

Questions

Questions for your child's teacher:

- ◆ What help/resources are available if I cannot help my child with his/her homework?
- ◆ How much homework do you assign weekly?
- ◆ How much time should it take to complete homework assignments?
- ◆ Is it possible to utilize a daily behavior/homework/class work /chart to communicate my child's progress?
- ◆ Which activities/workshops can a parent participate in order to support their child's learning?
- ◆ How do you teach math on a daily basis?
- ◆ What is your expectation of parents in regards to supporting your classroom?

Activities for Home

What can I do to help my child from home?

- ◆ Play restaurant or store with your child using coins and paper currency.
- ◆ Use a pizza or a pie to illustrate a halves, fourths, sixths and eighths.
- ◆ Add and subtract beans, button or coins to demonstrate the operations of addition and subtraction.
- ◆ Make addition and subtraction fact cards and review daily.
- ◆ Teach your child width of a finger is a centimeter, a large bottle of pop is 2 liters and a paper clip weighs one gram.
- ◆ Use ruler measure items around the house.
- ◆ Find 3 dimensional items around the house that resemble cubes, sphere, prism, cones and pyramids.
- ◆ Use blocks, buttons, pots, pans and eating utensils to create number patterns.
- ◆ Create a timeline from the beginning to the end of a special family celebration.
- ◆ List each family member's preference for their favorite television programs, videos or movies and discuss the differences.

A Message from the CMSD

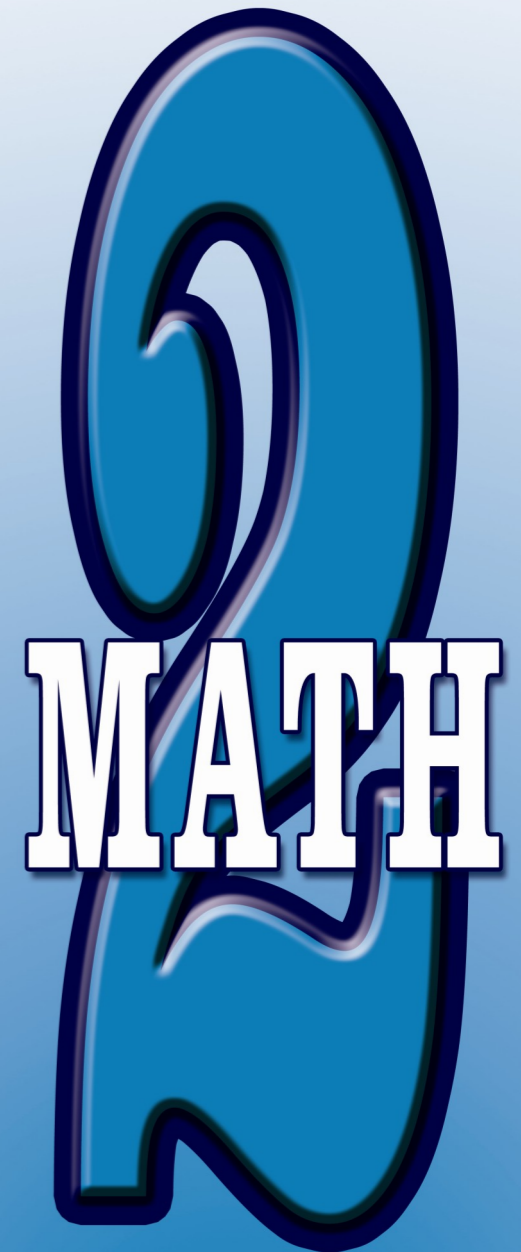
~School Parent Organization~

Dear Families,

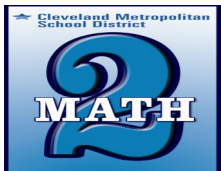
Establish a partnership with your child's school community to guide and encourage our children to strive to reach their academic potential. This collaboration of parents, students and school staff will lead us to become a premier school district in the United State of America

NOTES:

★ Cleveland Metropolitan School District



MATH



What should my second grader learn about Math?

Number, Number Sense and Operations

- ◆ Draw and compare numbers less than 0 through familiar applications and extending the number line.
- ◆ Compare, order and convert among fractions, decimals and percents.
- ◆ Develop meaning for percents, including percents greater than 100 and less than 1.
- ◆ Use models and pictures to relate concepts of ratio, proportion and percent.
- ◆ Use order of operations, including use of parenthesis and exponents to solve multi-step problems, and verify and interpret the results.
- ◆ Apply number system properties when performing computations.
- ◆ Apply and explain the use of prime factorizations, common factors, and common multiples in problem situations.
- ◆ Use and analyze the steps in standard and non-standard algorithms for computing with fractions, decimals and integers.
- ◆ Use a variety of strategies, including proportional reasoning, to estimate, compute, solve and explain solutions to problems involving integers, fractions, decimals and percents.

Measurement

- ◆ Tell time to the nearest minute on a digital clock and to the nearest five minutes on an analog (with hands) clock.
- ◆ Use measurement tools such as a ruler to draw lines, talk about how to use a measuring cup when measuring flour, etc. and use a scale to find the show how much items weigh.

- ◆ Identify appropriate tools and apply appropriate techniques for measuring angles, perimeter or circumference and area of triangles, quadrilaterals, circles and composite shapes, and surface area and volume of prisms and cylinders.
- ◆ Select a tool and measure accurately to a specified level of precision.
- ◆ Use problem solving techniques and technology as needed to solve problems involving length, weight, perimeter, area, volume, time and temperature.

Geometry and Spatial Sense

- ◆ Identify and label angle parts and the area defined within the plane where the angle resides.
- ◆ Draw circles, and identify and determine the relationships among the radius, diameter, center and circumference.
- ◆ Identify, describe and classify types of line pairs, angles, two-dimensional figures and three dimensional objects using their properties.
- ◆ Describe and use properties of triangles to solve problems involving angle measures and side lengths of right triangles.
- ◆ Predict and describe results (size, position, orientation) of changes of two dimensional figures. Identify and draw three-dimensional objects from different views (top, side, front and perspective).

Patterns, Functions and Algebra

- ◆ Extend simple number patterns (i.e. 2, 4, 6, 8 – increase by two each time).
- ◆ Represent, analyze and generalize a variety of patterns and functions with tables, graphs, words and symbolic rules.
- ◆ Use variables to create and solve equations and inequalities representing problem situations.
- ◆ Use symbolic algebra to represent and explain mathematical relationships.
- ◆ Use rules and variables to describe patterns, functions and other relationships.
- ◆ Use representations, such as tables, graphs and equations, to model situations and to solve problems, especially those that involve linear relationships.
- ◆ Solve linear equations and inequalities that include symbols, graphs, and numbers. $x + 5 = 7$
- ◆ Tell how inverse operations, or opposite operations, are used to solve linear equations. Ex. To solve $x + 5 = 7$ do the opposite of addition and subtract 5 from both sides of the equation, $x = 2$. Use formulas to solve problems.
- ◆ Graph linear equations and inequalities. Ex. Graph $y = 2x + 1$ or $y < 2x + 1$
- ◆ Observe, think about, and make decisions about how changing one amount will change another amount in an equation.
- ◆ Estimate and explain rates of change using graphs and numbers provided. and graphs, and identify misuses of statistical data and displays.

Data Analysis and Probability

- ◆ Pose questions and gathers data about everyday situations and familiar objects.
- ◆ Sort and classify objects by attributes, and organize data into categories in a simple table or chart.
- ◆ Represent data using objects, picture graphs and bar graphs.
- ◆ Describe the probability of chance events as more, less or equally likely to occur.

Mathematical Processes

- ◆ Use a variety of strategies to understand problem situations; e.g., discussing with peers, stating problems in own words, modeling problems with diagrams or physical materials, identifying a pattern.
- ◆ Identify and write in own words the question or problem and the information needed to solve the problem.
- ◆ List other ways to solve problems.
- ◆ Look at the possible solutions and possible answers to make predications.
- ◆ Explain to others how a problem was solved.
- ◆ Draw pictures and use real models (i.e. coins, building blocks) to show the problem and come up with solutions.
- ◆ Use invented and conventional symbols and common language to describe a problem situation and solution.
- ◆ Recognize the math meaning of common words and phrases (look on cartons for measurement amounts, street signs– talk about shapes, triangle, circle, etc.) and show to your child how math is part of everyday language.