

Dear Family,

Today my class started **Chapter 1: Use Place Value to Represent Whole Numbers**. I will be learning to read and write whole numbers to millions, compare and order whole numbers, and use the four-step plan to solve problems. I will also be learning to round whole numbers to the nearest ten, hundred, thousand, and ten thousand. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

place value The value given to a *digit* by its place in a number.

standard form The usual way of writing a number that shows only its *digits*, no words.

expanded form The representation of a number as a sum that shows the value of each digit. 536 can be written as $500 + 30 + 6$.

is greater than ($>$) An inequality relationship showing that the number on the left of the symbol is greater than the number on the right. $5 > 3$, five is greater than three.

is less than ($<$) The number on the left side of the symbol is smaller than the number on the right side. $4 < 7$, 4 is less than 7.

Activity

Write each of the following numbers on an index card or small piece of paper: 2,000; 6,000; 1,000; 500; 900; 300; 60; 30; 4; 8; and 9. Use the cards to represent the following numbers in expanded form: 2,969, 1,530, 6,068, and 564. Place addition signs between the cards to represent expanded form.

Books to Read

Reeses' Pieces Count By Fives

by Jeffrey Pallotta

The Warlord's Beads

by Virginia Walton Pilegard

A Gram of Rice

by Helena Clare Pittman

Dear Family,

Today my class started **Chapter 2: Solve Addition and Subtraction Problems**. I will learn how to add and subtract whole numbers. I will also learn how to estimate sums and differences. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

Associative Property of Addition This property states that the way in which numbers are grouped when added does not change the sum. $(5 + 8) + 2 = 5 + (8 + 2)$

Commutative Property of Addition This property states that the order in which the numbers are added does not change the sum. $6 + 1 = 1 + 6$

difference The answer to a subtraction problem. The difference of $8 - 2$ is 6.

estimate An answer that is close to the exact answer. An estimate for $17 + 9$ is 30.

Identity Property of Addition

This property states that the sum of any number and zero is the number.

$$8 + 0 = 8$$

sum The answer when you add numbers.

The sum of $4 + 5$ is 9.

Activity

Collect 5 small blue items, 2 green items, and 3 red items around the house. Line up the items on a table. Use the items to create addition and subtraction problems. Ask: If I add 2 blue items and 3 red items, how many items do I have? If I add all the red, green, and blue items together, how many do I have? If I take the green items away, how many red and blue items are left?

Books to Read

The Hershey's Kisses Addition Book

by Jerry Pallotta

12 Ways To Get 11

by Eve Merriam

Subtraction Action

by Loreen Leedy

Dear Family,

Today my class started **Chapter 3: Organize, Display, and Interpret Data**. I will be learning to read and interpret data. I will also be learning to display data on a number line, and in graphs, tables, and charts. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

bar graph A graph that compares data by using bars of different lengths and heights.

median The middle number (or item) when a set of numbers is arranged from least to greatest. Example: 34, 51, 62, 69, 81, (62 is the median)

mode The number(s) (or item) that occurs most often in a set of numbers. A set can have more than one mode. Example: 29, 21, 29, 30, 29 (29 is the mode)

outcome A possible result of an experiment.

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

Activity

Open the cupboards in your kitchen. Create a chart to tally the amount of each can, bottle, or box and brand present. What do you have the most of? What do you have the least of?

Books to Read

X Marks the Spot

by Lucille Recht Penner

The Water Hole

by Graeme Base

How Many Snails?

by Paul Giganti, Jr.

Dear Family,

Today my class started **Chapter 4: Apply Multiplication and Division Facts**. I will be learning how to use multiplication and division properties. I will also learn to identify factors and multiples. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

Commutative Property The property states that the order in which two numbers are multiplied does not change the product. $7 \times 2 = 2 \times 7$

Associative Property The property states that the grouping of the factors does not change the product. $3 \times (6 \times 2) = (3 \times 6) \times 2$

Distributive Property The property that states that in order to multiply a sum by a number, you can multiply each added by the same number and add the products.

Identity Property If you multiply a number by 1, the product is the same as the given number. $8 \times 1 = 8$ and $1 \times 8 = 8$

Zero Property The property states that any number multiplied by zero is zero. $0 \times 5 = 0$

fact family A group of related facts using the same numbers. $5 \times 3 = 15$, $3 \times 5 = 15$, $15 \div 5 = 3$, $15 \div 3 = 5$

factor A number that divides into a whole number evenly. $24 \div 3 = 8$ and $24 \div 8 = 3$. The factors of 24 are 1, 2, 3, 4, 6, 8, 12, and 24.

multiple A multiple of a number is the product of that number and any whole number. 15 is a multiple of 5 because $3 \times 5 = 15$.

Activity

Pretend you are planning a birthday party and putting together the party favor bags. Together with your child discuss how many people you will invite, what will be in each party favor bag, how many of each item will be in each bag, and so on. Write a shopping list with the total number of each item needed.

Books to Read

Anno's Mysterious Multiplying Jar
by Mitsumasa Anno

The King's Chessboard
by David Birch

Spaghetti and Meatballs For All
by Marilyn Burns

Dear Family,

Today my class started **Chapter 5: Describe Algebraic Patterns**. I will be learning to solve addition and subtraction equations. I will work on equations and identify extra and missing information when solving problems. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

expression A combination of numbers, variables, and operation symbols that represents a mathematical quantity. $3(x) = 27$

variable A letter or symbol used to represent an unknown quantity. $3(x) = 27$, x , is the variable

parentheses Tell you which operation to perform first. $12 - (7 + 2)$

equation A mathematical sentence that contains an equals sign, $=$, indicating that the left side of the equals sign has the same value as the right side. $4 + 5 = 9$

pattern A sequence of numbers, figures, or symbols that follows a rule or design. 2, 4, 6, 8

Activity

Place 2 plates next to each other. Think of each plate as one side of an equation. Place 1 dime on each plate. Add 2 nickels to the left plate. Place 1 dime on the right plate. Are the values on each plate equal? Remove a dime from each plate. What are the new values? Are they equal? What must you do to the left side so the two sides are equal?

Books to Read

Subtraction Action

by Loreen Leedy

How Many Feet? How Many Tails?

by Marilyn Burns

The Hershey's Kisses Addition Book

by Jerry Pallotta

Dear Family,

Today my class started **Chapter 6: Multiply by One-Digit Numbers**. I will be learning to multiply multiples of 10, 100, and 1,000. I will also be learning to estimate products by rounding. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

addition An operation on two or more addends that is equal to a sum. $4 + 4 = 8$.

division An operation on two numbers in which the first number is split into equal groups. Each group has a size equal to the second number.

estimate A number close to an exact value; an estimate indicates about how much. An estimate for \$4.99 is \$5.

multiplication An operation on two numbers to find their product. It can be thought of as repeated addition. $5 \times 5 = 25$.

product The answer to a multiplication problem. It also refers to expressing a number as a product of its factors. $4 \times 3 = 12$.

↑ product

subtraction An operation on two numbers that tells the difference, when some or all are taken away. $7 - 3 = 4$.

whole number The numbers 0, 1, 2, 3, 4 . . .

Activity

Collect 10 dimes, 20 nickels, and 30 pennies. If you multiplied each total number by 10, how many of each coin would you have?

Books to Read

The Rajah's Rice

by David Barry

The King's Chessboard

by David Birch

Amanda Bean's Amazing Dream

by Cindy Neuschwander

Dear Family,

Today my class started **Chapter 7: Multiply by Two-Digit Numbers**. I will be learning to multiply by multiples of 10 and two-digit numbers. I will also be learning to use rounding to estimate products. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

Distributive Property of Multiplication The property that states that to multiply a sum by a number, you can multiply each addend by the same number and add the products. Example:
 $4 \times (1 + 3) = (4 \times 1) + (4 \times 3) = 16$.

estimate A number close to an exact value; an estimate indicates about how much. Example:
 $47 + 22$ (estimate $50 + 20$), about 70.

product The answer to a multiplication problem. It also refers to expressing a number as a product of its factors. Example:
 $7 \times 2 = 14$, 14 is the product.

Activity

Pretend you are selling items in a store. Collect the following items and label them accordingly:
(1) book, \$10; (2) shirt, \$15; and (3) picture frame, \$5. If a teacher wanted to buy 10 of the books, how much would it cost? If someone wanted to buy 3 shirts, how much would it cost? If someone wanted to buy 2 picture frames, how much would it cost?

Books to Read

Anno's Mysterious Multiplying Jar
by Mitsumasa Anno

Amanda Bean's Amazing Dream
by Cindy Neuschwander

One Hundred Hungry Ants
by Elinor Pinczes

Dear Family,

Today my class started **Chapter 8: Divide by a One-Digit Number**. I will be learning to divide a two- or three-digit number by a one-digit number. I will also be learning to estimate quotients. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

remainder The number that is left after one whole number is divided by another when the quotient is a whole number.

dividend A number that is being divided.
Example: $3 \overline{)19}$, 19 is the dividend.

divisor The number by which the dividend is being divided. Example: $3 \overline{)19}$, 3 is the divisor.

quotient The result of a division problem.
Example: $24 \div 3 = 8$, 8 is the quotient.

compatible numbers Numbers in a problem or related numbers that are easy to work with mentally. Example: 720 and 90 are compatible numbers for division because $72 \div 9 = 8$.

Activity

Place 30 cotton balls on a table or 30 dots on a piece of paper.
Divide them into 3 equal groups.
How many are in each group?
Divide them into 2 equal groups.
How many are in each group?
Divide them into 5 equal groups.
How many are in each group?

Books to Read

Bunches and Bunches of Bunnies
by Louise Mathews

A Grain of Rice
by Helena Clare Pittman

100th Day Worries
by Margery Cuyler

Dear Family,

Today my class started **Chapter 9: Identify and Describe Geometric Figures**. I will be learning to identify, describe, and classify two and three-dimensional figures. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

three-dimensional figure A figure that has length, width, and height.

net A flat pattern that can be folded to make a three-dimensional figure.

two-dimensional figure A figure that has length and width.

polygon A closed plane figure formed using line segments that meet only at their endpoints.

angle A figure that is formed by two rays with the same endpoint.

triangle A polygon with three sides and three angles.

Activity

Go on a scavenger hunt around your house for items shaped like the following figures: cube; rectangular prism; cone; sphere; and cylinder.

Books to Read

Sea Shapes

by Suse MacDonald

Twizzlers Shapes

and Patterns by Jerry Pallotta

Eight Hands Round

by Ann Whitford Paul

Dear Family,

Today my class started **Chapter 10: Understand and Develop Spatial Reasoning**. I will be learning to find points on number lines and coordinate planes. I will also learn how to identify and describe lines, segments, and rays. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

number line A line that represents numbers as points.

point An exact location in space that is represented by a dot.

coordinate plane A coordinate plane is formed when two number lines intersect at their zero points.

transformation A movement of a figure that does not change the size or shape of the figure.

Activity

Create a number line to graph the temperature outside. Every hour, mark what the new temperature is. Determine the difference in temperature from hour to hour by adding or subtracting on a number line

Books to Read

Biggest, Strongest, Fastest
by Steve Jenkins

X Marks the Spot by Lucille Recht Penner

Tiger Math, Learning to Graph from a Baby Tiger by Nagda and Bickel

Dear Family,

Today my class started **Chapter 11: Measure Length, Area, and Temperature**. I will be learning to measure length and temperature in both customary and metric units. I will also be learning to find perimeter and area. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

metric system the measurement system that includes units such as meter, gram, liter, and degrees Celsius

square units a unit for measuring area

perimeter the distance around a shape or region

area the number of square units needed to cover the inside of a region or plane figure

temperature a measurement that tells how hot or cold something is; can be measured in degrees Fahrenheit or degrees Celsius

customary system the measurement system that includes units such as foot, pound, quart, and degrees Fahrenheit. Also called *standard measurement*

Activity

Cut out small slips of paper. On each slip, write a measurement in customary units. Draw one slip at a time, converting the written measurement to a different customary unit. For example, you would convert 36 in. to 3 ft. Repeat the activity, converting to a different unit each time.

Books to Read:

The Patchwork Quilt
by Valerie Flourney

A Cloak for a Dreamer
by Aileen Freidman

The Librarian Who Measured the Earth by Kathryn Lasky

Dear Family,

Today my class started **Chapter 12: Measure Capacity, Weight, and Volume**. I will be learning to estimate, measure, and convert customary units of capacity and weight and metric units of capacity and mass. I will also be learning to measure and estimate volume in cubic units. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

capacity Amount of liquid a container can hold.
Example: The capacity of a cocoa mug is about 1 cup.

weight How heavy an object is. Example: My dog's weight is 50 pounds.

mass Amount of matter an object has.
Example: The mass of a nickel is 5 grams.

volume Amount of space that a three-dimensional object contains. Example: The volume of my swimming pool is 1,000 cubic feet.

elapsed time Amount of time between the beginning and ending of an activity. Example: We started dinner at 5:15 and finished at 6:00. The elapsed time was 45 minutes.

Activity

Collect the following items: liquid measuring cup, two empty glasses, one empty pitcher. Work with your child to measure one cup of water. Pour the water into a glass. Next measure one fluid ounce of water and pour it into the second cup. Ask your child to guess how many fluid ounces equal one cup.

Books to Read

Mr. Archimedes' Bath
by Pamela Allen

Pigs on A Blanket
by Amy Axelrod

Counting on Frank
by Rod Clement

Dear Family,

Today my class started **Chapter 13: Describe and Compare Fractions**. I will be learning to identify, read, and write fractions. I will also be learning to compare and order fractions. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

denominator The bottom number in a fraction. In $\frac{5}{6}$, 6 is the denominator. It tells you how many parts in all.

equivalent fractions Fractions that represent the same number. $\frac{3}{4}$ and $\frac{6}{8}$

fraction A number that represents part of a whole or part of a set. $\frac{1}{2}$, $\frac{3}{4}$, $\frac{5}{6}$

improper fraction A fraction with a numerator that is greater than or equal to the denominator.

mixed number A number that has a whole number part and a fraction part. $2\frac{3}{4}$

numerator The top number in a fraction. In $\frac{5}{6}$, 5 is the numerator.

Activity

Collect 10 counters or cubes. Count the number of each color you have. Write each amount in the form of a fraction. Example: If you have 3 red counters out of 10 total counters, what would the fraction form of that statement be?

Books to Read

Fraction Fun by David Adler

The Fraction Family Moves West by Marti Dryk

The Doorbell Rang by Pat Hutchins

Dear Family,

Today my class started **Chapter 14: Use Place Value to Represent Decimals**. I will be learning to identify, read, write, and model decimals. I will also be learning to relate decimals fractions, and mixed numbers, to compare and order decimals and to solve problems by making a model. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

decimal A number with one or more digits to the right of the decimal point, such as \$2.05

decimal point A period separating the ones and the tenths in a number. Example: \$2.95

tenth One of ten equal parts or $\frac{1}{10}$

hundredth A place value position. One of one hundred equal parts

mixed number A number named by a whole number and a fraction. Example: $2\frac{1}{2}$

decimal equivalent A fraction that has a denominator that is a factor of 10 or 100 that can be stated as a decimal

Activity

Collect 10 coins. Count the number of each coin. Write each amount in decimal form. Example: If you have 3 dimes out of 10 total coins, what would the decimal form of that statement be?

Books to Read

Piece = Part = Portion by Scott Gifford

100th Day Worries by Margery Cuyler

Odds and Evens by Heidi Goennel

Dear Family,

Today my class started **Chapter 15: Add and Subtract Decimals**. I will be learning to add and subtract simple decimals. I will also be learning to round decimals and estimate decimal sums and differences. Here are my vocabulary words and an activity that we can do together.

Love, _____

Key Vocabulary

decimal A number with one or more digits to the right of the decimal point. \$2.05

decimal point A period separating the ones and the tenths in a number. 0.8

addends Any numbers being added together. In $2 + 4 = 6$, 2 and 4 are addends.

sum The answer to an addition problem. In $2 + 8 = 10$, 10 is the sum.

difference The answer to a subtraction problem. In $8 - 3 = 5$, 5 is the difference.

round To change the value of a number to one that is easier to work with. 21 can be rounded to 20.

estimate A number close to an exact value; an estimate indicates about how much. $47 + 22$ (estimate $50 + 20$) is about 70.

Activity

Start a pretend store. Find items around the house and attach price tags to them. Be sure the prices are in decimal form. (Example: \$1.24) Once you have stocked your store, pretend you are the customer and select things you want to buy. Add up the total price. Repeat.

Books to Read

Piece=Part=Portion by Scott Gifford

Alice in Pastaland by Alexandra Wright

The Doorbell Rang by Pat Hutchins