

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. It is also called *expanded notation*. 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: Add and Subtract to Solve 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

**data** Another word for information.

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

**outcome** A possible result of an experiment.

**survey** A method for collecting data.

**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.  $4 + 5 = 9$

**balance** When the amount on the left side of an equation is the same as the amount on the right side, both sides are equal and the equation is balanced.

$$5 + 1 + 5 = 6 + 2 + 3$$

**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 Whole Numbers. I will be learning to multiply multiples of 10 and 100. I will also be learning to estimate products, to multiply a multidigit number, and to determine reasonable answers. Here are my vocabulary words and an activity that we can do together.

Love, \_\_\_\_\_

## Key Vocabulary

**Distributive Property of Multiplication** Allows you to break apart factors to find a product.

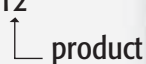
**division** An operation on two numbers in which the first number is split into equal groups. Each group has a size equal to the second number.

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

**factor** Two or more numbers that are multiplied together to form a product.

**multiple** Two product of that number and any whole number.

**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

**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: Divide by One-Digit Numbers. I will be learning to divide a two- or three-digit number by a one-digit number. I will also be learning to divide a multidigit number by a one-digit number and learning to solve problems using the guess and check strategy. 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

***100<sup>th</sup> Day Worries***  
by Margery Cuyler

Dear Family,

Today my class started **Chapter 8: Identify and Describe Geometric Figures**. I will be learning to identify, describe, and classify solid and plane figures. Here are my vocabulary words and an activity that we can do together.

Love, \_\_\_\_\_

## Key Vocabulary

**solid figure** A figure having the three dimensions; length, width, and thickness or depth.

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

**plane figure** A two-dimensional figure that lies entirely within one plane such as a triangle or square.

**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 9: 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 of 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 10: Measure Length, Perimeter, 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 11, Measure Capacity, Weight/Mass, 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 12: 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 13: 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 14, 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