

# **Math-Ese Workshop**

**October 28, 2006**

## **"Mastering Math Vocabulary"**

**The students will demonstrate their understanding of key vocabulary words by constructing and organizing a Math Dictionary.**

**Nancy Lines**

**Name:** Nancy Lines

**Grade Level/Subject:** 4<sup>th</sup> Grade Math

**Topic:** Student Math Dictionary

**Objectives (P.A.S.S.):**

Process Standard 2: Communication

1. Express mathematical ideas
4. Represent, discuss, write, and read mathematical ideas and concepts.

**Materials:** Student's 3-ring binder

Various worksheets to be used to make the dictionary pages with the alphabet letters on the right edge of the paper.

**Introduction:**

Begin the lesson by a guided discussion asking the students what is the purpose of a dictionary. Lead the discussion into the area of Math. Ask if they have ever used a dictionary to help them with Math.

**Instructional Process:**

It would be my intention to teach my students how to make their Math Dictionary at the beginning of the school year. Pages would be added as terms are taught during the year.

Because I am teaching this lesson after the first nine weeks, I will begin my math dictionaries the following way:

1. Put the students into groups of 2 or 3. Ask them to skim through the math lessons we have already completed and make a list of important vocabulary words.

2. Ask each student to pick from their group's list two math vocabulary words.
3. Explain to the students how they are to use the Verbal & Visual Word Association pages to define their chosen terms. At this time, the teacher should demonstrate how to use this paper by defining a word no one has chosen.
4. Ask them to "define" their first term. Allow the students to share their work with the class.
5. Then ask them to "define" their second term.
6. The students will cut off all the letters below the letter their word begins with and place in their 3-ring binder.

**Closure:**

Allow the students to share their second vocabulary term with the class.

Ask the students to write two other words they would like to include in their dictionary.

**Assessment:**

The students will be assessed by the accuracy of their completed dictionary pages and their class presentations.

**Modifications:**

Advanced Students: Ask them to design their own worksheet that would help them to define and illustrate a math term.

Special Needs: Ask them to define only one term. Put them with another student close to their ability and let them do their page together. You could also copy another students page to put in their dictionary.

## Reflection

The students struggled putting the definitions into their own words. One student made the statement that it is easy to copy a definition but writing it themselves makes them think more.

This is a very valuable tool for both the students and the teacher. I look forward to using and experimenting with this tool throughout the year.

## 4<sup>th</sup> Grade Math Vocabulary Words

Addition	Ordinal Numbers	Number Line
Addend	Subtraction	Positive Numbers
Sum	Minus	Regrouping
Commutative Property of Addition	Difference	Expanded Form
Identity Property of Addition	Fact Family	Celsius
Number Sentence	Whole Numbers	Fahrenheit
Counting Numbers	Hyphen	Scale
Sequence	Greater Than	Metric System
Digits	Less Than	Perimeter
Even Numbers	Equal	U.S. Customary System
Odd Numbers	Line	Center
Place Value	Line Segment	Compass
	Negative Numbers	Diameter

Radius	Commutative Property of Multiplication	Congruent
Decimal Point	Identity Property of Multiplication	Cone
Denominator	Property of Zero for Multiplication	Cube
Equation	Area	Cylinder
Fraction	Array	Edge
Numerator	Square Number	Face
Acute Angles	Square Root	Rectangle Hexagon
Angles	Mixed Number	Symmetry
Endpoints	Capacity	Mean
Intersect	Average	Median
Obtuse Angles	Century	Mode
Parallel Lines	Decade	Range
Perpendicular Lines	Circle	Oblique
Ray	Circumference	Octagon
Right Angle	Diameter	Parallel Lines
Vertex	Radius	Parallelogram
Multiplication	Common Year	Pentagon
Product	Leap Year	Percent
Factor		Perpendicular Lines
		Polygon

Probability

Pyramid

Quadrilateral

Division

Quotient

Polygon

Rhombus

Right Angle

Right Triangle

Roman Numerals

Scalene Triangle

Similar

Side

Sphere

Square

Straight Angle

Tally Mark

Trapezoid

Triangle

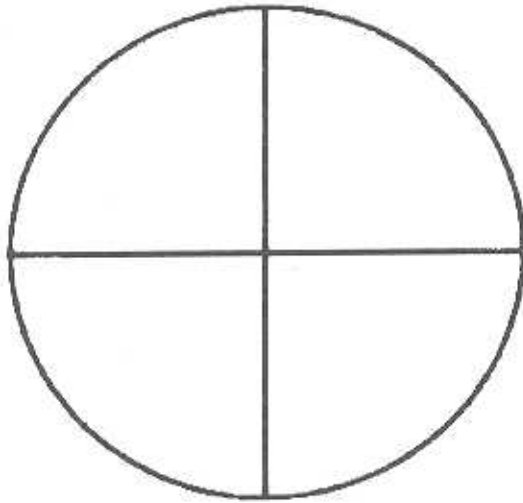
Vertical Volume

# Verbal & Visual Word Association

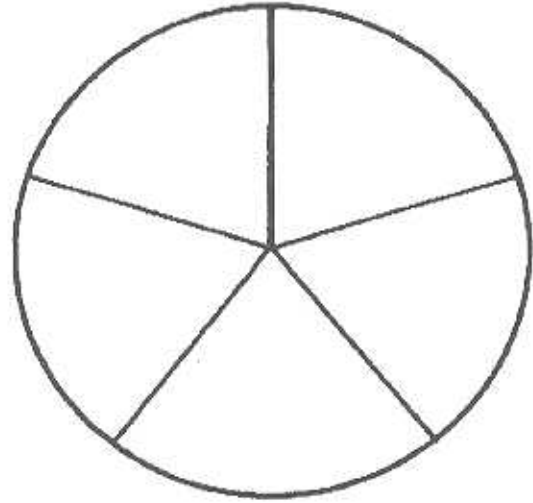
Visual Representation:	Personal Association:
Vocabulary term:	Definition:

A  
B  
C  
D  
E  
F  
G  
H  
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J  
K  
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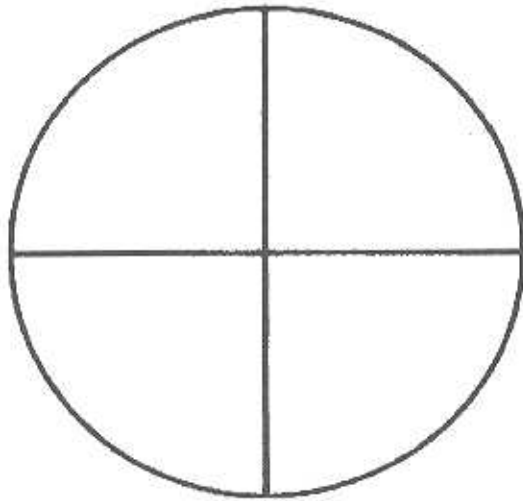
# Concept Circles



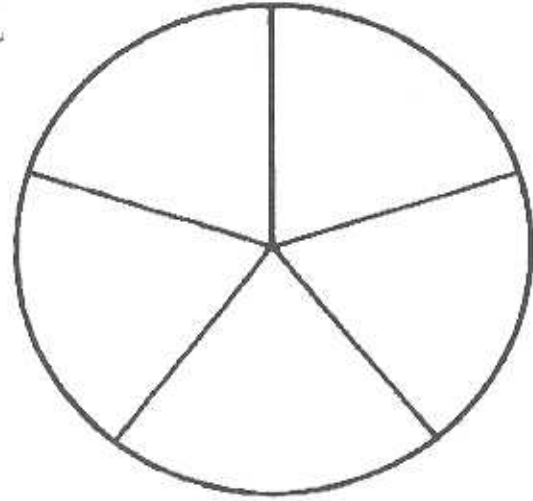
Concept \_\_\_\_\_



Concept \_\_\_\_\_



Concept \_\_\_\_\_



Concept \_\_\_\_\_

A  
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