

Tips for Helping at Home

Questions to ask:

- What is it that you don't understand (have the student be specific)?
- What about putting things in order?
- Could you try it with simpler numbers?
- 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?
- We will be sending home some games involving hundreds and thousands that your child can teach you.
- Any time you need to estimate or deal with large numbers at home, try to involve your child in the process.
- Find ways to count or estimate large numbers of things found at home: tiles on the floor or pieces of cereal in a bowl or in the whole box.



Web Resources

You will find web resources at:

<http://www.dreamsbeginhere.org/static/aboutdcps/departments/acadprog/mathematics/index.asp>

<http://www.shodor.org/interactivate/activities/agma/>

Mathematical Emphasis

Investigation 1—Working with 100

- Finding and counting by factors of 100
- Recognizing factor pairs
- Using landmarks to find differences between numbers under 100
- Making conjectures about factors of 100

Investigation 2—Exploring Multiples of 100

- Using knowledge about the factors of 100 to explore multiples of 100
- Relating knowledge of factors to division situations and to standard division notation
- Adding and subtracting multiples of 10 to numbers in the hundreds
- Solving addition and subtraction problems by reasoning from known relationships
- Communicating strategies orally and on paper through use of words, pictures, and numbers

Investigation 3—How much is 1000?

- Reading and writing numbers to 1000
- Locating numbers in sequence to 1000
- Getting a sense of the magnitude of multiples of 100 up to 1000
- Identifying and using important landmarks up to 1000, including the factors of 1000 and multiples of those factors
- Developing strategies for adding and subtracting numbers in the hundreds
- Estimating quantities up to 1000

Duval County Public Schools



Investigations in Number, Data, and Space



Landmarks in the Thousands Grade 4

The Number System

Unit Goals:

- Students explore the structure of our number system through activities involving hundreds and thousands
- Students explore factors and multiples of 100 and 1000
- Students solve addition and subtraction problems in the hundreds
- Students begin to develop a sense for the relative sizes of 100, 1,000, and 10,000

Proposed Time Frame:

4 weeks

Vocabulary

Expanded form: a number that is stretched out to show all the place value parts. For example: 234,259 would be written as $200,000 + 30,000 + 4,000 + 200 + 50 + 9$

Word form: a number written out in words. For example, two hundred thirty four thousand, two hundred, fifty eight.

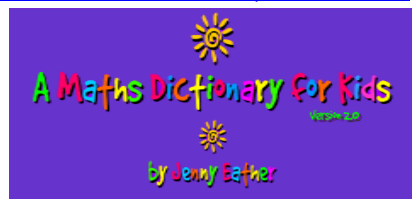
Landmark numbers: numbers that are familiar landing places, that make for simple calculations, and to which other numbers can be related.

Number line: a picture or diagram showing numbers as points on a line.



Glossary

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



The focus of this book is exploring our number system through activities involving hundreds and thousands.



Students make a book of the numbers 1 to 1000 by using ten blank 100 charts. They decide what numbers to put on each page so that they can locate any number up to 1000 easily.

301	302	303	304	305	306	307	308	309	310
									320
									330
									340
									350
									360
									370
									380
									390
									400

Students use a variety of methods to complete this task—write the first and last number on each page, or all the multiples of ten, or a few numbers per row.

Russell, S. Investigations in Number, Data, and Space: Landmarks in the Thousands. Dale Seymour, 1998.

Close to 1000

Materials

- One deck of Numeral Cards
- Close to 1000 score sheet for each player

Players:

2 or 3

How to Play

1. Deal out eight Numeral Cards to each player
2. Use any six cards to make two numbers. For example, a 6 a 5, and a 2 could make 652, 625, 526, 562, 256, or 265. Wild Cards can be used as any numeral. Try to make numbers that, when added, give you a total that is close to 1000.
3. Write these numbers and their total on the Close to 1000 Score Sheet. For example, $652 + 347 = 999$.
4. Find your score. Your score is the difference between your total and 1000.
5. Put the cards you used in a discard pile. Keep the two cards you didn't use for the next round.
6. For the next round, deal six new cards to each player. Make more numbers that come close to 1000. When you run out of cards, mix up the discard pile and use them again.
7. After five rounds, total your scores. Lowest score wins!

Scoring Variation

Write the score with plus and minus signs to show the direction of your total away from 1000. For example: If your total is 999, your score is -1 . If your total is 1005, your score is $+5$. The total of these two scores would be $+4$. Your goal is to get a total score for five rounds that is close to 0.