturdy pocket size clinometers. Sighting and scale reading are done simultaneously. Contains bar codes 1635 through 1654.	1634
Coin Sets	Six sets of coins to be used with counting	2997
Color and Light (Grades 5-6)	Students use prisms to investigate the full range of colors in white light, called the visible spectrum. They experiment with subtractive color mixing and discover the significance of the primary pigments. Students separate pigments with paper chromatography, then combine colors by blending filtered light beams. Experiences with both subtractive and additive mixing help students understand the role of the eyes and brain in perceiving color. That understanding is extended as students identify the dot patterns in printed pictures, and manipulate color filters to make colors disappear. Students also explore afterimages and phantom images, turn two-dimensional drawings 3-D, and demonstrate persistence of vision. Kit includes materials for 32 students plus comprehensive step-by-step teacher guide with student activity sheets and 3-part assessment feature.	3156

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Compasses (Orienteering)	Learn the history of the magnetic compass and how to build a simple magnetic compass. Discuss the basic physics behind operating a magnetic compass. Includes games for students to demonstrate the use of the compass.	1145
Counting Cubes	15 sets of cubes	2983
Counting Tiles	Multicolor Counting tiles. 2 sets of 100	3103
Cuisenaire kit grade 3	Contains Math Manipulatives: Cuisenaire rods, Pattern blocks plastic , Clock dials set/10, Paper money , Coins (2), student thermometer, Rocker scale, Hundreds boards, Color tiles , Two-color counters, Geoboards plastic, Snap cubes, Mirrors, Fraction strip plastic, Hundreds squares, Cuisenaire rods,, Unit cubes, , Spinners, Rod trays, geoboards Also contains Cuisenaire overhead material grade 3 kit. (1379)	1388
Cuisenaire kit grade 6-8	Contains Math Manipulatives: Two-color counters, Plastic geoboards, Snap cubes, Algebra tiles, O.H. algebra, Tangrams, Polydrons starter set, Hundreds squares , Cuisenaire rods,, Unit cubes, Thousand cubes, Pi Hoop, Triman compass rotractor , spinners , Mirrors, base tens Also contains Cuisenaire overhead material grade 6-8 kit (1378)	1387
Density Volume Displacers	Some plastic cups with straws protruding out of their sides!!! These cups can be used to determine the density of objects through the displacement of water.	1821
Diameter English tapes	Tape used for determining diameter of trees - English Units.	1460
Diameter Metric Tapes	These measuring tapes may be used for determining the diameter of trees - metric units. The kit consists of one container of materials.	1459
Dinosaur Footprint Casting Kit	Play the role of a Paleontologist to study clues and create hypotheses about how and when dinosaurs lived.	1311
Dinosaur Poster and Tracking Kit	For use with the Evolution of Dinosaur Teeth Kit and Footprint Casting Kit.	1441
Dissecting Kit	Dissecting tools for use with preserved specimens. Specimens not included.	1394
Earth, Sun, & Moon-just passing time kit	Examine the positions of the sun, earth and moon in relation to one another. Focus on the natural movements of the earth and moon relative to the sun and each other and how our concepts of time corresponds to these movements.	1263
Earthly Interactions Kit	The purpose of this kit is to examine the nonliving components of our planet and certain of their characteristics. This kit demonstrates interactions that naturally occur between and among the air, water, rock, and soil and the living inhabitants of the earth.	1261
Electric Circuits Kit II	Learn how positive and negative charges interact with each other. Conduct an experiment using a light bulb to observe electricity. Learn different types of circuits and how they work with electricity.	1265
Electricity		2948

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Electricity Lab Kit	Hands on experimenting with Electricity. Using, batteries, bulbs, wires, balloons and other interesting objects, to learn about current and static electricity.	1133
Electricity Measurer Package		2210
Energy Kit	Learn the topic of energy conversion by concentrating on stored or potential energy and its release as kinetic energy or work. Investigate the relationship between stored energy and work.	1366
Energy Sources Kit	The activities in this kit provide the student with the opportunity to explore energy in its various forms and the sources from which this energy originates. The kit consists of one container of materials.	1377
Energy Transfer Kit	How is energy stored, released, transferred, and measured. Learn how simple machines work using energy.	1259
Evolution of Dinosaur Teeth	This kit combines factual information with "hands-on" dinosaur tooth replicas. Together, students play the role of paleontologists, to put together clues and answer questions and the existence and evolution of dinosaurs.	1255
Extra Burner	Extra Burner	2252
FAST FOOD FOR THOUGHT	Base 10 Fries have been used successfully by students and teachers in grades 2 through 6. Base 10 fries are an especially useful with older students who need to strengthen their use of place value and whole number operations	2800
Fiber Optics Kit	This kit is designed for grades 6-12 and is divided into two curricula: and introductory and an intermediate. Upon completion of the activities, students will see fiber optics applied to everyday things and will have a much better appreciation for this exciting technology. The topics include: Origin of Fiber Optics, What It Is Used For, Light and the Optic Fiber, Fiber Optic Transmitters and Receivers for Fiber Optic Systems. This kit contains one container of material.	1292
Finding the Moon (Grades K-1)	Through daytime astronomy activities, young students follow the moon during one complete phase cycle and gain an understanding of earth and moon orbits. (Grades K-1)	3155
Fingerprint Analysis Kit	Learn to identify fingerprint patterns and classify the right thumb prints of class members.	1127
Fisher Scientific Microscope (Hair Analysis Kit)	This microscope can be used in conjunction with the Hair Analysis Kit.	2216

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Flight and Rocketry (Grades 5-6)	To understand the fundamentals of flight, students must first grasp the properties of air, especially that air exerts pressure. They assemble a hangar-full of flying machines. Parachutes, kites, and hot-air balloons demonstrate air resistance, wind and angle, and lighter-than-air flight. Paper airplane trials prove that shape determines flight path and duration. Next, students discover how the airfoil design of both fixed wings and helicopter rotors creates lift. They construct propeller-driven and jet vehicles to explore plane power, and they learn to control flight by adding ailerons, elevators, and rudders to gliders. Students cap off the unit by building and launching fuel-powered model rockets. Kit includes materials for 32 students plus comprehensive step-by-step teacher guide with student activity sheets and 3-part assessment feature.	3158
Flower Model	This colorful teaching model was designed specifically for hands on use with children. The model is made of resilient, stimulate problem-solving skills, and develops small motor skills. Includes worksheets, cross-curricular extension activities and assessment ideas.	3160
Foam Operations Dice	Helps students master the signs of basic operations with these oversized dice.	3163
Force Measurer		2209
Forensic Science: Introduction to DNA Fingerprinting	Grades 4-8 This kit introduces students to a crime scene where they gather evidence to be analyzed. Five student worksheets, materials for making models of DNA, X-ray film of DNA fingerprints, and many more items are included to complete their investigations. Kit contains materials for 15 groups of 2 students each and teacher instructions.	3154
FOSS: Air and Weather Module (Grades 1-2)	The Air and Weather Module (4 activities) involves students in monitoring weather. They explore properties of air using plastic syringes and tubes to find that air takes up space and builds up pressure when compressed. Students construct devices that use air to function; parachutes, propellers, balloon rockets, gliders, pinwheels, streamers, wind socks, kites, and whirligigs. Module is designed for grades 1 and 2 and consists of 2 drawers of materials.	2362
FOSS: Air and Weather-Literature Resource Kit	Titles: The Big Balloon Race, Can You See the Wind?, What's the Weather Today, When a Storm Comes Up, The Moon Seems to Change, What Will the Weather Be, A Tree for all Seasons, Gilberto and the Wind, Storm in the Night, The Snowy Day, Water Dance, Katy and the Big Snow, The Cloud Book, It Looked Like Spilt Milk	3186

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
FOSS: Animals Two By Two Module (Grade K)	Animals Two by Two provides young students with close and personal interaction with some common land and water animals. Appropriate classroom habitats are established, and students learn to care for the animals. In four activities the animals are studied in pairs. Students observe and care for one animal over time, and then they are introduced to another animal similar to the first but with differences in structure and behavior. This process enhances opportunities for observation, communication, and comparison.	2365
FOSS: Balance & Motion-Literature Resource Kit	Titles: Forces Around Us, Up and Down on the Merry - go -round, Wheels	3209
FOSS: Balance and Motion Module (Grades 1-2)	The Balance and Motion Module (3 activities) has students balance cardboard shapes and pencils, and make mobiles to explore balance, counterbalance, and stability. They investigate spinning motion with tops, zoomers, and whirlers, and rolling motion with wheel-and-axle systems, rolling cups, and marbles in runways. This module consists of 1 drawer of materials and 20 marble runways. It contains 3 activities appropriate for grades 1 and 2.	2366
FOSS: Earth Materials Module (Grades 3-4)	The Earth Materials Module (4 activities) puts students in touch with the basic building materials from which the earth is made. They experience simulated and real rocks, investigate minerals and their properties, and learn techniques used by geologists for taking apart and identifying several important rocks and minerals. The module consists of 1 drawer of materials and is age appropriate for grades 3 and 4. Measurement Tool Kit included.	2350
FOSS: Environments Module(Grades 5-6)	The six activities in this module expose students to a variety of different plants and animals and their environments. Structured investigations in both terrestrial and aquatic systems develop the concepts of environmental factor, tolerance, environmental preference, and environmental range. The module consists of 2 drawers of materials and is appropriate for grades 5 and 6. Measurement Tool Kit included.	2354
FOSS: Fabric Module (Grade K)	Fabric, a material so often taken for granted, makes a fascinating study for early-childhood students. In the Fabric Module students are introduced to a wide variety of fabrics in a systematic way, so that they become familiar with fabrics' properties, discover what happens when they are tested, and discover how they interact with other materials, including water.	2356
FOSS: Fabric-Literature Resource Kit	Titles: A New Coat for Anna, A Pocket for Corduroy, Caps for Sale, Charlie Needs a Cloak, Harry the Dirty Dog, Joseph Had a Little Overcoat, No Roses for Harry, Pelle's New Suit, Sam Johnson and the Blue Ribbon Quilt, The Crane Wife, The Emperor's New Clothes, The Goat in the Rug, The Quilt Story	3210

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
FOSS: Food and Nutrition Module (Grades 5-6)	The four activities in this module provide students with the means for testing food for acid content, vitamin C content, fat content, and sugar content. Following these activities, they use their knowledge and nutritional information from product ingredients to plan and evaluate lunch meals. The module consists of 1 drawer of materials and is appropriate for grades 5 and 6. Measurement Tool Kit included.	2348
FOSS: Human Body Module (grades3-4)	The Human Body Module (4 activities) helps students understand the basic structural systems of their bodies (skeleton, joints, and muscles), and how these systems work together to provide movement, particularly in a stimulus/response situation. Designed for Grades 3-4 (1 drawer of materials) Measurement Tool Kit included.	2373
FOSS: Human Body Module (grades3-4)	The Human Body Module (4 activities) helps students understand the basic structural systems of their bodies (skeleton, joints, and muscles), and how these systems work together to provide movement, particularly in a stimulus/response situation. Designed for Grades 3-4 (1 drawer of materials)	3124
FOSS: Ideas and Inventions Module (Grades 3-4)	The Ideas and Inventions Module (4 activities) features divergent thinking and creativity. After mastering four techniques used by scientists to gather information that would usually go unnoticed (rubbing, chromatography, fingerprinting, and mirror imagery), the students apply the techniques to produce games, artwork, and other creations. The module consists of 1 drawer of materials and is appropriate for grades 3 and 4. Measurement Tool Kit included.	2367
FOSS: Insects Module (Grades 1-2)	The Insects Module (6 activities) introduces students to the life sequences of a number of insects. Darkling beetles, milkweed, bugs, wax moths, silk moths, painted lady butterflies, crickets, and ants are a few of the organisms observed over time. Students observe and compare insect structures and behaviors in different stages of the life cycle, discuss and record findings, and pose questions to be resolved. Students experience complete and simple insect metamorphosis and are introduced to a sampling of the diversity in the animal kingdom.	2358
FOSS: Insects-Literature Resource Kit	Titles: How to Hide a Butterfly and Other Insects, Insects, Monarch Butterfly, Lifetimes: A Beautiful Way to Explain Death to Children, Thinking about Ants, Bug Faces	3188
FOSS: Land forms Module (Grades 5-6)	The 5 activities in this module develop concepts of physical geography and mapping. Students use stream tables to simulate the creation of land forms and make and use topographic maps that describe land forms. The module consists of 2 drawers of materials and 8 stream table trays. It is geared towards grades 5 and 6. Measurement Tool Kit included.	2359

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
FOSS: Levers and Pulleys Module (Grades 5-6)	This module contains 4 activities designed to expose students to basic concepts of mechanics using two of the six simple machines: levers and pulleys. They gain first-hand experience with effort, load, fulcrum, and mechanical advantage. The module consists of 1 drawer of materials and is appropriate for grades 5 and 6. Measurement Tool Kit included.	2352
FOSS: Magnetism and Electricity Module (Grades 3-4)	The 4 activities in this module allow students to explore permanent magnetism, simple electrical current, and electromagnetism. Knowledge gained in the first three activities is applied to the fourth as the students make telegraph units and develop a code system to communicate with each other. The module consists of 1 drawer of materials and is appropriate for grades 3 and 4. Measurement Tool Kit included.	2371
FOSS: Measurement Module (Grades 3-4)	The Measurement Module (4 activities) introduces students to metric measurement. They learn the standard units used to measure length (meter), weight (gram), fluid volume (liter), and temperature (degrees Celsius), and use the appropriate tools in situations calling for measurement. The module consists of 2 drawers of materials and is appropriate for grades 3 and 4.	2370
FOSS: Mixtures & Solutions- Literature Resource Kit	Titles: Marie Curie: Brave Scientist, Science Experiments You Can Eat, Super Science Concoctions, Chemical Chaos, Gorky Rises, What is the World Made Of? All About Solids, Liquids and Gases	3192
FOSS: Mixtures and Solutions (Grades 5-6)	The 4 activities in this module introduce students to basic chemistry concepts. They experience mixture, solution, concentration, saturation, evaporation, and chemical reaction. This module consists of 2 drawers and is appropriate for grades 5 and 6. Measurement Tool Kit included.	2364
FOSS: Models and Designs Module (Grades 5-6)	The 4 activities in this module develop the concept of a scientific model and provides opportunities for students to create solutions to a variety of problems. Strong emphasis is placed on the construction of working models and solving real-world problems. The module consists of 2 drawers of materials and is appropriate for grades 5 and 6. Measurement Tool Kit included.	2351
FOSS: New Plants Module (Grades 1-2)	The New Plants Module (4 activities) helps students appreciate the diversity of life in the plant kingdom. They become familiar with the structures of flowering plants and discover ways to propagate new plants from mature plants. Students grow plants from seed using rapid-cycling brassica (Wisconsin Fast Plants [™]) and observe its life cycle in a month. They plant monocots (rye grass) and dicots (alfalfa) together in a "lawn" and compare the results of mowing. They grow new plants from cuttings, bulbs, and roots, and monitor growth. This module consists of 2 drawers of materials and is appropriate for grades 1 and 2.	2360

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
FOSS: New Plants-Literature Resource Kit	Titles: Messy Bessey's Garden, How a Seed Grows, The Little Red Hen, The Carrot Seed, Growing Vegetable Soup, Bread is for Eating, A Seed Grows: My First Look at a Plant's Life Cycle, The Reason For a Flower, Jamie O'Rourke and the Big Potato, The Tiny Seed, Kid's Gardening: A Guide to Messing Around in the Dirt, A Handful of Sunshine,	3189
FOSS: Paper Module (Grade K)	The 3 activities in this module guide students to take a close look at paper. They begin by focusing on the properties of paper. Then they make paper constructions, see how paper interacts with water, and finally make some paper of their own. The module consists of 1 drawer of materials and is intended for use with kindergarten classes.	2349
FOSS: Pebbles, Sand and Silt-Liteature Resource Kit	Titles: Stone Soup, Let's Go Rock Collecting, Everybody Needs a Rock, Sylvester and the Magic Pebble, When Clay Sings, The Quicksand Book, If You Find a Rock	3191
FOSS: Pebbles, Sand, and Silt Module (Grades 1-2)	The Pebbles, Sand, and Silt Module (4 activities) introduces students to several kinds of rocks. Throughout the activities in this module, students sort, wash, compare, and seriate rocks. They separate mixtures of rocks with screens, and investigate clay and soil. After students have had many experiences with these earth materials, they participate in projects that demonstrate how people use earth materials in their daily lives. The module consists of 2 drawers of materials and is appropriate for grades 1 and 2.	2363
FOSS: Physics of Sound Module (Grades 3-4)	The Physics of Sound Module (4 activities) gives students experience with sound sources, sound receivers, amplification, pitch, and directionality of sound. It also develops the central idea of vibration as the source of all sounds. Students work at learning centers to investigate the various concepts associated with the physics of sound. This module consists of 2 drawers of materials and is appropriate for grades 3 and 4. Measurement Tool Kit included.	2369
FOSS: Solar Energy Module (Grades 5-6)	This module consists of 4 activities which introduce students to the important concepts of apparent sun movement and passive solar energy. Students capture solar energy using several different earth materials, and make solar water heaters using reflective and absorbent collectors. Finally, they work with model houses to discover how to maximize space heating using the sun's energy. The module consists of 2 drawers of materials and is appropriate for grades 5 and 6. Measurement Tool Kit included	2357

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
FOSS: Solids and Liquids Module (Grades 1-2)	The Solids and Liquids Module (4 activities) introduces students to characteristics of two states of matter. After describing properties of solid objects, students use them in construction projects. They investigate the properties of particulate solids (cornmeal, beans, rice) and liquids (water, corn syrup, oil) and compare their behaviors. After observing solid/liquid and liquid/liquid interactions, students investigate toothpaste to determine if it is solid or liquid. The module consists of 2 drawers of materials and 5 bus pans. It is age appropriate for grades 1 and 2.	2361
FOSS: Solids and Liquids- Literature Resource Kit	Titles: Bartholomew and the Oobleck, Galimoto, Horrible Harry and the Green Slime, Kids Cooking: A Very Slightly Messy Manual, Solid, Liquid, or Gas?, The Quicksand Book, The Snowy Day	3190
FOSS: Structures of Life Module (Grades 3-4)	The Structures of Life module (5 activities) continues the story of life in the classroom. Students germinate seeds and grow them in hydroponic gardens. They keep crayfish in the classroom and observe their fascinating structures and behaviors. This module consists of 1 drawer of materials and 2 bus pans. It is appropriate for grades 3 and 4.	2372
FOSS: Trees Module (Kindergarten)	The giant sequoia is the most massive living organism on earth. It is a tree, magnificent in dimension and awe inspiring in its longevity and durability. To stand in the company of such giants is to experience the scale of life. To a kindergartner the oak on the corner, the pines at the park, and the mulberry trees at school are giants. Systematic investigation of trees will bring students to a better understanding of trees' place at school and in the community, and will provide some solid experiences on the way to understanding all plants.	2353
FOSS: Trees-Literature Resource Kit	Titles: The Secret Life of Trees, From Acorn to Oak Tree: How Things Grow, It Could Still Be a Tree, Someday a Tree, The Seasons of Arnold's Apple Tree, Birches, Sky Tree: Seeing Science Through Art, , The Great Kapok Tree: A Tale of the Amazon Rain Forest, Our Big Home An Earth Poem, The Tremendous Tree Book, Red Leaf, Yellow Leaf, The Gift of the Tree	3187
FOSS: Variables Module (Grades 5-6)	The 4 activities in this module introduce students to the concept of a variable. Students identify variables, control variables, and conduct controlled experiments using a variety of multi variable systems: pendulums, airplanes, boats, and catapults. The module consists of 1 drawer of materials and is appropriate for grades 5 and 6. Measurement Tool Kit included.	2374
FOSS: Variables Module (Grades 5-6)	The 4 activities in this module introduce students to the concept of a variable. Students identify variables, control variables, and conduct controlled experiments using a variety of multi variable systems: pendulums, airplanes, boats, and catapults. The module consists of 1 drawer of materials and is appropriate for grades 5 and 6.	3123

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
FOSS: Water Module (Grades 3-4)	The Water Module (4 activities) plunges students into close contact with the most amazing material: water. They investigate surface tension, freezing, expansion, density, evaporation, and condensation in a number of everyday settings. Finally, they consider water quality and the processes by which water is recycled naturally. This module consists of 2 drawers of materials and is appropriate for grades 3 and 4. Measurement Tool Kit included.	2368
FOSS: Wood Module(Grade K)	The 2 activities in this module call for students to compare the properties of different kinds of wood (pine,plywood, redwood, particleboard, and basswood). They investigate wood in water and find out what it takes to sink samples of wood. They take wood apart by sanding and then explore the resulting sawdust and wood shavings. They put wood together by making sandwich wood (plywood) and sawdust wood (particleboard). They also put wood together with nails and glue to create wood sculptures. This module consists of 2 drawers of materials and is intended for use with Kindergarten classes.	2355
Fossils through time\ :a complete fossil laboratory	Learn about genus and phylum. Learn about environmental conditions for some fossils and learn how to label their geologic time period.	1374
Fraction Burger Class Set	Helps students to learn about fractions Set of 30	3164
Franklin's Forecaster Kit	Teach students how to record daily weather observations on a chart and how to describe weather conditions from day to day comparative terms.	1328
Free Fall/Gravity Kit	This electronic device illustrates and measures acceleration due to gravity for falling objects. The kit also includes a device for observing projectile motion versus free falling objects.	1137
Gaint Shapes Set	Students can gain a solid understanding of geometery concepts by measuring dimensions and comparing the surface areas and volumes of hte nin transparetn shapes	3161
Geiger Counter - Muller	(Currently in an UPDATE) This kit contains 7 GEIGER COUNTERS. Bar codes : 2828 through 2834.	2930
Geiger Counters- Muller	(Currently in an UPDATE) This kit contains Bar codes 2835 through 2841.	2931
Geiger Counters-Ludlum Model 2200	(Currently in an UPDATE) Self-contained, counting instrument designed for operation with scintillation, proportional, or G-M detectors. The unit is complete with a voltage-sensitive preamplifier, linear amplifier, electronic timer, and dector high-voltage power supply. This kit contains 4 counters bar codes 1682 through 1684.	2928
Geiger Counters-Victoreen 496 Portable Count Rate	(Currently in an UPDATE) Overall operating range of 80,000cpm. Operates on two D cell batteries or rechargeable cells. Contains Counters with bar codes 1677 through 1681.	2929
Gel electrophoresis kits		1464
Geo Boards	Math Geo Boards with rubber bands	2988

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Geologic time chart game	This is a game desinged to teach kids about the evolution of the Earth. It is used along with the kit Fossils Through Time.	1403
Goelological Landform Model	This kit helps students learn about geology and geography. The kit contians 8 3D models of various landforms and has 7 tapes that deals with these landforms.	3165
Graduated Cylinders	For general chemistery use in the classroom	2998
Groundwater simulation system	Learn what groundwater is, how it is stored, where does it come from and where it is going. Study Darcy's Law and groundwater flow.	1371
Hair Analysis Kit	Learn how hair analysis relates to police work. Observe and compare hair. Learn terms related to hair analysis. Observe different types of hair visually and microscopically.	1128
Hand Generator Kit	This kit includes individual kits for students age 10 and up to build and investigate the workings of a simple coil motor. Assembly requires one hour +. Generator produces 2 amps/5 volts. Complete instructions included. D cell batteries not included.	1329
Hand-Held Laser Show	This kit helps stubents to learn diferent light patterns, sound, and vision.	3169
Heat Kit	The activities in this kit allow students to explore heat as energy and to measure temperature. Activities focusing on heat transfer and insulation are also included.	1395
Helium Laser Kit	Study different types of Lasers. Learn the history of the laser and use the modulated laser to demonstrate light beam transmissions.	1129
Holography Demonstration Kit	This kit offers the opportunity for basic understanding of holograms, how they are produced, their characteristics and uses.	1402
Hooke's law apparatus	Used to demonstrate Hooke's law of elasticity of solids.	1461
How To Know Amphibians and Reptiles	Kit containing eleven "how to know" books for student teaching.	2192
How To Know The Aquatic Insects	Twelve student guides to teach how to collect, preserve, and study various families of aquatic insects.	2203
How To Know The Beetles	Twelve "how to" books to help students learn how to classify beetles into various species.	2194
How To Know The Ferns and Fern Allies	Ten guides to help teach students the various families of ferns and fern allies. Describes what a fern is, it's structure, how it grows, and how to collect them.	2197
How To Know The Freshwater Algae	Nine student guides to teach how to collect, preserve, and study various forms of freshwater algae.	2204
How To Know The Freshwater Fishes	Fifteen guides to help students classify freshwater fish into various species.	2196
How To Know The Grasses	What is grass? What does it look like? How can I study and collect grass? These questions and more is answered with the twelve guides you will find in this kit.	2206
How To Know The Immature Insects	Thirteen books to describe immature insects, their importance, what they look like, where/how to collect them, and classifying them.	2205

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
How To Know The Lichens	Fourteen guides to teach students how to properly classify lichens into various species.	2201
How To Know The Mites and Ticks	This kit contains 14 "how to know" books to be used with student teaching on classification of mites and ticks.	2193
How To Know The Mosses and Liverworts	Thirteen guides to learning about mosses and liverworts. Can be used in teaching students about classification.	2195
How To Know The Non-Gilled Mushrooms	Fifteen guides to help teach students about various families of non-gilled mushrooms. Learn about their bodies, how to properly handle, and study them.	2198
How To Know The Protozoa	Eleven guides to help teach students the various families of protozoa. This will aid in demonstrating how many families of protozoa there actually are.	2200
How To Know The Seaweeds	Fifteen student guides to teach how to collect, preserve and study various families of seaweeds.	2202
How To Know The Spiders	Twelve guides to teach students about various families of spiders. Also gives indications as to where to find particular spiders, how to collect and preserve them, sexes, and venomous spiders.	2199
Human Skeleton Poster	Five foot labeled skeleton poster	2990
Increment Borer 18"	This device is used to obtain specimens from trees.	1465
Increment Borer 18"	This device is used to obtain specimens from trees.	1466
Incubator	Hova Bator's World's Best Small Incubator. Features two 4x8" viewing windows. Comes complete with thermometer, solid state thermostat, and built-in moisture rings in the base of the incubator. Approximate capacity is 50-60 chicken eggs, 200 quail eggs, 90 pheasant eggs, 40 turkey or duck eggs.	3246
Inference Boards	Learn the difference between inference and observation. Designed especially for seventh and eighth graders to increase their science skills in electric circuits.	1713
Inflatable Solar System	This kit is a set of inflatable planets, sun, and moon that helps students learn about how the solar system works.	3170
Interactions Kit	This kit reinforces skills of observation and classification as students use their senses to identify properties or attributes of objects. The terms solid, liquid, and gas are introduced in order to help students distinguish between the three basic types of matter. The concept of interaction - an object doing something to another object so that a change is observed - is introduced.	1257
Intermediate Overhead Calculator	To be used with an overhead projector.	1877
Intermediate Overhead Calculator	To be used with an overhead projector.	1878

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Kitchen kapers kit	Learn how to identify the physical characteristics of unidentified solids. What is a solution? Learn the most effective method to separate dissolved solids from a solution by using the properly identified solution.	1367
Know Your Minerals	This kit is designed to teach basic facts about minerals \ (Hardness, Cleavage, Fracture, Tenacity, and Streak Color).	1714
Light Optics Bench (with edible optics)	Learn about optics through light, lenses and mirrors. Study Reflection and Refraction, work with lens fabrication, real and virtual imaging, spherometry and ray tracing in many novel ways.	1136
Magiscopes (Set of 10)	Set of 10 Brock Magiscopes. Barcodes 3125-3134 Safe, simple, reliable, and rugged. View everyday objects or slides, anything up to 2" thick, indoors and out, with existing light. NO cords, mirrors, lamps or batteries. NO threads, knobs, gears, or screws to adjust, break or lubricate. Standard microscope optics provide clear 20x images. Innovative Lumarod gathers and concentrates light for through-the-stage illumination	3135
Magnetic Stirrer and Miscellaneous Electronic Equipment	Contains Power Supply, Voltmeter, Wide Band Signal Generator, Hot Plate/Stirrer, Magnetic Stirrer	1140
Magnetism and electricity kit	What is a magnet, magnetism, magnetic fields? Learn what causes the attraction and repel. Learn what different magnets are and what they are used for.	1389
Magnetism/electric models kit	Learn how to measure the strength of a magnet, lines of force in a magnetic field, use in compasses, and the relationship between electric current and magnetism. Also, learn the function of an electromagnet in a motor.	1262
Magnets	Materials for teaching basic magnetism to elementary and middle school students.	1130
Magnifying glasses	Magnifying glasses	1268
Map & Compass Clinic Kit	This kit provides activities in orienteering. May be used with Silva Ranger Compasses (Kit # 1457).	1270
Marble mania kit	Learn the concepts of systems and subsystems, an awareness of the interdependence of subsystems by watching the interaction of objects. By designing a marble maze, become familiar with the importance of working components and their relevancy to the a whole system.	1264
Master Forensics Kit	Become an investigator. Study and learn about fingerprint, soil, hair, typewriting, handwriting, ink and drug analyzing.	1397
Math and Science To Go Grade 1	Math manipulative kit for use in elementary school grades K- 5.	2974
Math And Science To Go Grade 2	Math manipulative kit for use in elementary school grades K- 5.	2973
Math and Science To Go Grade 4	Math manipulative kit for use in elementary school grades K- 5.	2972
Math And Science To Go Grade 5	Math manipulative kit for use in elementary school grades K- 5.	2975
Math And Science To Go Grade 6	Math manipulative kit for use in grade 6	2971
Math and Scienceto Go: Grade 3	Math manipulative kit for use in elementary school grades K- 5.	2803

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Math Flashcards	3 sets of flashcards dealing with addition, subtraction multiplication and division.	2982
Mechanics of Solids and Liquids	Conduct experiments in calculating volume, determining density and measuring lengths/time of solids and liquids. Learn about air and hydrostatic pressure, buoyancy force and Archimedes' principle.	1135
Meteorology kit	The activities in this kit reinforce basic concepts in the study of weather. Learn about uneven heating of the earth, changing air pressure, the recycling of water in all its forms and cloud formation. Students will be able to build weather instruments and use them to further their understanding of weather predictions.	1258
Metric Tapes	49 Metric Tapes	1824
Metric Tools - Math in a Nutshell	Students will tackle activities focusing on surface area, mass, perimeter, volume, customary and metric units, and even non-standard units of measure. (Grade 3-4)	3178
Model of Nose And Mouth	This kit was designed to give your students hands-on learning activities about the nose, mouth, teeth, and dental hygiene. The Kit includes a set of cards, a model of the nose and mouth, reproducible worksheets, and a class chart.	3102
Model of The Brain	This Kit includes : Reproducible worksheets, a model of the brain and tests.	3101
Model of The Eye	This model was created with the student in mind. The kit includes a set of cards which were developed with the interests of the students in mind. Hands-on activities and conversation will help the students relate the topics to the present. The student will be able to identify and state the function of each part of the eye. The kit also includes reproducible worksheets.	2993
Model of The Heart	This kit was developed with the interest of the student in mind. The topics are presented in a conversational style and include hands-on activities to help the students relate them to the present. The kit includes a model of the heart, and reproducible worksheets.	2991
Model of The Lung	This kit includes a set of cards that use hands-on activities that make the kit more understandable for the students, three-dimensional model of the lung, reproducible worksheets and test, a class record chart, answer key and full color poster comparing a healthy lung vs. a unhealthy lung.	2798
Model of The Skull	This kit includes: a model of the skull , reproducible worksheets, and a test.	3100
Model of The Tooth	This model has been created to give students hands-on learning activities about teeth and dental hygiene. The kit includes: activity cards, model of the tooth, reproducible worksheets, a class chart, answer key for the test and worksheets.	2992
Money	Paper money to be used to enhance counting skills	2986

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Newton's Toy Box (Grades 6-8)	In Newton's Toy Box, students experiment freely with familiar toys and objects. As they explain their observations, they prove Newton's three laws of motion. The path of a tossed basketball, the flip of a grasshopper toy, and the endless swing of clackers reinforce the concepts of inertia, gravity, acceleration, mass, force, and momentum. Students engage in races, games, and challenges that emphasize the laws of motion which govern everyday tasks and cosmic interactions. The kit includes a video of real astronauts in space using some of the same toys. Students use the video to compare the behavior of the toys on Earth with their behavior in a microgravity environment. By dealing with scaled-down applications, middle school students master these laws and the vocabulary of physics with confidence.	2973
Nystrom Physical Science Charts	These instructional charts focus on our dynamic planet and how it works. The charts address the following topics: what things are made of, what kind of bonds hold atoms together, why carbon is found in so many things, what we know about water, how objects react to forces, how light behaves, what we know about electricity and magnetism, where energy comes from and where it goes, and how we are endangering our Earth.	2933
Oceans (Grades 5-6)	Discover why Earth is called the "water planet." Explore the sea, its composition and properties. Create simple hydrometers to measure the density of saltwater samples. Map a section of the ocean floor, make water cycle chambers, and model ocean waves and currents. Study tides and the effect of the Moon's gravitational pull on the Earth and its oceans. Learn how sea animals have adapted to their harsh environment. Comprehensive 172-page teacher's guide has 12 step-by-step activities, 3-part assessment, student activity sheets; materials for 32 students.	2372
Ohaus Spring Scales	This kit contains eleven spring scales.	2346
Overhead base ten set	To be used along with base ten sets. Can be used on overhead projectors	2995
Overhead chips		2987
Periodic Table Of Elements (Poster)	Poster with picture of each element.	1792
Perspectives From Space Posters	This series of eight posters from NASA offers instructional discussion opportunities on the following topics: Earth, an Integrated System; Patterns Among Planets; Our Place in the Cosmos; Our Sun; the Nearest Star; Oasis of Life; The Influences of Gravity.	1372
Plant Families - How To Know Them	Eleven books to identify the families of plants which include algae, lichens, fungi, ferns, flowering plants, mosses and liverworts.	2207

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Plant Slides - Beginner	Case of 12 slides that introduce the small internal parts of plants. Tradescantia Leaf Epidermis (w.m.), Corn Grain Zea (l.s.), Privet Leaf Ligustrum -Typical Dicot (c.s), Privet Leaf Ligustrum -Typical Dicot (c.s), Lily Flower Bud - Monocot (c.s.), Onion Bulb - Epidermis Allium (w.m.), Buttercup Mature Root -Ranunculus (c.s.), Basswood Three Year Stem - Tilia (c.s.), Moss Protonema (w.m.), Lilca Leaf sec., Corn Root Tip Zea (l.s.)	2771
Polaroid-OneStep Camera	This Kit provides eight (8) cameras for use. It does not include the 600 Film necessary for taking pictures. Cameras 1685 through 1692.	1882
Power of Science :Cells	This kit covers the origin of living cells, cell theory, cell structure, and the function of diffusion and osmosis. The kit also covers cells and energy, chemical compounds, cell growth and division and cell organization.	3162
Predators- They're Part of the Picture	This is an audiovisual (slides) program that examines several different characteristics of predators such as their eating habits, their adaptation to the surrounding environment, and the role that they play in natural communities.	2381
Primary Rocker Balance	Rugged plastic balance with 1 gram sensitivity introduces basic measurement concepts. Large buckets hold liquids or solids. Not intended for children under 3.	2387
Probability - Math in a Nutshell	Students learn about fair and unfair games, population samples, combinations and compound probability. They'll work with diagrams, charts and graphs, recording the outcomes of events. Includes Delta's Probability Tube™, Probability Mats, Dial-a-Pattern I™ and II™ (custom spinners). (Grades 3-4)	3177
Protective goggles	25 Goggles	1306
Radioactivity and Half Life	(Currently in an UPDATE) Learn that everything is made of atoms, that electricity must be made, that radiation energy is all around and it can be measured. Learn several ways that radiation helps us and how it may hurt us.	1131
Rechargeable D cell batteries	50 D cell Batteries	1330
Red Overhead base ten units		2996
Ringstand and ring set	Ringstand and ring set	1463
Rutherford Atomic Scattering Kit	Students will try to determine the shape of an unknown object by using scientific thought process of creating a hypothesis, then testing it through inference. It is based upon the Rutherford Gold Foil Experiment where scientists discovered that the structure of the atom includes the nucleus in the center surrounded by electrons in empty space. It is a great introduction to the scientific process of deducing, forming scientific theories, and communicating with peers. It is also useful in the mathematics classroom by plotting the angles of incidence and reflection.	3286

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Science kit	Includes a variety of fundamental experiments that are clearly illustrated and fully explained to complement elementary science texts.	1360
Screen Sieves Kit	This kit is designed for the easy separation of soil into the various sizes of its particles. Porosity, permeability, and capillarity are all greatly affected by the particle size of earth materials. The kit is also used to investigate these properties.	1712
Sensornet Auxiliary Equipment	Auxiliary Equipment to be used with the Sensornet Labs	2394
Sharks and Dolphins	Teaches the anatomy and intelligence of dolphins and sharks. Also teaches how they communicate, stranding, swim and echolocation.	1141
Silva ranger compasses	Learn how to operate the silva ranger compasses.	1457
Simple Machines Discovery Kit	This kit contains mini kits that contain multiple parts that the students may use to create their own simple machine. Student guidebooks and a teacher guidebook are in the kit.	1375
Simple Machines Kit	Using this kit, students learn about force, measuring work, inclined plane or ramp, mechanical advantages, different classes of levers, pulleys, and axles. The kit provides oversized hands-on materials for teaching simple machines.(Best suited for grades K-3.)	1138 and 1139
Skeleton	Human Skeleton	1694
Skeleton	Human Skeleton	1799
Skeleton	Skeleton with vertebrae cartilage.	1855
Slides - Bacterial Structures Set	Six slides demonstrating typical bacterial types. It that allow students to view and compare the structures of bacteria. May be used with Basic Bacteriology Slide Set (BC 1705). Clostridium Tetani (w.m.), Bacillus Anthracis (w.m.), Oral Smear (w.m.), Bacteria Types (w.m.), Bacteria Types (w.m.), Bacterial Fat Bodies (w.m.), Mycobacterium Tuberculosis (w.m.),	1707
Slides - BACTERIOLOGY SURVEY SLIDE SET	Blood Film Human Spear, Wright, Klebsiella Pneumoniae (w.m.), Bacteria Types (w.m.), Bacteria Types (w.m.), Mycobacterium Tuberculosis (w.m.), Clostridium Tetani (w.m.), Bacillus Anthracis (w.m.), Bacterial Capsules (w.m.), Oral Smear (w.m.),	2816
Slides - Basic Bacteriology Set	Six slides that allows students to see different types of bacteria. May be used with Bacterial Structures Slide Set (BC 1707). Klebsiella Pneumoniae (w.m.), Corynebacterium Pseudodiphthericum (w.m), Corynebacterium Diphtheriae (w.m.), Clostridium Tetani (w.m.), Lactobacillus Casei (w.m.), Bacteria Types (w.m.), Oral Smear (w.m.), Proteus Vulgaris (w.m.), Bacillus Subtilis (w.m.)	1705
Slides - Basic Biology	12 Premounted slides for introductory studies of biology. It allows students to see all five different kingdoms of life. - Taenia Pisiformis Immature (w.m.), Bacillus Anthracis (w.m.), Salt Crystals (w.m.), Human Stratified Squamous Epithelium Smear, Onion Mitosis Root Tip Allium (l.s.), Elodea Leaf (w.m.), Corn Leaf Zea - Typical Monocot (c.s.), Cotton Fibers (w.m.), Corn Stem Zea -Typical Monocot (c.s.), Paramecium (w.m.), Euglena (w.m.), Ranunculus Mature Root (c.s.),	1706

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Slides - BEGINNER'S BIOLOGY SLIDE SET	Oral Smear (w.m.), Amphibian Small Intestine (c.s.), Insect (w.m.), Daphnia (w.m.), Earthworm Intestinal Region (c.s.), Leech (w.m.), Ascaris Lumbricoides Male (c.s.), Heterophyes (w.m.), Planaria (w.m.), Obelia (w.m.), Hydra With Bud +Spermary (w.m.), Granatia Isolated Spicules (w.m.), Coprinus Mushroom (c.s.), Penicillium (w.m.), Rhizopus Sporangia (w.m.), Spirogyra (w.m.), Volvox (w.m.), Euglena (w.m.), Paramecium (w.m.), Amoeba Proteus (w.m.), Bacteria Types (w.m.), Fish Blastodisc Mitosis sec., Fish Mitosis sec., Lilac Leaf Syringa Paradermal sec., Amphiuma Liver sec., Mature Embryo Capsella (l.s.), Mixed Pollen Grains (w.m.), Lily Flower Bud - Monocot (c.s.), Privet Leaf Ligustrum (c.s.), Spiderwort Leaf Epidermis Tradescantia (w.m.), Basswood Three Year Stem Tilia (c.s.), Corn Stem Zea (c.s.), Buttercup Mature Root Ranunculus (c.s.), Fern Sporangia (w.m.), Fern Young Sporophyte (w.m.), Moss Archegonial Head Mnium (l.s.), Moss Antheridial Head Polytrichium (l.s.), Chick 56 Hour (w.m), Human Sperm Smear, Mammal Testis sec., Mammal Ovarian Follicles sec., Mammal Neuron Motor Nerve Cells Smear, Mammal Skeletal Muscle sec., Human Blood Film Smear, Frog Blood Smear, Human Compact Bone Ground, Mammal Fibrocartilage sec., Mammal Areolar Tissue Spread, Mammal Simple Cuboidal Epithelium sec.,	2818
Slides - Beginner's Common Things Set	12 pre mounted slides of various things to be viewed under a microscope. Colored Threads (w.m.), Corn Starch (w.m), Cork (sec.), Volcanic Ash, Sugar Crystals (w.m.), Sawdust, Newspaper Print (w.m.), Mite (w.m.), Insect (w.m.), Hair (w.m.), Dust (w.m.)	1715
Slides - BEGINNER'S INVERTEBRATE ZOOLOGY SLIDE SET	Granatia Spicules (w.m.), Earthworm Intestinal Region (c.s.), Klebsiella Pneumoniae (w.m.), Hydra Plain (w.m.), Hydra (l.s.), Typical Dicot Root (c.s.), Trichinella Spiralis Encysted sec., Ascaris Lumbricoides (m & f), Chiloplacus (w.m.), Daphnia (w.m.), Oscillatoria (w.m.), Granatia Thick (c.s.), Snail Radula (w.m.), Starfish Development (w.m.), Planaria Injected (w.m.), Male Mosquito Head (w.m.), Mussel Gills (c.s.), Spider (w.m.), ,	2934
Slides - BEGINNERS SLIDE SET	Cork sec., Colored Thread (w.m.), Dust (w.m.), Straight Human Hair (w.m.), Letter 'e' (w.m.), Earthworm Intestinal Region (c.s.), Volcanic Ash (w.m.), Salt Crystals (w.m.), ,	2801
Slides - Biology slides--extras	Cork sec. (4 slides), Fish Blastodic Mitosis sec. (2 slides), Granatia Spicules (w.m.), Human Palmar Skin sec., Human Nerve (c.s. & l.s.), Human Compact Bone, Ground (c.s.), Wool Fibers (w.m.), Silk Fibers (w.m.), Schistosoma Mansoni, Male (w.m.), Onion Mitosis Root Tip Allium (l.s.), Nylon Fibers (w.m.), Mycobacterium Tuberculosis (w.m.), Human Stratified Squamous Epithelium, Smear, Wheat Root Hairs Triticum (w.m.), Skeletal Muscle sec.,	2817
Slides - Hair Comparison slide set	Cow Hair, Goat Hair, Bat Hair, Cat Hair, Gray Human Hair, Muskrat Hair, Opposum Hair, Pig Hair, Rabbit Hair, Rat Hair, Sheep Hair,	2802

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Slides - Life in the Soil	8 pre mounted slides of various items found in the soil (dust, ash, earthworms, etc.). Pollen, 5 Types (w.m.), Rhizopus Sporangia (w.m.), Penicillum Conidia (w.m.), Earthworm Intestinal Region (c.s.), Bacteria Types (w.m.), Hymenoptera (w.m.),	1716
Slides - Natural Textile Fibers	6 pre mounted slides of wool, cotton, rabbit hair, etc. Angora Rabbit Hair , Camel Hair, Cotton, Manila Hemp, Ramie, Wool	1717
Slides- Pond Life	Anabaena (w.m.), Cyclops (w.m.), Hydra with Food (w.m.), Mixed Freshwater Forms (w.m.), Paramecium Multicronucleatum (w.m.), Euglena (w.m.), Daphnia (w.m.), Mature Ebryo Capsella (l.s.), Spirogyra (w.m.), Legume Root Nodule, sec., Spirogyra Vegetative (w.m.), ,	2773
Slides-Beginner Biology Slides	This is a slide set that has the has 50 slides. These slides are for beginner's in biology.They help to show the basics of animals and plants in biology.Amoeba Proteus (w.m.), Areolar Tissue Spread, Bacteria Types (w.m.), Bone, Femur Ground (c.s.), Capsella Embryo Mature (l.s.), Chick 38-43 Hours (w.m.), Coprinus Mushroom (c.s.), Corn Steam Zea - Typical Monocot (c.s.), Earthworm Intestinal Region (c.s.), Euglena (w.m.), Fern Antheridia and Archegonia (w.m.), Fern Sporangia (w.m.), Fern Young Sporophyte (w.m.), Fibrocartilage sec., Frog Blood Smear, Hydra Plain (w.m.), Human Blood Smear Wright, Insect (w.m.), Liver Amphiuma sec., Mixed Pollen Grains (w.m.), Monocot Flower Bud Liliium (c.s.), Moss Archegonia Head mniium (l.s.), Moss Antheridial Head (l.s.), Neuron Smear, Obelia Hydroids (w.m.), Onion Mitosis Allium Root Tip (l.s.), Oral Smear (w.m.), Ovary Rabbbit sec., Paramecium (w.m.), Privet Leaf Ligustrum Typical Dicot (c.s.), Ranunculus Mature Root (c.s.), Skeletal Muscle sec., Small Intestine -Frog, Rhizopus Sporangia (w.m.), Simple Columnar Epithelium (w.m.), Human Sperm, Spirogyra Vegetative (w.m.), Testis - Monkey sec., Tilia -Three Year Stem (c.s.), Trichinella Spiralis sec., Whitefish Mitosis Section, Volvox-Daughter Colonies (w.m.),	1708
Slides-BEGINNER INSECT SLIDE SET	Insect Cornea (w.m.), Insect Spiracle (w.m.), Musca Domestica Head (w.m.), Butterfly Wing (w.m.), Butterfly Proboscis (w.m.), Musca Domestica Leg (w.m),	2815
Slotted Weights Set	Slotted Weights	1458
Solar Filter for Skyview 90mm refractor telescope	Solar Filter to be used with the Skyview 90mm refractor telescope	2926
Solar System (Grades 3-4)	As they make measurements and create scale models, students grasp the relative sizes and distances of planets in orbit around the sun.	3157
Sound discovery kit	Learn about characteristics of sound and how those characteristics can be controlled to produce pleasant sounds.	1368
Sound kit	Learn how sound is produced, how it travels, different types of sounds, and particular pitches.	1256

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
South Carolina Minerals and Rocks	Designed to familiarize earth science students and the general public with 24 of the minerals and rocks of the Palmetto State. The 6 mineral and rock sets are in labeled, compartmentalized plastic boxes that are accompanied by a 22-page booklet. The booklet provides some general information about minerals and rocks and the geology of South Carolina, descriptions of the specimens and their importance to South Carolina and maps showing the general and specific locations of occurrences within the state. This kit partially funded by a grant from the Harry Hampton Fund.	3121
Specific heat specimens		1455
Spectroscopes	This kit contains 35 spectroscopes that can be used to study the different types of light. Each spectroscopes is equipped with a inner light spectrum measurement scale. Also, this kit allows students to observe the different types of light given off during the gaseous state of certain elements such as oxygen, neon, water vapor, helium, argon, and nitrogen.	2380
Sprout and Grow Window	Use this kit to watch plants grow and see their root growth.	3264
Star Gazer Planetarium		2969
Start Making Sense Kit	This kit enables people to know and react to their surroundings. Our sensory investigations are keys to discovery in science. This kit focuses on one sense at a time so as to strengthen each sense in turn. The students not only use their senses in the activities that follow, they become aware that they are using them to find out about the world around them.	1260
Static Electricity and Van de Graaf Generator	Instrument used to demonstrate static electricity.	1134
STC: Animal Studies Kit (Grade 4)	By caring for and observing three animals from different habitats—the dwarf African frog, the fiddler crab, and the land snail—students learn about what animals need to survive, the primary parts of their anatomical structure, and the ways in which they are suited for life in a particular environment. Students create and maintain individual logs in which they record their observations of each animal over time. These observations focus on animal behavior, including methods for food getting, movement, and protection. Toward the end of the unit, students apply what they have learned about structure, habitat, survival needs, and behavior to study a fourth classroom animal: the human. They also conduct an animal research project and decide how they will present their findings to the class.	2283 and 3117
STC: Animal Studies–Literature Resource Kit	Titles: Animal Feelings, Animals Should Definitely Not Wear Clothing, Frog Prince, Conitnued, From Frog to Tadpole, Poison Dart Frogs, The House for the Hermit Crab	3208
STC: Balancing & Weighing–Literature Resource Kit	Titles: Ella, If I Ran the Circus, Mirette on the High Wire, Olivia Saves the Circus, Who Sank the Boat?	3195

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Balancing and Weighing Kit (Grade 2)	This unit introduces students to the relationship between balance and weight. Experiences with a beam balance introduce students to the concept that amount of weight, position of weight, and position of the fulcrum affect balance. Work with an equal-arm balance challenges students to place objects in serial order on the basis of weight and to appreciate that weighing is the process of balancing an object against a certain number of standard objects. In the final lessons, students turn to a series of problem-solving investigations with the equal-arm balance and cupfuls of four different foods. These activities provide an opportunity to explore the relationship between weight, density, and volume.	1200, 2268 and 3108
STC: Changes Kit (Grade 2)	Students expand their understanding of solids, liquids, and gases by exploring changes in state. They inv. freezing, melting, evaporation, and condensation of water. Students produce a mixture of two solids and a mixture of solids with liquids and observe the results. They work through several methods to separate mixtures: sieving, filtration, evaporation, and chromatography. The students set up races that involve sugar dissolving in water and observe the effects of particle size and water temperature on the rate at which the sugar dissolves. They also observe crystals formed as a result of evaporation. Students observe some changes that occur immediately and some that occur over time, and they begin to recognize the characteristics of chemical reactions. They investigate rusting, and they observe and collect the gas formed by mixing an effervescent tablet in water. Students have several opportunities to practice their new skills in lessons in which they devise ways of separating a mystery mixture and plan and carry out investigations that involve other changes.	2217 and 2274
STC: Changes-Literature Resource Kit	Titles: Bartholomew and the Oobleck, Changes, Changes, Nate the Great and the Snowy Trail, Recycle!, The Legend of the Indian Paintbrush, The Little Red Hen, The Magic Schoolbus Gets Baked in a Cake: A Book about Kitchen Chemistry, The Milk Makers, The Mixed-Up Chamelon, Why Do Leaves Change Color?	3198

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Chemical Tests Kit (Grade 3)	<p>This unit introduces third-graders to the science of chemistry by challenging them to explore and determine the identity of five common household chemicals: sugar, alum, talc, baking soda, and cornstarch. Students begin by focusing on the physical properties of color, form, and texture. Next, they explore chemical properties by observing how the five powders interact with water, vinegar, iodine, and red cabbage juice. These tests enable them to explore phenomena such as crystallization and to observe the processes of evaporation and filtration. Finally, students apply their skills and their knowledge of the five chemicals to identify a variety of "mystery" mixtures. As a result of conducting these investigations, students develop scientific skills such as observing and recording results, forming conclusions on the basis of experience, communicating results, and applying their knowledge to solve problems.</p>	1404 and 2301
STC: Comparing and Measuring Kit (Grade 1)	<p>Students explore the concepts that underlie the science skills of comparing and measuring. The lessons are based on a developmental sequence that includes three activities: comparing, matching, and measuring. Initially, students compare lengths by matching measuring tape to their own heights and the lengths of their arms and legs. They make the transition from matching to measuring length by quantifying nonstandard units of measure (in this case, their own feet) and discover that using nonstandard units of measure produces varied results. Finally, students use standard units of measure, such as Unifix® cubes and measuring strips, to measure height, width, and distance. In so doing, students begin to understand key measuring concepts, such as using beginning and ending points, a common starting line, and standard units of measure.</p>	2279
STC: Comparing and Measuring-Literature Resource Kit	<p>Titles: Exactly the Opposite, Flat Stanley, Hottest-Coldest-Highest-Deepest, Inch by Inch, Ira Says Goodbye, Little Blue and Little Yellow, Measuring Penny, More, Fewer, Less, Tiny and Bigman</p>	3201
STC: Ecosystems Kit (Grade 3-5)	<p>Students begin the by setting up a terrarium in which they grow grass, mustard, and alfalfa plants. They then add crickets and isopods. They also set up an aquarium into which they introduce snails, guppies, elodea, algae, and duckweed. By connecting the terrarium and aquarium bottles to create an "ecocolumn," students are able to observe the relationship between the two environments and the organisms living within them. Using test ecocolumns that contain only plants, students simulate the effects of pollutants—such as road salt, fertilizer, and acid rain—on an environment. Students then use a food chain wheel to make inferences about the effects these pollutants might have on their own miniature ecosystems. Later, students read about, explore, and discuss the Chesapeake Bay as a model ecosystem. They analyze this ecosystem from the viewpoint of various users.</p>	1208 and 2273

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Ecosystems Kit (Grade 3-5)	Students begin the by setting up a terrarium in which they grow grass, mustard, and alfalfa plants. They then add crickets and isopods. They also set up an aquarium into which they introduce snails, guppies, elodea, algae, and duckweed. By connecting the terrarium and aquarium bottles to create an "ecocolumn," students are able to observe the relationship between the two environments and the organisms living within them. Using test ecocolumns that contain only plants, students simulate the effects of pollutants—such as road salt, fertilizer, and acid rain—on an environment. Students then use a food chain wheel to make inferences about the effects these pollutants might have on their own miniature ecosystems. Later, students read about, explore, and discuss the Chesapeake Bay as a model ecosystem. They analyze this ecosystem from the viewpoint of various users.	3110
STC: Ecosystems-Literature Resource Kit	Titles: What are Food Chains and Webs?, What is a Biome?, Deadly Waters, Cactus Hotel, A day in the Woods	3200
STC: Electric Circuits Kit (Grade 4)	Students are first introduced to the basic properties of electricity as they learn about electric circuits and the parts of a light bulb. Next, students learn about conductors and insulators and about the symbols used to represent the parts of a circuit in circuit diagrams. Students also explore different kinds of circuits, learn about switches, construct a flashlight, and investigate the properties of diodes. Finally, students apply their knowledge and skills to wire a cardboard house.	1211, 2266 and 3111
STC: Electric Circuits-Literature Resource Kit	Titles: Ben and Me, Black Pioneers of Science and Invention, Switch On, Switch Off, The mAgic School Bus and The Electric Field Trip, The Story of Benjamin Franklin, Amazing American, The Story of Thomas Alva Edison, The Usborne Book of Batteries and Magnets, Wild Weather: Lightning!	3204
STC: Experiments with Plants Kit (Grade 6)	Students apply the knowledge and skills they have gained in earlier STC® life science units to investigate some of the variables that affect plant growth and development. The main objective of the unit is to enable students to design and conduct a controlled experiment. They begin by studying the key variables that affect the life, health, and reproduction of the Wisconsin Fast Plant™ (Brassica rapa) and how they can manipulate these variables. Working in teams, students formulate a question about the plant and carry out a controlled experiment designed to answer that question. During the ensuing weeks, they observe the plants and record their data. Each team then shares its results with the class. Final activities entail germinating seeds that students have gathered from the plants and exploring tropisms.	1215, 2262 and 3112

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Floating and Sinking Kit (Grade 5)	In this unit, students investigate the phenomenon of buoyancy. They begin by making a spring scale with which they weigh various objects. They make clay boats, test their boats' buoyancy, and discover that altering the shape of the boats affects buoyancy. Students are then challenged to design a boat that has a certain loading capacity. These experiments allow them to witness several surprising phenomena; for example, some "floaters" are heavier than some "sinkers," and large objects are not always heavier than smaller objects. Students then turn their attention to differences between objects placed in fresh water and in salt water. They construct a hydrometer that compares the levels at which objects float in both types of water.	1201 and 2267
STC: Food Chemistry Kit(Grade 5)	Students explore basic concepts related to food and nutrition. They set up their own classroom laboratory and perform physical and chemical tests to identify the presence of starch, glucose, fats, and proteins in common foods. Some of the tests are relatively simple and produce "yes-or-no" results; others require multiple steps. Still other tests, such as the glucose test, produce results that require interpretation. Through readings, students discover how proteins, fats, and carbohydrates, as well as vitamins, are related to good health. They also learn how to interpret food labels. In a final challenge, students apply their knowledge and skills to analyze the nutritional components of a marshmallow.	1213 and 2277
STC: Land & Water-Literature Resource Kit	Titles: Beavers, Floods!, Grand Canyon : Exploring A Natural Wonder, Letting Swift River Co., Listen to the Rain, River Town, The Magic School Bus Goes Upstream	3196
STC: Land and Water (Grade 4)	Students investigate the interactions between land and water. Using a stream table as their model, students observe how runoff causes stream formation; how groundwater forms; how soil is eroded, transported, and deposited; and how water shapes land. Students create hills, build dams, and grow vegetation. Miniature valleys, waterfalls, and canyons form in the stream tables as water flows over the soil. Students also deepen their appreciation for the vastness of stream systems by creating aerial diagrams of their stream table results. The stream table also serves as a basis for investigations of the water cycle. Through observing the model, manipulating certain parts of it, and testing interactions under various conditions, students discover how water changes the shape of land and how land formations, in turn, affect the flow of water. They connect the models to real-world examples and apply the concepts they have learned to photographs of land and water on earth.	2282 and 3115

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Magnets and Motors Kit (Grade 6)	This unit, which builds on the knowledge that students gained in the STC® Electric Circuits unit, offers students the opportunity to explore the properties of magnets and the magnetic properties of electric currents. The unit includes information on the historical development of scientists' understanding of the use of magnetism, electricity, and electromagnetism. Students begin by studying magnets and making a compass. They then investigate the relationship between magnetism and electricity, as they explore the characteristics of switches and circuits. Finally, students experiment with three different motors. Applying their learning and experience, they dismantle, experiment with, and reassemble a manufactured motor.	1203 and 2263
STC: Measuring Time Kit (Grade 6)	In the first part of this unit, students explore the use of natural phenomena, such as the phases of the moon, to keep time. In the second section, students conduct experiments using some of the instruments that have been used to keep time throughout the centuries. They build and experiment with a water clock and investigate the characteristics of the pendulum. Finally, they apply what they have learned to assemble and evaluate a clock escapement and modify the device in order to make it more accurate. The unit provides students with an opportunity to learn how to measure time, to investigate machines, to explore concepts such as energy and motion, and to learn about the science of astronomy.	1205, 2272 and 2385
STC: Microworlds Kit (Grade 5)	Students examine everyday objects as well as microorganisms with a variety of magnifying devices. They begin by investigating several common objects with the unaided eye. Using a variety of lenses, including hand lenses, acrylic spheres, and water drops, they learn that a magnifying lens must be transparent and curved. Next, students use a microscope to view inanimate objects. They learn proper focusing and lighting techniques, as well as how to prepare slides. Students prepare a section of onion skin and observe its cells. Students' attention then turns to living specimens. Using a microscope, they view three microorganisms—Volvox, Blepharisma, and the vinegar eel. They study the cell structure of these organisms and observe how the organisms feed, grow, and multiply.	1207 and 2264
STC: Motion & Design-Literature Resource Kit	Titles: Leonardo de Vinci for Kids:, Magic School Bus Plays Ball" A book About Forces, The Best Paper Airplanes You'll Ever Fly, The Wright Brothers: Pioneers of American Aviation	3211

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Motion and Design (Grade 4)	Students explore the physics of motion and to apply these concepts to technological design. Using plastic construction materials, weights, rubber bands, and propellers, students design and build vehicles. Students record their designs using technical two-view and three-view drawings. They test how fast the vehicles move and use their findings to redesign the vehicles to move more efficiently. Cost analysis is one of the students' design requirements. As students design their vehicles, they intuitively apply concepts such as friction and kinetic and potential energy. They also explore the effect of gravity on motion. The unit concludes by challenging students to solve a design challenge and to present their findings to the class.	2214 and 2265
STC: Organisms Kit (Grade 1)	This unit provides hands-on experiences that help students develop an understanding of and sensitivity to living things. Students create and maintain a woodland habitat containing pine seedlings, moss, pill bugs, and Bess beetles or millipedes. They also set up and observe a freshwater habitat into which they introduce elodea and cabomba plants, pond snails, and guppies. With both plants and animals in each habitat, students have the opportunity to observe how these organisms coexist. Through studying the needs and characteristics of a variety of organisms, the students are able to draw conclusions about how plants and animals are similar and different. In a final lesson, students apply to humans what they have learned about organisms, exploring how human beings are similar to and different from other living things.	2275
STC: Organisms-Literature Resource Kit	Titles: A House for Hermit Crab, A House Is a House For Me, ABC Animal Riddles, Cactus Hotel, Have You Seen Bugs?, How a Seed Grows, Morning, Noon, and Night, The Very Clumsy Click Beetle, What's in the Pond	3199
STC: Plant Growth and Dev. Kit (grade 3)	Students observe each stage in the life cycle of a simple plant. Working with Wisconsin Fast Plants™ (Brassica rapa), which germinate, mature, and go to seed within a 40-day period, students plant seeds and watch the seedlings emerge. Later, they thin and transplant seedlings. As they watch their plants grow, students learn that plants need nutrients from the soil, as well as water and light, to thrive. As the unit expands to focus on the interdependence of living things, students cross-pollinate the flowers with dried honeybees. Finally, they harvest mature seeds and determine seed yields. These experiences deepen students' understanding of the characteristics of living organisms and their relationship with and dependence on their environment.	1206, 2270 and 3116
STC: Plant Growth-Literature Resource Kit	Titles: Corn is Maize: The Gift of Indians, Flower Alphabet Book, Grow It Again, The Bee Tree, The Carrot Seed, The Fascinating World of Bees, The Magic School Bus Plants Seeds, The Story of Ferdinand, What Is a Life Cycle?	3202

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Rocks & Minerals Kit (Grade 3)	Students explore the differences and similarities between rocks and minerals by investigating samples of these earth materials, performing a series of tests similar to geologists' field tests, and reading about rocks and minerals and how they are used. The first lessons focus on rocks. The students then turn their attention to a set of 12 minerals and test them to identify properties such as streak color, luster, transparency, hardness, shape, and magnetism. After completing these observations, students compile them into their own "Minerals Field Guide." In a culminating activity, they are challenged to apply their knowledge and skills to identify new minerals. They then report on how rocks and minerals are used.	1202 and 2269
STC: Rocks & MInerals-Literature Resource Kit	Titles: Everybody Needs A Rock, Eyewitness Books: Fossil, Eyewitness Books: Crystal and Gems, Sierra, Stone Soup, The Magic School Bus: Inside the Earth, Volcanoes	3194
STC: Soils Kit (Grade 2)	In this unit, students investigate the chief components of soil—sand, clay, and humus—and explore the relationship between soil and plant growth. Early in the unit, they create their own compost bags. This activity enables them to observe the decomposition of organic materials over time. Students observe and read about earthworms to learn about their connection to plant roots and soil. The students also conduct tests that enable them to observe and compare such properties of soil as odor, appearance, and texture. Phenomena such as settling, water content, and soil consistency are also explored. These observations are then related to plant growth, as students plant cucumber seeds in a clear plastic tube. By observing root growth, students learn about the role of roots in keeping the plant anchored and upright. In a final activity, students apply what they have learned to investigate a sample of local garden soil.	1204 and 2276
STC: Soils-Literature Resource Kit	Titles: Earthworms, Underground Farmers, Miss Rumphius, Mud Matters: Stories from a Mud Lover, Mud Puddle	3197
STC: Solids and Liquids (Grade 1)	Students investigate the similarities and differences in a variety of common solids and liquids. First, they observe, describe, and compare a collection of solid objects, focusing on such properties as color, shape, texture, and hardness. They also perform tests to determine whether the objects roll or stack and float or sink, as well as whether they are attracted to a magnet. Investigations of liquids center on how various liquids look and feel, their fluidity, how they mix with water, and their degree of absorption. In a final lesson, students compare the properties of solids and liquids and identify how they are similar and different.	2278 and 3114
STC: Solids and Liquids-Literature Resource Kit	Titles: Emmett's Snowball, Freckle Juice, I Can Roll, It Could Still be Water, Mouse Painting, Oil Spill!, Solid, Liquid or Gas, The Important Book, What is th World Mad of: All About Solida Liquids and Gases	3203

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: Sound-Literature Resource Kit	Titles: Beethoven Lives Upstairs, Flash Crash Rumble and Roll, Helen Keller, In Time of the Drums, Polar Bear Polar Bear What Do You Hear?, The Cow That Went Oink, The Very Quiet Cricket, Whistle for Willie	3206
STC: Sounds Kit (Grade 3)	Students use tuning forks, slide whistles, strings, and other sound-producing objects to investigate the characteristics of sound. Students learn that sound is caused by vibrations, and they explore how sound travels. They learn about the relationship of pitch and volume to the frequency and amplitude of vibrations. They discover, for example, that they can alter pitch by varying the length or tension of a string. Constructing simple stringed instruments, they discover how they can increase the volume of the sound produced by the strings. Students investigate the characteristics of another common sound-producing mechanism—the human vocal cords—and build model vocal cords. They also learn about the anatomy and functioning of the human ear. They apply what they learn in the unit by designing and building musical instruments or other sound-producing devices.	1209 and 2302
STC: Technology Of Paper (Grade 6)	In this unit students explore the properties of paper, make paper by hand, and understand how the properties of paper relate to how it is used. By testing six types of paper for smoothness, tear-resistance, opacity, water-resistance, and ink receptivity, students deepen their understanding of the relationship between the properties of a certain type of paper and its intended uses. Students read about industrial papermaking and explore hand papermaking. Using the class hand-papermaking process, students investigate the role of additives and of embedding and embossing in the creating of paper with a variety of properties. In a final activity, students apply their learning and experience to work through a four-step technological design process as they create their own recycled-paper product.	2215 and 2303
STC: The Life Cycle of Butterflies (Grade 2)	This unit introduces students to the concept of life cycles by inviting them to investigate one organism—the Painted Lady butterfly (<i>Vanessa cardui</i>). During an eight-week period, students observe, record, and describe the metamorphosis from caterpillar to chrysalis and from chrysalis to butterfly. In many cases, they watch the butterfly lay eggs. The butterfly ultimately dies a natural death, thereby completing students' observations of the life cycle. The children compare the life cycle of the butterfly with that of other organisms, an experience that deepens their understanding of the diversity of life and the patterns that characterize animal life cycles.	1210

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
STC: The Life Cycle of Butterflies (Grade 2)	This unit introduces students to the concept of life cycles by inviting them to investigate one organism—the Painted Lady butterfly (<i>Vanessa cardui</i>). During an eight-week period, students observe, record, and describe the metamorphosis from caterpillar to chrysalis and from chrysalis to butterfly. In many cases, they watch the butterfly lay eggs. The butterfly ultimately dies a natural death, thereby completing students' observations of the life cycle. The children compare the life cycle of the butterfly with that of other organisms, an experience that deepens their understanding of the diversity of life and the patterns that characterize animal life cycles.	2271 and 3109
STC: The Lifecycle of Butterfly-Literature Resource Kit	Titles: Butterfly House, Bugs! Bugs! Bugs!, Insectlopedia, The Grouchy Ladybug, Charlie and the Caterpillar, Chickens Aren't the Only Ones, Amazing Butterflies and Moths, Very Hungry Caterpillar	3193
STC: Weather Kit (Grade 1)	This unit introduces first-graders to the concept of weather and how it affects their lives. Using a variety of tools, students observe, discuss, measure, and record data on cloud cover, precipitation, wind, and temperature. They learn how to read a thermometer and construct a rain gauge to measure precipitation. They also study cloud formations and use a wind scale to estimate the speed of wind. To apply their new skills and knowledge, students compare their own weather predictions with an actual weather forecast and use the weather data they have collected to form generalizations about the weather in their own locale.	2300
STC: Weather-Literatur Resource Kit	Titles: Bringing the Rain to Kapiti Plain, Caps, Hats, Socks and Mittens, Flash, Crash, Rumble, and Roll, Snowy Flowy Blowy: A Twelve Months Rhyme, Storms, The Cloud Book, The Magic School Bus Inside a Hurricane, Weather Words and What They Mean	3207
Stereomicroscope	Ward's 24 W 4602 Student Inclined Stereomicroscope. 10X paired wide field eyepieces with 2X objective gives you up to 20X magnification. There are 20 stereomicroscope available.	1271-1291
Stethoscopes	Set of 15 professional stethoscopes.	3136
Stream Table Kit	Kit is designed to provide means of exploring and discovering various geologic principles and processes. Involves observing and recording data from which conclusions can be drawn in regard to geologic concepts and their application in nature.	1710
Student battery testers	Kit provides hands on experience in building a tool that can then be used in experiments that explore science concepts of current and voltage.	1357
Student Binoculars (26)	7 X 35 Aerolite Binoculars. Contain 26 binoculars. Bar codes 1607 through 1633.	1606
Student Binoculars (5)	7X25 Binoculars. This kit contains 5 binoculars. Bar codes 1666 through 1671	1665

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Student dry cell kit set	Learn how to assemble a dry cell, how dry cells and batteries work, and learn how the dry cell was developed. Conduct experiments with dry cells.	1331
Student Microscope		1553
Student Microscopes With Light Sources		1143
Student Microscopes With Light Sources	Student Microscopes With Light Sources 1180, 1181, 1182, 1183	1180-1183
Student optics kits	Kit provides hands on experience using a particular tool used to explore science concepts. Provides an understanding of reflection, refraction, and other optical principles.	1358
Sun Tracking Hemisphere Kit	Use this kit to plot the daily motion of the sun.	3262
Super Sun print Kit	This kit allows students to see the effects that the sun's rays has on sun print paper.	2219
Superconductivity and Liquid Nitrogen	1 tank, 1 insulated container, 1 box of materials and activities. (Must make reservations at least one week in advance.)	1132
Telescope - Dobsonian Reflector 8"	Telescope	1674
Telescope - Scherr	47.75 inches focal length. 7 inch diameter, 50 inches length tube. Cast aluminum mirror mount. 6 power, 1 inch diameter, double alignment support mounts, manufactured by Edmond Scientific (Finder Scope).	2347
Telescope - Schmidt - Cassegrain	8 inch diameter reflector with motor drive and tripod. - Solar filter.	1144
Telescope - Sky View 90mm refractor	90 mm refractor telescope. Solar filter available.	1412
Telescope-"Deluxe Space Conqueror" Reflector	Telescope	1753
Telescope-Tasco 675TR	This is the Tasco 675TR Telescope.	2315
Television - Phillips	To be used with the Video Microscope (1143)	2927
The Journey Inside: The Computer		2949
This Is Your Land- Public Lands Belong To All Of Us	This audio-visual program emphasizes the need to maintain our public lands wisely. Some of the public lands introduced are National Parks and Monuments, National Forests, National Wildlife Refuges, and public lands managed by the Bureau of Land Management.	2383
TI View screen with a TI-73 claculator #2794 and TI - 83 calculator #2375	To be used with TI-73, 80,81,82 calculators only For use with a TI-73 claculator #2794 and TI - 83 calculator #2375 in the bag.	2776
TI Viewscreen with TI-83 Calculator (#2376)	For use with TI-83 Calculator. Includes TI83 Calculator #2376.	2724
TI Viewscreen with TI80(#2905) and TI83(#2806) Calculator	TI Viewscreen - includes a TI80 (#2905) and TI83 (#2806) Calculator	2777
TI- 92 View screen	To be used with TI-92 calculators only.	2191

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
TI- 92 ViewScreen	For TI-92 Calculators ONLY	1791
TI-73 Calculator Kit II	This kit contains 23 TI-73 graphing calculators. Barcodes 2737-2741, 2743-2748, 2750-2761	2736
TI-73 Calculators	This is a complete classroom set of TI-73 calculators. bar codes 2317 through 2344 and 2386.	2345
TI-73 Calculators with Manuals	This kit contains 17 TI-73 graphing calculators. Barcodes 2906-2920, 2563-2568	2562
TI-73 View screen Calculator	In bag with TI-Viewscreen number 2922	2921
TI-73 VIEWSCREEN Calculator	In with Viewscreen Kit 2776	2794
TI-80 Calculator Kit A	This kit contains 39 TI-80 calculators. Barcodes 3000-3039	1252
TI-80 Calculator Kit B	This kit contains 26 TI-80 calculators. Barcodes 3040-3066	1253
TI-80 viewscreen calculator	For use with and in bag with viewscreen #2777	2905
TI-82 Calculator Kit I	This kit contains 28 TI-82 calculators. Barcodes 3067-3098	1254
TI-83 Calculator Kit I	TI-83 Calculators to be used as a classroom set. This kit contains 30 calculators. Bar codes 1513 through 1542 and 2575.	1515
TI-83 Calculator Kit II	This kit contains 19 TI-83 calculators for use in the classroom. Barcodes 1564-1565, 1568-1582, 1585-1588.	1559
TI-83 View screen Calculator	In bag with TI Viewscreen Barcode #2724	2376
TI-83 View screen Calculator	NOT AVAILABLE FOR CHECKOUT	2377
TI-83 View screen Calculator	For use with and in bag with viewscreen #2777	2806
TI-92 Calculator Kit I	This kit contains 6 TI-92 graphing calculators. Barcodes 1543-1548	1558
TI-92 Calculator Kit II	This kit contains 16 TI-92 calculators for use in the classroom. Barcodes 1591-1605	1590
TI-ViewScreen	NOT AVAILABLE FOR CHECKOUT	1293
TI-ViewScreen	NOT AVAILABLE FOR CHECKOUT	1440
TI-ViewScreen	Viewscreen can be used with TI 82, 73 or 83. No calculator included.	1788
TI-ViewScreen with TI73 Calculator (#2921)	TI Viewscreen to be used with the TI 80 serties and TI73. Bag includes a TI73 (#2921)	2922
TI-ViewScreen with TI-83 Calculator #2827	Viewscreen can be used with TI 82, 73 or 83. Includes TI83 Calculator #2827	2768
Time Kit (Grades 1-3)	Teach time-telling at a moment's notice! Includes: 1 demonstration Judy clock, 24 student Judy clocks, 1 overhead clock, five clock stamps, and 1 clock activity mat, tucked neatly into a handy plastic bin.	3159
Traffic light kit		1344
Triple Beam Balance	Balance for classroom use or check out.	2654

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
Using Your Senses	Students explore Using Your Senses through twelve hands-on activities and the Delta Science Reader. Introduce your students to the inner workings of the body's amazing communications network—the five senses. Students examine the structure of each sensory organ (eyes, ears, skin, nose, and tongue) to find out how it works. They use lenses and prisms to create images and colors, explore depth perception, and measure their fields of vision. They experiment with tuning forks, cones, and membranes to model sound waves and eardrums, and construct a zither for manipulation of pitch and volume. They distinguish textures by feel and test sensitivity to touch and temperature changes. Finally, they identify objects in odor boxes by smell and map the four taste areas of their tongues. (Grades 2-3)	3174
Volume Relationships Set	These transparent plastic shapes help students to estimate and test volume relationships.	3168
Water Optics Kit	This kit shows the student how light can be transmitted through water.	3171
Water Cycle Model	This kit helps to teach students the process of evaporation, condensation, and precipitation.	3167
Water- We Can't Live Without It	This is a audio-visual program that explores the fascinating story of water and its significance in our lives and the natural world. The program examines water and its many forms and uses, several freshwater habitats, problems threatening water supply and quality , and conservation of our water resources.	2382
Weather: basic science inquiry kit	Learn about what temperature conditions are necessary for condensation to take place. Learn how cloud formation is related to the weather. Learn how the angle of the rays of the sun striking the earth affect the temperature. Learn low and high pressure and how to predict future weather.	1386
ZOOM Into Engineering	Materials to be used with the ZOOM Into Engineering Curriculum. Activities include: Egg Bungee Jump, Flunker, Gumdrop Dome, Hoop Glider, Keep a Cube, Paper Tower, Polishing Pennies, and the Puff Mobile	3105 and 3106
Special Materials for Trained Educators		
CBL Adaptors & Accessories	Donated CBL System components from the Chemistry Department. (CBL Equipment to be used by trained teachers and presenters)	2304
CBL Calorimeter	Calorimeters donated by the Chemistry Department. To be used with the CBL systems this kit contains 7 calorimeters . Bar codes 2293 through 2299 (CBL Equipment to be used by trained teachers and presenters)	2292
CBL Conductivity Probes	Donated by the Chemistry Department to the RPSEC 7 probes (CBL Equipment to be used by trained teachers and presenters)	2281
CBL LAB: Acid-Base Titration	These are solutions for CBL experiment Acid Base Titration. (CBL Equipment to be used by trained teachers and presenters)	2702

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
CBL Lab: Determining the Concentration of a Solution: Beer's Law	CBL Lab: Determining the Concentration of a Solution: Beer's Law (CBL Equipment to be used by trained teachers and presenters)	2705
CBL Lab: Determining the Free Chlorine Content of Swimming Pool Water	CBL Lab: Determining the Free Chlorine Content of Swimming Pool Water (CBL Equipment to be used by trained teachers and presenters)	2679
CBL Lab: Electromagnets: Winding Things Up	CBL Lab: Electromagnets: Winding Things Up (CBL Equipment to be used by trained teachers and presenters)	2695
CBL Lab: Energy Content of Foods	CBL Lab: Energy Content of Foods (CBL Equipment to be used by trained teachers and presenters)	2703
CBL Lab: Est. a Table of Reduction Potentials: Micro-Voltaic Cells	CBL Lab: Est. a Table of Reduction Potentials: Micro-Voltaic Cells (CBL Equipment to be used by trained teachers and presenters)	2708
CBL Lab: Est. a Table of Reduction Potentials: Micro-Voltaic Cells	CBL Lab: Est. a Table of Reduction Potentials: Micro-Voltaic Cells (CBL Equipment to be used by trained teachers and presenters)	2710
CBL Lab: Household Acids and Bases	CBL Lab: Household Acids and Bases (CBL Equipment to be used by trained teachers and presenters)	2903
CBL Lab: Kinetics of Crystal Violet Decomposition	CBL Lab: Kinetics of Crystal Violet Decomposition (CBL Equipment to be used by trained teachers and presenters)	2707
CBL Lab: Light Intensity vs Distance	CBL Lab: Light Intensity vs Distance (CBL Equipment to be used by trained teachers and presenters)	2677
CBL Lab: Limitations on Cell Size: Surface Area to Volume	CBL Lab: Limitations on Cell Size: Surface Area to Volume (CBL Equipment to be used by trained teachers and presenters)	2696
CBL Lab: Limitations on Cell Size: Surface Area to Volume	CBL Lab: Limitations on Cell Size: Surface Area to Volume (CBL Equipment to be used by trained teachers and presenters)	2697
CBL Lab: Limitations on Cell Size: Surface Area to Volume	CBL Lab: Limitations on Cell Size: Surface Area to Volume (CBL Equipment to be used by trained teachers and presenters)	2902
CBL Magnetic Field Sensor	Donated by the Chemistry Department. This kit is to be used with CBL systems and it contains 9 Sensors. Bar codes 2284 through 2291. (CBL Equipment to be used by trained teachers and presenters)	2284
CBL Motion Detectors	Donated by the Chemistry Department. This kit contains motion detectors for use with CBL systems. There are 7 units in this kit with bar codes 2238 through 2244 (CBL Equipment to be used by trained teachers and presenters)	2237
CBL Pressure Sensors	Part of CBL Systems donated by the Chemistry Department. Pressure sensors for use with the CBL systems. This kit contains 8 sensors. Barcodes 2246-2251 (CBL Equipment to be used by trained teachers and presenters)	2253
CBL system	CBL System: Contains CBL System, Light Probe and Voltage Probe (CBL Equipment to be used by trained teachers and presenters)	1509
CBL system	CBL System: Contains CBL System, Light Probe and Voltage Probe (CBL Equipment to be used by trained teachers and presenters)	1511

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
CBL system	CBL System: Contains CBL System, Light Probe and Voltage Probe (CBL Equipment to be used by trained teachers and presenters)	1512
CBL system	CBL System: Contains CBL System, Light Probe and Voltage Probe (CBL Equipment to be used by trained teachers and presenters)	2788
CBL system	CBL System: Contains CBL System, Light Probe and Voltage Probe (CBL Equipment to be used by trained teachers and presenters)	2789
CBL: 25-g Accelerometers	For use with CBL units This kit contains 5 accelerometers. Bar codes 2883 through 2887. (CBL Equipment to be used by trained teachers and presenters)	2213
CBL: Absorption of Radiant Energy	(CBL Equipment to be used by trained teachers and presenters)	2535
CBL: Absorption of Radiant Energy	(CBL Equipment to be used by trained teachers and presenters)	2536
CBL: Barometers	Barometers to be used with the CBL units and TI Calculators Contains 6 units. (CBL Equipment to be used by trained teachers and presenters)	2211
CBL: Biology Gas Pressure Sensor	Pressure sensor for use with CBL Systems. This kit contains 6 sensors. Barcodes 2689-2694 (CBL Equipment to be used by trained teachers and presenters)	2688
CBL: Calculator to Calculator Link Cables	This kit contains 12 linking cables for calculators. Bar codes: 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722,2723	2603
CBL: Calorimeters II	The Vernier Software Colorimeter is a computer-interfaced probe designed to determine the concentration of a solution by analyzing its color intensity. The color of a solution may be inherent or derived by adding another reagent to it. Monochromatic light from a LED light source passes through a cuvette containing a solution sample. Some of the incoming light is absorbed by the solution. As a result, light of a lower intensity strikes the photodiode. Barcodes 1761, 1783, 2629, 2630, 2632-2634 (CBL Equipment to be used by trained teachers and presenters)	2635
CBL: CBL Lab: Conductivity of Solutions	CBL Lab: Conducting Solutions (CBL Equipment to be used by trained teachers and presenters)	2709
CBL: CBL System and Calculator	TI-83 Calculator and CBL system (CBL Equipment to be used by trained teachers and presenters)	2765
CBL: CBL System and calculator	CBL system and calculator (CBL Equipment to be used by trained teachers and presenters)	2766
CBL: CBL System and Calculator	CBL system and calculator (CBL Equipment to be used by trained teachers and presenters)	2767
CBL: CBL System and Calculator	cbl system and calculator (CBL Equipment to be used by trained teachers and presenters)	2769
CBL: CBL System and Calculator	cbl system and calculator (CBL Equipment to be used by trained teachers and presenters)	2770
CBL: CBL System and TI-83	cbl system and calculator (CBL Equipment to be used by trained teachers and presenters)	2900

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
CBL: CBR Kit with Clamps	Classroom set of CBR Units. Bar code Numbers:2537 through 2560 (CBL Equipment to be used by trained teachers and presenters)	2561
CBL: CBR Motion Detectors	This kit is for use with the CBL SYSTEM. Bar codes, 2682, 2683, 2684, 2685, 2686, 2687 (CBL Equipment to be used by trained teachers and presenters)	2681
CBL: CBR Motion Detectors	CBR Motion Detectors to be used with TI Calculators. This kit contains 10 detectors bar codes: 2726 through 2735. (CBL Equipment to be used by trained teachers and presenters)	2726
CBL: Conductivity Probes	Conductivity Probes for use with the CBL System. this kit contains bar codes: 2670, 2671, 2672, 2673, 2674, 2675 (CBL Equipment to be used by trained teachers and presenters)	2669
CBL: Current & Voltage Probes	Current and Voltage Probes for use with CBL Units and TI Calculators Contains 4 units with bar codes 1777 through 1779. (CBL Equipment to be used by trained teachers and presenters)	2857
CBL: Diffusion Through Membranes	This kit contains materials for the CBL experiment Diffusion Through Membranes. (CBL Equipment to be used by trained teachers and presenters)	2701
CBL: Dual Photogate Adaptor	To be used with CBL Systems. Contains Bar codes : 2625, 2626, 2627, 2628. (CBL Equipment to be used by trained teachers and presenters)	2624
CBL: Endo- and Exothermic Reactions	This kit contains materials for the CBL experiment Endo- and Exothermic Reactions. (CBL Equipment to be used by trained teachers and presenters)	2678
CBL: Gas Pressure Sensors	Donated by the Chemistry Dept. to the Ruth Patrick. This kit contain Gas Pressure Sensors for use with CBL systems. It has 10 sensors in it. Bar codes 2872 through 2879 (CBL Equipment to be used by trained teachers and presenters)	2280
CBL: Heart Rate Monitor	Heart Rate Monitors for use with CBL units and TI Calculators contains bar codes 2858, 1505, 1504, 2859, 2860. (CBL Equipment to be used by trained teachers and presenters)	2212
CBL: Household Acids and Bases	These are solutions for CBL experiment Household Acids and Bases. (CBL Equipment to be used by trained teachers and presenters)	2676
CBL: Magnetic Field Sensor	Magnetic Field Sensor to be used with CBL and TI Calculators. This kit contains sensors with bar codes 1762 through 1766. (CBL Equipment to be used by trained teachers and presenters)	2867
CBL: Magnetic Field Sensors	To be used with CBL Systems. This kit contains 6 sensors bar codes 2263 , 2664, 2665, 2666, 2667, 2668, 2680. (CBL Equipment to be used by trained teachers and presenters)	2662
CBL: Microphones	This kit is to be used with CBL Systems. It contains 5 microphones. bar codes 1755 through 1758. (CBL Equipment to be used by trained teachers and presenters)	2888
CBL: Motion Detectors	CBL Motion Detectors to be used with CBL Unit and TI Calculator. This kit contains motion detectors: 1502, 1503, 1754, 1785, 1790. (CBL Equipment to be used by trained teachers and presenters)	2901

Ruth Patrick Science Education Center
Traveling Science and Mathematics Demonstrations Program
Kit Descriptions

Kit Title	Description	Barcode
CBL: Newton's Law of Cooling	CBL Lab Kit for Newton's Law of Cooling (CBL Equipment to be used by trained teachers and presenters)	2680
CBL: pH Amplifier	To be used with CBL Systems . This kit contains 6 amplifiers. Barcodes 2611-2616 (CBL Equipment to be used by trained teachers and presenters)	2610
CBL: Photogate Adaptors	Photogate adaptors to be used with the CBL systems . This kit contains 12 adaptors. bar codes 2637 through 2648. (CBL Equipment to be used by trained teachers and presenters)	2636
CBL: Photogates with Manual	CBL: Photogates with Manual for use with the CBL System . This kit contains 6 units with manuals. Bar code numbers: 2618, 2619, 2620, 2621, 2622, 2623. (CBL Equipment to be used by trained teachers and presenters)	2617
CBL: Picket Fence	(CBL Equipment to be used by trained teachers and presenters)	2650
CBL: Picket Fence	(CBL Equipment to be used by trained teachers and presenters)	2651
CBL: Picket Fence	(CBL Equipment to be used by trained teachers and presenters)	2904
CBL: Plastic Cuvettes	(CBL Equipment to be used by trained teachers and presenters)	2594
CBL: Pressure Sensors	To be used with CBL Systems This kit contains 5 sensors. Bar codes 2605, 2607, 2608, 2609,2606 (CBL Equipment to be used by trained teachers and presenters)	2604
CBL: Pressure Sensors	This kit contains 5 Pressure Sensors to be used with the CBL Equipment. Contains Pressure Sensors:1500, 1501, 1874, 1875, 1876 (CBL Equipment to be used by trained teachers and presenters)	2881
CBL: Properties of Solutions: Electrolytes & Non-electrolytes	CBL Lab Kit: Properties of Solutions: Electrolytes & Non-electrolytes (CBL Equipment to be used by trained teachers and presenters)	2706
CBL: Relative Humidity Sensor	Relative Humidity Sensor . These sensors are used with computer based laboratory units and TI-82 or 83 calculators. This kit contains 5 sensors. with bar codes 1772 through 1776. (CBL Equipment to be used by trained teachers and presenters)	2866
CBL: Saltwater Conductivity: The Effects of Concentration	CBL: Saltwater Conductivity: The Effects of Concentration (CBL Equipment to be used by trained teachers and presenters)	2698
CBL: Saltwater Conductivity: The Effects of Concentration	CBL: Saltwater Conductivity: The Effects of Concentration (CBL Equipment to be used by trained teachers and presenters)	2699
CBL: Saltwater Conductivity: The Effects of Concentration	CBL: Saltwater Conductivity: The Effects of Concentration(CBL Equipment to be used by trained teachers and presenters)	2700
CBL: Student Force Sensor	Student force sensors for use with CBL units and TI calculators. This kit contains 10 sensors bar codes 2598 through 2602 and 2810 through 2814. (CBL Equipment to be used by trained teachers and presenters)	2596
CBL: Student Force Sensors	Force sensors for use with CBL units and TI calculators. This kit contains 10 sensors bar codes 2255, 2256, 2258, 2257, 2259, 2260, 2261, 1787, 1786 (CBL Equipment to be used by trained teachers and presenters)	2254

Ruth Patrick Science Education Center
 Traveling Science and Mathematics Demonstrations Program
 Kit Descriptions

Kit Title	Description	Barcode
CBL: Temperature Probes	Temperature Probes for use with CBL units and TI calculators. This kit contains 6 probes with barcodes 2868 , 2891, 2894, 2897-2899 (CBL Equipment to be used by trained teachers and presenters)	1780
CBL: Temperature Probes	To be used with the CBL system. This kit contains 6 probes. bar codes :2893 through 2899 (CBL Equipment to be used by trained teachers and presenters)	2893
CBL: Thermocouple	Thermocouples to be used with CBL and TI Calculators Contains 5 thermocouples with bar codes 1767 through 1771. (CBL Equipment to be used by trained teachers and presenters)	2882
CBL: TI-83 Calculators with CBL Systems	Donated Calculators from the Chemistry Department . These calculators are to be used with CBL systems there are 14 sets in this kit. Bar codes 2221 through 2234 (CBL Equipment to be used by trained teachers and presenters)	2220
CBL: TI-Graph Link	This is used to interface between a TI Calculator and a computer. May be used with TI-82, 83, 85 or 92. (CBL Equipment to be used by trained teachers and presenters)	2889
CBL: Voltage Probes	Seven Voltage probes for use with CBL units and TI calculators. his kit contains * probes bar codes 1362, 2850, 2851, 2852, 2856, 2853, 2854, 2855. (CBL Equipment to be used by trained teachers and presenters)	1362