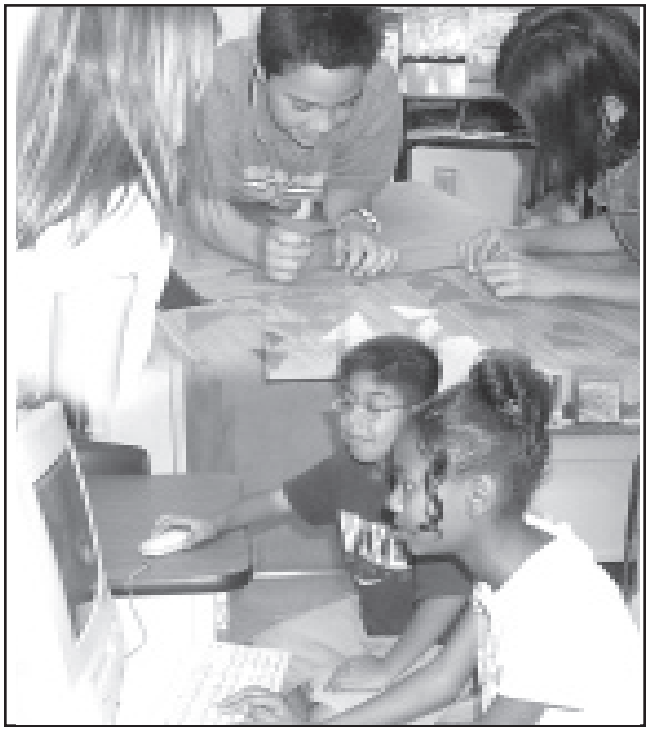
Non-Disciplinary Programs

TEAMS Orientation

• One 60-minute program

What is TEAMS? How can TEAMS help increase student achievement? How does TEAMS look in the classroom? How are teachers supported and how is teaching and learning enhanced by TEAMS? Find the answers to these and other questions. This program introduces participants to distance learning modules enhanced by online resources and support. Find out how TEAMS can meet your instructional needs.



Programming for Parents in English and Spanish

THE SUPPORTIVE LEARNING ENVIRONMENT

- Three 60-minute programs in English
- Three 60-minute programs in Spanish

Parent as Teacher: Working with Your Child in the Content Areas
Padres como Maestros: Trabajando con sus Hijos en Materias Academicas

This program helps parents understand what they can do to help their children succeed in the content areas of reading, language arts, mathematics, science and history/social science.

Involvement: The Power of Parents
Involucramiento: El Poder de los Padres

Parents find out the importance of becoming involved in the school community and how this involvement can contribute to their child's self esteem and confidence with learning.

Journey Toward Technology: What Does It Have to Offer?
Jornada Hacia la Technología: Qué Nos Puede Ofrecer?

This program focuses on technologies that are in use in classrooms and how parents can use technology to enhance their child's learning.

Program Descriptions

TEAMS programming is standards-based and is part of a distributed learning project designed to help teachers, students, and parents become more knowledgeable through a variety of technologies. The professional development programs show teachers how to facilitate exciting hands-on distance learning lessons in the content areas of reading, language arts, mathematics, science and history/social science.

TEAMS programs for students are designed to be viewed on tape. The studio instructor initiates the lesson, shows examples, and gives directions. Then a YOUR TIME screen appears and indicates a "pause the tape"

Reading/Language Arts Programs

TEAMS reading/language arts programs invite teachers and students to participate in a variety of lessons that encourage active participation. **Reading: Basic to Success**, for grades K-3, stresses reading acquisition and demonstrates the components of a comprehensive literacy program. **Windows on My World**, for grades 4-7, concentrates on reading to learn and is based on quality literature. **Writing in the Primary Grades** focuses on the stages of writing development. Through the TEAMS DISTANCE LEARNING Home Page, http://teams.lacoe.edu, teachers and students can access resources that extend and support these programs.

READING: BASIC TO SUCCESS

Reading: Basic to Success is developed in two modules, each consisting of eight student programs supported by four staff development programs. The first module focuses on K-1 classrooms, the second on grades 2 and 3. Programs provide for active viewing and student participation.

Reading: Basic to Success Grades K-3

Introduction and Review

Staff Development Programs
- Two 60-minute programs

Introduction

The *Introduction* program visits a first grade class in September. The teacher gives students individual assessments and then demonstrates small group instruction based on the results of those assessments.

Review

The *Review* program revisits the same first grade classroom in May to observe student progress made in reading acquisition. The Results Project, a program that focuses on matching instruction to assessment, is discussed.

Kindergarten - Grade 1

(Units 1-4)

Staff Development Programs
- Four 60-minute programs

Student Programs: Grades K-1
- Eight 30-minute programs

Unit 1: Grades K-1

Skills for Beginners

Staff Development 1

The staff development program demonstrates how to help students acquire alphabet knowledge, phonemic awareness, and concepts about print. Appropriate tools for assessing these concepts are presented.

Student Programs 1.1 & 1.2

These programs demonstrate assessment tools and teaching strategies for phonemic awareness, concepts of print, and alphabet knowledge. Three exciting children's books are used.

Unit 2: Grades K-1

Phonics Instruction

Staff Development 2

The staff development program takes teachers through the stages of phonics development and demonstrates appropriate assessment tools for these stages. An explicit, systematic phonics lesson is demonstrated and appropriate reinforcement activities are provided for students in grades K-1.

Student Programs 2.1 & 2.2

Students experience explicit, systematic phonics lessons that use decodable text to reinforce the skills focus.

Unit 3: Grades K-1

Spelling Instruction

Staff Development 3

In this staff development program, the stages of spelling development are described and appropriate assessment tools are examined. The program covers the transition from phonetic spelling at the kindergarten level to conventional spelling by the end of first grade.

Student Program 3.1 & 3.2

The stages of phonics and spelling development, including assessment tools are explained. The studio teacher demonstrates explicit, systematic lessons. Students experience lessons that are appropriate for various spelling stages. Activities that reinforce spelling development are included.

Unit 4: Grades K-1
Comprehension and Vocabulary Development

Staff Development 4

Interactive read-aloud strategies are demonstrated during this staff development program that help students deepen comprehension and expand vocabulary.

Student Programs 4.1 & 4.2

Students are invited to interact with the text as it is read aloud to practice predicting, questioning, clarifying, and summarizing strategies at the K-1 level.

Grades 2 - 3
(Units 5-8)

Staff Development Programs
- Four 60-minute programs

Student Programs: Grades 2-3
- Eight 30-minute programs

Unit 5: Grades 2-3
Phonics Instruction

Staff Development 5

The staff development program guides teachers through the stages of phonics development and demonstrates appropriate assessment tools for these stages. An explicit, systematic phonics lesson is demonstrated and appropriate reinforcement activities are explored.

Student Programs 5.1 & 5.2

Students experience phonics lessons that address specific skills. Students participate in activities that reinforce phonics concepts they have learned.

Unit 6: Grades 2-3
Spelling Instruction

Staff Development 6

This staff development program describes the stages of spelling development and appropriate assessment tools. The program includes an explicit spelling lesson as well as activities that reinforce spelling patterns.

Student Programs 6.1 & 6.2

Classroom students experience lessons that teach specific spelling patterns at the grade 2-3 level.

Unit 7: Grades 2-3
Comprehension and Vocabulary Development

Staff Development 7

Activities are demonstrated during this staff development program that teach students to use strategies that deepen comprehension and expand vocabulary. Both narrative and informational texts are used. The writing process is introduced.

Student Programs 7.1 & 7.2

Students are invited to interact with the text as it is read aloud to experience predicting, questioning, clarifying and summarizing strategies. Vocabulary development is stressed.

Unit 8: Grades 2-3
Strategic Reading Instruction

Staff Development 8

The staff development program demonstrates strategies that help students become independent readers. The reciprocal teaching method that teaches students to predict, question, clarify, and summarize information is highlighted.

Student Programs 8.1& 8.2

Students experience strategic reading lessons using fictional as well as informational texts. They use the techniques of predicting, questioning, clarifying and summarizing.

WRITING FOR PRIMARY GRADES (K-3)

Modules in this series review effective ways to help students develop writing skills. The writing process is emphasized.

Teaching Writing, *Kindergarten - Grade 1*

Staff Development Programs
- One 60-minute program

Student Programs: Grades K-1
- Two 30-minute programs

Writing Development

The staff development program for this module reviews the stages of writing development. Examples of student writing at the kindergarten and first grade levels are shared. Strategies are modeled that encourage young children to attempt their own writing. Types of writing for primary students are explained. Teachers work with examples of student writing to evaluate developmental stages of writing.

The Writing Process, K-1

During the first student program, the studio teacher models the writing process and motivates students to create their own stories on the topic of pets. Students use the writing process to write about a personal experience. A graphic web is used to organize key thoughts.

Writing in the Content Areas, K-1

During the second student program, the focus is on writing in the content areas. The studio teacher introduces students to the concept of collecting and organizing research. In this program students do informational writing. They use a KWL chart to organize their ideas.

Teaching Writing, Grades 2-3

Staff Development Programs
- One 60-minute program

Student Programs: Grades 2-3
- Two 30-minute programs

Writing Development

During the staff development program, the stages of writing development and samples of student writing at the second and third grade level are shared and discussed. Suggestions are made to help students learn to use the writing process.

The Writing Process, 2-3

In this program, students are introduced to narrative writing. They create their own organizing web and work through the stages of the writing process.

Writing in the Content Areas, 2-3

Students are introduced to informational writing. They use a KWL chart to organize their information.

WINDOWS ON MY WORLD

The *Windows on My World* Series is designed for students in grades 4-7. Each module is sequenced around a different piece of literature with integrated listening, talking, writing, and technology components.

Letters from Rifka

Staff Development Program
- One 60-minute program

Student Programs: Grades 5-7
- Five 30-minute programs

This module is based upon the novel *Letters from Rifka* by Karen Hesse. The book is a delightful story about the life and struggles of a young girl as she emigrates from Russia to America in 1919. Active experiences help students become better readers, writers, and discussants.

Staff Development

The staff development program introduces and familiarizes teachers with the content and teaching strategies specific to the novel. Teacher guides and procedures for implementing student programs are discussed.

Student Programs

***#1** Building Background Knowledge*

Students are introduced to an important theme presented in *Letters from Rifka,* the trauma involved in the movement of a family from one place to another.

***#2** Initial Response to the Story*

Students examine four character traits associated with resiliency in *Letters from Rifka* (self-reliance, self-discipline, perseverance, and self-preservation).

***#3** Deepening Understanding*

Students have an opportunity to ask questions to a student playing the role of Rifka.

***#4** Understanding Historical Significance*

Using non-fiction material, students gain an understanding of how events in history add to the understanding and meaning of the novel.

***#5** Extending Understanding*

Students explore the motivation, available options, and potential courses of actions open to Rifka. They reflect on the resiliency traits she possessed.

Shiloh

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Four 30-minute programs

This module is sequenced around the reading of the novel *Shiloh.* Written by Phyllis Reynolds Naylor, *Shiloh* was the winner of the 1992 Newbery Medal. The book involves the reader in a universal dilemma confronted by a young boy in West Virginia when he befriends an abused dog.

Staff Development

On the staff development program the general philosophy of the series is shared. The program helps prepare teachers for the student programs by sharing ideas for room arrangement, classroom management, pre-program preparation, and pacing of instruction.

Student Programs

***#1** Building Connections*

Students create and share their personal mandalas. They make connections with Marty, the main character in *Shiloh,* and they explore how it feels to be lonely after reading and discussing the poem "Alone."

***#2** Developing Understanding*

Students use visualization to develop their understanding of the story. Students learn the elements of a good persuasive letter and begin their draft.

***#3** Expanding Meaning*

Students share their persuasive letters and collaborate on a project for their classroom or neighborhood. They compose tanka-a Japanese form of poetry.

***#4** Writing to Learn*

Students share their initial response to the story in a Grand Conversation. Through personal writing and visualizations they start a literary mandala.

Patty Reed's Doll: The Story of the Donner Party

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-5
- Five 30-minute programs

This module is based upon the novel *Patty Reed's Doll: The Story of the Donner Party.* This book is about the life and struggles experienced by the Donner Party on their journey across the United States.

Staff Development

Teachers are introduced to the content and teaching strategies specific to the novel. Teacher guides and procedures for implementing student programs are discussed. Student activities are presented and modeled.

Student Programs

#1 *Thinking Historically*

Students learn how to think historically as they read *Patty Reed's Doll,* developing empathy, understanding multiple perspectives, understanding cause and effect, and doing comparative studies.

#2 *Using Prior Knowledge*

Students build background knowledge and learn new vocabulary through tapping their existing knowledge, studying maps and primary sources, hearing literature read aloud, using vocabulary-building strategies and studying realia and artifacts.

#3 *Comprehension*

Students use graphic organizers to record information, understand cause and effect, make comparisons and use these comprehension strategies to make meaning from the text.

#4 *Building Language Skills*

Students show what they have learned about both content and language structures by writing complex sentences. Students use signal words and build vocabulary as they progressively write more sophisticated sentences and paragraphs.

#5 *Responding to the Text*

Students respond to the text using several different oral and written language and art activities. They write paragraphs in journals and letters home from multiple perspectives.

Instructional Materials — Reading/Language Arts

TEAMS READING
Reading: Basic to Success

The following are suggested books for participation in ***Reading: Basic to Success***. Some of these books are used in the programs, but it is possible for teachers and students to fully participate in the programs without having direct access to each book. These books are easily purchased through a variety of local vendors:

Reading: Basic to Success, Grades K-1

A Chair for My Mother, by Vera Williams
ISBN: 0-688-040741

Pumpkin, Pumpkin, by Jeanne Titherington
ISBN: 0-688-09930-0

Chicka, Chicka, Boom, Boom, by Bill Martin Jr. and John Archambault
ISBN: 0-671-67949-X

Have You Seen My Cat? by Eric Carle
ISBN: 0-88708-054-5

The Hungry Thing, by Jan Slepian
ISBN: 0-590-42292-8

Reading: Basic to Success, Grades 2-3

Angel Child, Dragon Child, by Michelle Surat
ISBN: 0-590-42271-5

Sheep in a Jeep, by Nancy Shaw
ISBN: 0-395-47030-7

Charlie Needs a Cloak, by Tomie de Paola
ISBN: 0-671-66467-0

TEAMS LANGUAGE ARTS
Windows on My World

Participants need to obtain these books through a vendor of choice.

Shiloh

Each student will need a copy of *Shiloh*, by Phyllis Reynolds Naylor. New York: Dell Publishing, 1991.

Letters from Rifka

Each student will need a copy of *Letters from Rifka*, by Karen Hesse. New York: Puffin Books, 1992.

Patty Reed's Doll: The Story of the Donner Party

Each student will need a copy of *Patty Reed's Doll: The Story of the Donner Party,* by Rachel K. Laurgaard. Caldwell, ID: Caxton Press, 1956.

Mathematics Programs

TEAMS mathematics programs complement classroom curriculum for first grade through middle school. They model effective teaching strategies and are starting points to a rich and rigorous mathematics program. Students explore, investigate, and use problem solving skills as they develop mathematical thinking skills related to algebra, number and geometry concepts. Through the TEAMS

ALGEBRA

The algebra series provides students with activities that build a foundation for understanding algebraic concepts.

Teaching Algebraic Concepts

Staff Development Programs

- Two 60-minute programs

These staff development programs help teachers understand what algebraic thinking is and the importance of teaching algebraic concepts throughout the grades. Strategies for helping students develop algebraic thinking are modeled. Program design, teacher guides, and online opportunities for students, teachers, and parents are explored.

Algebra: Grades 1-2

Algebra and Functions for Primary Grades

Student Programs: Grades 1-2

- Six 30-minute programs

This module develops an understanding of how naturally occurring situations can be represented algebraically. Through active investigation, students model, represent, and interpret number relationships. They use algebraic symbols to create and solve problems using addition and subtraction. Equations are introduced as a way to generalize patterns and describe number relationships.

Student Programs

#1 *Writing Equations*

Students model real life experiences and translate them into addition and subtraction equations. Balance is emphasized.

#2 *Exploring Number Relationships*

Using a target game, students try to find all possible combinations of numbers and their resulting sums. They combine two and three numbers.

#3 *Using Data for Problem Solving*

Students collect data and create pictographs and bar graphs. They interpret the graphs, creating questions to solve using addition and subtraction.

#4 *Working with Functions*

Students explore simple functions, T-tables, and create their own functions.

#5 *Describing and Extending Patterns*

Using objects, students explore linear patterns. They describe and extend the pattern and solve problems.

#6 *Solving Riddles*

Using clues, students solve problems to find an unknown.

Algebra: Grades 3-4

Algebra in My World

Student Programs: Grades 3-4

- Six 30-minute programs

Algebra in My World presents activities that have students thinking algebraically as they work with functions, patterns and algebraic symbols. Problem solving strategies are used to help students solve word problems.

Student Programs

#1 *Fun with Functions*

Students are given the rule of a function and asked to find the input or output by completing a sequence of computations or constructing an inverse operation.

***#2** Looking at Patterns*
Using objects and diagrams, students create and extend patterns, make predictions, and describe the patterns.

***#3** Relationships of Numbers*
Students are asked to find the combination of numbers that make equations true. They solve problems related to the relationships of numbers.

***#4** Word Problems*
Students explore variables and solve algebraic sentences.

***# 5** Working with Inequalities*
Students use numbers and symbols to compare expressions.

***# 6** Looking for a Balance*
Students solve problems related to balance.

Algebra: Grades 5-6

Turn On to Algebra

Student Programs: Grades 5-6
- Eight 30-minute programs

Turn On to Algebra helps students understand that algebra is a problem solving tool. Students investigate patterns and identify relationships between numbers. They interpret and process word problems and develop the understanding that formulas are equations which represent relationships.

***#1** Problem Solving and Patterns*
Using objects and diagrams, students create and extend geometric patterns, make predictions, and describe the patterns as functional relationships.

***#2** Finding Functions*
Students use T-tables to collect data. They determine functions of numeric and geometric patterns. Algebraic notation is introduced.

***#3** Graphing Functions*
Students plot ordered pairs and create graphs of functions. Students look at the graphs to learn about slope and y-intercept.

***#4** Making Sense of Word Problems*
Activities provide students opportunities to "break-down" problems to obtain solutions. Problem solving techniques are emphasized.

***#5** Symbols of Algebra*
Students become familiar with how algebraic symbols are used and begin to make connections between the symbolic notations and the concepts these notations represent.

***#6** What's an Integer?*
Students perform operations with integers using manipulatives. By recording and sketching their steps they begin to see a pattern and understand the algorithms for these operations.

***# 7** Working with Equations*
Students are introduced to variables, equations, and inequalities. They work with expressions and equations.

***#8** Thinking Algebraically*
Various activities enable students to balance equations and symbolic notation.

Algebra: Middle School

Algebraic Concepts for Middle School

Student Programs: Grades 6-8
- Six 30-minute programs

Algebraic Concepts for Middle School is designed to help students make the transition from arithmetic to algebra. Students are involved in rich experiences that introduce them to equations, variables, integers and other algebraic concepts. Students begin to see the relevance of algebra in their world.

***#1** Patterns and Functions*
Students look for a pattern in a tile design. They record the pattern on a T-table and graph the resulting ordered pairs.

***#2** Expressions and Algebraic Symbols*
Students solve problems using deductive reasoning. They demonstrate their understanding of equality and ways to modify inequalities to achieve balance.

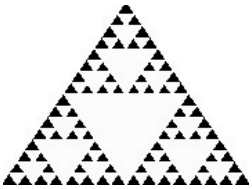
***#3** Introduction to Integers*
Students perform operations with integers using manipulatives. They begin to see a pattern and understand the algorithms for these operations.

***#4** Working with Variables*
Students review algebraic equations, variables, number principles, and coefficients. They solve for unknowns.

***#5** Operations with Integers*
Students perform operations on integers and polynomials.

***#6** Algebraic Equations*
Students use algebraic reasoning to form generalizations that they later express in equations using algebraic notations.

NUMBER



The Number series provides lessons for first through middle school grades and gives students rich experiences with number concepts. Programs focus on reasoning and generalizations.

Teaching Number Concepts

Staff Development Program
- One 60-minute program

This staff development program helps teachers identify important properties of number that help build

a firm foundation for understanding geometry and algebra. Program design, teacher guides, and online opportunities for students, teachers, and parents are explored. Quality assessment is discussed.

Number: Grades 1-2

Number Concepts for Primary Grades

Student Programs: Grades 1-2

- Six 30-minute programs

This module introduces primary students to the properties of number. Lessons help them develop an understanding of the multiple relationships among whole numbers and the effects of operations on those numbers.

Student Programs

***#1** Representing Numbers*

A variety of games are used to help students understand numbers, ways of representing numbers, relationships among numbers and number systems.

***#2** Part-Part-Whole Concepts*

Students solve "joining" and "take-away" problems to understand relationships between addition and subtraction by examining part-part-whole concepts.

***#3** Operations on Numbers*

Through problem situations students encounter in their daily lives, they experience multiple definitions of subtraction. They also work with the operations of addition and multiplication.

***#4** Understanding Place Value*

Students count large groups of objects and use multiple models to develop initial understanding of place value and the base ten number system.

***#5** Problem Solving*

Students write their own mathematical problems as well as solve routine and non-routine problems.

***#6** Properties of Number*

Students play various games involving place value, addition, and subtraction. Through these games they informally explore and use the commutative, associative, identity, and substitution properties for whole numbers.

Number: Grades 3-4

Number in My World

Student Programs: Grades 3-4

- Six 30-minute programs

This module focuses on understanding fractions. Students in grades 3 and 4 are introduced to a variety of models that include an area model, a linear model, and a sharing model. Throughout the module, students represent and compare fractions. They compare fraction equivalence represented by drawings or concrete materials. Students add and subtract simple fractions in context.

***#1** Representing Fractions (area model)*

Students use geoboards to create fractional parts and compare them to the unit whole. They work with partners to explore, discuss and prove their examples, and finally they record their fractions on dot paper.

***#2** Understanding Fractions (area model)*

Students use dot paper rectangles and Color Tiles to compare fractional values. They discover that the size of a fractional unit is dependent on the size of the whole.

***#3** Adding & Subtracting Fractions*

Students use Pattern Blocks to add and subtract fractions and express answers in simplest form.

***#4** Working with Fractions (sharing model)*

Students use a sharing model to develop an understanding of fractions.

***#5** Equivalent Fractions (linear model)*

Students explore relationships among fractions on a linear model using non-standard measurement.

***#6** Fractions/Decimals Connection*

Students use money to connect fraction and decimal representations and to solve problems.

Number: Grades 5-6

Turn On to Number

Student Programs: Grades 5-6

- Six 30-minute programs

This module introduces students in grades 5 and 6 to the properties of number with an emphasis on fractions and decimals. They solve problems encountered in their world that involve multiplication and division of fractions. Students use concrete models to build their understanding of concepts.

***#1** Multiples, Primes, and Composites*

Students use divisibility rules to complete the sieve of Eratosthenes in order to determine prime numbers from 1 to 100.

***#2** Composing & Decomposing Fractions*

Students create their own tangram and use pieces to compare and calculate fractional values of parts and unit wholes.

***#3** Understanding Fractional Relationships*

Students use ratios in different contexts and use proportions to solve problems.

***#4** Operations on Fractions (multiplication & division)*

Students create models to explain multiplication and division algorithms of fractions and apply these procedures to solving problems.

***#5** Comparing Fractions and Decimals*

Students use 10 x 10 grids and a number line to compare and order fractions and decimals.

***#6** Everyday Fractions*
Students convert fractions and decimals to percents and use proportions to determine discounts and calculate interest.

Number: Middle School
Number Concepts for Middle School
Student Programs: Grades 6-8
- Six 30-minute programs

Middle school students are introduced to several ways of representing numbers and relationships among numbers. Lessons build and expand on their informal experiences with numbers. Students develop the ability to make comparisons of quantitative information.

***#1** Powers & Exponents*
Students fold paper in half several times to explore exponential growth by the power of two.

***#2** Factors & Multiples*
Students investigate factor and multiple patterns and discover if numbers are relatively prime.

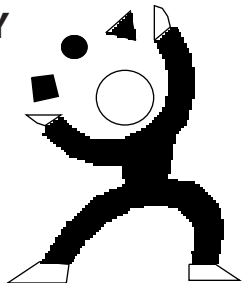
***#3** Generalizations*
Students measure and compare the ratio of circumference to diameter of circles, then identify relationships to form generalizations.

***#4** Rational Numbers*
Students find the decimal equivalents of fractions and discover rules for determining if they are repeating or terminating decimals.

***#5** Proportional Reasoning*
Students compare specific body measures to explore ratios and proportions.

***#6** Problem Solving Involving Proportions*
Students use proportions to compare and create similar figures.

GEOMETRY



The *Geometry* series provides lessons for first through middle school grades and gives students rich experiences with both two- and three-dimensional shapes.

Teaching Geometry Concepts
Staff Development Programs
- Two 60-minute programs

These staff development programs help teachers understand the instructional strategies for effectively teaching geometry concepts. Program design, teacher guides, and online opportunities for students, teachers, and parents are explored.

Geometry: Grades 1-2
Geometry Concepts for Primary Grades
Student Programs: Grades 1-2
- Six 30-minute programs

This module stresses the development of geometric ideas through activities that engage students in doing, thinking, and reflecting on geometric concepts. The activities help build self-confidence, nurture natural curiosity, and challenge students.

***#1** Sorting Geometric Shapes*
Attribute Blocks and Venn Diagrams are used to help students discover attributes of shapes.

***#2** Classifying Geometric Shapes*
Students build shapes on geoboards, then classify those shapes to get a better understanding of the properties of polygons.

***#3** Discovering Attributes of Geometric Shapes*
Students discover attributes of geometric shapes. They begin to develop geometric vocabulary and spatial sense.

***#4** Constructing Shapes*
Students make geometric shapes (polygons) from equilateral triangles. They discover that shapes can be formed from other shapes.

***#5** Slides, Flips, and Turns*
Students are introduced to the language of geometric transformation (flips, slides, and turns) as they manipulate themselves, "people cards" and designs.

***#6** Three-Dimensional Geometry*
Students use a variety of geometric solids to explore properties of the 3-dimensional figures. They look for patterns.

Geometry: Grades 3-4
Geometry in My World
Student Programs: Grades 3-4
- Eight 30-minute programs

Students use geometry as a means of describing the physical world. Programs include identifying, describing, comparing, and classifying geometric figures, developing spatial sense, understanding geometric properties and relationships, and exploring symmetry.

***#1** Defining Polygons*
Students explore properties of polygons. They identify specific polygons and discover these polygons in the world around them.

***#2** Transformation*
Students work with transformational geometry using square designs. These transformations include translations (slides), rotations (turns), and reflections (flips).

***#3** Tessellating Shapes*
Students use Pattern Blocks to discover which polygons tessellate. They create their own tessellating design.

***#4** Problem Solving with Pentominoes*
Students create pentominoes and use the pentominoes to explore tessellations.

***#5** Geometry & Number*
Students build rectangles, look for patterns and discover a variety of mathematical concepts.

***#6** Properties of Polyhedrons*
Students discuss properties of polyhedrons using Geoblocks. Students develop spatial sense by looking at nets (jackets) and visualizing which polyhedrons these nets create.

***#7** 2-Dimensional Parts of Polyhedrons*
Students continue working with Geoblocks as they explore surface area and perimeter. They use the nets (jackets) to help calculate measures.

***#8** Math in Art*
Students look for symmetry using pentominoes and Pattern Block designs. They create a mask applying what they learned about symmetry.

Geometry: Grades 5-6

Turn On to Geometry

Student Programs: Grades 5-6
- Eight 30-minute programs

This module helps students develop spatial understanding. Through active investigation, students discover properties and relationships of two- and three-dimensional figures. They explore such geometric concepts as similarity, congruence, and how to apply transformations.

***#1** Sorting and Classifying Geometric Shapes*
Students sort cards with shapes as they review the attributes and names of geometric figures. They practice Origami.

***#2** Discovering Why Polygons Tessellate*
Students explore angles of polygons to discover the mathematical reason for why certain shapes tessellate.

***#3** Exploring Angles Using Tangrams*
Students identify angles on Tangram pieces and create figures that have specific angle requirements.

***#4** Exploring Polygons Using Tangrams*
Students use Tangram pieces to create other polygons. They investigate properties of geometric figures.

***#5** Creating Polyhedrons Using Polydrons*
Students create polyhedrons using Polydrons. They discover which polygon shapes make up the polyhedrons.

***#6** Drawing 3-D Objects in Perspective*
Students create 3-dimensional shapes shown in two dimensional drawings. They explore volume and surface area.

***#7** Demonstrating Geometric Ideas*
Students explore the properties and attributes of polyhedrons. They construct pyramids and prisms.

***#8** Platonic Solids and Crystals*
Students explore the properties and attributes of three-dimensional figures. They create regular polyhedrons using Polydrons.

Geometry: Middle School

Geometry Concepts for Middle School

Student Programs:
Grades 6-8
- Six 30-minute programs

This module helps students develop a greater understanding of geometric concepts by comparing geometric figures and understanding geometric properties and relationships. They explore both two- and three-dimensional figures.

***#1** Two-Dimensional Geometry Concepts*
Students identify, create, and sort two-dimensional shapes.

***#2** Three-Dimensional Geometry Concepts*
Students work with three-dimensional objects and draw these as 2-dimensional drawings. They use cubes to build structures using 2-dimensional drawings.

***#3** Properties of Angles and Angle Sums*
Students review definitions of angles, measure angles, and develop an understanding of angle relationships.

***#4** Properties of Triangles*
Students measure sides and angles of triangles, then analyze patterns and relationships found in right triangles.

***#5** Transformations and Coordinates*
Students plot polygons on a four-quadrant grid of a coordinate plane. They apply geometric transformations to these polygons and investigate patterns.

***#6** Geometry Connections*
Students sort quadrilaterals according to lines of symmetry and their attributes. Students create a Papel Picado hanging, which provides an insight into this traditional art form of Mexico.

Instructional Materials—Mathematics

My World : The following instructional materials are used with **Geometry in My World, Algebra in My World,** and **Number in My World** modules.

TI Math Explorer
Dot Dice, set of 12
Transparent 6" rulers, set of 10
Overhead Numeral Tiles , 1 set
Overhead Color Tiles, set of 48
Overhead Pattern Blocks, 1 set
Color Tiles, set of 400
Pattern Blocks, 3 buckets
Deluxe Wood Geoboard, 30
Rainbow Pentominoes, 5 sets of 6
Geoblocks, 2 sets
Math in Nature Posters
Geoboard Collection, gr. 4-6
Geometry & Fractions with Pattern Blocks
Geoblocks and Geojackets
Get It Together

Turn On *:* The following instructional materials are used with **Turn On to Geometry, Turn On to Algebra,** and **Turn On to Number** modules.

Pop Cubes, 3 sets
Unicubes, set of 1,000
Bucket of Tangrams, 2
Polydrons, 4 tubs
Transparent Spinner, 4 sets of 5
Overhead Tangrams, set of 4
Overhead Color Squares
Transparent ruler, 12"/30 cm
Magnetic Wand
Magnetic Chips, 4 sets of 50
MathLink Cubes, Intermediate
Geometry & Functions with Tangrams
Elementary Geometry with Polydrons

Science Programs

TEAMS science delivers balanced programs that respect the diversity of science content, disciplines, teaching strategies, and scientific thinking processes. The programs include fundamental and discrete teaching strategies that help students develop fluency in the essential scientific thinking processes. Through the TEAMS Distance Learning Home Page, http://teams.lacoe.edu, teachers and students can access resources that extend and support the science programs.

PHYSICAL SCIENCE

Chemistry

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Eight 30-minute programs

Staff Development

The staff development program introduces the *Chemistry* module. Making inferences from observed data is emphasized through several hands-on activities.

Student Programs

#1 *Observing Matter & Changes*

Students explore matter and its interactions. They investigate how several common household powders interact with water and vinegar.

#2 *Properties of Matter*

Students use chemical indicators to test and compare the properties of matter. They test a mixture of two powders and infer which powders have been mixed and investigate acids and bases.

#3 *Mixtures & Solutions*

Students investigate mixtures and solutions. Students observe, communicate, compare and organize data.

#4 *Chemical & Physical Change*

Students investigate the characteristics of chemical and physical change. They observe chemical reactions where heat is released and absorbed.

#5 *Rates of Change*

Students observe the electrolysis of water and discuss the properties of oxygen and hydrogen. They investigate factors that influence chemical and physical change rates.

#6 *Vitamin C Testing*

Students use indophenol, a chemical indicator for vitamin C, to test and compare a variety of fruit juices and other beverages for their vitamin C content. They discuss chemical indicators as valuable tools.

#7 *Density*

Students explore density as a property of matter. They compare and seriate objects based on their density.

#8 *Concept Using & Assessment*

Students are presented with new materials and interactions to observe and describe. After observing and discussing the initial reaction, they pose questions and investigate reactions.

Forces and Motion

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Eight 30-minute programs

Staff Development

The staff development program introduces the *Forces and Motion* module in preparation for the student programs. These programs involve teachers in the elements of good science teaching and meaningful assessment. How does it look? How do we do it?

Student Programs

#1 *Getting to Know Newton*

Students discuss and explore ways to make common objects move and discuss the forces involved. Isaac Newton and his First Law of Motion are introduced.

#2 *Measuring Forces*

Students investigate friction as they measure and compare the effects of gravitational force using a Newton spring scale. They explore potential and kinetic energy through roller coasters and pendulums.

***#3** Newton II: Making Things Move*
Students are introduced to Newton's Second Law of Motion. Students investigate the interaction of acceleration, force and mass and explore the forces involved in the acceleration of objects.

***#4** Toys, Forces, & Motion*
Students investigate the movement of toys and the forces involved in that movement. They view NASA space shuttle footage to compare the behavior of toys in space and in the classroom.

***#5** More About Newton: Action-Reaction*
Students investigate Newton's Third Law. They observe and analyze force interactions in everyday situations and model construction of the Space Shuttle launch.

***#6** Getting the Advantage: Simple Machines*
Students explore the effects of simple machines on the effort required to move objects. Students construct and investigate models of simple machines to compare mechanical advantage.

***#7** More About Machines*
Students explore the idea of combining simple machines to make machine systems that vary in complexity. They analyze the interaction of the simple machine components within the more complex system.

***#8** Concept Using & Assessment*
Students use the concepts that they have learned about forces and motion to participate in three performance-based assessment tasks. Students solve problems, test a system to lift a load, and analyze the tools used by the ancient Egyptians to build the pyramids.

EARTH SCIENCE

Earth Processes

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Eight 30-minute programs

Staff Development
The staff development program introduces the *Earth Processes* module in preparation for the student programs. The teaching strategies emphasized are discussed and several of the hands-on activities are reviewed.

Student Programs
***#1** Maps & Models*
Students explore how maps and models are used to represent features of the earth, both static features and dynamic processes.

***#2** Time & Position*
Students investigate the historical clues revealed by observing the relative position of observed features of the earth. They observe and discuss geologic clues.

***#3** Mountain Building*
Program three explores the processes that build landforms on the crust of the earth. Models are used to simulate processes of faulting, folding, and volcanism.

***#4** Rocks & Soils*
Students observe and compare the characteristics of rocks and soil cycles, emphasizing the processes and cycles that link rocks and soil. The processes that produce igneous, sedimentary, and metamorphic rocks are represented with models.

***#5** Weathering & Erosion*
Students explore some of the variables that influence stream erosion using "stream tables." Wind, chemical, and other forms of erosion are explored as well.

***#6** Sedimentation*
Program six uses stream tables to observe and measure the transportation, deposition, and sedimentation of eroded materials. Students explore how particle size influences the rate of transportation and deposition.

***#7** What If…? Explorations*
Students pose and conduct investigations using the stream tables and sedimentation tubes to investigate land forms, erosion, transportation, sedimentation, flooding, and soil conservation.

***#8** Concept Using & Assessment*
In this program, landforms, earth processes, and geologic hazards from the real world are discussed in the context of the experiences and concepts from the module.

LIFE SCIENCE

Life Cycles

Staff Development Program
- One 60-minute program

Student Programs: Grades 2-3
- Five 30-minute programs

The Life Cycles module provides students with the opportunity to observe and compare caterpillars and mealworms and then observe how each progresses through metamorphosis. Rapid-cycling Wisconsin Fast Plants™ are grown providing hands-on experiences with the entire life cycle of a plant. Observing and comparing plant and animal life cycles first-hand provides students with an excellent opportunity to observe, compare, discuss, describe sequence, and make predictions based on data.

Staff Development

During this program, teachers review key concepts, strategies, and outcomes for the Life Cycles module. They become familiar with the materials and organisms essential to the activities.

Student Programs

#1 *Plants & Seeds*

Students begin observations of a plant life cycle. They observe and discuss the growth and development of the Fast Plants throughout their life cycle.

#2 *Mealworms & Caterpillars*

Students share and compare observations of the progress of plant and insect life cycles. Students observe and discuss the growth and development of the Fast Plants and of Painted Lady Butterflies.

#3 *Growth & Development*

Students continue to observe and discuss the growth and development of the Fast Plants and of Painted Lady Butterflies throughout their life cycles. They observe and describe honeybees and discuss how bees pollinate plants.

#4 *Life Cycles*

Students share and compare observations of the progress of the plant and insect life cycles.

#5 *Making Comparisons*

Students share and compare observations of the progress of the plant and insect life cycles. Life cycle stages of organisms are emphasized.

Ecosystems

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Eight 30-minute programs

This program series provides students with the opportunity to investigate ecosystems with an emphasis on human impact on the environment. Students investigate systems and interactions as they explore predator-prey relationships, energy transfer in ecosystems, energy resources, habitat and pollution.

Staff Development

The staff development program provides the basis of the content, teaching methods and procedures used in the student telecasts. Key concepts, strategies, and outcomes for the Ecosystems module are reviewed. Teachers become familiar with the materials and organisms essential to the activities. Tips for setting up and maintaining the classroom aquarium environments are presented.

Student Programs

#1 *Observing Your Environment*

Students make observations of the environment around them and use classroom maps to record these observations.

#2 *Populations*

Students observe, discuss, and investigate several populations of aquatic organisms as well as factors which influence those populations.

#3 *Food Webs*

Students dissect owl pellets and investigate the feeding habits of barn owls. Prey species are identified and the owl's food web is discussed.

#4 *Interdependence*

Students explore interdependence in an ecosystem. The balanced tangle of factors influencing an ecosystem are investigated.

#5 *Adaptations*

Observations, hands-on experiences, and active simulations are used to illustrate concepts of adaptation. Students use the adaptation concepts they are developing to design a zoo habitat suitable for an animal removed from its natural environment.

#6 *Humans in the Ecosystem*

Students explore the trade-offs associated with human culture in an ecosystem. Students are also challenged to identify and share local sources of pollution and other environmental issues specific to their area.

#7 *Habitats & Biomes*

Students observe and compare the organisms found in several habitats and begin to explore how organisms are suited to particular habitats. They discuss the relationship between geographic conditions and the type of ecosystem found in an area.

#8 *Changes!*

Students consider their role as change agents in environmental issues, both local and global. They continue to focus on observations, data collection and changes that occur over time.

Fast Plants

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Eight 60-minute programs

Students explore the growth and development of a flowering plant through its entire life cycle. They design and conduct experiments. When flowers appear, students pollinate them with "beesticks" and then observe as the plants complete their life cycle and produce seeds. The last 15 minutes of each student program is designed to expand and enhance the concepts explored during the telecast. Some segments will be specifically for teachers while others continue with student activities.

Staff Development

An overview of the module is presented on the staff development program including kit materials and use and information specific to the set up, growth and maintenance of Wisconsin Fast Plants™. Teaching strategies emphasize question posing and experimental design.

Student Programs

#1 *Planting Fast Plants*

Students observe and investigate the life cycle of a flowering plant. They plant seeds and discuss laboratory conditions under which they are grown.

#2 *Seeds & Germination*

Students share observations of Fast Plants which have germinated and pushed through the soil since Program #1. Students dissect and observe bean seeds.

#3 *What If…?*

Students share and compare observations of the plants. They brainstorm " What If...? questions they would like to investigate.

#4 *Experimental Design*

Students continue to share observations, questions, and ideas they have regarding the plants. Data is shared and graphed.

#5 *Pollination*

Students use hard lenses to observe flower parts and discuss their function. Dried bees are also observed to investigate structures of the bee which are important to pollination.

#6 *Variation & Diversity*

Students continue to share observations, questions, and ideas they have regarding the plants. Final pollination and bud removal is demonstrated and discussed.

#7 *Life Cycles*

Students share observations of the developing seed pods, looking for patterns in the observations. Several stages of mealworm metamorphosis are displayed and discussed as another example of life cycles.

#8 *Concept Using & Assessment*

Students review key processes and concepts of the module through the administration of two performance-based assessment tasks. Instructions for seed ripening, harvesting, and replanting are described and demonstrated.

Instructional Materials — Science

Order kits for **Chemistry, Ecosystems, Forces & Motion,** and **Earth Processes** modules from:

Delta Education
Attn: Customer Service
P.O. Box 3000
Nashua, NH 03061
TEL: 800/258-1302
FAX: 603/880-6520

Order Information

- Price includes shipping. Allow 6-8 weeks for delivery.
- Sales tax not included in price.
- Prices effective through June 30, 2005.

TEAMS participants need to order all kits directly from the vendors.

Chemistry

Full Kit	#715-0032	$208.50
Refill Kit	#715-0043	$95.80

Qty	Unit	Description
2	1 lb box	Baking soda *
1	1 lb box	Cornstarch *
1	1 lb box	Sugar, granulated *
1	1 lb box	Sugar, powdered *
2	26 oz box	Salt, non-iodized *
1	2 lb box	Plaster of paris *
1	150 grams	Iron filings *
1	2 lbs	Sand, fine brown *
2	500 grams	Calcium chloride *
1	1.2 grams	Phenol red *
1	100 ml	Bromothymol blue *
1	100 ml	Lugol's iodine *
1	1 gram	Dichloroindophenol (w/ measuring spoon) *
1	pkg of 8	Steel wool, fine *
6	pkg of 100	pH paper 0-14 *
5	ea	"Hot hands," * hand warmer
2	1 oz	Food coloring, blue *
2	1 oz	Food coloring, red *
2	1 oz	Food coloring, green *
8	ea	Candles, food warmer *
1	box	Matches, wooden *
12	ea	Well trays
36	ea	Scoops *
12	25 ml	Graduated cylinders
12	400 ml	Beakers
24	8 oz	Squeeze bottles
24	1 oz	Dropper bottles
48	ea	Vials, 13 dram
36	10 oz	Cups, wide
50	ea	Medicine cups *
36	ea	Droppers
8	ea	Funnels
6	ea	Trays, notched
50	ea	Rubber bands *
1	box	Toothpicks, flat *
50	ea	Stirring sticks *
100	ea	Beads, plastic
200	ea	Filter paper strips (1" X 4") *
1	box of 100	Filter paper, med. speed *
6	ea	Magnet, rubberized
1	ea	Marking pen, black *
2	pkg of 8 colors	Crayons *
6	ea	Ziplock bags, 4" X 4" *
50	ea	Ziplock bag, 6" X 6" *

Instructional Materials — Science

Safety Goggles Kit

Full Kit	#715-0054	$98.50
Refill Kit	#715-0065	$18.40

Qty	Unit	Description
32	ea	Goggles, plastics, vented
32	ea	Plastics bags, self-sealing *
1	120 ml	Lens cleaning solution *
1	12 oz	Disinfectant *
2	pkg of 50	Lens paper *
1	ea	Permanent marker *
2	pkg of 40	Name labels *
1	ea	Goggles instructions sheet
1	ea	"Goggle Required" sign
1	ea	Plastics storage bin

Ecosystems

Full Kit	#789-3710	$225.00
Refill Kit	#715-0010	$125.00

Qty	Unit	Description
Living Material - 1 card		
16	oz	Algae, green *
16	ea	Damselfly larvae*
24	ea	Pond snails*
200	ea	Daphnia*
17	ea	Anachris*
1	jar	Duckweed*
Other Materials		
7	ea	Aquarium, 6 liter
7	ea	Lid for aquarium, raised
12	ea	Daphnia counters
60	ea	Vials with caps
24	ea	Magnifiers
12	ea	Medicine droppers, plastic
1	ea	Baster, kitchen
5	vials	Wide range pH paper with color chart (1 - 14 range)*
5	vials	Narrow range pH paper with color chart (0 - 6 range)*
100	ea	Plastic cups, 7 oz clear*
20	ea	Owl pellets*
15	ea	Plastic forceps (tweezers)
1	box	Toothpicks, round*
1	roll	Seine twine, #21 cotton (330')*
2	ea	Orienteering compass
100	strips	Cobalt chloride indicator paper*

Forces & Motion

Full Kit	#790-9934	$199.50
Refill Kit	#715-0076	$23.50

Qty	Unit	Description
32	pkg	Large marbles
25	pkg	Rubber bands*
8	ea	Newton springscales
8	ea	Sandpaper*
2	sets	*Toys in Space* toys
8	ea	Toy dump trucks
16	pkg	Small paper cups*
2	rolls	Kite string*
24	pkg	Fishing weights
80	pkg	Washers
1	ea	Plastic sheets*
2	ea	Markers*
32	pkg	Long balloons*
100	pkg	Plastic drinking straws
8	pkg	Wooden fulcrums
30	ea	Corrugated cardboard pieces*
8	pkg	Nails*
80	pkg	Clothespins
8	ea	Pulley support board with cup hooks
16	pkg	Large pulleys
8	ea	Half bricks
8	ea	Gear base
8	pkg	Gear handlers
8	pkg	Gear pointers
8	pkg	Large gears
8	pkg	Medium gears
8	pkg	Small gears

Order kits for **Chemistry, Ecosystems, Forces & Motion,** and **Earth Processes** modules from:

Delta Education
Attn: Customer Service
P.O. Box 3000
Nashua, NH 03061
TEL: 800/258-1302
FAX: 603/880-6520

Order Information

- Price includes shipping. Allow 6-8 weeks for delivery.
- Sales tax not included in price.
- Prices effective through June 30, 2005.

Earth Processes

Full Kit	#715-0087	$218.00
Refill Kit	#715-0098	47.35

Qty	Unit	Description
8	ea	Beakers, plastic
8	ea	Cubes, wooden
6	ea	Bottles, dropper
1	ea	Calcite chips*
20	ea	Caps for tubes
1	1 lb	Clay, plasticine
16	ea	Containers 1-l
8	ea	Containers, plastic (large hole)
8	ea	Containers, plastic (small hole)
50	ea	Cups, foam
1	ea	Labels p/50*
8	ea	Magnifiers
8	ea	Balance beams
1	6 lbs	Sand, fine brown*
1	6 lbs	Sand, aquarium gravel*
1	5 lbs	Soil, clay*
1	4 qts	Soil, potting*
4	ea	Spoons, measuring 1 TBS
1	ea	Wooden sticks p/100
1	ea	Tape, duct (2" x 20)
1	8 oz	Vinegar*
9	ea	Stream tables
9	ea	Grids, stream table
9	ea	Grommets, stream table
16	ea	Trays, plastic
20	ea	Tubes, plastic
1	27 ft	Tubing, vinyl*
1	10 lbs bag	Diatomaceous earth*
4	ea	Filter masks*
1	ea	Toothpicks, round (box)*
5	ea	Basalt
5	ea	Granite
5	ea	Pumice
5	ea	Obsidian
5	ea	Sandstone
5	ea	Shale
5	ea	Limestone
5	ea	Conglomerate
5	ea	Slate
5	ea	Marble
5	ea	Quartzite
5	ea	Schist

* Parts of the Refill Kit

Order kits for **Fast Plants** and **Life Cycles** from:

Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215
800/334-5551

Wisconsin Fast Plants™

Light System	#15-8998	$116.95
Full Kit	#15-8702A	$85.95
Refill Kit	#15-8703A	$49.50

- Teachers will need to supply six, 40-watt fluorescent bulbs for the lights—they are not included with the light system materials.
- Price includes shipping.
- Prices effective through June 30, 2005.

Qty	Unit	Description
300	ea	Basic brassica rapa seeds*
50	ea	Rosette brassica rapa seeds*
6	ea	Anti-algal squares*
24	ea	Plastic quad labels*
1	pkg	Fertilizer*
1	pkg	Dried bees*
1	liter	Potting soil*
144	ea	Wicks*
32 (16)	ea	Plant support stakes (with strings)*
3	ea	Water mats*
3	ea	Water tray (with lid)
23	ea	Quads
12	ea	Pipette
1	ea	Growing instructions
15	ea	Forceps
15	ea	Hand lens

Life Cycles (Wisconsin Fast Plants™)

Full Kit Quote #TQ18529 $205.25
Growing System* #15-8993 $29.02

Qty	Unit	Description
2	ea	reservoir trays
2	ea	water mats
1	set	wicks
1	set	anti-algal squares
1	set	pipettes
1	set	labels
1	set	stakes
1	set	dried bees
1	bag	fertilizer
1	bag	soil
1	set	quads
1	ea	growing instructions

Seeds*
#15-8836 $19.26

Qty	Unit	Description
1	pkg	AstroPlant seeds (200)

Solar Circle Plant Light *
#15-8994 $79.95

Qty	Unit	Description
1	ea.	30 watt bulb
1	ea.	ballast adapter
1	ea.	cord & socket
1	pvc	light stand and hood

Please reference the catalog number and price on all purchase orders.
All prices FOB destination (freight included).

Painted Lady Life Cycle Custom ❖

#Special $84.55

Qty	Unit	Description
60-75	ea	Painted lady butterfly larvae
1	jar	culture medium
1	ea	butterfly cage
2	ea	feeding vials
2	ea	egg-laying discs
30	ea	culture vessels w/ lids
1	set	filter paper
5	ea	brushes
5	ea	wooden spatulas
1	ea	teacher's manual

Please be sure to reference quotation #TQ18529 for discounted pricing and correct identification of the full kit. Shipment can be made within 14 days after receipt of order unless otherwise stated. Ship via cheapest/best way, FOB shipping point.

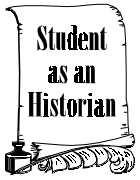
❖ Partial kits can be ordered using the partial kit order number.

TEAMS participants need to order all kits directly from the vendors.

History/Social Science

TEAMS history/social science programs help students learn to manage resources, acquire information, and use a variety of technologies. Learners become self-motivated and improve thinking and reasoning skills. Teachers and students can access resources that extend and support the history/social

HISTORY



Student as an Historian

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Five 60-minute programs

Students explore and learn about their own family history. They discover that history is more than memorizing a list of facts, dates, and names. During the last 15 minutes of each student program, additional activities are presented to reinforce program concepts.

Staff Development

In the staff development program, teachers explore content and strategies needed to effectively implement student programs.

Student Programs

#1 *Ancestor Detectives*

Students are introduced to the exciting and imaginative study of history by discovering through their own personal and family history that studying history is more than memorizing a list of facts, dates, and names.

#2 *Back to the Past*

Students are introduced to primary and secondary sources. They learn how these sources can provide a wealth of information about their family history.

#3 *Family Scrapbooks*

Students are introduced to some of the ways family histories can be organized and preserved as a source for future information.

#4 *Family Stories*

Students explore the importance of oral histories. They learn how matriarchs and patriarchs of a family can be the sources of wonderful family stories and information.

#5 *Family Histories*

Students complete their Family History Storybooks, learn ways they can preserve their own personal history for future generations, and are challenged to promote the study of family history.

History Hunt

Staff Development Program
- One 60-minute program

Student Programs: Grades 2-3
- Five 30-minute programs

Students compare and contrast past events, people, places, or situations to their own lives. Literature selections are included in each program.

Staff Development

Teachers learn techniques for implementing the module and explore related activities. Effective instructional strategies for teaching history/social science are presented.

Student Programs

#1 *Family Memories*

Students identify, analyze, and interpret primary sources such as photos, family stories, and oral interviews. They learn how these historical records can provide them with information about their family and their connection to the past.

#2 *School House History*

Students discover how schools looked, what equipment teachers used, and what subjects were taught. Students also research their own school history to discover how it has changed over time.

#3 *Past-time Fun*

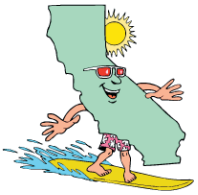
Students explore games, activities, and other entertainment families enjoyed in the past and compare and contrast it to entertainment today.

#4 *History Walks*

Students investigate the history of their community to create a neighborhood walking tour of their community. This enables students to discover how architecture, monuments and historic landmarks connect their community to the past.

***#5** Living History*
Students create a role-play or skit about an historic event. They discover how an historic event has affected our lives today.

GEOGRAPHY



Natural Events: Then and Now

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Four 30-minute programs

Students explore natural events and discover what impact these events have in determining how and where people live. Both historical and present day examples are used to illustrate this.

Staff Development
Teachers learn techniques for implementing the module and explore related activities. Effective instructional strategies for teaching history/social science are explored.

Student Programs
***#1** Earthquakes: Historical Significance*
Students investigate earthquake impact and effect on California's people, by examining historical and present day earthquakes.

***#2** Floods: Necessity and Deluge*
Students learn that although floods can cause disasters, they can also be beneficial. Both positive and negative consequences of floods are explored.

***#3** Fire: Helpful and Destructive*
Students investigate the destructive nature of fires by examining the effect on human settlements.

***#4** Wind: Ordinary and Extraordinary*
Students discover the effects of wind on an environment. They also learn about the important role wind has played in supplying California with renewable energy.

California, Here I Come!

Staff Development Program
- One 60-minute program

Student Programs: Grades 4-6
- Five 30-minute programs

Students explore how people interact with environmental regions such as mountain ranges, coastal bays, natural harbors, river valleys and delta regions, and how these interactions have influenced history. Events from California history are used.

Staff Development
During the staff development program, content and activities for each student program are demonstrated and the teacher guide is presented.

Student Programs
***#1** Geography: People and Places*
Students are introduced to the five themes of geography and the role they play in helping us study the earth's land, weather, water, plants, and animal life.

***#2** Desert Regions*
Students investigate desert regions to discover the characteristics that define and make these regions special and unique. How plants, animals, and people adapt to the desert's harsh environment is also explored.

***#3** Mountain Regions*
Students investigate the ways people and environments interact. California's mountain region is explored to determine how the physical characteristics of a place can influence the way people live in a region.

***#4** Coastal Bays and Natural Harbors*
Students investigate ways people and environments interact. California's coastal region, Pacific Coast, is explored to determine how the physical characteristics of a place influence the way people live.

***#5** Central Valley Regions*
Students investigate ways people and environments interact. California's Central Valley Region, is explored to determine how the physical characteristics of a place influence the way people live.

Instructional Materials— History

The following are suggested books for participation in the history/social science modules. These books can be purchased through a variety of vendors:

California, Here I Come!
Mojave, by Diane Siebert. Harper Trophy
Sierra, by Diane Siebert. Harper Trophy
Kate on the Coast. Bradbury Press
Don Radio, by Arthur Dorros. Houghton Mifflin
Working Cotton, by Sherley Anne Williams. Harcourt Brace

History Hunt
When I was Young in the Mountains, by Cynthia Rylant. Penguin Putnam
My Great Aunt Arizona, by Gloria Houston. Harper Collins
Song and Dance Man, by Karen Ackerman. Random House
Town Mouse, Country Mouse, by Jan Brent. Penguin Putnam
The Little Engine that Could, by Watty Piper. Grosset & Dunlap