

# Measurement Introduction

Monday 10/20/08

Name:  
Homeroom:  
Mr. Z.'s Science Class  
10/20/08

## Do-Now: Units of liquid measure

Suppose you are measuring some amount of liquid. Depending on how much you have, you may measure it in **pints**, **cups**, **gallons**, **quarts**, or a variety of other units.

1. Tell me what you already know about **what these units are used for**.

Pint	Cup	Gallon	Quart

2. In the space below, rank these units in order from smallest to largest.  
(If you don't know how big one of them is, just leave it out)

## What is the correct order?

1. Based on seeing the units, what is the correct order?
  
  
  
  
  
  
  
  
  
  
2. We can prove that that order is right by...

## I can measure the same thing with different units

1. In order to \_\_\_\_\_ something, I need to count how many of some \_\_\_\_\_ will fit into it.
2. Mathematically, what I am doing here is called \_\_\_\_\_.
3. The amount is written as \_\_\_\_\_.
4. The number is meaningless if I don't include the \_\_\_\_\_.
5. Measuring how much water is held by a two liter soda bottle:



6. When I measure with a bigger \_\_\_\_\_ I get a smaller \_\_\_\_\_.

# Measurement Introduction Practice

## Will the number come out larger or smaller?

1. A glass holds 3 cups of water. If I were to measure that in pints, it would be...
  - a) More than 3 pints
  - b) Less than 3 pints
  - c) Exactly 3 pints
2. A container holds 4 gallons. If I were to measure that in quarts, it would be...
  - a) More than 4 quarts
  - b) Less than 4 quarts
  - c) Exactly 4 quarts
3. A **bushel** is a unit that is larger than a **peck**. If I pick 12 bushels of apples, that would be...
  - a) More than 12 pecks
  - b) Less than 12 pecks
  - c) Exactly 12 pecks

## Which unit is larger?

1. One person measures that a barrel holds **9 buckets** of water. Another person measures that it contains **4 firkins** of water. Which is larger, a bucket or a firkin?
2. Three people measure the volume of a swimming pool. One measures it to be **6 puncheons**, one measures it to be **4 butts**, and one measures it to be **8 hogsheads**. Rank the units **puncheon**, **butt**, and **hogshead** in order from smallest to largest.

Smallest |

| Largest

3. A dairy farm produces the same amount of milk every day. On Monday, Alice measures the milk and finds that **20 barrels** were produced. On Tuesday, Bob measures the same amount of milk, but writes it down as **40 kinderkins**. On Wednesday, Charlie records the amount as **30 bags**.

Rank the units **barrel**, **kinderkin**, and **bag** in order from smallest to largest.

Smallest |

| Largest

## Which measurement is a larger amount?

*If there is a larger number of the larger unit, you know that measurement is larger. If not, we have no way of figuring it out yet, and you should write "Can't tell."*

1. Which is larger: 2 cups or 3 pints?
2. Which is larger: 12 cups or 2 quarts?
3. Which is larger: 10 gallons or 7 quarts?
4. Which is larger: 8 quarts or 12 pints?
5. Which is larger: 6 gallons or 5 pints?