

Tips for Helping at Home

- Take time to learn some of the math games we are playing with number cards, dot cards, coins, and counters.
- Look for addition and subtraction situations at home (numbers under 25 are about right for many 1st graders).
- Your child may work out the answers by using counters such as pennies, buttons or paper clips. Or, your child might draw pictures, write down steps, or work mentally.

Websites

<http://cms.everett.K12.wa.us/math>
<http://mathforum.org/students>
<http://www.rainforestmaths.com/>

How to help when your student gets stuck. . .

- What do you need to find out?
Student should be specific.
- What information do you have?
- What strategies are you going to use?
- Does that make sense?
- How do you know?
- How did you get answer?
- Does your answer seem reasonable?
- What else is there to do?

Mathematical Emphasis

Investigation 1— Exploring Materials

- * Exploring mathematic materials and tools, such as pattern blocks, interlocking cubes, geo-blocks, and calculators
- * Comparing and finding relationships among geometric shapes

Investigation 2—Exploring Numbers

- * Developing strategies for comparing two quantities up to about 20
- * Finding combinations of numbers up to 10
- * Representing solutions to mathematics problems with pictures, numbers, and words

Investigation 3—Patterns

- * Describing pattern sequences
- * Predicting what comes next in a pattern sequence
- * Constructing patterns from a variety of materials

Investigation 4—Counting and Combining

- * Counting and keeping track of a set of objects
- * Extending and deepening understanding of comparing two quantities
- * Using counting, patterns and other strategies to help solve problems
- * Extending and deepening understanding of number combinations

Investigation 5—Data About Our Class

- * Inventing representations that show what a survey was about
- * Categorizing data in ways that communicate clearly to others
- * Representing the sizes of different groups
- * Counting, combining, and comparing the sizes of different groups
- * Making sense of survey results and presenting them to others



Mathematical Thinking At Grade 1

Introduction to Mathematics



Everett Public Schools

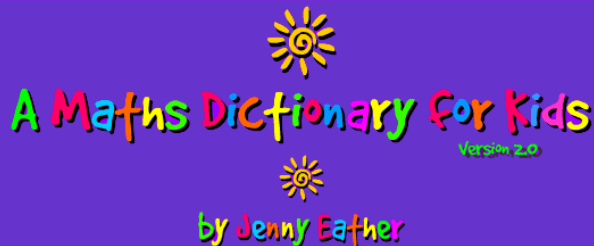
Vocabulary

- Symmetrical—same on both sides
- Compare—looking at two things and see how they are alike and how they are different
- Solution—the final answer
- Method—way in which a solution is found
- Representation—using pictures, numbers, and/or words to clearly show data or how a problem is solved



Online Glossary

<http://www.amathsdictionaryforkids.com/>



Games: The Importance of Playing More Than Once

Games are used throughout the *Investigations* curriculum as a vehicle for engaging students in important mathematical ideas.

The more students play the games the more opportunities they have to practice important skills and to think and reason mathematically. The first time or two that students play, they focus on learning the rules. Once they have mastered the rules, their interest turns to the mathematical content.

For example, when students play Double Compare, they practice counting, combining, and comparing quantities. Over time, they become familiar with addition combinations through frequent experience, rather than by rote memorization.

For many students, repeated experiences lead naturally to developing more efficient strategies for combining numbers, to reasoning about numbers and number combinations, and to explore relationships among number combinations.

Classroom Needs

- Tubs or shoe boxes
- Paper cups
- Crayons or markers
- Counters
- Tongue depressors
- Spring-clip clothespins
- Glue
- Colored pens
- Stickers
- Buttons



Game

Compare

You will need a deck of Number Cards 0—10

(remove the Wild Cards)

Players: 2

Object: Decide which of two numbers shows a larger number.

How to Play:

1. Mix the cards and deal them evenly to each player. Place your stack of cards face down in front of you.
2. At the same time, both of you turn over the top card in your stack. Look at the numbers. If your number is larger, you say “Me!” If the two cards are the same, turn over the next card.
3. Keep turning over cards. Each time, say “Me!” if your number is larger.
4. The game is over when you have both turned over all the cards in your stack.

Variations:

- A. If you have the smaller number, you say “Me!”
- B. Play with three people. Look at all 3 numbers
- C. Add the four wild cards to the deck. A wild card can be made into any number.

