

Mathematical Emphasis

Investigation 1 - Exploring Materials

- Describing and sorting materials on the basis of their attributes
- Identifying categories
- Writing number expressions

Investigation 2 - Looking at Numbers

- Keeping track of the number of school days
- Writing equations that equal the number of days in school
- Making combinations of 10

Investigation 3 - Geometric Counts

- Exploring and describing two-dimensional geometric shapes
- Exploring, sorting and describing three-dimensional shapes

Investigation 4 - Counting

- Counting 15 - 20 objects
- Counting by 2's, 5's, 10's and other ways
- Comparing two sets by identifying how many more are needed or how many are extra
- Identifying coins and their values
- Combining coins to make 25¢ and 50¢

Investigation 5 - Collecting Data About Ourselves

- Sorting and classifying information
- Collecting, recording and representing data
- Counting and comparing amounts
- Counting one group of objects in more than one way
- Talking and writing about problem-solving strategies

Tips for Helping at Home

• Questions to ask:

- What is it that you don't understand (have the student be specific)?
- What information do you need?
- What strategies are you going to use?
- Can you guess and check?
- Does this make sense?
- What can you do to explain your answer to show others what you are thinking?
- Does your answer seem reasonable?

• Your child will bring home two card games, Tens Go Fish and Turn Over 10. Have your child teach the family members how to play the games. Playing the games frequently will help your child learn addition combinations of 10. Please help your child find a safe place to store these materials and directions since some of them will be used repeatedly throughout the unit.

• As your child works on problems at home, encourage him or her to record strategies for solving problems or keeping track in ways that will make sense to your child. Some children will use numbers, some will use pictures or charts, others will use words, and many will use a combination of these methods.

• Often children will work out number problems by using real objects. If you can, provide objects for counting, such as beans, pennies, or buttons.



GAME

Turn Over 10

- Materials: One deck of Number Cards 0 - 10 (four of each) plus four wild cards
- Players: 2 to 3
- Object: Turn over and collect combination of cards that total 10.
- How to play:

1. Arrange the cards face down in four rows of five cards. Place the rest of the deck face down in a pile.
2. Take turns. On a turn, turn over one card then another. A wild card can be made into any number.

-If the total is less than 10, turn over another card.

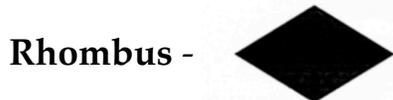
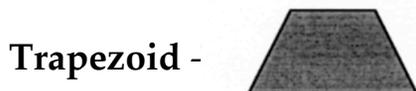
-If the total is more than 10, your turn is over and the cards are turned face down in the same place.

-If the total is 10, take the cards and replace them with cards from the deck. You get another turn.

3. Place each of your card combinations of 10 in separate piles so they don't get mixed up.
4. The game is over when no more 10's can be made.
5. At the end of the game, make a list of the number combinations for 10 that you made.

Vocabulary for Parents

Attribute - a characteristic like shape, color or size



Web Sites

<http://www.investigations.scottforesman.com/pdfs/parentpage.pdf>

<http://www.everett.k12.wa.us/math/Second%20Grade>

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

About the Mathematics In This Unit

The emphasis of this unit is counting and sorting. Your child will investigate everyday uses of numbers, count groups of objects in more than one way, and compare amounts. Students will play games involving money and finding different coins that show the same amount. They will explore, sort, compare and describe different shapes. The class also will collect and organize data about themselves as a group.

Throughout this unit, your child will be using materials like interlocking cubes, pattern blocks, geoblocks, and money. Students will be working with peers, writing and drawing about their work, and talking about how they do the problems. Each of these processes is an important emphasis in our mathematics program this year. In addition, your child will have a math folder for keeping track of the work he or she does in class.



Economopoulos, K. Investigations in Number, Data and Space: Mathematical Thinking at Grade 2.

Dale Seymour Publications, 1998



Mathematical Thinking at Grade 2

Introduction to
Mathematics



State College Area School District