

“Climbing Our Way to Higher Scores with Mountain Math”

~ A Returning Developer ~



For further information contact...

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2008 - 2009 IDEA CATALOG OF EXCELLENCE

PROGRAM OVERVIEW

Mountain Math is a way to review commonly used, but often forgotten, math skills on a daily basis. **Mountain Math** is presented to students using a bulletin board or pocket chart. Students are presented with 24 problem cards on the bulletin board. There is a supplied worksheet that accompanies the program. The worksheet questions never change only the numbers used on the board change. Everyday the students work on the assigned problems for the day. Each day my students work on five problems. I check them against my answer key. If the answers are incorrect we fix them together.

I use **Mountain Math** as a morning warm up when the students enter the room. It takes approximately ten minutes for the students to complete. I check the answers quickly during the first three minutes of math. Students are continuously reviewing place value, rounding, multiplication, division, fact families, perimeter, measurement, geometry, money, adding and subtracting.

OVERALL VALUE

Mountain Math has been a great asset to my classroom this year. It is a program that takes little time, but has a great impact on my students in mathematics. It allows me to review with the students on a daily basis without standing in front of the class or handing out one more worksheet. The board is bright, colorful and my students love it! They are eager to do **Mountain Math** in the mornings when they enter.

The kit comes with all the math cards ready for you to cut out on brightly colored cardstock paper. All you have to do is set up the pocket chart, place the cards in and begin! It is a flexible program that allows the teacher to adapt to his/her student's needs in math!

LESSON PLAN TITLES

- Let's Start the Climb!
- Reaching the Summit!

MATERIALS

- Pocket Chart or Bulletin Board
- Mountain Math Kit (Grade Level Specific) with provided worksheets

ABOUT THE DEVELOPER

Laura Sherley has a B.A. in Elementary Education from the University of Florida. She is currently pursuing her master's degree in Educational Leadership at The University of South Florida. She enjoyed teaching third grade for three years and is currently teaching fourth grade at Lake Country Elementary.

She loves spending time with her husband and daughter.



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Lesson Plan No 1 (Day 1-Day 5): Let's Start the Climb with #1-12



■ **SUBJECTS COVERED**

Mathematics

■ **GRADES**

Third (purchase the kit that applies to your grade level)

■ **OBJECTIVES**

- ✓ The students will practice mathematics skills as a review on a daily basis.

■ **SUNSHINE STATE STANDARDS**

MA.A.1.2: different way numbers are written and used in the real world.

MA.A.3.2: the effects of operations on numbers and the relationship among these operations, selects appropriate operations and computes for problem solving.

MA. A. 4.2: uses estimation in real world problem solving and computation.

MA.A.2.2: understands the number system.

MA.B.1.2: measures quantities.

MA.B.4.2: selects and uses appropriate units and instruments for measurement.

MA.C.1.2: describes, draws, analyzes and identifies two and three-dimensional figures.

MA.C.2.2: visualizes and illustrates way in which shapes can be divided, combined and changed.

MA.D.1.2: describes, analyzes and generates a wide variety of patterns, relations and functions.

■ **MATERIALS**

- Mount Math Student Worksheet
- Mountain Math Problem Cards

■ **DIRECTIONS**

Time Required to Complete

Lesson Day 1

10 minutes for students to work

3+ minutes to assess their work

Procedures

Students will need to complete problems 1-5 (Day 1), 6-10 (Day 2), 10-15 (Day 3), 16-20 (Day 4) and 20-24 (Day 5) on the Mountain Math Board for morning work. During the first three minutes of the math block, check their answers and circle the incorrect ones for them to fix the next morning.

Each day the students complete 5 problems until they finish on Friday.

■ **EVALUATION/ ASSESSMENT (FORMATIVE)**

On Friday, after all problems have been completed, students turn in their work to assure the corrections were made.



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Lesson Plan No 2: Reaching the Summit!



■ **SUBJECTS COVERED**

Mathematics

■ **GRADES**

Kindergarten - Six (purchase the kit that applies to your grade level)

■ **OBJECTIVES**

- ✓ The students will practice mathematics skills as a review on a daily basis.

■ **SUNSHINE STATE STANDARDS**

MA.A.1.2: different way numbers are written and used in the real world.

MA.A.3.2: the effects of operations on numbers and the relationship among these operations, selects appropriate operations and computes for problem solving.

MA. A. 4.2: uses estimation in real world problem solving and computation.

MA.A.2.2: understands the number system.

MA.B.1.2: measures quantities.

MA.B.4.2: selects and uses appropriate units and instruments for measurement.

MA.C.1.2: describes, draws, analyzes and identifies two and three-dimensional figures.

MA.C.2.2: visualizes and illustrates way in which shapes can be divided, combined and changed.

MA.D.1.2: describes, analyzes and generates a wide variety of patterns, relations and functions.

■ **MATERIALS**

- Mount Math Student Worksheet
- Mountain Math Problem Cards

■ **DIRECTIONS**

Time Required to Complete

25 minutes to complete
assessment #1-24

Procedures

Each student will complete Mountain Math numbers 1-24 as a summative assessment. This will allow the teacher to see if students understand the concepts presented to them through Mountain Math.



Extensions Activities

Each number in the Mountain Math program corresponds to a concept taught in Mathematics. Here are a few helpful hints I have found when teaching certain concepts:

Rounding

Rounding Rap (see attached)

Multiplication

We use a program called Rhymes and Times! It corresponds multiplication facts with rhyming poems. The children really love it and it works great!

Estimation

Rounding Rap (see attached)

Elapsed Time

Students have a clock they are allowed to work with at each table.

The Website also allows the consumer to purchase Extension Areas. I use these areas for my enrichment children. The content is more difficult then the initial Mt. Math. The areas focus on specific mathematics skills.

I also allow the students to become the teachers and do problems on the board. They amaze me at how they approach problem solving!



Rounding Rap

Find the place and circle the digit.
Move to the right and underline get it!
0 to 4 the circle stays the same.
5 or more adds one to the game.
Now flex your muscles, you're a hero,
All the numbers to the right change
to zero.

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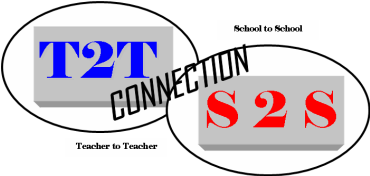
Lesson Plans Materials Budget



Materials Budget

SUPPLIER	ITEM DESCRIPTION	COST	QUANTITY	TOTAL COST
www.mtmath.com	Mt. Math Kit	\$75.95	1	\$75.95
	Mt. Math Vinyl Mount	\$20.00	1	\$20.00
	Extension - Area	\$5.00	1	\$5.00
	Extension - Congruent Shapes	\$5.00	1	\$5.00
	Extension - Expressions	\$5.00	1	\$5.00
	Extension - Convex, Concave	\$5.00	1	\$5.00
	Extension - Equivalent Fractions	\$5.00	1	\$5.00
Learning Resources	Pocket Chart - Extra Wide	\$35.95	1	\$35.95
County Warehouse	Copy Paper-Box (6 reams per box)	\$10.00	2	\$20.00
			Subtotal	\$176.90
			Tax if applicable	0.00
			Shipping if applicable	10.00
			TOTAL BUDGET AMOUNT	\$186.90

Teacher's Name *Laura Sherley*
 School: *Lake Country Elementary*



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Rubric



	Beginning 1	Developing 2	Accomplished 3
Students are successful using Mt. Math.	Students miss 10 or more problems in Mt. Math.	Students miss 3-10 problems in Mt. Math	Students miss 3 or fewer problems in Mt. Math.
When notified of mistakes students are able to correct.	Students fix the mistakes only after the teacher works one on one with the student.	Students fix the mistakes after two attempts.	Students fix the mistakes after only one attempt or have no mistakes.

Total Points: