Differentiated Instruction for MATHEMATICS

Numbers & Operations • Algebra • Geometry • Measurement

Lakeshore® ELEMENTARY

products designed with learning in mind™

2009-2010

S4826

Lakeshore offers research-based, differentiated instruction

Supporting teachers in their efforts to differentiate instruction in the classroom is our top priority. The materials in this brochure were developed for just that purpose. Each item supports a variety of teaching strategies and features targeted instructional activities to challenge and motivate students of varying abilities. To highlight important information about our products, we have color-coded specific elements on each page as outlined below.

You'll find a list of the product components in the **blue box**.

Relevant research and expert opinions are located in the **yellow box**.

Appropriate strategies for differentiated instruction are in the **purple box**.

Simply look for the **color-coded bars** to see grade levels.

Key product features are in the **green box**.

Current pricing in effect until January 2010. If ordering after this date, please contact our Sales & Marketing division at (800) 421-5354.

hands-on materials to support in your mathematics program!

Dear Teachers and Administrators,

Differentiate instruction with classroom-tested materials based on scientific research

Lakeshore understands that not all students learn at the same rate or in the same manner. Teachers must target their lesson plans to meet the needs of every student—and we have developed all of the items in this brochure to make this process as effective as possible. Many of the items on the following pages allow teachers to facilitate manipulative-based math instruction and practice—providing hands-on activities for kinesthetic learners, as well as the richness needed to challenge more advanced students and enhance their understanding of concepts. Many of the products offer opportunities for informal assessment and progress monitoring, allowing teachers to guide instruction and meet every student's needs.

Educational tools designed by teachers for teachers

Every item we create is designed and developed by our in-house team of elementary-level educators. The materials presented in this brochure address all the NCTM strands critical for mathematical success. The goal? To provide teachers with practical educational tools that support the findings of current research…and help every school and district meet state and national standards.

Materials that easily integrate into the classroom

Our materials for differentiated instruction don't require any specialized training. They come ready to implement and feature simple instructions that save teachers time and promote opportunities for learning. Plus, our materials put a premium on versatility, easily integrating into any math program.

Over 50 years of experience meeting the needs of educators

Lakeshore has been providing targeted, supplemental materials to the nation's schools since 1954. To this day, we remain committed to the success of every school, teacher, and student.

Patti Rommel
Director of Research & Development
Lakeshore Learning Materials

Table of Contents

Elementary Math Instant Learning Centers

Implement meaningful, standards-based activities in order to be able to provide differentiated instruction for other students.

Lakeshore's eight easy-to-implement, ready-to-use Elementary Math Instant Learning Centers feature purposeful, self-directed activities that reinforce explicit math instruction, allowing teachers to focus attention on individual students or small groups based on students' needs. Each center is designed for four students to use at once, and includes four sets of engaging, hands-on materials—along with an easy-to-follow instruction chart ideal for independent learning and an answer card for easy self-checking. The centers support and enhance any core math program and cover important math standards—from describing the attributes of shapes to naming and representing commonly used fractions.

Each Center Includes:

- Enough hands-on materials for 4 students to work at once
- Double-sided instruction chart
- Write & wipe assessment card
- Answer card
- Teacher's guide with differentiated instruction strategies

Grade Level 1 2 3

DD570XMA Complete set of 8 centers. **$179.00**

⚠ *WARNING: CHOKING HAZARD — Small parts. Not for children under 3 yrs.*

What Experts Are Saying…

"Centers should not be just for fun experiences or time fillers, but for learning experiences based on targeted standards that are designed to meet the needs of a variety of different learners. They are also great vehicles for offering students opportunities to use their various multiple intelligences."

Gayle H. Gregory & Carolyn Chapman (2006)

Key Features

The double-sided instruction chart makes it easy for every student to read the simple, step-by-step directions—no matter where they are seated.

Hands-on, color-coded materials come ready to use right out of the box—no photocopies necessary!

Students can use the answer card to check their own work for immediate feedback, or use the activity for assessment or progress monitoring purposes.

Differentiating Instruction with the **Elementary Math Instant Learning Centers**

Supplement Math Curriculum

- Use the materials in a center for supplemental reinforcement of concepts taught in math programs.

Small Group Instruction

- Use materials in a teacher-directed, small group setting. Model how to complete the activity, then scaffold instruction according to students' needs.

Informal Assessment

- Check students' work, then record observations on the assessment card to help guide future instruction and/or intervention lessons.

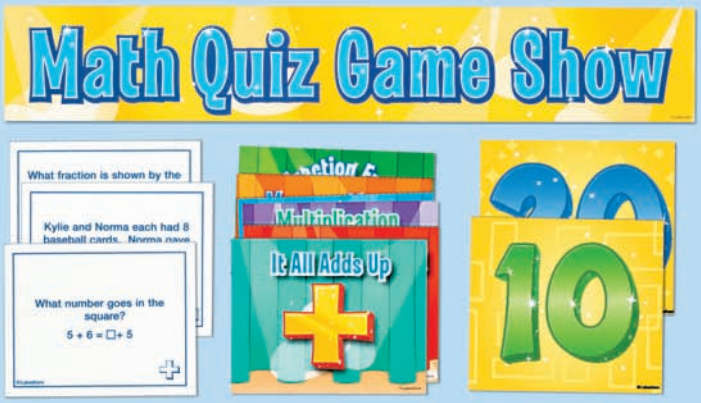
Math Quiz Game Shows

Use a fun and motivating game show format to help students improve a variety of math skills according to their individual needs and levels of readiness.

One challenge teachers face when looking for supplemental materials is finding products that cover a full breadth of math skills while simultaneously accommodating the wide range of learning levels among students in the classroom. Lakeshore's Math Quiz Game Shows target and reinforce essential skills that are taught throughout the year, and allow teachers to preselect the specific skills they want to cover. Teachers provide differentiated skills review with a fun, motivating game show format that keeps students engaged as they strengthen their math content knowledge.

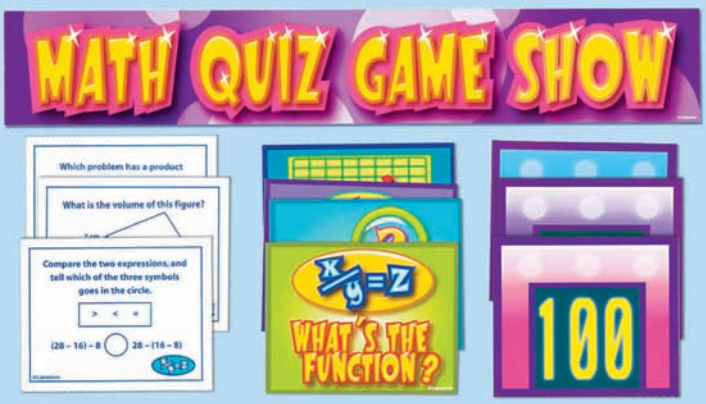
Each Game Show Includes:

- Pocket chart
- 20-35 point cards
- 210 self-checking question cards
- 11-12 category cards
- Teacher's guide



Question cards *Category cards* *Point cards*

Grade Level 1 2 3 **TT258MA** **$49.95**



Question cards *Category cards* *Point cards*

Grade Level 4 5 6 **TT558MA** **$49.95**

What Experts Are Saying...

"When readiness levels differ, so must the complexity of instruction provided for students. In a differentiated classroom, instruction is customized to match students' readiness levels and enable all students to experience continuous learning."

Bertie Kingore (2004)

Key Features

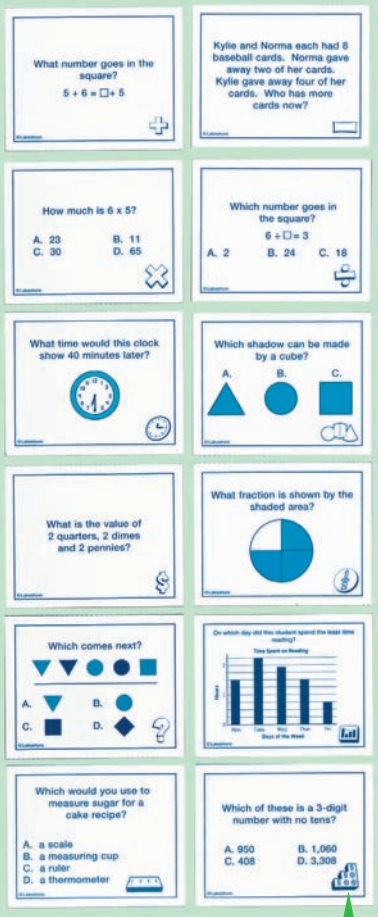
A wide variety of categories lets teachers focus on the skills students need to practice the most.

The included pocket chart allows for clear, convenient display.

Cards have answers on back for self-checking.

Question cards vary in difficulty, so they are great for differentiated practice.

The game shows integrate test preparation with questions modeled after those found on standardized tests.



Icons on question cards make it easy to identify their categories.

Differentiating Instruction with the Math Quiz Game Shows

Target Skills for Reinforcement

- The game shows come with 11-12 different categories. Select 5 categories that target skills according to students' needs.

Cooperative Learning

- Divide the class into teams. Children take turns answering questions, seeking assistance from their teammates as needed.

Have Students Explain Their Solutions

- For an added challenge, as students share their answers, have them explain and/or demonstrate the method they used to find the answer.

Instant Math Games Libraries

Provide motivating materials for skills practice and to encourage all students—including reluctant learners.

Research has shown that high-interest, engaging activities and games cultivate motivation and sustained effort in students. They create environments in which participation, retention, and, ultimately, learning are increased. Lakeshore's Instant Math Games Libraries reinforce challenging concepts such as algebraic thinking and measurement while appealing to *all* students—from reluctant learners to those needing a challenge. The games are an ideal supplement to any math program for teachers looking to offer motivating learning opportunities beyond the typical worksheet.

Each Library Includes:

- 8 different games—each with materials for up to 4 players
- Classroom-tough display box

⚠ *WARNING: CHOKING HAZARD — Small parts. Not for children under 3 yrs.*

Grade Level 1 2
EE880MA $149.00

Grade Level 3 4
LL320MA $149.00

What Experts Are Saying...

"Studies show that the use of educational games effectively increases motivation, participation, and retention among students, and can be especially beneficial in differentiated classrooms and among underserved and struggling learners."

Xiomara Romine (2004)

Key Features

Each game provides targeted practice with an important math concept and skill:

Grades 1-2

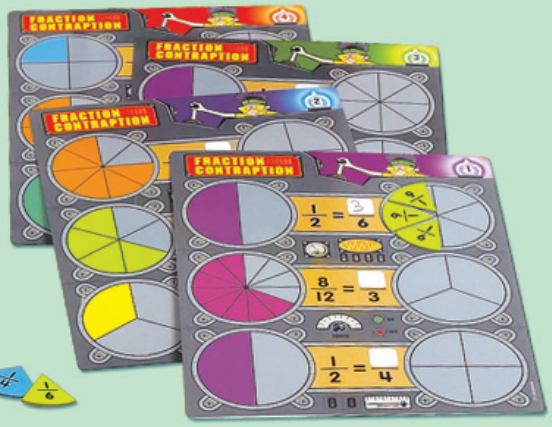
- Place Value
- Time
- Subtraction
- Measurement
- Addition
- Geometry
- Money
- Fractions

Grades 3-4

- Measurement
- Fractions
- Money
- Place Value
- Multiplication
- Division
- Geometry
- Balancing Equations

No prep time needed... easy-to-follow directions for each game are on the back of each game box.

Convenient display box keeps games organized and ready to play.



Differentiating Instruction with the Instant Math Games Libraries

Math Learning Center

- Group 2-4 students—either heterogeneously or by level of readiness—and encourage them to play a game as a center activity.

Self-Directed Activity

- The games are great for early finishers. Individual students can play them independently for skills reinforcement.

Intervention Lessons

- Review concepts that students have difficulties with and address any misunderstandings they may have. Then, provide practice and reinforcement by playing the game that targets each concept.

Math Facts Practice Centers

Help students learn and recall math facts with automaticity while supporting their individual readiness and pace.

Building fluency with math facts allows students to develop into confident and efficient problem solvers. A student's ability to recall facts with automaticity supports mental math computations and approximation skills, and ultimately facilitates the capability of performing higher-level mathematics. Lakeshore's Math Facts Practice Centers help students master essential math facts at the ideal pace according to their individual levels of readiness.

Each Center Includes:

- Freestanding storage folder
- 132 flash cards on 12 rings
- Teacher's guide with differentiated instruction strategies and reproducible awards

Grade Level 1 2 3 4 5 6

DD890XMA
Complete set of 4 centers.
$89.95
⚠ WARNING: CHOKING HAZARD — Small parts. Not for children under 3 yrs.

Each center is also available separately.

DD891MA
Addition **$24.95**

DD892MA
Subtraction **$24.95**

DD893MA
Multiplication **$24.95**

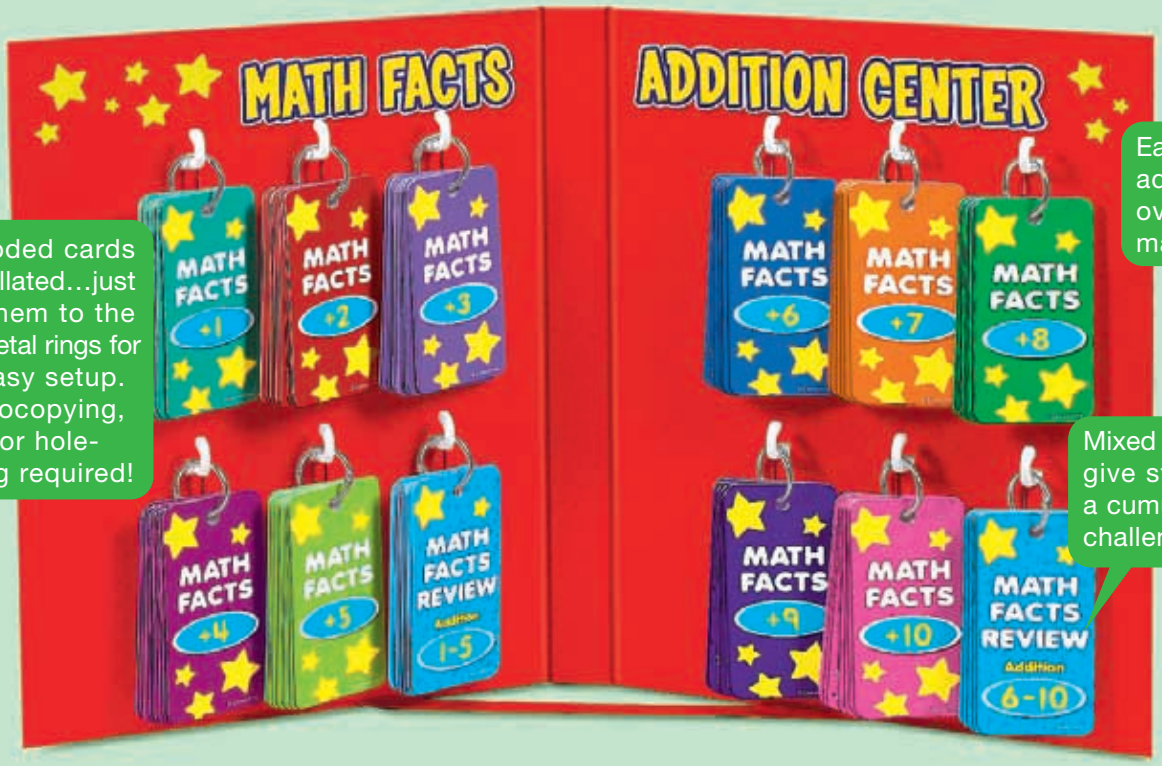
DD894MA
Division **$24.95**

What Experts Are Saying...

"Differentiated instruction...allows you to use your time more efficiently. You adjust pace and depth to the needs of learners and the demands of the curriculum. You eliminate the teaching of specific content or skills for students who have already mastered them. You plan more time and instruction for those who need more practice. Time may actually be saved as students engage in learning that responds to their needs."

Diane Heacox (2001)

Key Features

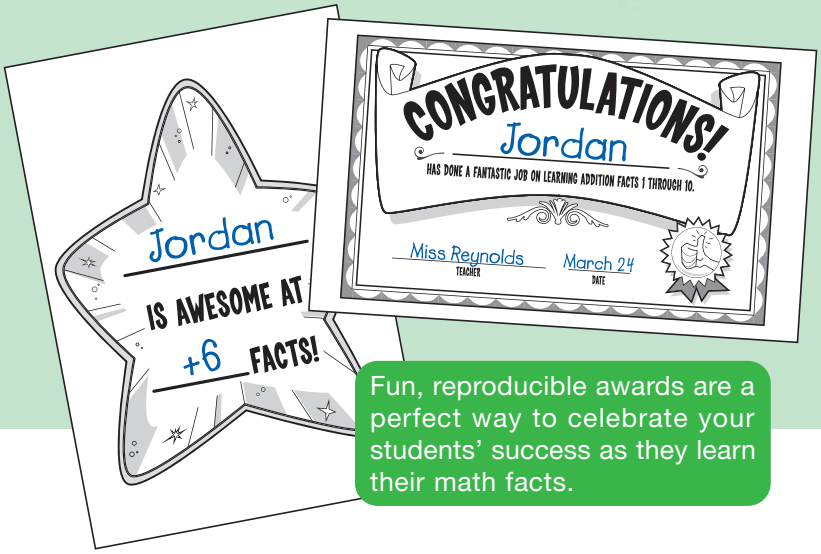


Color-coded cards come collated…just attach them to the sturdy metal rings for super-easy setup. No photocopying, cutting, or hole-punching required!

Each center addresses over 100 math facts.

Mixed review cards give students a cumulative challenge!

Cards have answers on back for instant feedback to aid in memorization.



Fun, reproducible awards are a perfect way to celebrate your students' success as they learn their math facts.

Differentiating Instruction with the **Math Facts Practice Centers**

Learning Center

- During independent work time, students work on pre-assigned math fact rings according to their levels of readiness.

Partner Practice

- Pair students of similar skill levels or in mixed-readiness partnerships. One student displays the problem, while the second student recalls the answer. Students can check each other's answers by looking at the backs of the math fact cards. Cooperative learning allows students to play important roles in their peers' success.

Challenge Activity

- Students look at the answer sides of the math fact cards and write down all the possible ways to get each answer. For example, if the answer is 6, they would write "6 x 1," "3 x 2," "2 x 3," and "1 x 6."

Tic-Tac-Toe Math Games

Motivate students to reinforce important math skills with engaging, cooperative games.

Reinforcing math skills through isolated rote practice can potentially result in waning student interest. One way to counter this effect is to encourage cooperative learning and provide standards-based skills review through interactive, engaging game play. Lakeshore's Tic-Tac-Toe Math Games reinforce essential skills in a fun and purposeful way. The games appeal to all students—from reluctant learners to those needing an extra challenge—and foster opportunities for students to collaborate with partners or in flexible groups.

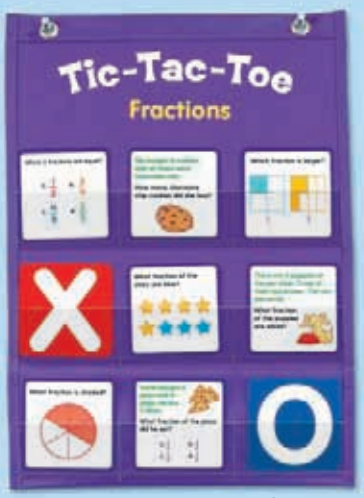
Each Game Includes:

- Nylon pocket chart
- Teacher's guide with differentiated teaching strategies
- 36 question cards with answers on back
- 14 "X" and "O" cover cards

Grade Level 1 2 3 **EE960XMA** Complete set of 4 games. **$69.95** *Each game is also available separately.*

EE961MA Problem Solving **$19.95**

EE962MA Place Value **$19.95**



EE963MA Fractions **$19.95**

EE829MA Time **$19.95**

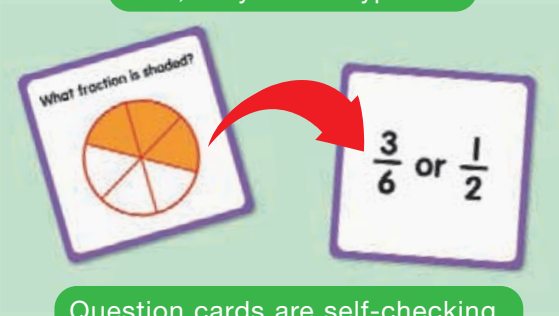
What Experts Are Saying...

"Cooperative learning techniques, when used extensively in mathematics classes, generate many advantages for the students and teachers. Students' critical thinking skills are enhanced; motivation levels are increased as students become familiar with working with peers, leading to a newfound enjoyment of mathematics classes; achievement levels increase and thus math anxiety is reduced and student self-esteem is increased."

Theodore Panitz (2000)

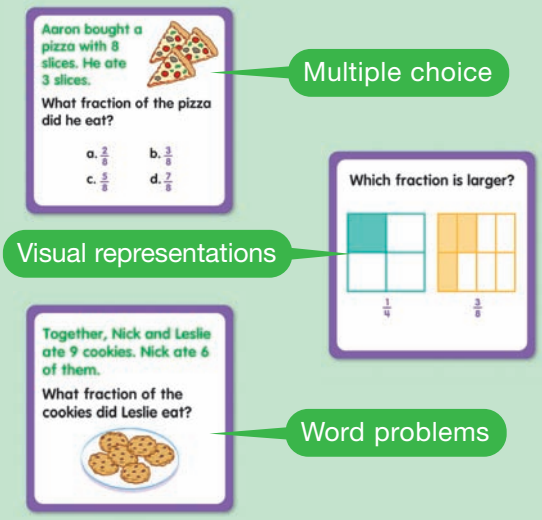
Key Features

Large question cards feature bold, easy-to-see type.

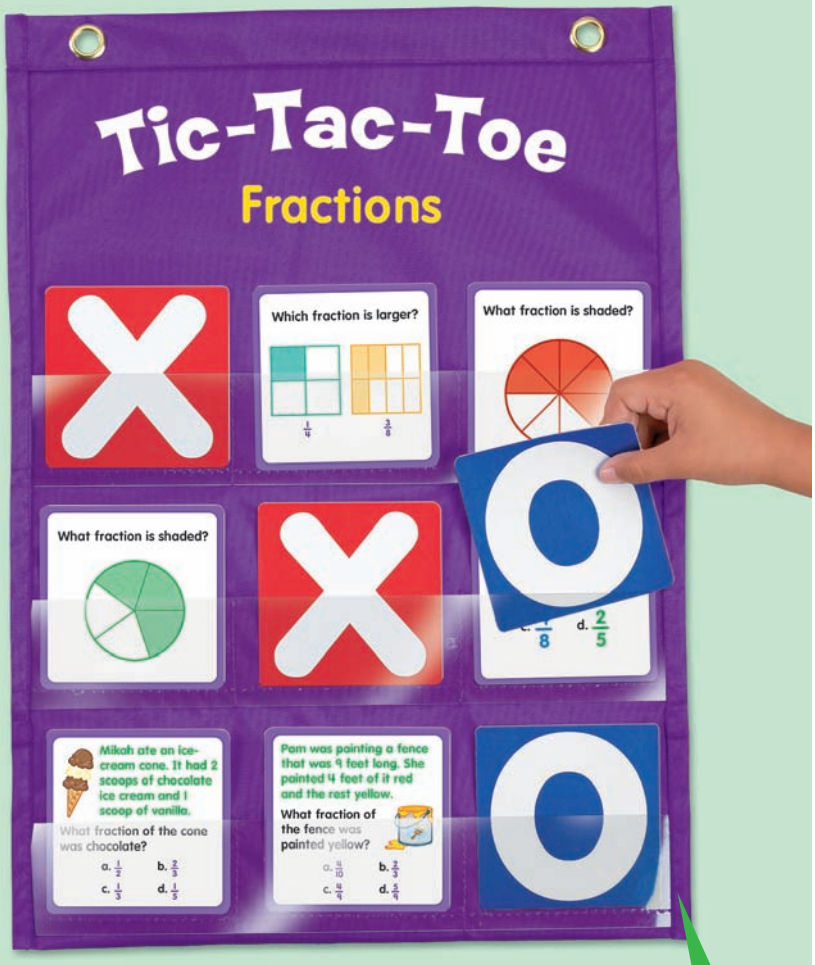


Question cards are self-checking, so students receive instant feedback as they play independently.

Test prep-style questions come in various formats so that students become flexible, confident problem solvers.



Setup is quick and easy—so students can manage themselves!



A handy pocket in back provides easy-access storage for all of the cards.

Differentiating Instruction with the Tic-Tac-Toe Math Games

Adjust Content

- The questions cover a variety of skills. Preselect question cards based on student readiness.

Flexible Grouping

- Group students homogeneously based on similar learning needs. Or, play the game with mixed-readiness groups, which are effective settings for fostering cooperative learning.

Challenge

- Change the object of the game: Instead of playing a traditional 3-in-a-row game, have students play a version called “blackout” in which the goal is to cover up all 9 squares. The player or team that answers the most questions correctly is the winner.

Twist & Turn Number Builders

Build and reinforce important number concepts according to students' needs and levels of readiness with engaging, hands-on materials.

When differentiating instruction, it is important to use materials that take into account students' varying needs and readiness. Lakeshore's Twist & Turn Number Builders make it possible for students to use similar manipulatives to cover varied skills. Thus, they learn essential number concepts and develop number sense at their own pace. The Number Builders come with color-coded flip books that cover essential math skills, such as comparing numbers, adding, and subtracting. Teachers can customize lessons by assigning appropriate Number Builders and their corresponding flip books to students based on their needs.

Set Includes:

- 8 Number Builders
- 4 color-coded, self-checking flip books—each with 10 pages of activities
- Teacher's guide with differentiated instruction strategies

Grade Level 2 3
FF736MA **$24.95**

What Experts Are Saying...

"...a student who has good number sense has a good understanding of number meanings and numerical relationships and is flexible in thinking about numbers. Number sense also includes the ability and inclination to use this understanding in flexible ways to make mathematical judgments and develop useful strategies for handling numbers and operations."

Yea-Ling Tsao (2005)

Key Features

Each flip book is color-coded to two Number Builders and covers different math skills:

- building numbers
- comparing numbers
- adding and subtracting
- comparing numbers, adding, and subtracting (review)

Students use the answers on the back of each flip card to check their own work.

Flip books include various types of questions that require students to represent their answers in different ways, helping students become flexible and confident problem solvers.

2 • Find the builder with 4 in the thousands place.
• Make a number that has 4 thousands, 6 hundreds, 7 tens, and 5 ones.

1 Write the number you made.
2 Now, write the number in word form.

Numbers in word form

6 Use both builders to make as many numbers as you can that have the same numeral in the ones, tens, hundreds, and thousands places.

1 What numbers did you make?
2 How many different numbers can you make in all?

Open-ended questions with more than one correct answer

8 Make an even number that has 4 in both the thousands and the tens place.

1 What number did you make?
2 Now change one numeral on your builder to turn it into an odd number. Did you change the thousands, hundreds, tens, or ones place?

Problem solving opportunities

Each durable Number Builder provides a tactile, hands-on experience.

Differentiating Instruction with the **Twist & Turn Number Builders**

Assign Activities According to Need

- Reinforce specific number skills by assigning Number Builders and their corresponding flip books to students who need extra practice.

Intervention Activity

- Teacher and student each take one of two matching Number Builders and work together on the activities from the corresponding flip book. The teacher models the activity on one Number Builder—providing scaffolding as needed—while the student attempts the same problem on the other Number Builder.

Partner Activities

- Promote cooperative learning as students work on an assigned flip book together. The teacher's guide also includes engaging and meaningful partner games that reinforce skills and concepts.

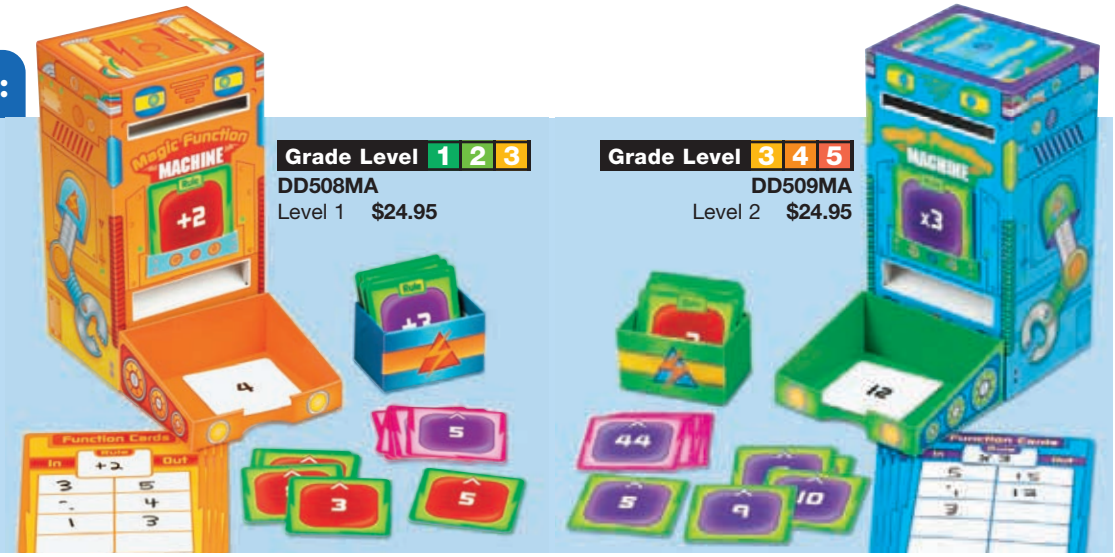
Magic Function Math Machines

Promote independent mastery of early algebra skills and increase computational fluency with self-checking activities that provide instant feedback.

Many experts believe that mathematics instruction should include an emphasis on algebraic thinking early on in a student's education. Even in the early grades, algebraic ideas and representations can play a supportive role in learning other important math concepts. Lakeshore's Magic Function Math Machines feature a self-checking design that gives students instant feedback, helping them develop computational proficiency and confidence with algebraic functions and enhancing mental math skills. Each Math Machine encourages independent practice, affording teachers the ability to work one-on-one with other students who require additional attention.

Each Level Includes:

- Sturdy chipboard function machine tower and tray
- 83-85 number cards
- 15-17 rule cards
- 4 write & wipe work mats
- Storage box for number and rule cards
- Teacher's guide with differentiated instruction strategies



Grade Level 1 2 3
DD508MA
Level 1 **$24.95**

Grade Level 3 4 5
DD509MA
Level 2 **$24.95**

What Experts Are Saying...

"Regardless of the source of feedback, it should be provided immediately in order to prevent the learner from continuing to practice the skill incorrectly. Unlearning something that has been practiced frequently and relearning it correctly is always more difficult than learning a skill right the first time."

Seth N. Leibler & Ann W. Parkman (2003)

Key Features

Level 1 covers addition and subtraction.

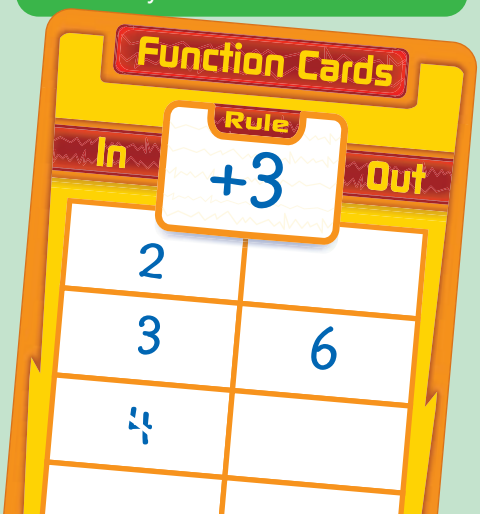
Level 2 covers multiplication, division, and mixed operations.

Students drop a number card into the function tower…

…and the answer pops out below, giving students instant feedback in a fun, engaging way.

Number and rule cards are color-coded for easy setup and management.

Write & wipe work mats make it easy for students to record their answers—no photocopying necessary.



Differentiating Instruction with the **Magic Function Math Machines**

Small Group Instruction

- Work with 3-4 students according to their needs. Model and discuss how to solve the functions of your choice. Provide scaffolding as needed as students solve problems. Encourage students to share their method for finding each answer.

Independent Center Activity

- Choose rule cards according to the readiness of the students who will work at the center. Students solve the different functions, record their answers on the included work mats, and take turns using the Magic Function Math Machine to check their answers.

Provide Supporting Resources

- Supply students with manipulatives and tools that will help them solve the different functions (e.g., counters, number lines, hundreds boards, etc.).

What's Missing? Magnetic Math Kits

Provide students with focused opportunities to strengthen algebraic thinking skills in multiple learning contexts.

Building algebraic thinking skills starting from the primary grade levels lays the foundation for future success with more advanced, sophisticated concepts. Lakeshore's What's Missing? Magnetic Math Kits help students develop and reinforce the algebraic thinking skills they will need to prepare them for success with higher-level mathematics. Students build a solid understanding of important pre-algebraic skills as they balance equations, practice operations, and complete number patterns. The kits give teachers the flexibility to target these concepts in various instructional contexts—small groups, individual practice, warm-up activities, etc.

What's Included:

Grade Level 1 2 3 4

FF765XMA Complete set of 3 kits. **$79.95**

FF766MA Balancing Equations **$29.95**
FF768MA Operations **$29.95**

- 25 number sentence strips
- 25 answer squares
- Teacher's guide with differentiated instruction strategies

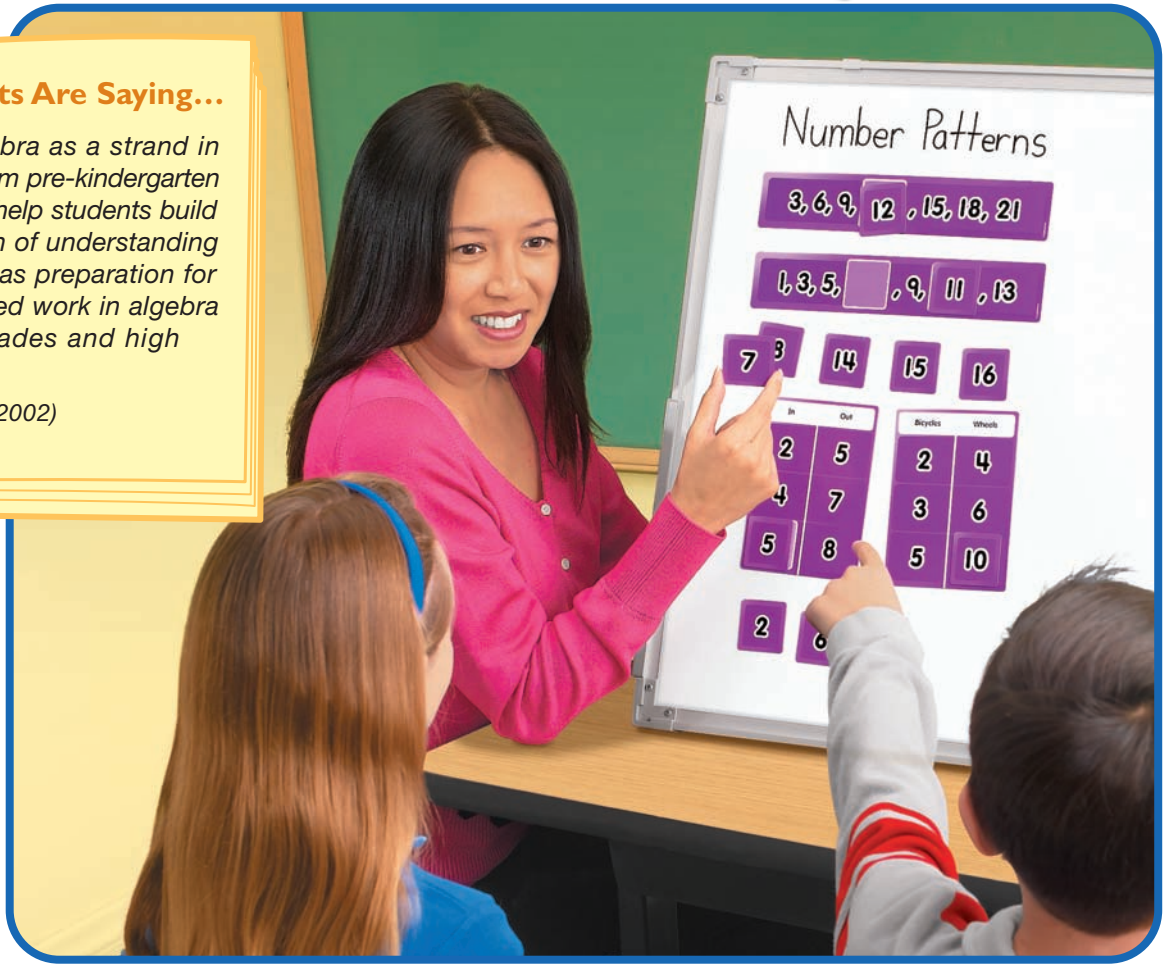
FF767MA Number Patterns **$29.95**

- 10 number pattern strips
- 10 function tables
- 20 answer squares
- Teacher's guide with differentiated instruction strategies

What Experts Are Saying...

"By viewing algebra as a strand in the curriculum from pre-kindergarten on, teachers can help students build a solid foundation of understanding and experiences as preparation for more sophisticated work in algebra in the middle grades and high school."

Marilyn Burns (2002)



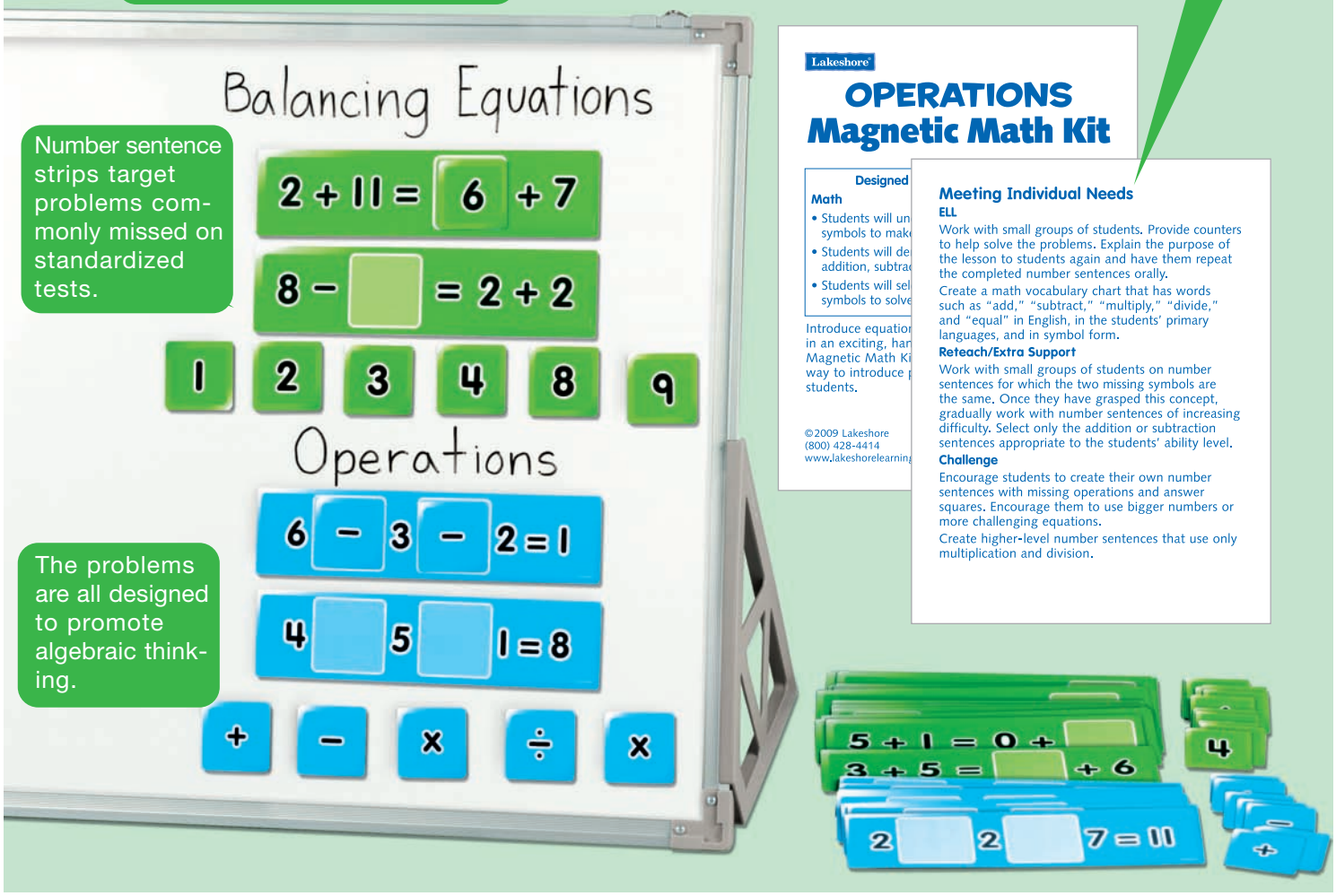
Key Features

Magnetic strips and squares are large enough to be used for small group and whole-class teacher demonstrations.

Teacher's guide includes suggestions for differentiating instruction to meet students' needs.

Number sentence strips target problems commonly missed on standardized tests.

The problems are all designed to promote algebraic thinking.



Differentiating Instruction with the **What's Missing? Magnetic Math Kits**

Small Group Instruction

- Use the kits as an instructional tool in small group settings. Select number strips and provide explicit, step-by-step instructions on how to solve them. Then, encourage students to practice other similar problems, offering assistance as needed.

Interactive Whole Group Activity

- Engage active, kinesthetic learners with an interactive, cooperative learning activity. Assign 10 problem strips or function tables to 10 students and the corresponding answer squares to 10 different students. Students work together to find the match to solve each problem.

Adjust the Difficulty of the Task

- Scaffold the activity by reducing the number of answer squares for students to choose. Then, encourage students to practice other similar problems and to communicate their mathematical thinking.

Build & Learn Geometry Kit

Provide hands-on materials that give learners concrete, kinesthetic experiences to build geometric knowledge.

Research shows that hands-on learning gives students concrete practice and experience to develop a solid understanding of abstract concepts. Lakeshore's Build & Learn Geometry Kit gives students valuable tactile experiences as they build, identify, and describe geometric shapes. Students piece together shapes such as a simple triangle and a rectangular prism, thereby learning about the various attributes of two- and three-dimensional forms. Tactile interaction with geometric shapes is not only essential to developing students' mathematical understanding, but it is also an engaging way to reinforce and supplement learning from math textbooks and worksheets.

Kit Includes:

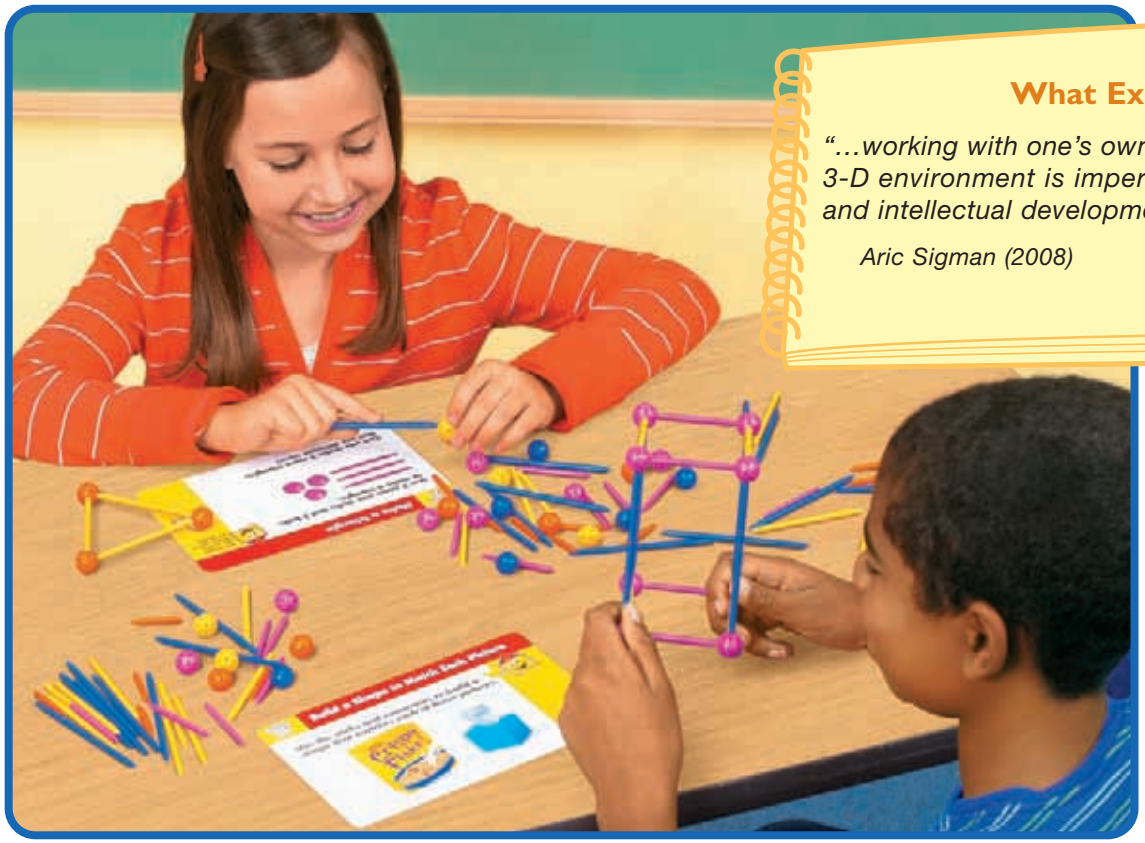
- 12 activity cards
- 130 sticks in four sizes
- Over 70 connector balls
- Geometry facts card
- Teacher's guide card

Grade Level 1 2 3 4 5

GG458MA $34.95

⚠ *WARNING: CHOKING HAZARD — Small parts. Not for children under 3 yrs.*

⚠ *WARNING: CHOKING HAZARD — This toy is or contains a small ball. Not for children under 3 yrs.*



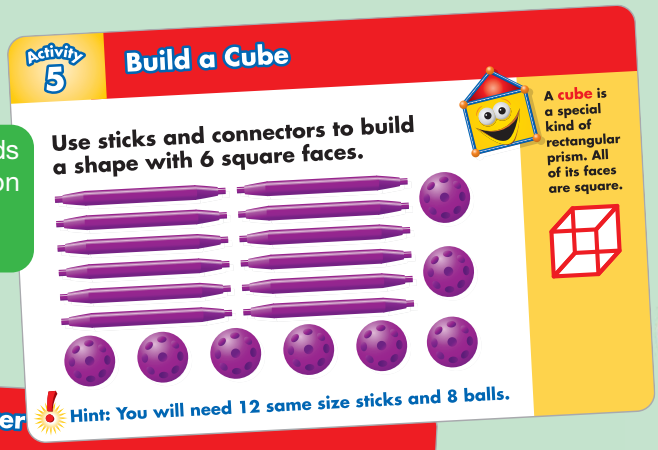
What Experts Are Saying…

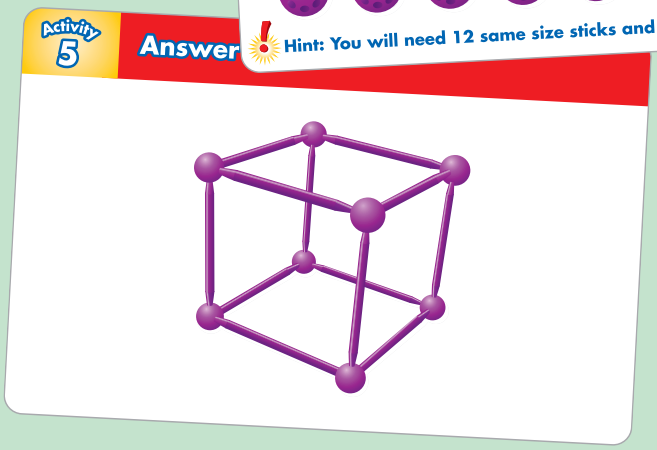
"…working with one's own hands in a real-world 3-D environment is imperative for full cognitive and intellectual development…"

Aric Sigman (2008)

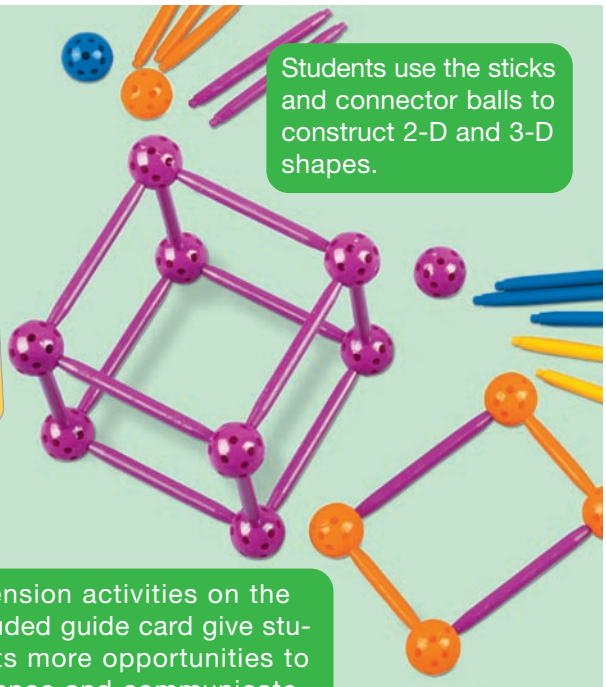
Key Features

The activity cards have answers on back for easy self-checking.

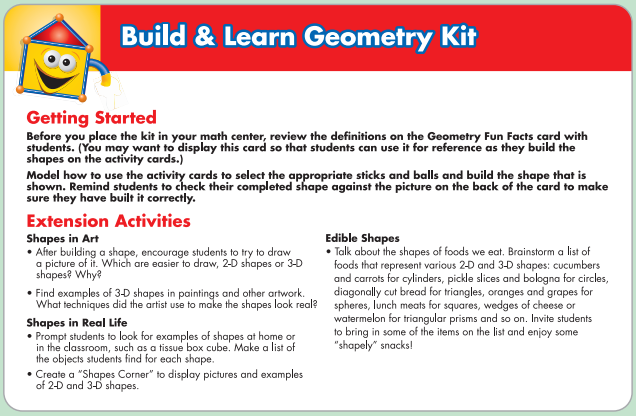




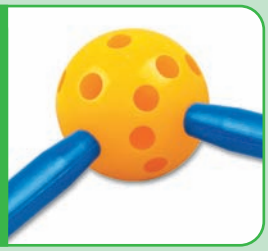
Students use the sticks and connector balls to construct 2-D and 3-D shapes.



Extension activities on the included guide card give students more opportunities to enhance and communicate understanding.



Sticks and connectors snap together to help students identify key attributes of shapes, such as sides, vertices, faces, and parallel & perpendicular lines.



Differentiating Instruction with the Build & Learn Geometry Kit

Math Learning Center or Independent Practice

- Assign a group of 4 students to use the Build & Learn Geometry Kit as a center activity. Preselect activity cards to meet each student's level of readiness.

Small Group Lessons

- The Build & Learn Geometry Kit comes with enough materials to use in a small group context. Choose an activity card according to the needs of students in the group and complete the activity together, modeling and scaffolding as needed. Then, invite students to practice with other appropriate activity cards.

Supplement Math Curriculum

- Students can use the plastic sticks and connectors as manipulatives to help them solve problems from their math textbooks or workbooks and show representations to model mathematical ideas.

Geometry Hands-On Kit

Provide versatile, organized, and ready-at-your-fingertips manipulatives for all types of differentiated geometry lessons.

Modeling in the classroom is most effective when students are not merely observers but active participants in the process. However, it is a challenge for teachers to manage and organize materials to achieve this end. Lakeshore's comprehensive Geometry Hands-On Kit enables teachers and students to explore geometric concepts together in a variety of learning contexts. Overhead pattern blocks and corresponding student manipulatives allow for teacher demonstration of concepts and simultaneous active participation by students.

Kit Includes:

- Full set of 30 transparent overhead pattern blocks for teacher demonstration
- 20 student pouches—each with 30 pattern blocks
- 4 reproducible activity mats
- Sturdy storage box
- Teacher's guide

Grade Level 1 2 3

GG876MA $79.95

⚠ WARNING: CHOKING HAZARD — Small parts. Not for children under 3 yrs.

What Experts Are Saying...

"Multi-sensory supplements, such as math manipulatives, support the child's use of visual, tactile, and/or auditory interactions with the material. These types of materials can help to bridge the gaps that most elementary teachers will encounter when trying to teach young children novel and abstract mathematical concepts."

Jenny R. Rains, Catherine A. Kelly, and Robert L. Durham (2008)

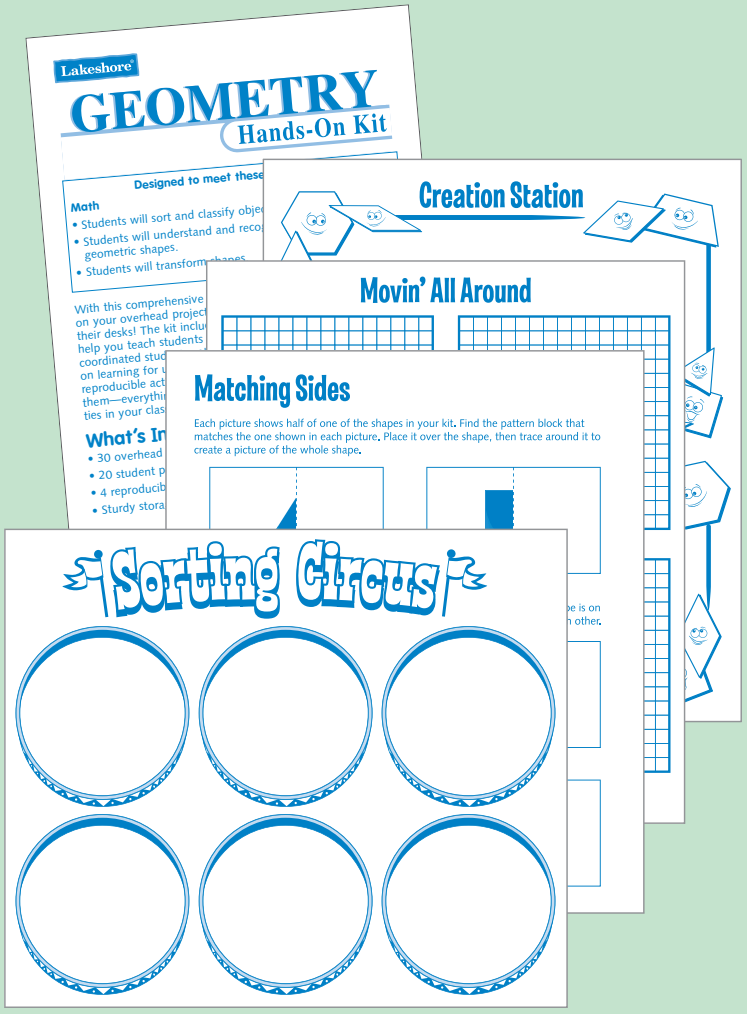
Key Features

Kit includes 20 presorted student pouches of pattern blocks.

The set of transparent pattern blocks is ideal for teacher demonstrations on any projector.

Each zip-close student pouch includes a matching set of pattern blocks.

The teacher's guide covers multiple standards-based geometry skills and includes reproducible activity mats.



Differentiating Instruction with the **Geometry Hands-On Kit**

Whole Group Instruction

- As the teacher uses the overhead pattern blocks for whole group demonstrations, visual learners can observe and follow along by manipulating their own pattern blocks.

Supplement Math Curriculum

- The kit includes enough sets of pattern block manipulatives for up to 20 students to use to support geometry activities from any math program.

Small Group and Independent Use

- Use the guide activities and the pattern block manipulatives to reinforce specific skills in a small group setting. Students can also explore concepts such as symmetry independently at a learning center using the pattern blocks and the "Matching Sides" reproducible activity mat.

Response to Intervention

- The Geometry Hands-On Kit supports RTI Tiers 1, 2, and 3.

Geometry Mystery Box

Strengthen key geometric vocabulary as students manipulate 2-D and 3-D shapes and analyze their attributes.

Research indicates that vocabulary development in math is critical for developing students' conceptual understanding and their ability to articulate and explain their thinking when solving math problems. Students learn geometric vocabulary as they manipulate and feel the attributes of various 2-D and 3-D shapes in Lakeshore's Geometry Mystery Box. Students process the vocabulary-rich clues on the included activity cards and then reach into the Mystery Box to find the corresponding shape. As students focus on each shape's unique attributes, they make critical connections between the vocabulary they read and the attributes they touch.

What's Included:

- 20 foam shapes in 5 colors
- 20 self-checking question cards on a ring
- Sturdy Mystery Box
- Teacher's guide with differentiated instruction strategies

Grade Level 1 2 3
DD229MA $19.95

⚠ *WARNING: CHOKING HAZARD — Small parts. Not for children under 3 yrs.*

What Experts Are Saying...

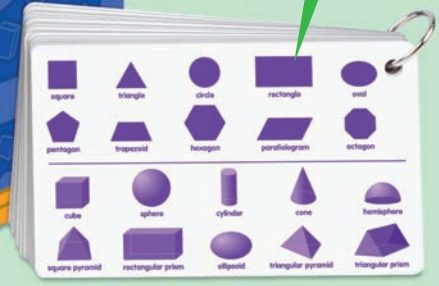
"Children learn mathematics best by using it, and understanding the language of math gives students the skills they need to think about, talk about, and assimilate new math concepts as they are introduced. For example, as students develop conditional knowledge, knowing how to label and define objects—such as the difference between triangles, rectangles, and polygons—is essential to manipulating those objects."

David Chard (2003)

Key Features

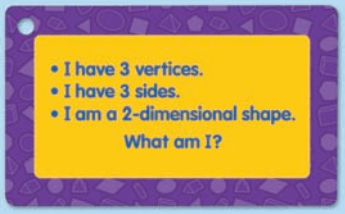
Reaching into the Mystery Box requires students to identify shapes based solely on their attributes.

The shape reference card shows all of the 2-D and 3-D shapes, offering scaffolded learning.



Cards feature riddle-style questions that promote the development of academic vocabulary.

Front



Back

The cards are self-checking, so they provide immediate feedback during independent learning.

Differentiating Instruction with the Geometry Mystery Box

Cooperative and Collaborative Learning

- Have students work on the activities with partners. Partners take turns reading the clues and searching for each shape in the Mystery Box. Students provide active feedback and accountability as they solve problems.

Flexible Grouping

- Pair students according to their levels of readiness. This gives students the opportunity to contribute to each other's learning.

Vocabulary Building

- Use the Geometry Mystery Box for vocabulary development. For example, if you focus on the word "face," have students feel for 3-D shapes with varying numbers of faces. Prompt them to describe how they were able to identify the faces and write a definition for "face" based on the discussion.

Hands-On Measurement Centers

Deepen students' understanding of various measurement concepts through meaningful activities that accommodate different learning styles.

Students who are engaged in a meaningful, diverse range of learning experiences make more connections to and ultimately develop a deeper understanding of essential concepts. Lakeshore's Hands-On Measurement Centers are filled with activities that appeal to a variety of learners and their different learning styles. In their reinforcement of measurement skills, the included activity cards capture the interest of all types of learners.

Grade Level 1 2 3 **DD555XMA** Set of 3 centers. **$129.00**
⚠ *WARNING: CHOKING HAZARD —Small parts. Not for children under 3 yrs.*

What Experts Are Saying...

"Learners whose styles are accommodated more frequently in school achieve more immediate success. Students who struggle to adapt to an uncomfortable way of learning often underachieve."

Pat B. Guild (2001)

What's Included:

DD557MA
Length, Perimeter, Area & Volume **$44.95**

- 10 write & wipe activity cards
- Conversion chart (customary & metric)
- 2-page assessment
- 2 rulers
- 2 measuring tapes
- 50 foam measuring tiles
- 50 foam measuring cubes
- 3 volume boxes
- Teacher's guide with differentiated instruction strategies

DD558MA Capacity **$44.95**

- 10 write & wipe activity cards
- Conversion chart (customary & metric)
- 2-page assessment
- Teacher's guide with differentiated instruction strategies

Metric measurement tools:

- Measuring cup (1 liter-4 cups)
- Graduated cylinder (10 mL)
- Funnel

Customary measurement tools:

- 4 see-inside measuring cartons
- Gallon container
- Measuring cup (1 liter-4 cups)

DD559MA Weight **$44.95**

- 10 write & wipe activity cards
- Conversion chart (customary & metric)
- 2-page assessment
- Balance scale
- Platform scale
- 30-piece gram weight set
- Teacher's guide with differentiated instruction strategies

Key Features

Hands-on measurement tools appeal to tactile learners and give students experiences that help build a deeper understanding of measurement concepts.

The included chart helps students learn customary and metric equivalents.

10 write & wipe activity cards have step-by-step instructions that help students practice standards-based measurement skills independently.

The 2-page reproducible assessment makes it easy to monitor students' progress.

Differentiating Instruction with the **Hands-On Measurement Centers**

Independent Learning Center

- Set up materials at an independent learning center. Preselect the activity cards to best meet the skill sets of individual students.

Small Group Instruction

- Select an activity card according to the skill you want to review and photocopy it. Model the activity for students in a small group while discussing the key concepts. Give each student a copy of the activity and provide scaffolding as students solve the problems.

Informal Assessment

- As students complete the activities, check their work to help identify measurement concepts that may require additional instruction and support.

Response to Intervention

- The Hands-On Measurement Centers support RTI Tiers 1 and 2.

Problem Solving Clock Books

Develop higher-order thinking and reinforce various time-telling skills with our interactive books.

Students often practice telling time as an isolated skill and not in a problem solving, real-world context. Problem solving is a critical component of any balanced math program because it not only reinforces important math skills, but also builds higher-level thinking in students. Lakeshore's Problem Solving Clock Books present real-world situations students will encounter and can truly relate to. Plus, the unique built-in clock feature allows students to visualize the word problems as they work. Students master time skills in a hands-on, concrete way and become confident problem solvers at the same time.

Each Book Includes:

- 14 self-checking problem cards
- 1-2 built-in clocks with movable hands

Grade Level 1 2 3 **AA590XMA** Complete set of 5 books. **$89.95** *Each book is also available separately.*

AA591MA
Time on the Hour
$19.95

AA592MA
Time on the Half Hour
$19.95

AA593MA
Time at 15-Minute Intervals
$19.95

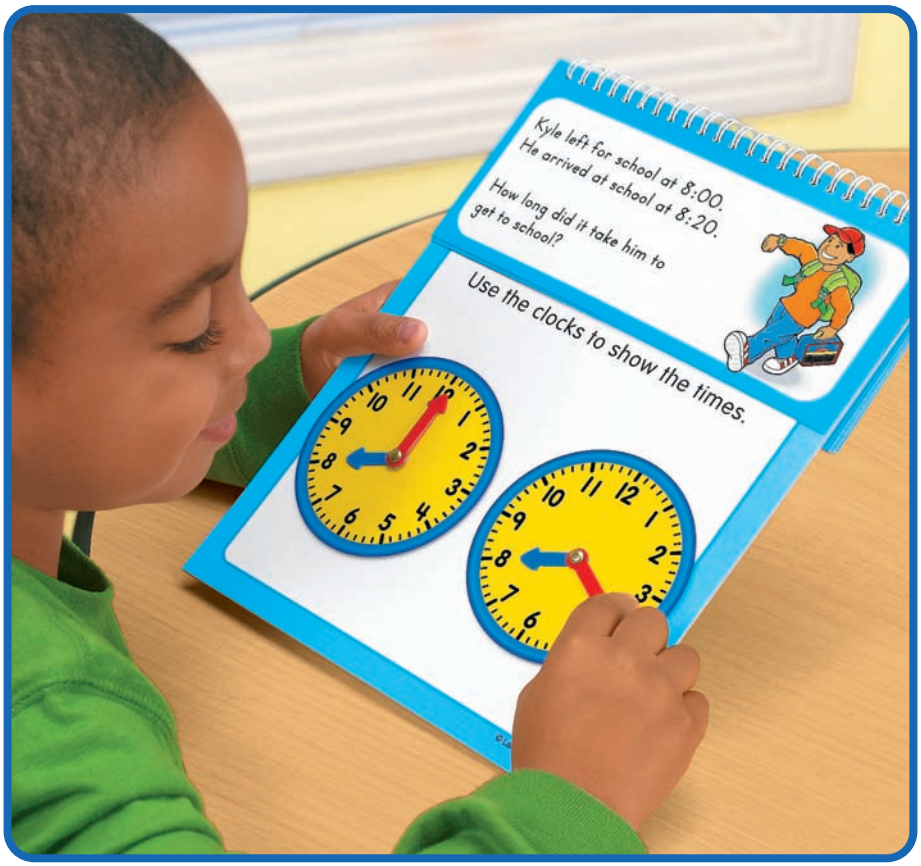
AA594MA
Time at 5-Minute Intervals
$19.95

AA595MA
Duration of Time
$19.95

What Experts Are Saying...

"Problem solving means engaging in a task for which the solution method is not known in advance. In order to find a solution, students must draw on their knowledge, and through this process, they will often develop new mathematical understandings. Solving problems is not only a goal of learning mathematics, but also a major means of doing so."

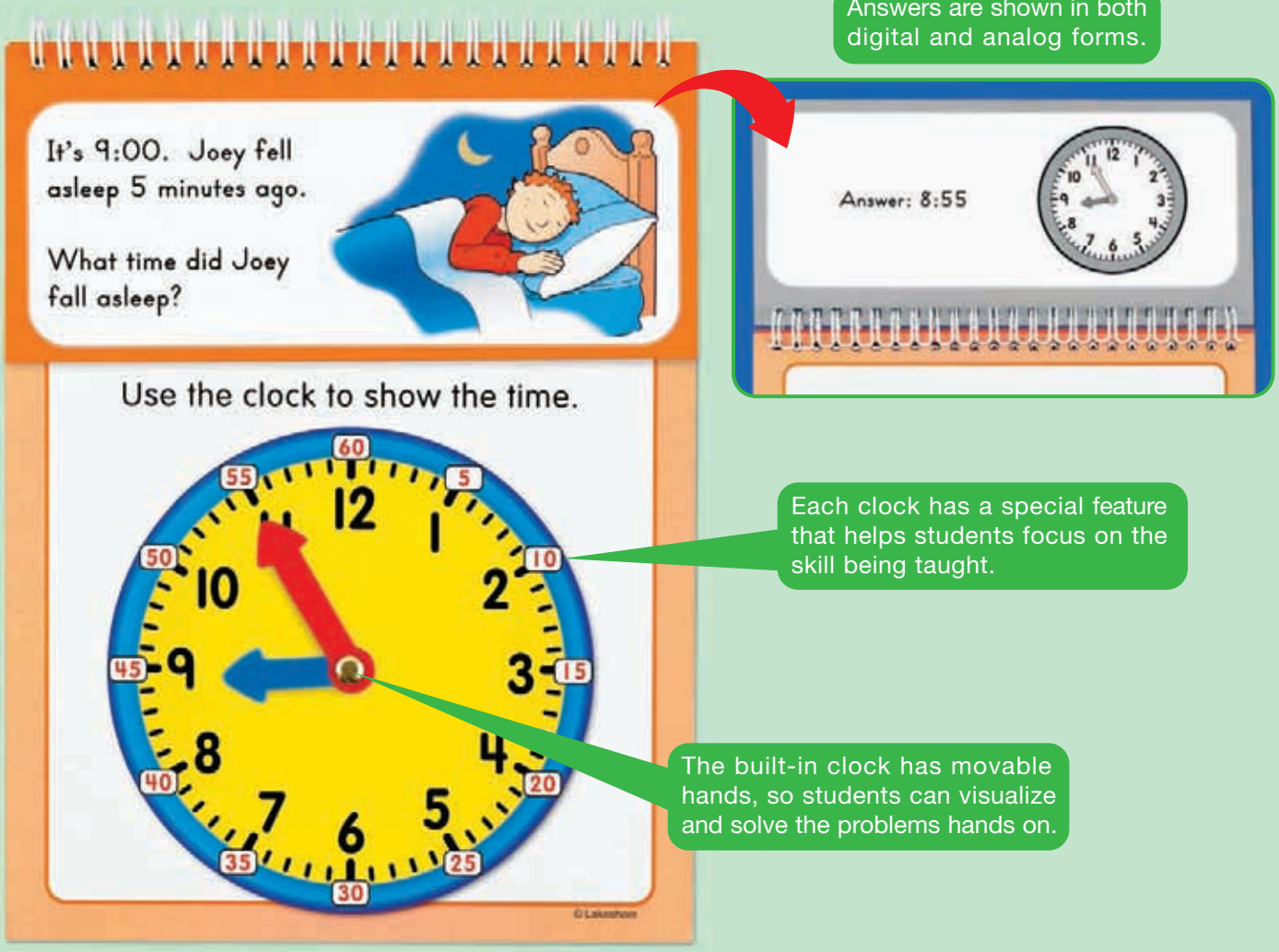
Principles and Standards for School Mathematics (2000)



Key Features

The word problems are self-checking for immediate feedback, so they are ideal for independent learning.

Answers are shown in both digital and analog forms.



Each clock has a special feature that helps students focus on the skill being taught.

The built-in clock has movable hands, so students can visualize and solve the problems hands on.

Differentiating Instruction with the **Problem Solving Clock Books**

Independent Learning Center

- Set up the clock books at an independent learning center. The self-checking word problems give students instant feedback, so the books are ideal for self-directed learning.

Target Instruction by Ability or Readiness

- Assign clock books to students based on their abilities or individual levels of readiness. Informally assess student work, and prompt students to advance to the next-level clock book when they are ready.

Intervention

- The clock books are perfect for intervention activities—teachers can partner with below-level students and provide targeted instruction and modeling as needed.

Hands-On Measurement Listening Center

Help students build measurement skills with the scaffolded activities in our concept-building listening center.

Scaffolding is defined as providing support for student learning and then gradually decreasing that support until students become self-reliant. Lakeshore's Hands-On Measurement Listening Center provides students with the explicit instructions and scaffolding they will need to gain proficiency with measurement skills—without the need for modeling by the teacher. The audio instructions lead students through each activity and even help them correct their own work. Students remain focused and on task, while the teacher is available to address the needs of other students.

Center Includes:

- 1 CD & 2 cassettes
- 16 write & wipe activity cards—4 each of 4 different activities
- 4 plastic rulers
- Answer key
- Reproducible assessment card
- Student progress chart
- Teacher's guide with differentiated instruction strategies

Grade Level 2 3

JJ528MA **$34.95**

What Experts Are Saying…

"Students can become independent, self-regulated learners through instruction that is deliberately and carefully scaffolded."

Martin A. Kozloff (2002)

Key Features

The center includes enough copies of 4 different activities for up to 4 students to work at once.

The recording guides students step by step through all the activities.

The included rulers give students real-world practice with measurement concepts.

The progress chart and reproducible assessment make it easy to track students' progress and assess their understanding of measurement concepts.

Differentiating Instruction with the **Hands-On Measurement Listening Center**

Learning Center

- The center includes enough materials for up to 4 students to work at a time. The recording features step-by-step instructions that provide the scaffolding necessary to ensure that students successfully complete each activity independently.

Assessment

- Use the reproducible assessment card to gauge students' level of understanding. Plan reinforcement or intervention as needed. The data from the progress chart can be included with report cards or presented during parent conferences.

Activities Based on Student Readiness

- Review the skills covered on the different activity cards. Assign the activities according to students' readiness.

Response to Intervention

- The Hands-On Measurement Listening Center supports learning and progress monitoring for students receiving Tier 2 and 3 instruction.

Research & Citations

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