

Dear Family,

Today my class started **Chapter 1: Use Place Value**. I will be learning to use place value to read, write, and compare whole numbers and decimals. I will be learning to solve problems using the guess-and-check strategy. Here are my vocabulary words and an activity we can do together.

Sincerely, _____

Key Vocabulary

Whole number: Any one of the numbers 0, 1, 2, 3 ... In greater numbers, each group of three digits is separated by commas and is called a **period**.

Place value: A system for writing numbers. In this system, the position of a digit determines its value.

Standard form: The usual or common way to write a number. Example: 223.

Expanded form: A way of writing a number as the sum of the *values* of its digits. Example:
 $200 + 20 = 3$.

Decimal: A number that has a digit in the tenths place, hundredths place, and beyond.

Activity

On a piece of paper have each player write four lines that will be filled in to create the largest number possible. Each player takes turns rolling a number cube and placing the digit they rolled on any line they choose. Once a digit is placed on a line it may not be moved. Continue rolling until each line is filled with a digit. The person who created the largest number wins.

Books to Read

The Grapes of Math

by Greg Tang

Math Curse

by Scieszka & Smith

Can You Count to a GOOGOL?

by Robert Wells

Dear Family,

Today my class started *Chapter 2: Add and Subtract Whole Numbers and Decimals*. I will learn how to add, subtract, and round whole numbers and decimals. I will also learn how to estimate sums and differences by rounding. Additionally, I will use properties of addition to add whole numbers and decimals mentally and I will learn to solve problems by using the work backward strategy. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Compatible Numbers: Numbers that are easy to add or subtract mentally.

Compensation: Adding a number to one addend to make the addition easier and then subtracting the same number from the other addend.

Estimate: When you do not need an exact answer or when you want to check whether an answer is reasonable, you can estimate.

Round: Finding a number's approximate value.

Activity

What types of exercise do your friends enjoy? Take a survey. After you collect your data, create a line plot to display your results.

Books to Read

Tiger Math, Learning to Graph from a Baby Tiger

by Nagda and Bickel

The M & M's Counting Book

by Barbara McGrath

Math Curse

by Scieszka & Smith

Dear Family,

Today my class started **Chapter 3: Multiply Whole Numbers**. I will be learning to multiply multiples of 10, 100, and 1,000 mentally. I will also be learning to multiply whole numbers. Additionally, I will identify and use properties of multiplication, multiply whole numbers, and solve problems by using the *draw a picture strategy*. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Clustering: Estimating by rounding a group of numbers that are close in value to the same number

Distributive Property: To multiply a sum by a number, you can multiply each addend by the same number and add the products

Factor: A number that is multiplied by another number

Product: The result of two or more numbers that are multiplied

Activity

Find similar objects around the house. Put them together in various number groupings. Find the total number of each number group.

Books to Read

Anno's Mysterious Multiplying Jar
by Mitsumasa Anno

The Rajah's Rice
by David Barry

Amanda Bean's Amazing Dream
by Cindy Neuschwander

Dear Family,

Today my class started **Chapter 4: Divide Whole Numbers**. I will be learning to divide multiples of 10, 100, and 1,000 mentally. I will also be learning to divide whole numbers. Additionally, I will estimate quotients of whole numbers, interpret remainders in division problems, and solve problems by using the *act it out* strategy.

Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

dividend The number that is divided

divisor The number that is used to divide another number

quotient The result of one number divided by another

remainder The number that is left after a quotient is found

Activity

Use beans, buttons, or other counters. Count out 48. How many groups of 6, 8, and 12 are in 48? Repeat with other numbers.

Books to Read

100th Day Worries
by Margery Cuyler

Each Orange Has 8 Slices
by Paul Giganti, Jr.

Sea Squares
by Joy Hulme

Dear Family,

Today my class started **Chapter 5: Use Algebraic Expressions**. I will be learning to write and evaluate algebraic expressions and complete function tables. I will also be learning to solve problems by using the *solve a simpler problem* strategy.

Sincerely, _____

Key Vocabulary

Variable: A letter or symbol used to represent a number.

Expression: A combination of variables, numbers, and at least one operation. An example of an expression is $8 + y$.

Evaluate: To find the value of.

Function: A relationship in which one input quantity is paired with exactly one output quantity.

Activity

Look at and discuss your family's monthly gas, telephone, or electric bill. Write an equation to determine the monthly charge based on usage based on the unit charge.

Books to Read

100th Day Worries
by Margery Cuyler

Hannah's Collections
by Marthe Jocelyn

Math Curse
by Scieszka & Smith

Dear Family,

Today my class started **Chapter 6: Use: Equations and Function Tables**. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Ordered pair: A pair of numbers that are the coordinates of a point in a coordinate grid in this order (horizontal coordinate, vertical coordinate). Example: (4, 0).

Equation: A number sentence that contains an equal sign, =, showing that two expressions are equal.

Solution: The value of a variable that makes the equation true.

Origin: The point (0, 0) where the x -axis and y -axis meet.

x -coordinate: The first number in an ordered pair.

y -coordinate: The second number in an ordered pair.

Activity

Write several different equations on small slips of paper. Write the answers to the equations on separate slips of paper. Pull one slip of paper from each pile at a time. Tell whether the answer shown is a solution to the equation. Repeat until all solutions have been matched with their equations.

Books to Read

Splash
by Ann Jonas

A Grain of Rice
by Helena Clare Pittman

On Beyond A Million
by David Schwartz

Dear Family,

Today my class started Chapter 7: Display and Interpret Data. I will learn how to find the median, mode, and range of a data set, make and interpret line plots and frequency tables, and make and interpret bar graphs and line graphs. I will also learn how to use and make an appropriate graph for presenting data. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Line graph: A graph that uses points connected by line segments to represent data.

Median: The middle value in a set of data arranged in order from least to greatest. If the set contains an even number of numbers, the median is the number exactly halfway between the two middle numbers.

Mode: The number(s), that occurs most often in a set of data. A set can have more than one mode.

Range: The *difference* between the greatest and the least values in a set of data.

Activity

Measure the heights of the people in your family. Using the skills you learned in class, find the median, mode, and range of your family's heights.

Books to Read

***Once Upon a Dime:
A Math Adventure***
by Nancy Kelly Allen

Anno's Math Games II
by Mitsumasa Anno

***Marvelous Math:
A Book of Poems***
by Lee Bennett Hopkins

Dear Family,

Today my class started **Chapter 8: Develop Fraction Concepts**. I will be learning to generate equivalent mixed numbers and improper fractions. I will also be learning to round fractions and mixed numbers and compare fractions. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Fraction: A number that represents part of a whole or part of a set. Example: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, and $\frac{3}{4}$ are fractions.

Numerator: The number above the bar in a fraction; the part of the fraction that tells how many of the equal parts are being used. Example: $\frac{2}{4}$, 2 is the numerator.

Denominator: The bottom number in a fraction. Example: $\frac{5}{6}$, 6 is the denominator.

Improper fraction: A fraction that has a numerator that is greater than or equal to its denominator. Example: $\frac{29}{5}$.

Mixed number: A number that has a whole number and a fraction. Example: $1\frac{3}{4}$

Activity

Sort marbles according to color. Create fractions, using the different marble colors to represent parts of the whole amount of marbles. Draw a pizza pie in the middle of a piece of poster paper and divide your pie into the number of marbles for each color. Practice adding together different sets of fractions.

Books to Read

**Polar Bear Math,
Learning About Fractions**
by Nagda and Bickel

The Doorbell Rang
by Pat Hutchins

Gator Pie
by Louise Mathews

Dear Family,

Today my class started **Chapter 9: Use Factors and Multiples**. I will be learning to find common factors and common multiples. I will learn to identify prime and composite numbers, find equivalent fractions, and write decimals as fractions. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

equivalent fractions Fractions that have the same value. Example: $(\frac{3}{4} = \frac{6}{8} = \frac{9}{12})$.

greatest common factor The greatest of the common factors of two or more numbers. Example: The greatest common factor of 12, 18, and 30 is 6.

least common multiple The smallest whole number greater than 0 that is a common multiple of each of two or more numbers. Example: The LCM of 2 and 3 is 6.

simplest form A fraction in which the GCF of the numerator and the denominator is 1. Example: $\frac{5}{12}$ is in simplest form because the GCF of 5 and 12 is 1.

Activity

Sort a bag of candy into color piles. For example, a bag of 20 candy hearts could be used. Record the correct fraction that matches each pile. For example: If you have 5 pinks, you would record $\frac{5}{20}$. Record all colors into fraction form. After all fractions have been recorded, practice combining the fractions.

Books to Read

Fraction Fun
by David Adler

The Doorbell Rang
by Pat Hutchins

Gator Pie
by Louise Mathews

Dear Family,

Today my class started **Chapter 10: Model Adding and Subtracting Fractions**. I will be learning to add and subtract like fractions. I will also be learning to estimate sums and differences of mixed numbers. Additionally, I will solve problems by determining reasonable answers. Here are my vocabulary words and an activity we can do together.

Sincerely, _____

Key Vocabulary

like fractions Fractions that have the same denominator.

numerator The part of the fraction that tells how many of the equal parts are being used.

denominator The bottom number in a fraction.

improper fraction A number in which the numerator is greater than the denominator.

simplest form The form of a fraction when the GCF of the numerator and the denominator is one.

Activity

Examples of like fractions are everywhere! Make a list of all the different places where you might find like fractions. Write down three examples, along with addition and subtraction sentences to represent them.

Books to Read

Pizza Counting
by Christina Dobson

The Fraction Family Moves West
by Marti Dryk

Gator Pie
by Louise Mathews

Dear Family,

Today my class started **Chapter 11: Use Measures in the Customary System**. I will be learning to choose appropriate customary units for measuring length. I will also be learning to convert customary units of length, weight, and capacity. And I will learn to solve problems involving elapsed time and to solve problems by using the *draw a diagram* strategy. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Capacity: The measure of how much a container can hold.

Elapsed time: The difference in time between the start and the end of an event.

Weight: A measure of how heavy an object is. Customary units of weight are ounce, pound, and ton.

Activity

Measure five items in your classroom. What is the most common unit of measure that you used?

Books to Read

Mr. Archimedes' Bath
by Pamela Allen

How Tall, How short, How Faraway
by David Adler

Inch By Inch
by Leo Lionni

Dear Family,

Today my class started **Chapter 12: Use Measures in the Metric System**. I will be learning to choose appropriate metric units for measuring length. I will also be learning to convert metric units of length, mass, and capacity. Additionally, I will learn to use integers to represent real-life situations, solve problems involving changes in temperature, and to solve problems by determining the reasonableness of an answer. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Integer: Negative and positive whole numbers.

Mass: A measure of the amount of matter in an object. Metric units of mass are milligram, gram, and kilogram.

Metric System: A decimal system of measurement. The common units of length in the metric system are millimeter, centimeter, meter, and kilometer.

Negative number: Any number less than zero

Positive number: Any number greater than zero

Activity

Find three items of varying lengths. Make table. On your table record the unit of measure you would use to measure each item. Then measure the items to the nearest half unit of measure.

Books to Read

Mapping Penny's World
by Loreen Leedy

Postcards from Pluto
by Loreen Leedy

Millions to Measure
by David Schwartz

Dear Family,

Today my class started *Chapter 13: Identify, Compare, and Classify Geometric Figures*. I will be learning to identify and label basic geometric terms. I will also be learning to identify characteristics of triangles and quadrilaterals. Additionally, I will solve problems by using logical reasoning. Here are my vocabulary words and an activity we can do together.

Sincerely, _____

Key Vocabulary

Parallel: moving in the same direction, equally distant, but not meeting

Perpendicular: meeting or crossing to form right angles

Quadrilateral: A shape that has four sides and four angles

Reflection: A transformation that flips a figure across a line to make a mirror image of that figure.

Rotation: A transformation that turns a figure around a point

Translation: A transformation in which a figure is moved along a straight line

Triangle: A polygon with three sides and three angles

Activity

Go for a walk in your neighborhood. How many examples of parallel and perpendicular lines did you see? Draw one or two examples.

Books to Read

Reflections
by Ann Jonas

A Cloak For A Dreamer
by Aileen Freidman

Grandfather Tang's Story
by Ann Tompert

Dear Family,

Today my class started **Chapter 14: Measure Perimeter, Area, and Volume**. I will be learning to find the perimeters of polygons. I will also be learning to find the areas of rectangles and triangles. And I will learn about the volume of three-dimensional figures. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Area: The number of square units needed to cover the inside of a region or plane figure.

Cone: A solid that has a circular base and one curved surface from the base to a vertex.

Perimeter: The distance around a shape or region.

Polygon: A closed figure made up of line segments that do not cross each other.

Prism: A polyhedron with two parallel congruent faces, called bases.

Three-dimensional figure: A solid figure.

Volume: The number of cubic units needed to fill a three-dimensional figure or solid figure.

Activity

Use construction paper to cut out 4 rectangles of different sizes. Use a ruler to measure the length and width in centimeters. Label each rectangle with its corresponding height and width. Find the area and perimeter of each rectangle.

Books to Read

Pigs Will Be Pigs
by Amy Axelrod

Mr. Archimedes' Bath
by Pamela Allen

The Tangram Magician
by Ernst & Ernst

Dear Family,

Today my class started **Chapter 15: Use Probability to Make Predictions**. I will be learning to determine the likelihood of an event and use probability to make a prediction. I will use fractions to describe probability and solve problems by making an organized list. Here are my vocabulary words and an activity that we can do together.

Sincerely, _____

Key Vocabulary

Probability: A number between 0 and 1 that measures the likelihood of an event happening.

Tree diagram: A diagram of all the possible outcomes of an event or series of events or experiments.

Outcome: A possible result of a probability experiment.

Activity

Flip a coin 10 times and record how many heads and tails occur. How many times do you think it will be heads? How many times will it be tails? Continue to flip the coin until you see that heads and tails come up evenly.

Books to Read

Piece-Part-Portion
by Scott Gifford

How Many Feet? How Many Tails?
by Marilyn Burns

Hannah's Collections
by Marthe Jocelyn