MOVING with MATH®
LEARNING SYSTEM

Moving with Math® for:
Utah's Response to Intervention

Math Teachers Press, Inc.

Agenda

The MOVING WITH MATH Difference
Meeting the Needs of Response to Intervention

I. The Problem

II. The Solution

Moving with Math Learning System

a. Assessment

b. Instruction

III. Meeting Your Needs for RTI

IV. Strategies and Results

V. Recommendations

VI. Conclusion

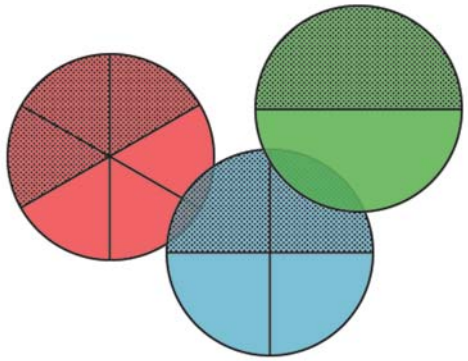
The Problem

National Results Show Students Lack Conceptual Understanding

4th Grade Results

Concept 3: Fractions	% Answering Correctly
How many fourths make a whole? Answer _____	50 %

National Assessment of Educational Progress

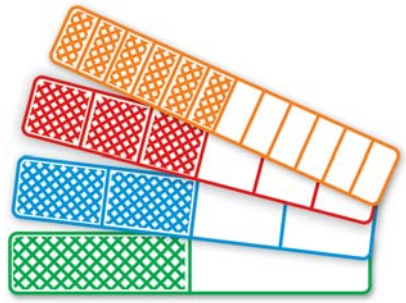


The Problem

National Results Show Students Lack Conceptual Understanding

Problem (13 year-olds)	% Answering Correctly
$\frac{1}{2} + \frac{1}{3}$	33%
$\frac{3}{4} + \frac{1}{2}$	33%
Estimate the best answer for $\frac{12}{13} + \frac{7}{8}$ **A** 1 **B** 2 **C** 19 **D** 21	25%

National Assessment of Educational Progress



The Problem

Disaggregated Group Results

Results Reveal a Divide in Math Classrooms Between the Students Who "Get Math" and the Students Who Don't

Problem	Average	Upper Quartile	Lower Quartile
47 - 18	60%	90%	20%

MATHEMATICS DEPARTMENT - MINNEAPOLIS PUBLIC SCHOOLS
Second Grade Math Benchmark Test Results

Problem	Average	Upper Quartile	Lower Quartile
34 x 2	83%	99%	68%

MATHEMATICS DEPARTMENT - MINNEAPOLIS PUBLIC SCHOOLS
Fourth Grade Math Benchmark Test Results

The Problem

Disaggregated Group Results

Results Reveal a Divide in Math Classrooms Between the Students Who "Get Math" and the Students Who Don't

*A difference of 20% or greater is statistically significant.

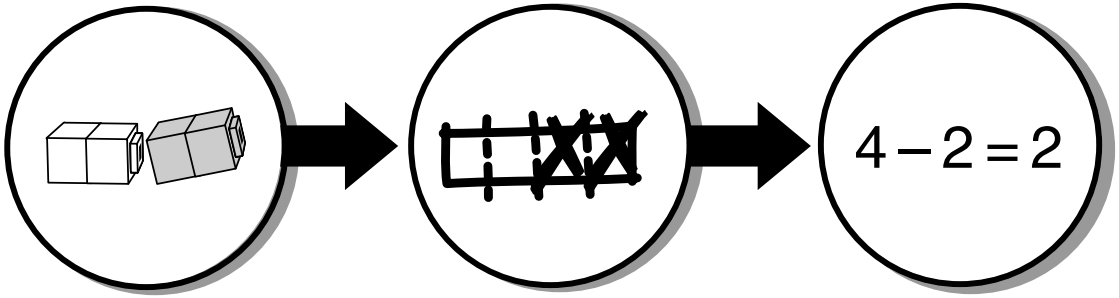
The Solution

The *Moving with Math*® Difference

- Curriculum alignment
- Conceptually based instruction
- Research-based strategies with proven results

The Solution

The Three Stages of Learning



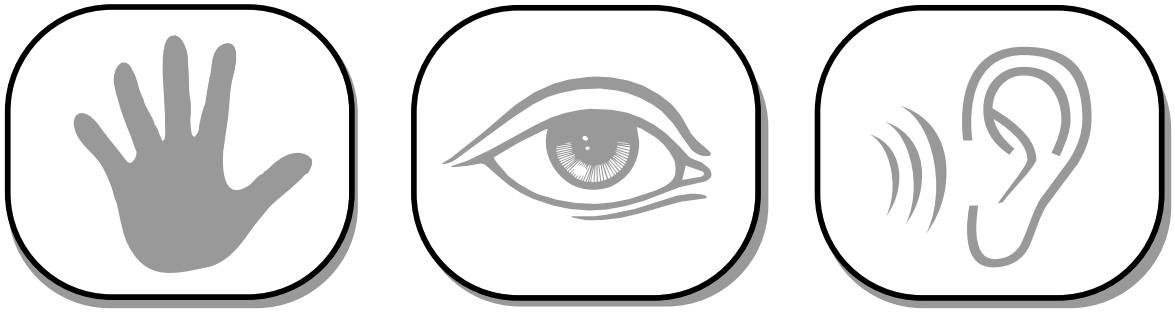
Concrete **Transitional Pictorial** **Abstract**

"All students benefit from a Concrete-Representational-Abstract (CRA) teaching sequence that introduces concretely, moves to visual and pictorial representations, and culminates in abstract symbolic reasoning and representation."

-Utah's 3-Tier Model of Mathematics Instruction, Page 19

The Solution

The Three Learning Styles



Kinesthetic Visual Auditory

"Allowing students differentiated ways of accessing and expresing mathematics increases engagement and successful acquisition of concepts and skills."

-Utah's 3-Tier Model of Mathematics Instruction, Page 19

Moving with Math® Learning System

Curriculum Alignment

A system of assessment and instruction where everything is tied to objectives and standards..with proven results!

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Step 1: Correlations to Objectives and Common Core State Standards

B1 Correlation to Objectives

Use this table to match objectives to pages in the Lesson Plans, Student Book and *Skill Builders*.

Obj.	Objective Description	Lesson Plan/ Student Book Pages	Skill Builders
B-1	Identify place values in numbers up to 3 digits, including expanded notation and use of calculators.	2-4, 66	1-1, 1-2, 1-3, 1-4
B-2	Compare and order numbers up to 6 digits, using models and a number line.	5-6, 16, 19	2-1, 2-2, 2-3, 2-4
B-3	Recognize and extend patterns using multiples of 1 to 10, 100, and 1000, with objects and symbols.	8-11, 14	3-1, 3-2
B-4	Write 4- to 6-digit numbers from words or models.	15, 21	4-1, 4-2, 4-3
B-5	Write words for any numeral up to 6 (or 9) digits.	20	5-1, 5-2
B-6	Identify place values in a 4- to 6-digit number.	17-18	6-1, 6-2, 6-3, 6-4, 6-5
B-7	Round a 2- to 4-digit number to nearest 10 using models, a number line, and patterns.	22-23	7-1, 7-2
B-8	Round a 3- to 4-digit number to nearest 100.	24-26	8-1, 8-2, 8-3
B-9	Determine from commutative or associative property a missing number in an addition equation. Write and solve mathematical expressions with parentheses.	27-28	9-1, 9-2
B-10	Add up to 3-digit numbers with 0 to 2 regroupings. Use a five-step plan to solve addition word problems.	33-38, 60, 67	10-1 to 10-16
B-11	Add 3 or 4 numbers up to 3 digits with regrouping.	39-40	11-1, 11-2
B-12	Add 4- to 6-digit numbers with regrouping.	71-72	12-1, 12-2
B-13	Manipulate and solve addition equations of varying lengths in vertical and horizontal formats.	73, 77	13-1
B-14	Recognize "sum" and the plus sign. Explore mathematical expressions using variables.	29-32, 38	14-1, 14-2, 14-3, 14-4
B-15	Subtract up to 3-digit numbers with 0 to 2 regroupings. Use a five-step plan to solve 1- and 2-step problems.	45-48, 50-55, 61, 63-65	15-1 to 15-19
B-16	Subtract 3-digit numbers with regroupings across 0.	56	16-1, 16-2
B-17	Subtract 4- or 5-digit numbers with regroupings.	74-75	17-1, 17-2
B-18	Manipulate and solve subtraction equations of varying lengths in vertical and horizontal formats.	76	18-1
B-19	Recognize "difference" and the minus sign. Relate subtraction to addition. Explore mathematical expressions using variables.	41-44, 49	19-1 to 19-7
B-47	Explore the concept of decimals. Perform basic operations with decimals and money amounts.	57-59, 62	47-1, 47-2, 47-3, 47-4
B-48	Graph points and identify coordinates for points on a coordinate grid.	12, 13	48-1, 48-2, 48-3
B-50	Plan, organize, display and interpret data using various graphical forms. Find the range, median, mode, and mean.	68-70	50-1, 50-2, 50-3, 50-4

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Step 2: Assess with Pre-Test

Name _____ Score _____
(50 possible)

Number Sense, Addition, Subtraction Pre-Test

1. Which digit is in the hundreds place?

_____ (Obj. 1)

6 5 3

A 6
B 0
C 5
D 3

2. Which number is the standard numeral for 300 + 20 + 7?

_____ (Obj. 1)

A 300,207
B 40,609
C 3027
D 327

3. Which number is the greatest?

_____ (Obj. 2)

A 5412
B 6421
C 6412
D 5642

4. This graph shows the pounds of recycling by grade.

Grade	Pounds of Recycling
2	648
3	571
4	598
5	652

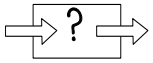
Which grade collected the most cans for recycling?

_____ (Obj. 2)

A Grade 2
B Grade 3
C Grade 4
D Grade 5

5. A number machine makes numbers in a pattern. What number will come next?

_____ (Obj. 3)

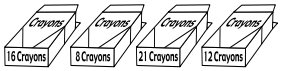


3, 6, 9, _____

A 10
B 11
C 12
D 13

6. An even number of crayons is to be packed in each box. Which box is not packed correctly?

_____ (Obj. 3)



A **B** **C** **D**

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Step 3: Interpret Results with Student Progress Report

Helpful tool for IEPs!

B1 Student Progress Report **Name** _____

Record results from the Pre- and Post-Test here to see strengths and weaknesses on test questions aligned to the objectives for this level.

Test Item	Pre-Test	Post-Test	Objective # and Description
1.	☐	☐	**B-1** Identify place values in numbers up to 3 digits.
2.	☐	☐	
3.	☐	☐	**B-2** Compare and order numbers up to 6 digits.
4.	☐	☐	
5.	☐	☐	**B-3** Recognize, describe and extend patterns. Identify patterns for odd and even numbers.
6.	☐	☐	
7.	☐	☐	**B-4** Write a 4-, 5- or 6-digit numeral from printed words or models.
8.	☐	☐	
9.	☐	☐	**B-5** Write the words for any numeral up to 6 (or 9) digits.
10.	☐	☐	
11.	☐	☐	**B-6** Identify place values in a 4, 5- or 6-digit number.
12.	☐	☐	
13.	☐	☐	**B-7** Round a 2-, 3- or 4-digit number to the nearest ten.
14.	☐	☐	
15.	☐	☐	**B-8** Round a 3- or 4-digit number to the nearest hundred.
16.	☐	☐	
17.	☐	☐	**B-9** Determine from the commutative (order) or associative (grouping) property a missing number in an addition equation.
18.	☐	☐	
19.	☐	☐	**B-10** Add up to 3-digit numbers. Employ a five-step plan to solve word problems involving addition.
20.	☐	☐	
21.	☐	☐	**B-11** Add three or four 2- or 3-digit numbers with regrouping.
22.	☐	☐	
23.	☐	☐	**B-12** Add 4- to 6-digit numbers with regrouping.
24.	☐	☐	
25.	☐	☐	**B-13** Manipulate and solve addition equations of varying lengths in vertical and horizontal formats.
26.	☐	☐	
27.	☐	☐	**B-14** Recognize addition vocabulary, including "sum" and the "+" sign. Explore mathematical expressions and open number sentences that use variables.
28.	☐	☐	
29.	☐	☐	**B-15** Subtract up to 3-digit numbers. Employ a five-step plan to solve one- and two-step word problems.
30.	☐	☐	
31.	☐	☐	**B-16** Subtract 3-digit numbers and money with regroupings across zero.
32.	☐	☐	
33.	☐	☐	**B-17** Subtract 4- or 5-digit numbers with regroupings.
34.	☐	☐	
35.	☐	☐	**B-18** Manipulate and solve subtraction equations of varying lengths in vertical and horizontal formats.
36.	☐	☐	
37.	☐	☐	**B-19** Recognize subtraction vocabulary, including "difference" and the "-" sign. Explore mathematical expressions and open number sentences that use variables.
38.	☐	☐	
39.	☐	☐	**B-47** Explore the concept of decimals, and solve problems with decimals and money. Round money to the nearest dollar or nearest 10 cents.
40.	☐	☐	
41.	☐	☐	**B-48** Graph points and identify coordinates of points shown on a coordinate grid.
42.	☐	☐	
43.	☐	☐	**B-10** Add up to 3-digit numbers. Employ a five-step plan to solve word problems involving addition.
44.	☐	☐	**B-15** Subtract up to 3-digit numbers. Employ a five-step plan to solve one- and two-step word problems.
45.	☐	☐	
46.	☐	☐	**B-50** Plan, organize, display and interpret data in various graphical forms.
47.	☐	☐	
48.	☐	☐	**B-47** Explore the concept of decimals, and solve problems with decimals and money. Round money to the nearest dollar or nearest 10 cents.
49.	☐	☐	**B-50** Plan, organize, display and interpret data in various graphical forms.
50.	☐	☐	

☐☐ Total **Correct** (out of **40** items)

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Step 3: Interpret Results with Class Record Sheet

Helpful tool for all tiers!

Class Record Sheet

Teacher: Ms. Marshall Class Name: Fourth Grade

• An X means the objective was answered incorrectly.
• The "Abs" column signifies number of absences.

STATE STANDARDS HERE

Student	Test	Numeration	Action	Multiplication	Division	Rational Numbers	Geometry	Measurement	Prob. Solv.	No. correct out of 50	% correct	Abs.
Jordan S	Pre-									23 /50	46%	0
	Post-									/50		
Christian S	Pre-									27 /50	54%	0
	Post-									/50		
Nicole S	Pre-									27 /50	54%	0
	Post-									/50		
Megan S	Pre-									19 /50	38%	0
	Post-									/50		
Brittany S	Pre-									22 /50	44%	0
	Post-									/50		
Brandon S	Pre-									19 /50	38%	0
	Post-									/50		
Michelle S	Pre-									28 /50		
	Post-									/50		
Ian S	Pre-									/50	32%	0
	Post-									/50		
	Post-									/50		
Timothy S	Pre-									/50		
	Post-									/50		
Jake S	Pre-									/50		
	Post-									/50		
Brandon S	Pre-									/50		
	Post-									/50		
Courtney S	Pre-									/50		
	Post-									/50		
Logan S	Pre-									/50		
	Post-									/50		
Deanna S	Pre-									/50		
	Post-									/50		
Daryn S	Pre-									/50		
	Post-									/50		
% of students with correct answers	Pre	69 88 88	38 25 31	44 38 63 13 19 6 25	25 38 19 31 44	38 44 75 38 44	63 25 88 94 38	81 44 81 56 13 38 38 13 56 38 56		49	Mean %, Pre	
% of students with correct answers	Post										Mean %, Post	
% of students with correct answers	Bench										Mean %, Bench	

Tier 1: Percent of students answering each question correctly identifies teaching areas of emphasis.

Tier 2: Form learning groups by missed objectives.

Tier 3: Pre-Test data identifies weakest students in the class.

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Step 4: Connect to Home

Family Math Letter

Dear Parent:

Your child is enrolled in a class to strengthen understanding and achievement in math. The class will learn place value up to 6 digits. They will add and subtract large numbers with and without regrouping. They will also be solving word problems that are relevant to everyday life and subjects in school.

Solving word problems is a difficult skill. To help your child at home, tell stories involving addition and subtraction. Using counters and models and understand the action in the problems.

The class will include a Pre-Test, a Post-Test, regular re provided with a list of your child's strengths and weaknes activities and games at home.

It is important that you be involved in your child's educa here, and I hope that you will contact me with any questi hearing from you.

Return the completed Family Math pages to receive a C

Sincerely,

Phone: _____

School Website: _

Parent Feedback

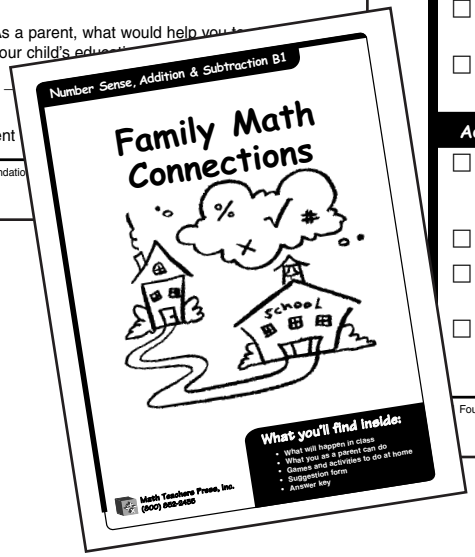
1. How could this session be improved? Circle all that a
   A. More practice pages in this booklet B. More deta
   C. Additional opportunities to communicate with the te
   my child's progress E. Other _____
2. What did your child enjoy most about this class?

   _____
3. What was most difficult for your child to learn?

   _____
4. As a parent, what would help you t
   your child's edu

Parent

B1 Foundatio



Student Strengths and Weaknesses

What this report shows:

The essential math skills listed here are necessary for your child's future math success. This report shows the skills your child already knows (marked with a ✔) as well as those your child still needs to learn during this course (marked with an ✖). At the end of this class, your child will be tested again on these same skills.

Numeration

- ☐ Identify place values in numbers up to 3 digits.
- ☐ Compare and order numbers up to 6 digits.
- ☐ Recognize, describe and extend patterns. Identify patterns for odd and even numbers.
- ☐ Write a 4-, 5- or 6-digit numeral from printed words or models.
- ☐ Write the words for any numeral up to 6 (or 9) digits.
- ☐ Identify place values in a 4, 5- or 6-digit number.
- ☐ Round a 2-, 3- or 4-digit number to the nearest ten.
- ☐ Round a 3- or 4-digit number to the nearest hundred.

Addition

- ☐ Determine from the order or grouping property a missing number in an addition equation.
- ☐ Add up to 3-digit numbers.
- ☐ Add three or four 2- or 3-digit numbers with regrouping.
- ☐ Add 4- to 6-digit numbers with regrouping.

Subtraction

- ☐ Manipulate and solve addition equations of varying lengths in vertical and horizontal formats.
- ☐ Recognize addition vocabulary, including "sum" and the "+" sign.
- ☐ Subtract 3-digit numbers. Solve word problems using subtraction
- ☐ Subtract 3-digit numbers and money with regroupings across zero.
- ☐ Subtract 4- or 5-digit numbers.
- ☐ Solve subtraction equations of varying lengths.
- ☐ Recognize subtraction vocabulary, including "difference" and the "–" sign.

Decimals

- ☐ Solve problems with decimals and money amounts. Make change for a $5 bill.

Coordinate Graphing

- ☐ Graph points and identify coordinates of points shown on a coordinate grid.

Data Analysis

- ☐ Plan, organize, display and interpret data as bar graphs.

Page 3

Foundations

Moving with Math® Learning System

Step 5: Teach

Pacing Calendars provide instructional support.

Lessons 1–5 — **30-Lesson Pacing Calendar** — ***Foundations B1***

	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Daily Review‡	**Daily Review 1**	**Daily Review 2**	**Daily Review 3**	**Daily Review 4**	**Check Point 5 and 6**—may be used as a quiz
Lesson Plan✻ **Hands-on Math Activities**	**Objective:** To explore and name base ten blocks, and develop an understanding of place values. To build models and draw pictures of numerals. To write numbers in expanded notation. **Materials:** Masters 1, 2, 20 and 21, base ten blocks, 6-sided dice. **Lesson Plans:** pp. 2–4 **Student Book:** pp. 2–4	**Assessment Pre-Test** **Assessment:** Administer Pre-Test to evaluate students' grasp of math skills considered essential for future math success. The Pre-Test is in the Assessment section of the Teacher Manual.	**Objective:** To compare and order 2- and 3-digit numbers. To estimate the number of objects in a jar. **Materials:** Masters 3 and 4, base ten blocks, index cards, 6-sided dice, playing cards, clear jar, 100 marbles, 100 pennies, large gumballs or golf balls **Lesson Plans:** pp. 5–7 **Student Book:** pp. 5–7	**Objective:** To discover patterns for odd and even numbers. To skip count by 3, 4, 5, and 6. To find the pattern in an arithmetic sequence. **Materials:** Masters 5, 6 and 7, one-inch squares, overhead squares, counters or cubes **Lesson Plans:** pp. 8–10 **Student Book:** pp. 8–10	**Objective:** To introduce function machines. To locate points on a coordinate grid. **Materials:** Masters 3 and 5, empty milk carton, large box, index cards, interlocking cubes, masking tape, crayons **Lesson Plans:** pp. 11–13 **Student Book:** pp. 11–13
Skill Builders	**Skill Builders:** 1-1, 1-2, 1-3, 1-4		**Skill Builders:** 2-1, 2-2	**Skill Builders:** 3-1, 3-2, 42-1	**Skill Builders:** 14-3, 14-4, 48-3
Read-to-Me	*One Hundred Is a Family,* p. 2 *101 Dalmatians...,* p. 3 *Amazing & Incredible Counting Stories,* p. 4		*Just Enough Carrots,* p. 5 *Gulliver's Travels,* p. 5 *One, Two, Three, Sassafras!* p. 6 *Betcha!,* p. 7	*Two Ways to Count to Ten,* etc., p. 8 *Spunky Monkeys on Parade,* etc., p. 9	*Roll Over! A Counting Song,* p. 11 *A Fly on the Ceiling,* p. 13
Math Games	Hammer to 100 Game, p. 4 Chisel to 0 Game, p. 4		Who Has More? p. 6 Smallest, Middle or Greatest, p. 6 How Many Ways? p. 6 Estimation Contest, p. 7	Buzz Game, p. 9	What's My Rule? p. 11
Journal Prompt **Test Prep** **Sum it Up!**	**Journal Prompt:** Student Book p. 4 **Sum it Up!** Student Book p. 3		**Sum it Up!** Student Book pp. 5, 7	**Journal Prompt:** Student Book p. 9 **Test Prep:** Student Book p. 8	**Test Prep:** Student Book p. 11
Family Math§		**Family Math:** Send home Family Math Letter and Student Strengths and Weaknesses Report, pp. 2–3			

‡ Daily Reviews and Check Points are found on pages 81–96 of the **Student Book** and copies are in the Assessment section of the **Teacher Manual.**

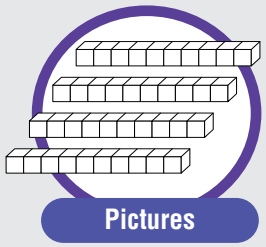
✻ All page numbers, unless otherwise indicated, refer to the **Lesson Plans/Student Book.**

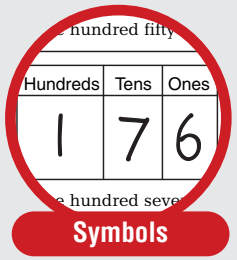
§ Make copies from the Family Math section of the **Teacher Manual.**

Lesson Content | Assessment | Home

Moving with Math® Learning System

Step 5: Teach





Objective:
To explore and name base ten blocks. To match the blocks with their place value names.

Materials:
Base ten blocks, Place Value Mats (Masters 1 and 2)

Note: Before class, make copies of Master 20 (Vocabulary Cards). Make copies of Master 21 (My Math Glossary) and distribute to each student.

Vocabulary:
different, place value names, same

Read to Me — *One Hundred Is a Family,* Ryan, Pam Munoz (Activity 2)

Concrete *Stage*

Introducing Base Ten Blocks

The main reason students make errors with whole number algorithms is that they do not understand multi-digit numeration. They do not know that 43 means 4 tens and 3 ones or 40 + 3.

Base ten blocks are ideal for teaching numeration concepts because students can see the abstract concept of place value each time they pick up a block. One tens block is always seen both as 1 ten and 10 ones.

Each pair or small group should have 20 ones blocks, 10 tens blocks, 10 hundreds blocks, and a place value mat.

Explain the benefits and proper use of manipulatives. Set ground rules for using them and discuss take-out and clean-up routines.

We are going to begin using base ten blocks. See what you can discover about your blocks. Allow exploratory time. Students might make buildings, roads and parking ramps.

Encourage students to look for patterns. **We can find important patterns if we ask ourselves how these blocks are the *same,* or alike, and how they are *different*, or not alike.**

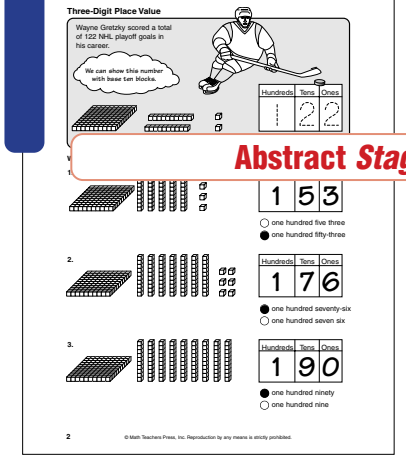
Write 2 columns on the board:

How are the blocks the same?
How are the blocks different?

What is one way the blocks are the same? (e.g., same material) After a period of time, ask students to share.

Same	Different
made of wood natural color points & corners solids made of 1 cm cubes 10 of 1 block = 1 of the next larger block	sizes shapes volumes weight

Representational *Stage*



Abstract *Stage*

How many different sizes do you have? (3) **Put 1 of each size in front of you. We call the smallest block the "ones" or "units" block. How many ones does it take to make the next-sized block?** (10) **We name this block the "tens" or "long" block.**

How many of the ones blocks are the same as the largest block? (100) **We name this block the "hundreds" or "flat" block.**

The words "ones," "tens," and "hundreds" are *place value names.*

Display 1 hundred, 2 tens, 5 ones. Place the blocks correctly on a Place Value Mat. Then say the words for the blocks, **one hundred twenty-five.**

About This Page

Work through the example together. **Look at problem 1. What blocks are shown?** (1 hundred, 5 tens, 3 ones) **Write the number in the correct place on the chart.** (153)

To say this number aloud, touch the biggest block and say its value. (100) **Now touch the next biggest blocks and say their value.** (50) **Then touch the smallest blocks and say their value.** (3) **Now say the number together as you touch the blocks.** (one hundred fifty-three)

Have students complete problems 2 and 3 on their own or with a partner.

Moving with Math® Learning System

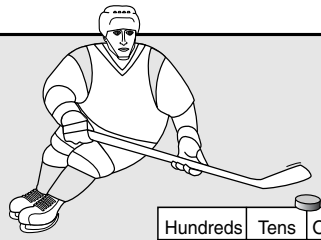
Step 5:
Teach

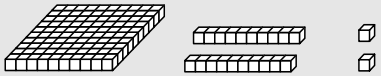
Pictures of manipulatives on the student page help transition to the abstract.

Three-Digit Place Value

Wayne Gretzky scored a total of 122 NHL playoff goals in his career.

We can show this number with base ten blocks.



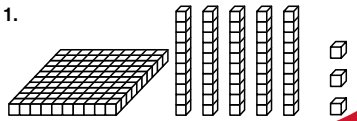


Hundreds	Tens	Ones
1	2	2

1 hundred 2 tens 2 ones = "one hundred twenty-two"

Write the number. Shade the bubble next to the correct name.

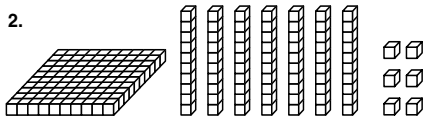
1.



Hundreds	Tens	Ones

◯ one hundred five three
◯ one hundred fifty-three

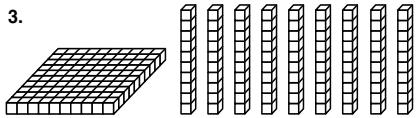
2.



Hundreds	Tens	Ones

◯ one hundred seventy-six
◯ one hundred seven six

3.



Hundreds	Tens	Ones

◯ one hundred ninety
◯ one hundred nine

2

Moving with Math® Learning System

Step 5: Teach

Curricular embedded assessments

Sum It Up!

What important pattern with base ten blocks helps us understand place value?

Journal Prompt

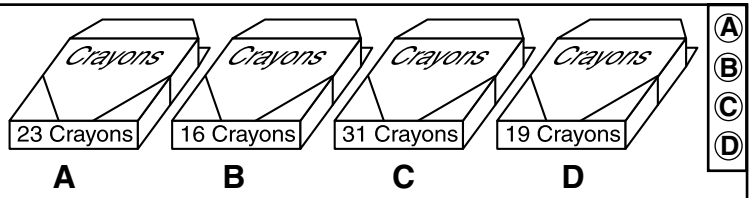
What number is missing in the pattern? Use words, numbers and pictures to tell how you know.

20, 24, _____, 32, 36

Test Prep

TEST PREP

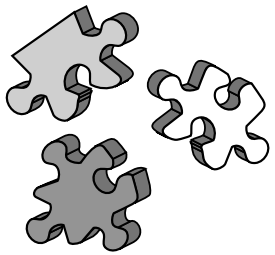
Maren packed an even number of crayons into her box. Which box did Maren pack?



Moving with Math® Learning System

Step 5:
Teach

Games motivate and engage students.



Hammer to 100 Game

Game for 2 players. Use base ten blocks in a pile: 1 hundred flat, 20 tens and 30 ones. Each player takes turns tossing a 6-sided die and removing the number tossed from the pile. Each time a player gets 10 ones, they are exchanged for 1 ten. The first player to get exactly 10 tens on a toss exchanges it for the 100 flat and is the winner.

Moving with Math® Learning System

Step 6:
Review and Reteach

Daily Reviews and Weekly CheckPoints are correlated to learning objectives and provide progress monitoring.

Name _____

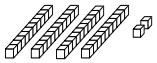
Daily Review

1. Which digit is in the tens place?

76

_____ (Obj. 1)

2. What number is shown?



_____ (Obj. 1)

3. $\begin{array}{r} 7 \\ +\ 2 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ +\ 3 \\ \hline \end{array}$

____, ____ (Obj. 10)

4. $\begin{array}{r} 10 \\ -\ 2 \\ \hline \end{array}$ $\begin{array}{r} 8 \\ -\ 3 \\ \hline \end{array}$

____, ____ (Obj. 15)

5. Pedro had 10¢. He spent 2¢. How much does he have left?

_____ (Obj. 15)

Review 1

Name _____

Daily Review

1. $\begin{array}{r} 9 \\ +\ 4 \\ \hline \end{array}$ $\begin{array}{r} 7 \\ +\ 9 \\ \hline \end{array}$

____, ____ (Obj. 10)

2. Write two subtraction facts for the addition fact 7 + 6 = 13.

_____, _____ (Obj. 19)

3. Carlos scored 9 goals last season. Pete scored 7 goals. How many goals were scored in all?

_____ (Obj. 10)

4. Neela baked 12 brownies. She gave 8 brownies away to her friends. How many brownies are left?

_____ (Obj. 15)

5. $\begin{array}{r} 6 \\ +\ 6 \\ \hline \end{array}$ $7 + 8 = \square$

____, ____ (Obj. 10)

Review 2

Moving with Math® Learning System

Step 6:
Review and Reteach

The Daily Review Record Sheet allows students to track their strengths and weaknesses.

It also suggests *Skill Builder* reteaching pages for missed objectives.

B1 Daily Reviews

Record the results from your Daily Reviews here. The label "Obj." shows which objective that problem covered.

	Review 1	Review 2	Review 3	Review 4	◇ Review 5 ◇	◇ Review 6 ◇	Review 7
1	Obj. 1 (SB 1-3)	Obj. 10 (SB 10-2)	Obj. 1 (SB 1-1)	Obj. 1 (S	Obj. 1 (SB 1-1)	Obj. 2 (SB 2-2)	Obj. 3 (SB 3-1)
2	Obj. 1 (SB 1-3)	Obj. 19 (SB 19-3)	Obj. 1 (SB 1-1)	Obj. 1 (		Obj. 2 (SB 2-2)	Obj. 3 (SB 3-2)
3	Obj. 10 (SB 10-1)	Obj. 10 (SB 10-2)	Obj. 1 (SB 1-1)	Obj. 2 (			Obj. 3 (SB 3-2)
4	Obj. 15 (SB 15-1)	Obj. 15 (SB 15-2)	Obj. 1 (SB 1-2)	Obj. 2			(SB 48-2)
5	Obj. 15 (SB 15-1)	Obj. 10 (SB 10-1)	Obj. 1 (SB 1-2)	Obj. 2			(SB 48-2)
	# Correct	# Correct	# Correct				# Correct

	Review 8	Review 9	Review 10	◇ Revi			Review 14
1	Obj. 48 (SB 48-3)	Obj. 4 (SB 4-1)	Obj. 6 (SB 6-2)	Obj. 4			9 (SB 9-1)
2	Obj. 48 (SB 48-3)	Obj. 2 (SB 2-3)	Obj. 6 (SB 6-2)	Obj. 2			9 (SB 9-2)
3	Obj. 4 (SB 4-1)	Obj. 6 (SB 6-2)	Obj. 5 (SB 5-2)	Obj. 6			14 (SB 14-1)
4	Obj. 4 (SB 4-1)	Obj. 6 (SB 6-2)	Obj. 4 (SB 4-2)	Obj. 2			10 (SB 10-3)
5	Obj. 2 (SB 2-3)	Obj. 2 (SB 2-4)	Obj. 7 (SB 7-1)	Obj. 5			10 (SB 10-4)
	# Correct	# Correct	# Correct				# Correct

	Review 15	Review 16	◇ Review 17 ◇	◇ R			Review 21
1	Obj. 14 (SB 14-2)	Obj. 10 (SB 10-6)	Obj. 14 (SB 14-2)	Obj. 1			Obj. 15 (SB 15-4)
2	Obj. 10 (SB 10-4)	Obj. 10 (SB 10-9)	Obj. 10 (SB 10-3)	Obj. 1			Obj. 15 (SB 15-5)
3	Obj. 10 (SB 10-5)	Obj. 10 (SB 10-10)	Obj. 10 (SB 10-5)	Obj.			Obj. 15 (SB 15-7)
4	Obj. 10 (SB 10-6)	Obj. 10 (SB 10-13)	Obj. 10 (SB 10-6)	Obj.			Obj. 15 (SB 15-8)
5	Obj. 10 (SB 10-9)	Obj. 10 (SB 10-12)	Obj. 10 (SB 10-9)	Obj.			Obj. 15 (SB 15-9)
	# Correct	# Correct	# Correct	# Correct			# Correct

	Review 22	◇ Review 23 ◇	◇ Review 24 ◇	Review 25	Review 26		Review 28
1	Obj. 15 (SB 15-9)	Obj. 15 (SB 15-4)	Obj. 15 (SB 15-11)	Obj. 15 (SB 15-15)	Obj. 16 (SB 16-1)	Obj. 10 (SB 10-14)	Obj. 10 (SB 10-14)
2	Obj. 15 (SB 15-9)	Obj. 15 (SB 15-5)	Obj. 15 (SB 15-12)	Obj. 15 (SB 15-15)	Obj. 47 (SB 47-2)	Obj. 15 (SB 15-16)	Obj. 47 (SB 47-4)
3	Obj. 15 (SB 15-11)	Obj. 15 (SB 15-7)	Obj. 15 (SB 15-15)	Obj. 16 (SB 16-1)	Obj. 47 (SB 47-3)	Obj. 47 (SB 47-4)	Obj. 15 (SB 15-18)
4	Obj. 15 (SB 15-12)	Obj. 15 (SB 15-8)	Obj. 15 (SB 15-15)	Obj. 47 (SB 47-1)	Obj. 10 (SB 10-14)	Obj. 47 (SB 47-4)	Obj. 15 (SB 15-18)
5	Obj. 15 (SB 15-15)	Obj. 15 (SB 15-9)	Obj. 15 (SB 15-15)	Obj. 47 (SB 47-3)	Obj. 10 (SB 10-14)	Obj. 15 (SB 15-18)	Obj. 15 (SB 15-18)
	# Correct	# Correct	# Correct	# Correct	# Correct	# Correct	# Correct

	◇ Review 29 ◇	◇ Review 30 ◇	Review 31	Review 32
1	Obj. 47 (SB 47-3)	Obj. 15 (SB 15-18)	Obj. 50 (SB 50-3)	Obj. 12 (SB 12-1)
2	Obj. 10 (SB 10-14)	Obj. 50 (SB 50-1)	Obj. 50 (SB 50-3)	Obj. 12 (SB 12-2)
3	Obj. 15 (SB 15-16)	Obj. 50 (SB 50-1)	Obj. 12 (SB 12-1)	Obj. 13 (SB 13-1)
4	Obj. 47 (SB 47-4)	Obj. 50 (SB 50-2)	Obj. 12 (SB 12-2)	Obj. 17 (SB 17-1)
5	Obj. 15 (SB 15-18)	Obj. 50 (SB 50-2)	Obj. 12 (SB 12-2)	Obj. 17 (SB 17-2)
	# Correct	# Correct	# Correct	# Correct

Record results of Daily Reviews by marking a "✔" next to ***missed*** questions/objectives. Write the ***total correct*** for each Daily Review in the space provided. For extra practice, use the *Skill Builders* page next to missed/checked objectives.

◇ **Denotes Checkpoint Reviews.**

Name _____

Review 2
Obj. 10 (SB 10-2)
Obj. 19 (SB 19-3)
Obj. 10 (SB 10-2)
Obj. 15 (SB 15-2)
Obj. 10 (SB 10-1)
Correct

Moving with Math® Learning System

Step 6:
Review and Reteach

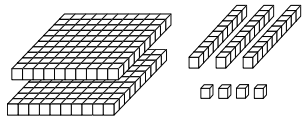
Skill Builders provide extra practice and homework.

Name _____

Place Value in a 3-Digit Number

Ten of the long blocks or tens will make a flat.
The flat square block is a model of the 100s or hundreds.

Here is a model of the number 234.

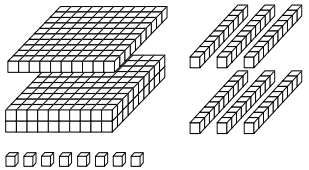


The names of the first three places are shown on this place value mat. Notice that the value of any digit depends upon its place on this mat.

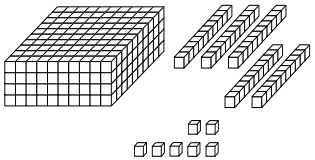
hundreds	tens	ones
2	3	4

Write the number that matches each model.

1. _____



2. _____



3. 235

Which digit is in the ones place? _____
Which digit is in the tens place? _____
Which digit is in the hundreds place? _____

4. 538

Which digit is in the ones place? _____
The tens place? _____
The hundreds place? _____

5. 307

Which digit is in the ones place? _____
The tens place? _____
The hundreds place? _____

6. 952

Which digit is in the tens place? _____
The ones place? _____
The hundreds place? _____

7. 600

Which digit is in the ones place? _____
The tens place? _____
The hundreds place? _____

8. 349

Which digit is in the hundreds place? _____
The ones place? _____
The tens place? _____

Moving with Math® Learning System

Step 7:
Reassess with Post-Test

Name _____ Score _____
(50 possible)

Number Sense, Addition, Subtraction Post-Test

1. Which digit is in the hundreds place?

_____ (Obj. 1)

7 2 4

A 7
B 0
C 2
D 4

2. What is the standard numeral for 400 + 60 + 9?

_____ (Obj. 1)

A 400,609
B 40,609
C 4069
D 469

3. Which number is greatest?

_____ (Obj. 2)

A 3462
B 3612
C 4321
D 4312

4. Which grade has the most students?

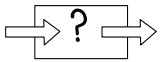
_____ (Obj. 2)

Grade	Number of Students
2	681
3	727
4	679
5	743

A Grade 2
B Grade 3
C Grade 4
D Grade 5

5. A number machine makes numbers in a pattern.What number will come next?

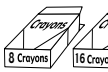
_____ (Obj. 3)



4, 8, 12, _____

A 13
B 14
C 15
D 16

6. An even numb
to be packed
box is not pa



A **B** **C** **D**

Record Post-Test Results on Class Record Sheet and Student Progress Report

Moving with Math® Learning System

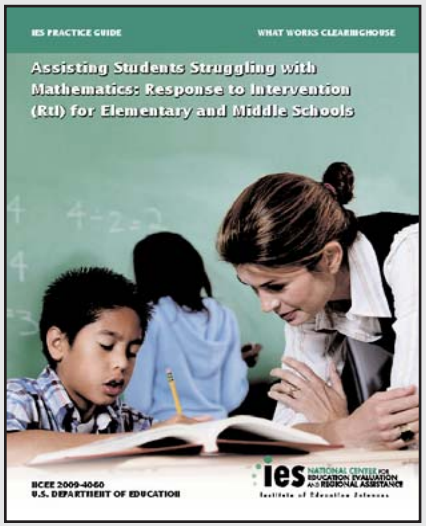
Curriculum Alignment

A system of assessment and instruction where everything is tied to objectives and standards..with proven results!

Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide

Assisting Students Struggling with Mathematics: Response to Intervention (RtI) for Elementary and Middle School



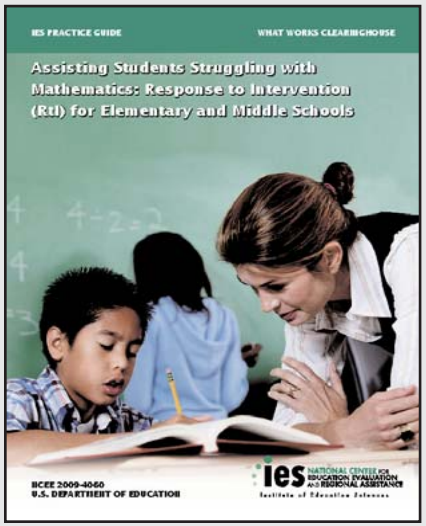
MOVING with MATH LEARNING SYSTEM

Summary of Best Practices

- Screen all students to identify those at risk
- In-depth instruction of whole numbers through grade 5 and rational numbers in grades 4-8
- Explicit and systematic instruction
- Instruction on solving word problems
- Physical and visual representations of mathematical ideas
- Building fluent retrieval of basic facts
- Progress monitoring
- Motivational strategies

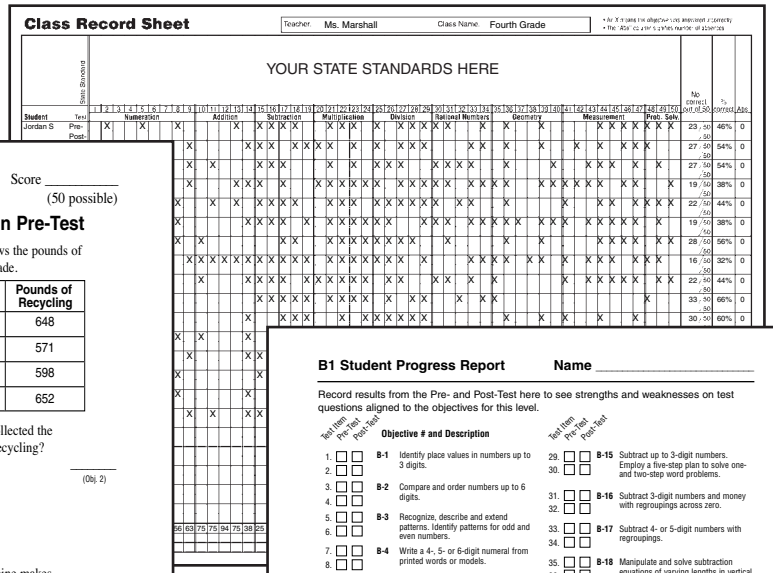
Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide



MOVING with MATH LEARNING SYSTEM

1. Screen All Students to Identify Those at Risk



Name _____ Score _____ (50 possible)

Number Sense, Addition, Subtraction Pre-Test

1. Which digit is in the hundreds place?

6 5 3

(Obj. 1)

A 6
B 0
C 5
D 3

2. Which number is the standard numeral for 300 + 20 + 7?

(Obj. 1)

A 300,207
B 40,609
C 3027
D 327

3. Which number is the greatest?

(Obj. 2)

A 5412
B 6421
C 6412
D 5642

4. This graph shows the pounds of recycling by grade.

Grade	Pounds of Recycling
2	648
3	571
4	598
5	652

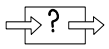
Which grade collected the most cans for recycling?

(Obj. 2)

A Grade 2
B Grade 3
C Grade 4
D Grade 5

5. A number machine makes numbers in a pattern. What number will come next?

(Obj. 3)

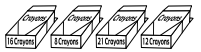


3, 6, 9, ____

A 10
B 11
C 12
D 13

6. An even number of crayons is to be packed in each box. Which box is not packed correctly?

(Obj. 3)



A **B** **C** **D**

B1 Student Progress Report **Name** _____

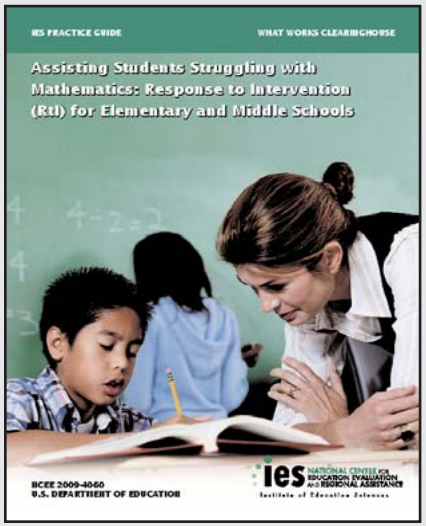
Record results from the Pre- and Post-Test here to see strengths and weaknesses on test questions aligned to the objectives for this level.

Test Item Pre-Test	Test Item Post-Test	Objective #	Description
1. ☐	2. ☐	B-1	Identify place values in numbers up to 3 digits.
3. ☐	4. ☐	B-2	Compare and order numbers up to 6 digits.
5. ☐	6. ☐	B-3	Recognize, describe and extend patterns. Identify patterns for odd and even numbers.
7. ☐	8. ☐	B-4	Write a 4-, 5- or 6-digit numeral from printed words or models.
9. ☐	10. ☐	B-5	Write the words for any numeral up to 6 (or 9) digits.
11. ☐	12. ☐	B-6	Identify place values in a 4, 5- or 6-digit number.
13. ☐	14. ☐	B-7	Round a 2-, 3- or 4-digit number to the nearest ten.
15. ☐	16. ☐	B-8	Round a 3- or 4-digit number to the nearest hundred.
17. ☐	18. ☐	B-9	Determine from the commutative (order) or associative (grouping) property a missing number in an addition equation.
19. ☐	20. ☐	B-10	Add up to 3-digit numbers. Employ a five-step plan to solve word problems involving addition.
21. ☐	22. ☐	B-11	Add three or four 2- or 3-digit numbers with regrouping.
23. ☐	24. ☐	B-12	Add 4- to 6-digit numbers with regrouping.
25. ☐	26. ☐	B-13	Manipulate and solve addition equations of varying lengths in vertical and horizontal formats.
27. ☐	28. ☐	B-14	Recognize addition vocabulary, including "sum" and the "+" sign. Explore mathematical expressions and open number sentences that use variables.
29. ☐	30. ☐	B-15	Subtract up to 3-digit numbers. Employ a five-step plan to solve one- and two-step word problems.
31. ☐	32. ☐	B-16	Subtract 3-digit numbers and money with regroupings across zero.
33. ☐	34. ☐	B-17	Subtract 4- or 5-digit numbers with regroupings.
35. ☐	36. ☐	B-18	Manipulate and solve subtraction equations of varying lengths in vertical and horizontal formats.
37. ☐	38. ☐	B-19	Recognize subtraction vocabulary, including "difference" and the "-" sign. Explore mathematical expressions and open number sentences that use variables.
39. ☐	40. ☐	B-47	Explore the concept of decimals, and solve problems with decimals and money. Round money to the nearest dollar or nearest 10 cents.
41. ☐	42. ☐	B-48	Graph points and identify coordinates of points shown on a coordinate grid.
43. ☐	44. ☐	B-10	Add up to 3-digit numbers. Employ a five-step plan to solve word problems involving addition.
45. ☐	46. ☐	B-15	Subtract up to 3-digit numbers. Employ a five-step plan to solve one- and two-step word problems.
47. ☐	48. ☐	B-50	Plan, organize, display and interpret data in various graphical forms.
49. ☐	50. ☐	B-47	Explore the concept of decimals, and solve problems with decimals and money. Round money to the nearest dollar or nearest 10 cents.
		B-50	Plan, organize, display and interpret data in various graphical forms.

☐☐ Total **Correct** (out of **40** items)

Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide

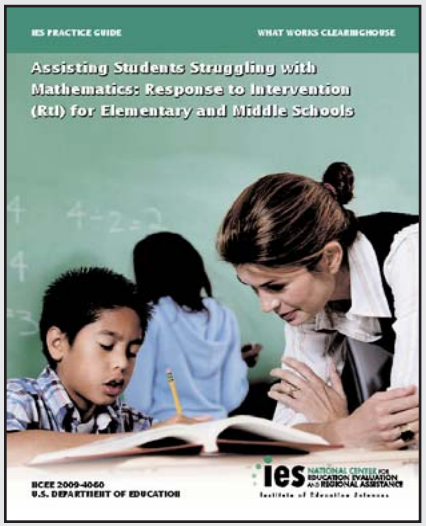


MOVING with MATH LEARNING SYSTEM

2. In-Depth Instruction of Whole Numbers through Grade 5 and Rational Numbers in Grades 4–8

Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide



MOVING with MATH LEARNING SYSTEM

3. Explicit and Systematic Instruction

Objective:
To explore and name base ten blocks. To match the blocks with their place value names.

Materials:
Base ten blocks, Place Value Mats (Masters 1 and 2)

Note: Before class, make copies of Master 20 (Vocabulary Cards). Make copies of Master 21 (My Math Glossary) and distribute to each student.

Vocabulary:
different, place value names, same

Read to Me *One Hundred Is a Family,* Ryan, Pam Munoz (Activity 2)

Introductory Activities

Introducing Base Ten Blocks

The main reason students make errors with whole number algorithms is that they do not understand multi-digit numeration. They do not know that 43 means 4 tens and 3 ones or 40 + 3.

Base ten blocks are ideal for teaching numeration concepts because students can see the abstract concept of place value each time they pick up a block. One tens block is always seen both as 1 ten and 10 ones.

Each pair or small group should have 20 ones blocks, 10 tens blocks, 10 hundreds blocks, and a place value mat.

Explain the benefits and proper use of manipulatives. Set ground rules for using them and discuss take-out and clean-up routines.

We are going to begin using base ten blocks. See what you can discover about your blocks. Allow exploratory time. Students might make buildings, roads and parking ramps.

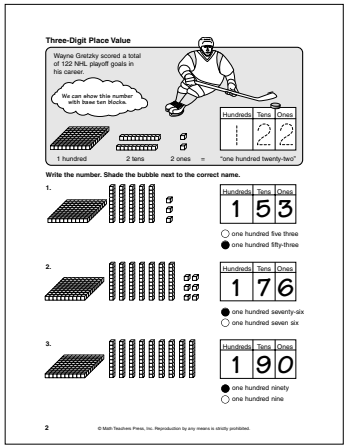
Encourage students to look for patterns. **We can find important patterns if we ask ourselves how these blocks are the *same,* or alike, and how they are *different*, or not alike.**

Write 2 columns on the board:

How are the blocks the same?
How are the blocks different?

What is one way the blocks are the same? (e.g., same material) After a period of time, ask students to share.

Same	Different
made of wood	sizes
natural color	shapes
points & corners	volumes
solids	weight
made of 1 cm cubes	
10 of 1 block = 1 of the next larger block	



How many different sizes do you have? (3) **Put 1 of each size in front of you. We call the smallest block the "ones" or "units" block. How many ones does it take to make the next-sized block?** (10) **We name this block the "tens" or "long" block.**

How many of the ones blocks are the same as the largest block? (100) **We name this block the "hundreds" or "flat" block.**

The words "ones," "tens," and "hundreds" are *place value names*.

Display 1 hundred, 2 tens, 5 ones. Place the blocks correctly on a Place Value Mat. Then say the words for the blocks, **one hundred twenty-five.**

About This Page

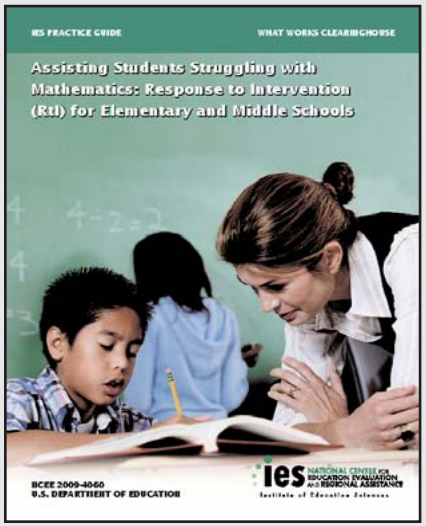
Work through the example together. **Look at problem 1. What blocks are shown?** (1 hundred, 5 tens, 3 ones) **Write the number in the correct place on the chart.** (153)

To say this number aloud, touch the biggest block and say its value. (100) **Now touch the next biggest blocks and say their value.** (50) **Then touch the smallest blocks and say their value**. (3) **Now say the number together as you touch the blocks.** (one hundred fifty-three)

Have students complete problems 2 and 3 on their own or with a partner.

Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide



MOVING with MATH LEARNING SYSTEM

4. Instruction on Solving Word Problems

Objective:
To solve word problems using the clue word "in all."

Materials:
Five Steps in Problem Solving (from Master 13), chart paper or tagboard

Vocabulary:
variable

Introductory Activities

Problem Solving Steps

During this activity, the teacher may start a chart of problem-solving steps for the class if desired. Students may also be given a copy of Master 13 as a reference.

Write on the board:

Wayne has 36 baseball cards. Terry has 48 baseball cards. How many cards do they have in all?

We are going to list the steps you use to solve word problems. What is the first thing you must do? (Read the problem.) **You must read the problem and be sure you understand it. A good way to understand a problem is to retell the problem in your own words.** Ask a volunteer to read the story aloud. Then have students take turns retelling the story to a partner.

Write on the chart:

1. Read and understand.

What is the next thing you must do? (Find the question. Find the facts.)

Write on the chart:

2. Find the question and needed facts.

Ask a student to identify and underline the question and identify and circle the needed facts.

Wayne has (36 baseball cards.) Terry has (48 baseball cards.) How many cards do they have in all?

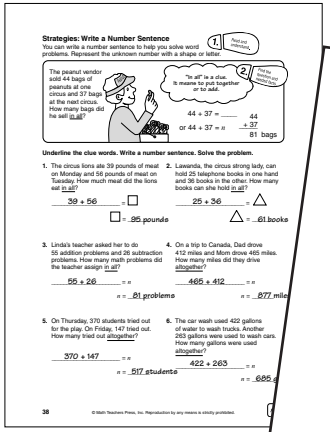
Is each circled fact related to the question? (yes) **If you find a fact that is not related, cross it out.**

What is this problem about, putting things together or taking things apart? (putting things together) Help students write a number sentence for their problem.

$36 + 48 = \square$

We can use a variable to represent our unknown number. A *variable* is a symbol such as a box or letter used to stand for a number. Have students solve for the unknown number.

Repeat the activity with a second real-world problem if needed.



Strategies: Write a Number Sentence

Underline the clue words. Write a number sentence. Solve the problem.

About This Page

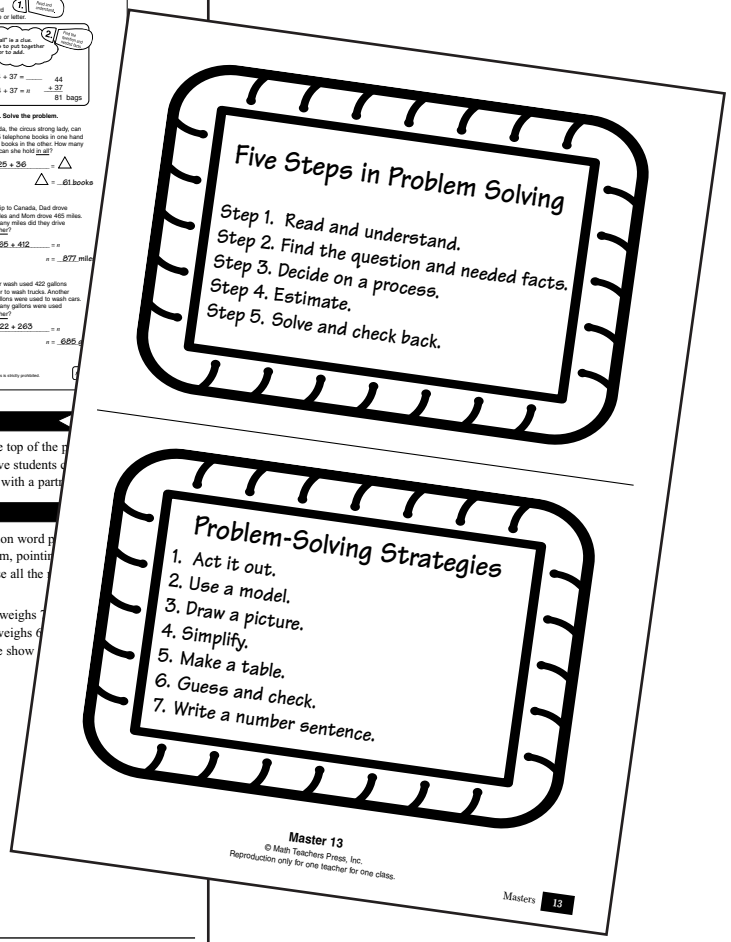
Together, read the example at the top of the p
Discuss the clue words "in all." Have students
the rest of the page on their own or with a part

Follow Up Activities

Give students examples of addition word p
having too much information in them, pointi
that sometimes you don't need to use all the
in a problem.

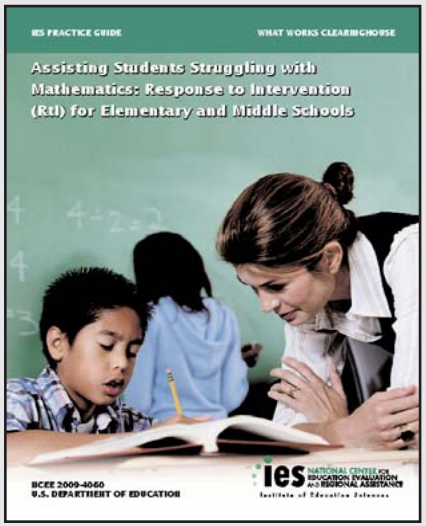
Example: Jane is 10 years old and weighs
Alex is 9 years old and weighs
How much would a scale show
stood on it together?

Skill Builders 10-13



Meeting Your Needs for RTI

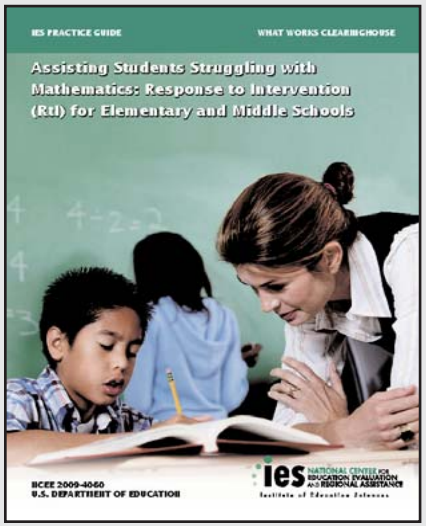
What Works Clearinghouse Practice Guide



5. Physical and Visual Representations of Mathematical Ideas

Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide



MOVING with MATH LEARNING SYSTEM

6. Building Fluent Retrieval of Basic Facts

Subtraction Facts

100 Basic Subtraction Facts

7 − 1	13 − 6	9 − 4	16 − 7	6 − 6	12 − 4	7 − 7	4 − 1
11 − 7	6 − 0	8 − 4	4 − 3	10 − 6	16 − 9	7 − 6	6 − 5
6 − 3	14 − 9	9 − 9	7 − 2	17 − 8	2 − 1	4 − 2	14 − 5
6 − 2	15 − 7	3 − 2	8 − 5	15 − 8	7 − 5	8 − 1	13 − 8
12 − 8	10 − 9	10 − 4	10 − 1	12 − 5	3 − 2	10 − 5	16 − 8
9 − 6	1 − 0	0 − 0	9 − 1	15 − 9	11 − 8	13 − 5	11 − 6
5 − 3	8 − 0	13 − 7	4 − 4	7 − 0	2 − 0	8 − 7	3 − 0
8 − 6	12 − 7	10 − 3	14 − 6	12 − 6	9 − 0	9 − 7	5 − 4
4 − 0	17 − 9	7 − 3	12 − 3	13 − 9	3 − 3	15 − 6	6 − 4
11 − 4	8 − 3	18 − 9	11 − 3	11 − 9	13 − 4	9 − 2	3 − 1

Master 17

Addition Facts

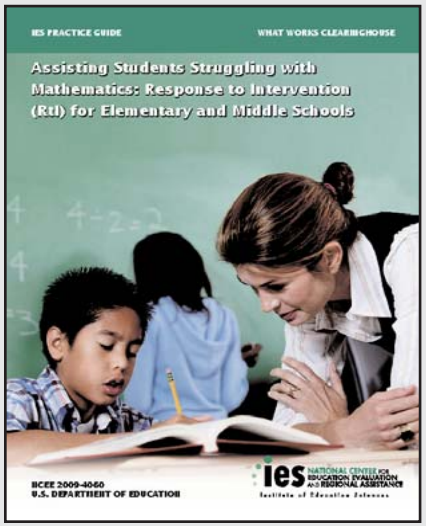
100 Basic Addition Facts Score_____

5 + 3	8 + 1	2 + 5	9 + 6	7 + 9	1 + 2	6 + 7	3 + 0	4 + 4	0 + 8
1 + 7	7 + 6	4 + 3	5 + 8	8 + 2	6 + 4	0 + 5	9 + 9	2 + 0	3 + 1
0 + 2	2 + 9	7 + 7	9 + 3	4 + 0	3 + 5	6 + 8	5 + 6	1 + 1	8 + 4
4 + 8	8 + 7	6 + 9	7 + 0	9 + 5	5 + 1	0 + 4	1 + 3	3 + 6	2 + 2
7 + 4	3 + 3	2 + 1	8 + 9	6 + 0	9 + 8	1 + 6	4 + 5	0 + 7	5 + 2
6 + 1	2 + 4	0 + 6	3 + 2	7 + 3	9 + 7	5 + 0	8 + 8	4 + 9	1 + 5
5 + 4	7 + 2	6 + 5	1 + 9	0 + 1	8 + 3	2 + 8	3 + 7	9 + 0	4 + 6
8 + 6	3 + 9	9 + 4	6 + 2	5 + 5	1 + 0	0 + 3	1 + 1	7 + 8	2 + 7
0 + 0	8 + 5	1 + 8	6 + 6	2 + 3	4 + 7	7 + 1	9 + 2	3 + 4	5 + 9
7 + 5	3 + 8	4 + 2	8 + 0	2 + 6	0 + 9	9 + 1	6 + 3	5 + 7	1 + 4

Master 15

Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide



MOVING with MATH LEARNING SYSTEM

7. Progress Monitoring

Name _____

Daily Review

1. Which digit is in the tens place?

76

_____ (Obj. 1)

Name _____

Daily Review

1. 9 + 4 ; 7 + 9

___, ___ (Obj. 10)

2. What

3. 7 + 2

4. 10 − 2

5. Pedro
How m

28 Assessment

© Math

B1 Daily Reviews Record the results from your Daily Reviews here. The label "Obj." shows which objective that problem covered.

	Review 1		Review 2		Review 3		Review 4		◇B◇ Review 5 ◇B◇		◇B◇ Review 6 ◇B◇		Review 7	
1	Obj. 1	(SB 1-3)	Obj. 10	(SB 10-2)	Obj. 1	(SB 1-1)	Obj. 1	(SB 1-1)	Obj. 1	(SB 1-1)	Obj. 2	(SB 2-2)	Obj. 3	(SB 3-1)
2	Obj. 1	(SB 1-3)	Obj. 19	(SB 19-3)	Obj. 1	(SB 1-1)	Obj. 1	(SB 1-2)	Obj. 1	(SB 1-1)	Obj. 2	(SB 2-2)	Obj. 3	(SB 3-2)
3	Obj. 10	(SB 10-1)	Obj. 10	(SB 10-2)	Obj. 1	(SB 1-1)	Obj. 2	(SB 2-1)	Obj. 1	(SB 1-2)	Obj. 3	(SB 3-1)	Obj. 3	(SB 3-2)
4	Obj. 15	(SB 15-1)	Obj. 15	(SB 15-2)	Obj. 1	(SB 1-2)	Obj. 2	(SB 2-2)	Obj. 1	(SB 1-1)	Obj. 3	(SB 3-2)	Obj. 48	(SB 48-2)
5	Obj. 15	(SB 15-1)	Obj. 10	(SB 10-1)	Obj. 1	(SB 1-2)	Obj. 2	(SB 2-2)	Obj. 2	(SB 2-1)	Obj. 3	(SB 3-2)	Obj. 48	(SB 48-2)
	# Correct		# Correct		# Correct		# Correct		# Correct		# Correct		# Correct	
	Review 8		Review 9		Review 10		◇B◇ Review 11 ◇B◇		◇B◇ Review 12 ◇B◇		Review 13		Review 14	
1	Obj. 48	(SB 48-3)	Obj. 4	(SB 4-1)	Obj. 6	(SB 6-2)	Obj. 4	(SB 4-1)	Obj. 5	(SB 5-2)	Obj. 7	(SB 7-1)	Obj. 9	(SB 9-1)
2	Obj. 48	(SB 48-3)	Obj. 2	(SB 2-3)	Obj. 6	(SB 6-2)	Obj. 2	(SB 2-3)	Obj. 4	(SB 4-2)	Obj. 8	(SB 8-2)	Obj. 9	(SB 9-2)
3	Obj. 4	(SB 4-1)	Obj. 6	(SB 6-2)	Obj. 5	(SB 5-2)	Obj. 6	(SB 6-1)	Obj. 7	(SB 7-1)	Obj. 8	(SB 8-3)	Obj. 14	(SB 14-1)
4	Obj. 4	(SB 4-1)	Obj. 6	(SB 6-2)	Obj. 4	(SB 4-2)	Obj. 2	(SB 2-4)	Obj. 8	(SB 8-2)	Obj. 9	(SB 9-1)	Obj. 10	(SB 10-3)
5	Obj. 2	(SB 2-3)	Obj. 2	(SB 2-4)	Obj. 7	(SB 7-1)	Obj. 5	(SB 5-2)	Obj. 8	(SB 8-1)	Obj. 9	(SB 9-2)	Obj. 10	(SB 10-4)
	# Correct		# Correct		# Correct		# Correct		# Correct		# Correct		# Correct	
	Review 15		Review 16		◇B◇ Review 17 ◇B◇		◇B◇ Review 18 ◇B◇		Review 19		Review 20		Review 21	
1	Obj. 14	(SB 14-2)	Obj. 10	(SB 10-6)	Obj. 14	(SB 14-2)	Obj. 10	(SB 10-10)	Obj. 15	(SB 15-15)	Obj. 19	(SB 19-2)	Obj. 15	(SB 15-4)
2	Obj. 10	(SB 10-4)	Obj. 10	(SB 10-9)	Obj. 10	(SB 10-3)	Obj. 10	(SB 10-11)	Obj. 11	(SB 11-1)	Obj. 15	(SB 15-3)	Obj. 15	(SB 15-5)
3	Obj. 10	(SB 10-5)	Obj. 10	(SB 10-10)	Obj. 10	(SB 10-5)	Obj. 10	(SB 10-12)	Obj. 19	(SB 19-1)	Obj. 15	(SB 15-4)	Obj. 15	(SB 15-7)
4	Obj. 10	(SB 10-6)	Obj. 10	(SB 10-13)	Obj. 10	(SB 10-6)	Obj. 15	(SB 15-15)	Obj. 15	(SB 15-3)	Obj. 15	(SB 15-5)	Obj. 15	(SB 15-8)
5	Obj. 10	(SB 10-9)	Obj. 10	(SB 10-12)	Obj. 10	(SB 10-9)	Obj. 11	(SB 11-1)	Obj. 15	(SB 15-3)	Obj. 15	(SB 15-6)	Obj. 15	(SB 15-9)
	# Correct		# Correct		# Correct		# Correct		# Correct		# Correct		# Correct	
	Review 22		◇B◇ Review 23 ◇B◇		◇B◇ Review 24 ◇B◇		Review 25		Review 26		Review 27		Review 28	
1	Obj. 15	(SB 15-9)	Obj. 15	(SB 15-4)	Obj. 15	(SB 15-11)	Obj. 15	(SB 15-15)	Obj. 16	(SB 16-1)	Obj. 10	(SB 10-14)	Obj. 10	(SB 10-14)
2	Obj. 15	(SB 15-9)	Obj. 15	(SB 15-5)	Obj. 15	(SB 15-12)	Obj. 15	(SB 15-15)	Obj. 47	(SB 47-2)	Obj. 15	(SB 15-16)	Obj. 47	(SB 47-4)
3	Obj. 15	(SB 15-11)	Obj. 15	(SB 15-7)	Obj. 15	(SB 15-15)	Obj. 16	(SB 16-1)	Obj. 47	(SB 47-3)	Obj. 47	(SB 47-4)	Obj. 15	(SB 15-18)
4	Obj. 15	(SB 15-12)	Obj. 15	(SB 15-8)	Obj. 15	(SB 15-15)	Obj. 47	(SB 47-1)	Obj. 10	(SB 10-14)	Obj. 47	(SB 47-4)	Obj. 15	(SB 15-18)
5	Obj. 15	(SB 15-15)	Obj. 15	(SB 15-9)	Obj. 15	(SB 15-15)	Obj. 47	(SB 47-3)	Obj. 10	(SB 10-14)	Obj. 15	(SB 15-18)	Obj. 15	(SB 15-18)
	# Correct		# Correct		# Correct		# Correct		# Correct		# Correct		# Correct	
	◇B◇ Review 29 ◇B◇		◇B◇ Review 30 ◇B◇		Review 31		Review 32							
1	Obj. 47	(SB 47-3)	Obj. 15	(SB 15-18)	Obj. 50	(SB 50-3)	Obj. 12	(SB 12-1)						
2	Obj. 10	(SB 10-14)	Obj. 50	(SB 50-1)	Obj. 50	(SB 50-3)	Obj. 12	(SB 12-2)						
3	Obj. 15	(SB 15-16)	Obj. 50	(SB 50-1)	Obj. 12	(SB 12-1)	Obj. 13	(SB 13-1)						
4	Obj. 47	(SB 47-4)	Obj. 50	(SB 50-2)	Obj. 12	(SB 12-2)	Obj. 17	(SB 17-1)						
5	Obj. 15	(SB 15-18)	Obj. 50	(SB 50-2)	Obj. 12	(SB 12-2)	Obj. 17	(SB 17-2)						
	# Correct		# Correct		# Correct		# Correct							

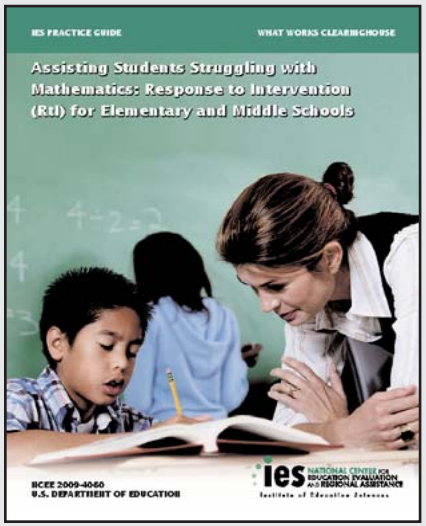
Record results of Daily Reviews by marking a "✔" next to ***missed*** questions/objectives. Write the ***total correct*** for each Daily Review in the space provided. For extra practice, use the *Skill Builders* page next to missed/checked objectives.

◇B◇ **Denotes Checkpoint Reviews.**

Name _____

Meeting Your Needs for RTI

What Works Clearinghouse Practice Guide



MOVING with MATH LEARNING SYSTEM

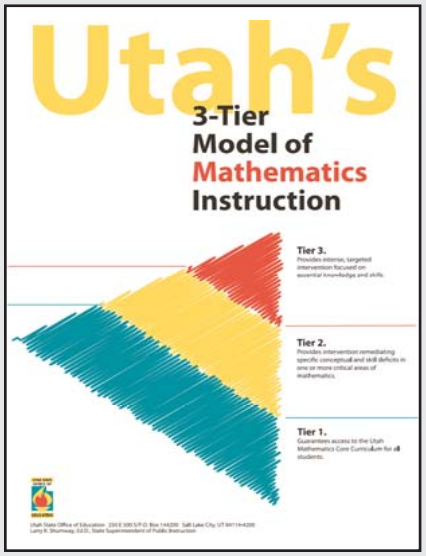
8. Motivational Strategies

Lesson Plans are guided to provide successful, engaging, and educational experiences

Meeting Your Needs for RTI

Utah's 3-Tier Model of Mathematics Instruction

Page 9



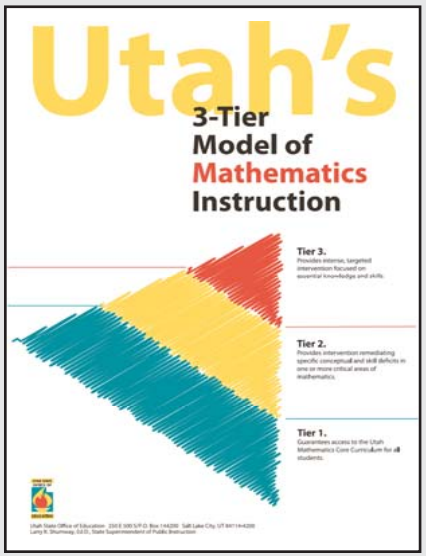
Tier 1 Essential Elements of Instruction

- Differentiated instruction for conceptual development, skill acquisition, and application, including reteaching, and/or additional practice
- Guided practice
- Use of physical, visual, and abstract representations
- Manipulatives as instructional tools

Meeting Your Needs for RTI

Utah's 3-Tier Model of Mathematics Instruction

Page 10



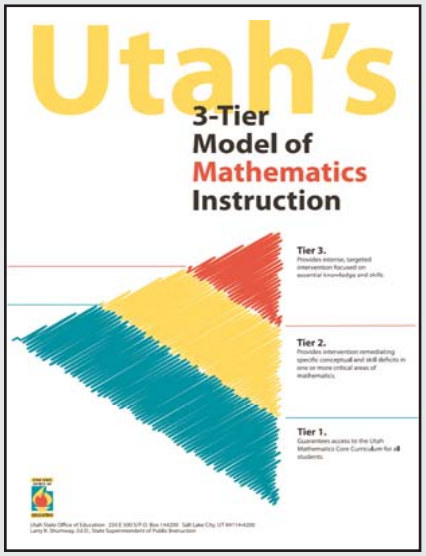
Tier 2 Essential Elements of Instruction

- Targeted, systematic, explicit instruction
- Differentiated instruction in small groups
- Explicit connections between physical, visual, and abstract representations
- Additional conceptual development of core mathematics ideas and skills
- Guided practice to develop skills for independent practice
- Manipulatives for instruction and individual skill practice

Meeting Your Needs for RTI

Utah's 3-Tier Model of Mathematics Instruction

Page 11



Tier3 Essential Elements of Instruction

- Explicit, intense, targeted instruction on specific conceptual components for individuals or small groups
- Use of manipulatives for accommodations, conceptual development, and individualized skill practice
- Guided practice to develop specific skills and strategies
- Instructional methods that explicitly link concepts and skills with physical, visual, and abstract representations

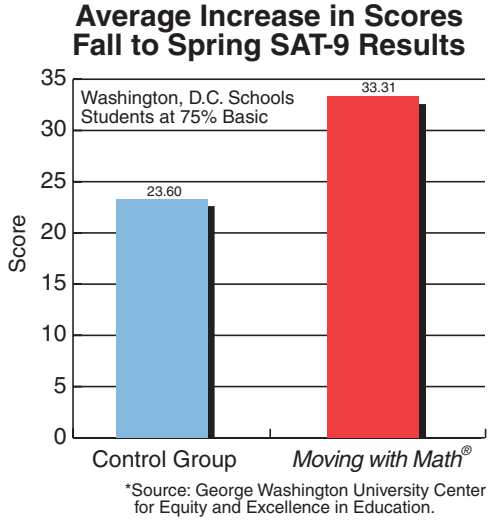
Research Based Strategies and Results

Research-Based Strategies for Special Education and ELL

- Include assessment tools to correctly place all learners
- Use manipulatives, pictures, and charts
- Implement scaffolding and front loading
- Introduce new vocabulary words at the beginning of the lesson and develop a glossary
- Use a consistent five-step problem solving plan and strategies
- Encourage peer communication and practice playing games
- Integrate oral and written communication between teacher and students

Research Based Strategies and Results

Scientifically Based Research Proves Student Gains



GWU Study Results

An independent study done by George Washington University found that over 11,000 students in Washington D.C. made statistically significant achievement gains on the SAT-9 compared to a control group in only 30 lessons.

Basic and **Below Basic** students made the greatest gains!

The RTI Solution for Utah's School Districts

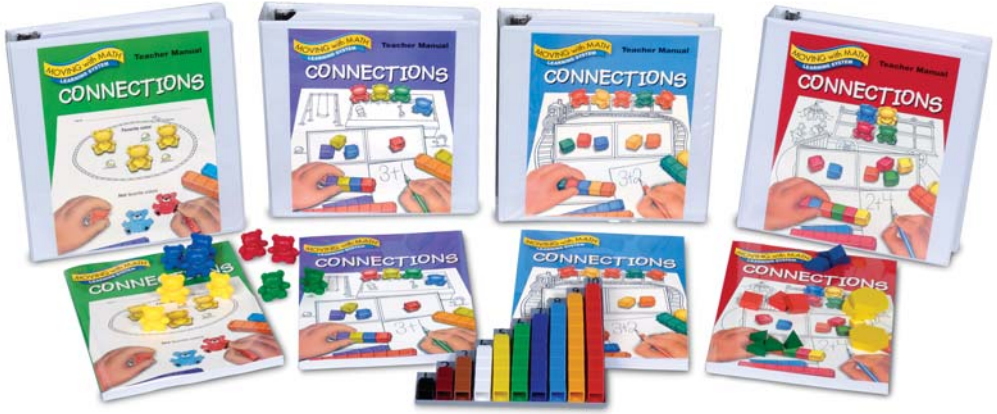
Moving with Math® for Utah's School Districts

The Solution

PRE-KINDERGARTEN through GRADE 2

Connections

Pre-Kindergarten through Grade 2



- Cross-curricular approach
- Connections to literacy
- Language acquisition
- Available in Spanish

The Solution

GRADES 1–4

MOVING with MATH LEARNING SYSTEM

Foundations by Topic

Grades 1 through 4

Level A
(Grades 1 and 2)

Level B
(Grades 3 and 4)

- Comprehensive or targeted intervention
- Connections to literacy
- Spanish/ELL Components

The Solution

GRADES 5–8

Math by Topic IM
Grades 5 through 8

- Comprehensive or targeted intervention
- Algebra readiness
- Web-based assessment technology available

The Solution

GRADES 1–8

MOVING with MATH® LEARNING SYSTEM

Math by Topic
Grades 1 through 8

- Comprehensive or targeted intervention
- Reading comprehension level is two grade levels below the math level–great for Tier 3!
- Web-based assessment technology available

The Solution

GRADES K–8

Condensed Intervention and/or Summer School

MOVING with MATH LEARNING SYSTEM

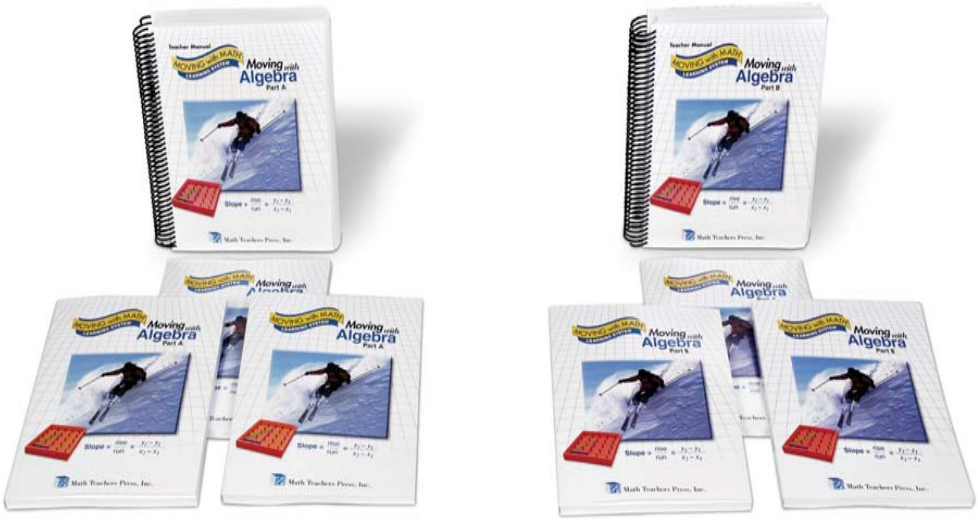
Extensions
Grades K through 8

- Condensed math intervention by grade level
- 20 lessons per grade level
- Web-based assessment available

The Solution

GRADES 7+

Moving with Algebra
Grades 7 or above



- Pre-algebra/core program
- Double dose/second math class
- Algebra readiness

The Solution

GRADES 9+

SUMS (Success Using Math Standards)

Grades 9 or above

- Core program
- Double dose/second math class
- Exit exam preparation
- Individualized study program
- Web-based assessment available

The Solution

PROFESSIONAL DEVELOPMENT

Professional Development
Implementation Workshop

- Organization of materials
- How to use assessment data to drive instruction
- What to expect the first two days of class
- RTI strategies and best practices

Contact Me for a Free Webinar

Kelsey Arneson

karneson@movingwithmath.com

P: 800-852-2435

"What you have been obliged to discover by yourself leaves a path in your mind which you can use again when the need arises."
-G.C. Lichtenberg