Helping our children with math!

Under **Common Core State Standards**, our students are expected to know much more than just the right answer. **What does it mean to be mathematically proficient?** Being mathematically proficient means to know **when**, **why** and **how** to apply calculations to different mathematical situations.

Common Core Mathematical Practice Standard 6:
Attend to precision.

<u>**What it means:**</u> This standard expects all students will have developed essential skills to *calculate accurately* when solving math problems, to be *precise with their answers* and to be able to *communicate their math thinking* using exact vocabulary.

How to help your child become successful with this standard

Math is filled with words that are hard for our students to understand. They are bombarded with technical words such as sum, vertices, parallel – as well as words that have *multiple meanings* such as feet, faces, power, and volume. To communicate effectively about math content our students must first know the words that express that content. They must also be able to explain their thinking and math procedures clearly.
<u>**Things to say to your children as they are attempting to solve problems:**</u>
1. Have you used the steps in the correct order?
2. Is your answer clear?
3. Did you include labels? (13 inches, instead of 13)
4. Could someone else follow your steps?
5. Have you checked your answer?
6. Can you explain how you solved this problem?

<u>**Things to Do at Home:**</u>

On the next page, there is a sample list of math vocabulary words based on grade levels. Can your child explain the meaning of these math words? Use some of the math vocabulary and illustrations listed to play *Mystery Words* with your child.
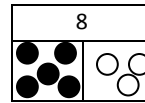
<u>**Mystery Words**</u>   Materials: Two people (you and your child), Word Cards

Create word cards. You can do this by writing the vocabulary term on one side of an index card and the definition/illustration on the other side. Once you have created your word cards, take turns picking one with your child. The person who has the card will describe the mystery word without saying it. Can your child listen to your clues and figure out the word? Can your child then describe a different word to you without saying it?

Information taken from: *Putting the Practices into Action: Implementing the Common Core Standards for Mathematical Practices K-8* by Susan O'Connell and John SanGiovanni.

Kindergarten

Add - To combine, join, or put together two or more quantities. 5 + 3 = 8

Digit - Any of the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9.

Equal – Having the same amount.

Hexagon – A 2-dimensional shape that has 6 straight sides and 6 vertices.

Sort – To put into groups by a common attribute (color, size, shape, etc.)

Subtract - To take away (separate), remove, or compare.
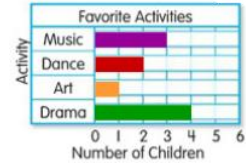
separate example: **6 – 2 = 4**

Grades 1 & 2

addend

Addend – Any number being added. 2 + 5 = 7

Analog clock – A clock that shows time by the position of the hour and minute hand.

Bar Graph – A graph that uses the length or height of rectangles to display and compare data.

Cube – A 3-dimensional shape with 6 square faces.

Doubles Fact – An addition fact that has the same addends. 4 + 4 = 8

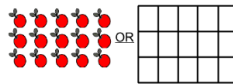**Estimate** – A number close to an exact amount. An estimate tells *about* how much or *about* how many.

Place Value – The value a digit has because of its place in a number.

Sum – The answer to an addition problem. 3 + 4 = 7 ← sum

Grades 3-5

Area - The measure, in square units, of the inside region of a 2-dimensional figure.

Array – An arrangement of objects in equal rows.

Dividend – A number that is divided by another number. $3\overline{)21}$ ← dividend
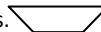
Equation – A mathematical sentence with an equal sign. The expression on one side of the equal sign has the same value as the expression on the other side.   5 + 1 = 4 + 2

factors

Factor – Whole numbers that are multiplied to get a product. 5 x 7 = 35 ← product

Product – The solution to a multiplication problem.

Trapezoid – A polygon that has 4 sides and one pair of parallel sides.

Whole number – A set of numbers made up of zero and the counting numbers 1,2,3,4,5,6,and so on.

Ask your child to explain a math term in his or her own words. They can show what they know through words, pictures, numbers and examples.

Mathematical Term:

Definition:	Picture:
Real Life Example:	Other Words:

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