

Further investigations:

Take your child on a measurement hunt in your home. Find different objects that are used for measuring: clocks, watches, measuring tapes, cups, spoons, scales, and so on. Have discussions with your child about each object, what it measures, and the use of the objects in everyday life.

With your child, measure objects around the house using different “tools” such as a book, a spice can, a stick of gum or a toothpaste box. Before actually measuring the different objects in your home, ask your child to estimate the measurement.

Compare the different weights of items when you go to the grocery store. Let your child hold different fruits or vegetables in his hands and compare the weights. He should be able to tell you which is heavier and which is lighter. Afterwards, put each item in the scale and see which is heavier. You can extend this activity by choosing one item and, after experiencing how heavy it is, ask your child to name five things he thinks would be heavier or lighter than the object in his hand.

Fill different containers up with rice or beans to discuss capacity. Start small and then move to different size objects. For example, have your child take a spoonful of beans and estimate how many spoonfuls it will take to fill a small cup. Then allow him to fill the cup, counting the spoonfuls as he goes. How close was the estimate?

Use shaving cream, whipped cream, or sand to draw clocks. Name different hour times and have your child draw the time with his finger. After several practices telling time by the hour, try telling time by the half hour.

Terminology:

Length: The distance along a line or a figure from one point to another

Weight: A measure of how heavy an object is

Capacity: The amount a container can hold

Estimate: A number close to an exact amount; telling about how much

Minute: A unit of time that is equal to 60 seconds. 60 minutes is equal to one hour

Hour: Unit of time that is equal to 60 minutes. Twenty-four hours is equal to 1 day

Related Files:

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How Can I Measure and Compare?

First Grade 4 of 6

Students will:

- Estimate and compare objects by measuring length, weight, and capacity
- Use measurement tools to measure objects
- Tell time to the nearest hour and half hour
- Understand the measurement of time as it relates to a calendar and daily schedule

Classroom Cases:

1. Mark is too big for his black belt and needs a new one. He found a gray belt but is not sure if he should get it. Looking at the belts below, should Mark get the gray belt?



Case Closed - Evidence:

No. When comparing the two belts, they are the same size, and Mark needs a bigger belt.

2. Which container below will hold the least amount of water?

Which container would you use to wash your bicycle?

Which container would you need more than one of to fill a tall glass of water?



Bucket



Teacup



Mayonnaise Jar

Case Closed - Evidence:

The teacup will hold the least because it is the smallest.

I would use the bucket because it would be the only container large enough to hold the amount of water needed to wash a bicycle.

I would need more than one teacup to fill a large glass of water and the other two containers hold too much.

3. Sophia is beginning her school day.

a. What time does the clock show?

b. When would Sophia go to school: in the morning, afternoon, or evening?



Case Closed - Evidence:

a. 8:00

b. Morning

4. Isaiah follows the same daily routine when he goes to school. He prepares for school, rides the bus, and attends class at school. What do you think comes next in Isaiah's day?

Case Closed - Evidence:

Answers may vary: ride the bus home, do homework, play outside

Clues:

The goals of measurement in first grade are 1) to focus on what exactly is being measured, 2) to explore with a variety of non-standard units to discover the “measure” of the object, 3) to appreciate that larger-sized units take fewer units to measure an object and smaller-sized units take more to measure an object, and 4) to realize the importance of standard units to make measurement uniform.

Book 'em:

How Tall, How Short, How Faraway

by David Adler

How Big is a Foot? by Rolf Myller

Measuring Penny by Loreen Leady

Who Sank the Boat? by Pamela Allen

Grouchy Lady Bug by Eric Carle

The Very Hungry Caterpillar by Eric Carle

Seven Blind Mice by Ed Young

Chicken Soup With Rice by Maurice Sendak