

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?

- For homework your child will be collecting information about how many teeth older or younger siblings have lost. (Children with no siblings can ask a friend.) As your child collects and records this information, you can ask him or her to predict how many teeth an older (or younger) sibling has. Some children may be interested in further investigation about the number of teeth different animals have. Your library can be a resource for this information.
- As you are reading the newspaper or a magazine, point out various graphs and charts to your child and talk about how you make sense of them, what they mean, and why you're interested in them. This is an opportunity for you to show your child how graphs communicate important information to you and your family.

Mathematical Emphasis

Investigation 1—Exploring Numerical Data

- Collecting data
- Keeping track of data
- Organizing numerical data
- Creating representations
- Describing and interpreting representations

Investigation 2—Teeth Data

- Collecting numerical data
- Organizing and describing numerical data
- Focusing on important features of the data (range, unusual pieces of data)
- Representing the same data set using different materials
- Comparing data sets
- Interpreting data and making hypotheses based on data

Investigation 3: Data Projects

- Planning a data analysis project
- Engaging in all phases of data analysis, including collecting, organizing, representing, and interpreting data
- Describing and interpreting data



Website

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



Grade 2

How Many Pockets? How Many Teeth?

Collecting and Representing Data



Vocabulary

numerical data - information collected through measurement (time, distance, weight) or through counting.

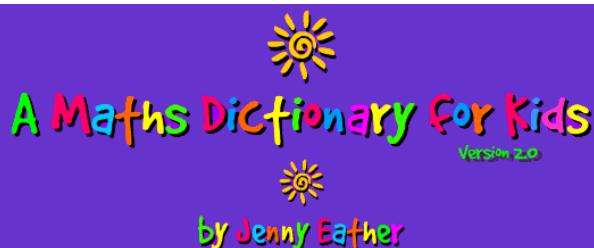
representation - organizing the information in graphs, line plots, charts, other visual organization

range - highest and lowest data values.



Glossary

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



About the Mathematics In This Unit

This unit introduces children to collecting, organizing and representing numerical information about a group of people. Children will collect and represent data about how many pockets they have on, how many siblings they have, how old they are, and how many letters are in their name. Throughout the unit, children will be introduced to a variety of ways of representing the data they collect. They will also be encouraged to develop their own representations of data.

Since losing teeth is such an important subject for second graders, the focus of one investigation is to collect data about the number of teeth lost. Children will use this information as well as data collected from their older and younger siblings to predict how many teeth they expect children in older and younger grades to have lost. They will investigate this question further by collecting teeth data from other classrooms in the school and comparing the real data with their hypotheses.

In the final project of the unit, students will design their own data collection project based on a question they are interested in investigating.

Economopoulos, K. Investigations in Number, Data and Space: How Many Pockets? How Many Teeth?. Dale Seymour Publications, 1998.

Game

Tens Go Fish

Materials: Deck of Number Cards 0 - 10 (four of each) with the wild cards removed

Players: 3 to 4

How to Play

The object of the game is to get two cards that total 10.

1. Each player is dealt five cards. The rest of the cards are placed face down in the center of the table.
2. If you have any pairs of cards that total 10, put them down in front of you and replace those cards from the deck.
3. Take turns. On a turn, ask one other player for a card that will go with a card in your hand to make 10.

If you get a card that makes 10, put the pair of cards down. Take one card from the deck. Your turn is over.

If you do not get a card that makes 10, take the top card from the deck. Your turn is over.

If the card you take from the deck makes 10 with a card in your hand, put the pair down and take another card.

5. If there are no cards left in your hand but still cards in the deck, you take two cards.
6. The game is over when there are no more cards.
7. At the end of the game, make a list of the number pairs you made.

