

Math Game

Guess My Unit

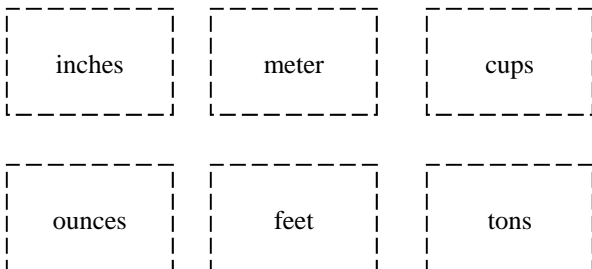
Materials:

- ◇ Create a set of cards with a unit of measurement on each.
- ◇ Provide scraps of paper

Procedure:

- ◇ Choose a unit of measure
- ◇ Give only one clue
- ◇ Students can ask 5 “yes” or “no” questions to eliminate other possibilities.
- ◇ Students can use scrap paper to make notes or work out their thinking.
- ◇ Students can use the cards as a reference
- ◇ Don’t share your unit until the end

Some Sample Cards:



Web Resources

You will find web resources at:

<http://www.everett.k12.wa.us/math>
www.illuminations.nctm.org

Measurement Games

<http://www.funbrain.com/measure/index.html>
<http://www.rickyspears.com/rulergame/>
<http://www.quia.com/mc/66516.html>
<http://www.shodor.org/interactivate/activities/permaarea/index.html>

Glossary

Volume- amount of space occupied by an object.

Estimate- to make an approximate, or rough calculation, often based on rounding.

Standard Measurement- measurement units of inches, feet, yards, pounds, cups and used primarily in the United States.

Metric System- decimal system of measurement that uses multiples of 10.

Density- the amount per unit size and the spatial property of being crowded together.

On-Line Glossary

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



Investigations in Number,
Data, and Space

Everett Public Schools
Mathematics Program

Measurement Benchmarks

Estimating and Measuring

Unit Goals:

- * **Measure of Length and Distance**
- * **Measure of weight and Liquid Volume**
- * **Units of Time**

Proposed Time Frame:
Approximately 5 weeks

Mathematics in Investigations

Investigation 1: Measures of Length and Distance

- * Using U.S. standard and metric tools for measuring length, weight, volume, and time.
- * Using benchmarks to estimate measures and deciding when to use estimation.
- * Recognize and explain possible sources of error.
- * Comparing Lengths expressed in different ways
- * Keeping track and calculating measures.

Investigation 2: Measures of Weight and Liquid Volume

- * Compare sizes of standard and metric measures of weight and liquid quantity.
- * Develop a sense of weights
- * Use a balance scale to measure weight.
- * Develop a sense of volumes
- * Develop meaning for volume and density.

Investigation 3: It's About Time

- * Develop vocabulary for units of time.
- * Timing in minutes and seconds
- * Collecting, displaying, and analyzing data
- * Using measurement conversions in the problem solving process.
- * Keeping track of computations in multistep problem.

Tips for Helping at Home

- * Make sure the measuring tool is lined up exactly at zero
- * Do not mix metric and standard measurements.
- * Help child recognize when to estimate, and when exact measurement is needed.



Listed below are questions to help teachers during observations and assessments.

Getting Started

- * **What is it that you don't understand? (Have your child be specific.)**
- * What do you need to find out?
- * What do you need to know?
- * What terms do you understand or not understand?

While Working

- * How can you organize the information?
- * Do you see any patterns or relationships that will help solve this?
- * What would happen if...?

Reflecting about the Solution

- * How do you know your answer is reasonable?
- * Has the question been answered?
- * Can you explain it another way?

At Home:

- 1 Talk about mathematics class.
- 2 Have your child find the correct measurement units when working on a project.
- 3 Encourage your child to schedule a regular time for homework and provide a comfortable place for their study, free from distractions.
- 4 Monitor your child's homework on a regular basis by looking at one problem or asking your child to briefly describe the focus of the homework. When your child asks for help, work with them instead of doing the problem for them.

At School:

- 1 Attend Open House, Back to School Night, and after school events.
- 2 Join the parent-teacher organization

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