NAME DATE

About the Mathematics in This Unit

Dear Family,

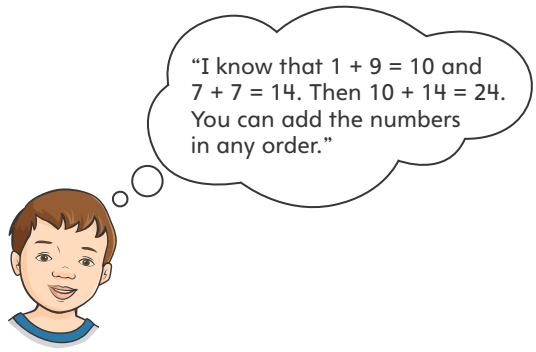
Our class is starting the year with a mathematics unit called *Coins, Number Strings, and Story Problems*. This unit lays the groundwork for the mathematics we do all year. We will focus on counting by 1s and by groups of 5 and 10, identifying and recognizing coins and their values, using what we know to add and subtract numbers, developing fluency with the addition and subtraction facts, and understanding and solving a variety of story problems that involve addition and subtraction.

Throughout the unit, students work toward the following goals.

Benchmarks/Goals	Examples
Recognize and identify coins and know their value.	Which one is the dime? What's the name of the other coin?  "A quarter is worth 25 cents."  = 25¢

NAME _____ DATE _____

About the Mathematics in This Unit

Benchmarks/Goals	Examples
Use known combinations to add several numbers in any order.	1 + 7 + 9 + 7 = _____ 
Solve a comparison story problem with the difference unknown.	There are 29 cookies. Are there enough cookies for everyone in our class to have one? How many would be left over?
Solve story problems with an unknown total and an unknown result.	Kira had 10 marbles. Jake had 12. How many marbles do they have together? There were 22 children playing tag on the playground. Then 10 more children joined the game. How many children were playing tag? Kira had 16 baseball cards. She gave 7 of them away. How many baseball cards does Kira have left?

In our math class, students engage in math problems and activities. They are frequently asked to share their thinking about a given problem. Most important is that children accurately solve math problems in ways that make sense to them. At home, encourage your child to explain the math thinking that supports those solutions. In the coming weeks, you will receive more information about our work in this unit as well as suggestions for activities to do at home. We are looking forward to creating a mathematical community in our classroom.

NAME DATE

About Mathematics Homework

Dear Family,

Homework is an important link between learning in school and learning out of school. It can extend the work students do in class, provide the opportunity to practice previously learned skills, or prepare students for the next day's lesson.

In Grade 2, math homework activities include working on addition and subtraction problems, playing a game learned in class, collecting information (from family members) for a data project, or solving a story problem.

Here are some suggestions for making the homework experience successful for your child.

- Establish a quiet place to work (whether at home, in an after-school program, or in some other place) and a system for bringing homework back and forth.
- Certain materials such as decks of Number Cards and game directions will be used again and again throughout the year. Since math materials will only be sent home once, please help your child find a safe place to store them—maybe in a folder, an envelope, or a shoebox—so that they can be easily located and used when needed. If your child regularly does homework in more than one place, we can talk about how to obtain the necessary materials.
- Children often use real objects to solve math problems. Please provide a collection of 30–40 small objects, such as beans, buttons, or pennies, for your child to use at home. These can be stored in a plastic bag or small container and kept with other math materials.

NAME DATE

About Mathematics Homework

- While working on math problems at home, encourage your child to solve problems and record work in ways that make sense to him or her. Some children will use numbers and equations, some will use pictures or charts, others will use words, and many will use a combination of these methods. We want all students to use problem-solving methods that are meaningful to them.

- If your child asks for your help in solving some of these problems, it may be helpful for you to ask him or her questions such as: What's a good place to start? Does this problem remind you of anything you've done in school? What are you trying to figure out?

- For story problems, these questions might be helpful: Can you draw a picture of what is happening in this problem? Can you tell me what is happening in this story? Do you think at the end of the story there will be more or fewer than there were at the beginning?

If you would like to share any thoughts with me about how your child is approaching a homework task, please feel free to send me a note. If a task seems too difficult or is confusing, please let me know so I can address the issue. I look forward to working with you and your child throughout the year.

NAME DATE

Learning the Facts

Dear Family,

To be able to add and subtract well, students need to become fluent with addition and subtraction within 20. In Grade 2, students learn their addition and subtraction facts over the course of the year, and fluency is expected by the end of the year. In this first number unit, students will be working with the following sets of combinations.

Fact Cards: Set 1

- **Make 10 Facts:** All of the combinations of 10 made with two numbers, such as $8 + 2$ and $4 + 6$
- **Plus 1 Facts:** Any number plus one $(5 + 1)$, or 1 plus any number $(1 + 8)$
- **Plus 2 Facts:** Any number plus two $(3 + 2)$, or 2 plus any number $(2 + 7)$
- **Doubles Facts:** Any number plus itself $(5 + 5, 9 + 9)$
- A few facts with sums less than 10 that do not fall into the above categories

Fact Cards: Set 2

These facts include the related subtraction facts for each of the above categories: the 10 Minus facts, the Minus 1 Facts, the Minus 2 Facts, and problems like $10 - 5$ and $18 - 9$, as well as a few that do not fall into the above categories.

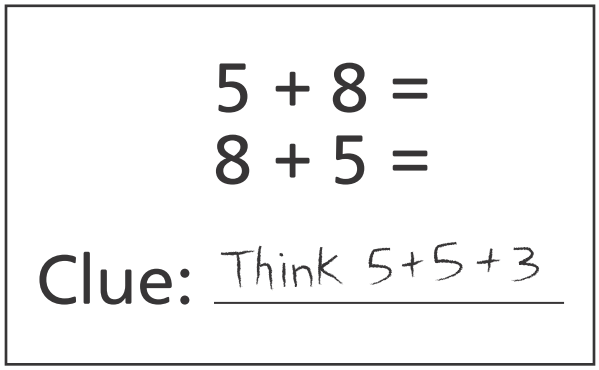
Students will work on other sets of addition and subtraction facts—Plus 10 and Minus 10 Facts, Plus 9 and Minus 9 Facts, and facts that are "near" Doubles (e.g. $5 + 6$ or $11 - 6$)—in later units. Students are expected to be fluent with all of these facts by the end of Grade 2.

NAME _____ DATE _____

Learning the Facts

Students will learn these addition and subtraction facts through frequent and repeated use. In school, we will be playing lots of games that help students learn particular groups of facts. Students will also play some of these games for homework. We'll also be using Fact Cards like the one below.

Students use these cards to practice their facts and sort them into two envelopes—"Facts I Know" and "Facts I Am Still Working On." We think a lot about ways to remember the facts that students find difficult. For example, your child might write, "Think 5 + 5 + 3" as a clue for solving 5 + 8.



In addition to using the facts frequently, students will focus on the numbers and relationships involved. That way, if students forget a fact, they can still solve the problem quickly and efficiently. For example, students might use the following strategies:

- "8 + 5 is the same as 8 + 2, which is 10, and 3 more, which is 13."
- "7 + 9 is like 7 + 10, just one less. So it's 16."

Again, thank you for your interest and support.

NAME DATE

Related Activities to Try at Home

Dear Family,

The activities suggested below are related to the mathematics we are currently working on in school. Doing them together can enrich your child's mathematical learning.

Coins In class, we are learning about coins and their values. At home, your child can examine coins and talk with someone about what they notice. Ask them questions such as, "What is this coin called?", "Can you find a quarter?", and "How much is each coin is worth in pennies?" You can also discuss questions such as: "Here are two dimes. How much is this worth? … Can you find another way to make 20¢?" or "Let's trade coins. I'll give you 2 nickels for 1 dime."

Pockets at Home In school, we count the number of pockets that people have on their clothes in several different ways. At home, your child can find how many pockets people in your family are wearing—individually and altogether. Your child may be interested in comparing the number of pockets on different days (on school days and on weekends) or at different times of the day (school/work clothes, play clothes, pajamas . . .).

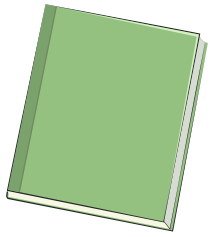
Counting by Groups Look for opportunities to practice counting by 2s, 5s, and 10s. Count together and see how high you can go. Think about situations that involve equal groups. Pose questions such as these:

> "If you have 8 pairs of socks, how many socks do you have? If there are 5 people sitting on a bench, how many toes will there be?"

NAME DATE

Related Activities to Try at Home

Math and Literature Here are some children's books that contain ideas related to our work in this mathematics unit. You can find them in your local public library and read and discuss them together. See what mathematical concepts your child discovers.



Cribb, Joe. *Money*.

Glass, Julie. *A Dollar for Penny*.

Jenkins, Steve. *Just a Second*.

Murphy, Stuart J. *Game Time!*

Viorst, Judith. *Alexander, Who Used to Be Rich Last Sunday*.

Walton, Rick. *Bunny Day: Telling Time from Breakfast to Bedtime*.

Wells, Rosemary. *Bunny Money*.

Williams, Rozanne Lanczak. *The Coin Counting Book*.

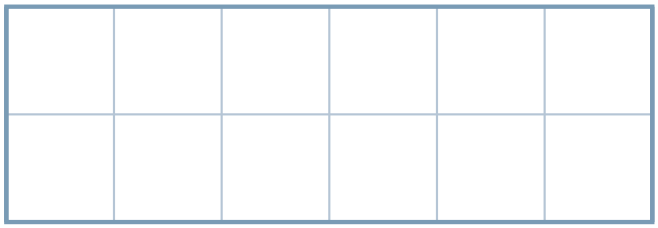
NAME DATE

About the Mathematics in This Unit

Dear Family,

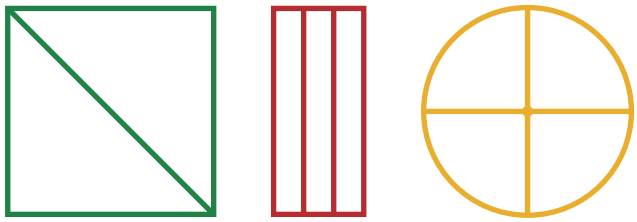
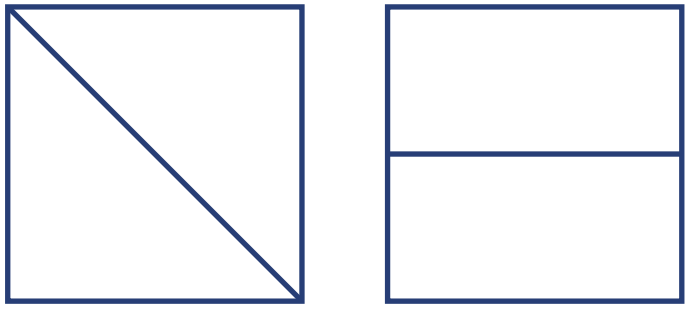
We are beginning a new unit in mathematics called *Attributes of Shapes and Parts of a Whole*. In this unit, which focuses on 2-D and 3-D geometry and also foundational ideas about fractions, students will identify two- and three-dimensional shapes, learn about rectangular arrays, and partition squares, rectangles, and circles into equal parts.

Throughout the unit, students work toward the following goals.

Benchmarks/Goals	Examples
Identify attributes of and draw 2-D and 3-D shapes.	 6 sides; 4 sides, 4 right angles; 6 square faces
Make a rectangle out of squares and describe it.	 2 rows 6 in each row

NAME DATE

About the Mathematics in This Unit

Benchmarks/Goals	Examples
Divide 2-D shapes into halves, thirds, and fourths.	
Recognize that [halves] of the same whole can look different.	

In class, students engage in math problems and activities. They are frequently asked to share their thinking about a given problem. What is most important is that children accurately solve math problems in ways that make sense to them. At home, encourage your child to explain the math thinking that supports those solutions. In the coming weeks, you will receive more information about our work in this unit as well as suggestions for activities to do at home.

NAME DATE

Related Activities at Home

Dear Family,

The activities suggested below are related to the mathematics in the geometry and fractions unit we are currently working on, *Attributes of Shapes and Parts of a Whole*. Doing the activities at home together will enrich your child's mathematical learning.

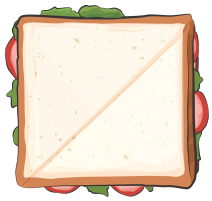
Shapes in the Environment Look for different shapes around your home and neighborhood. What shape are the doors and windows? Can you see shapes within other shapes, such as panes in a window? What shape are the street signs as you walk or drive to school? What shapes can you find around the kitchen?

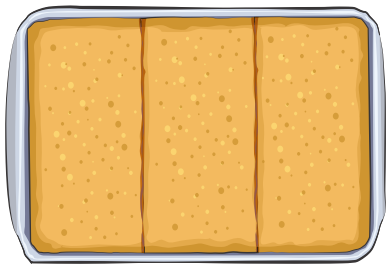
Making Shapes Make pictures out of shapes cut from paper. Scrap paper and newspaper work fine. Cut a variety of shapes (squares, rectangles, triangles, circles, and hexagons) for your child to glue onto a background. You might like to do this as a family mural, adding shapes over time.

Flags and Fractions Many nations' flags and nautical flags are divided into fractional parts, such as halves, thirds, or fourths. You and your child might like to hunt for flags in books and around your neighborhood. You can find pictures of flags in an encyclopedia, in an atlas, in books about flags (see page 2), or on a website pertaining to flags. Find flags that are clearly divided into fractional parts, and then ask questions such as these: "How much of this flag is blue?", "What color is half of that flag?", and "Is that flag partitioned into halves or thirds?" Your child might draw the flags on graph paper, color them, and label fractional parts.

NAME DATE

Related Activities at Home

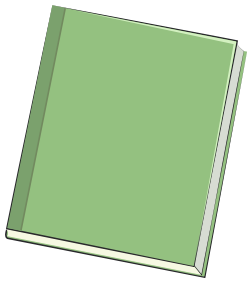




Finding Fair Shares Your child can practice partitioning objects into equal shares. Ask your child, "Let's cut your sandwich into halves. How many different ways can we cut your sandwich so it becomes two equal pieces?" and "Can we cut this pan of cornbread into thirds? … What about fourths?"

Math and Literature

Below are some suggestions of children's books that contain relevant ideas about geometry and fractions. Most of them can be found in your school or local library.



Adler, David A. *Shape Up!*

Bednar, Sylvia. *Flags of the World.*

Burns, Marilyn. *The Greedy Triangle.*

Dodds, Dayle Ann. *Full House: An Invitation to Fractions.*

Franco, Betsy. *Bees, Snails, & Peacock Tails.*

Greene, Rhonda Growler. *When a Line Bends . . . A Shape Begins.*

Murphy, Stuart J. *Captain Invincible and the Space Shapes.*

Napoli, Donna Jo. *The Wishing Club: A Story About Fractions.*

NAME DATE

About the Mathematics in This Unit

Dear Family,

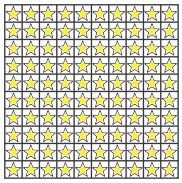
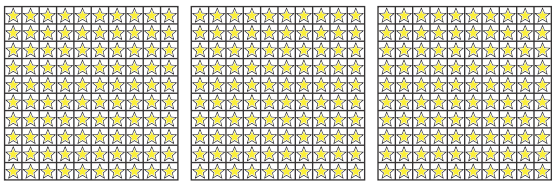
We are beginning a new unit in mathematics called *How Many Stickers? How Many Cents?*. In this second number unit, students focus on place value of 2- and 3-digit numbers. They are introduced to *Sticker Station*, a store that sells single stickers, strips of 10 stickers, and sheets of 100 stickers. They use this context, as well as money (pennies, dimes, dollar bill) and cubes organized in towers of 10, to think about how numbers are composed. Students also solve a variety of addition and subtraction story problems and play games that involve adding multiples of 5 and 10 up to 100 or $1.00. They read and write numbers to 500 and practice adding and subtracting 10 to 3-digit numbers.

Throughout this unit, students will be working toward these goals:

Benchmarks	Examples
Solve a put together/take apart story problem with both addends unknown, and find all the possible combinations.	Sally had 34 cents in dimes and pennies. How many of each could she have? 3 dimes and 4 pennies 2 dimes and 14 pennies 1 dime and 24 pennies 34 pennies
Solve a put together/take apart story problem with one addend unknown.	If you have 41 stickers in a sticker book, how many more do you need to have 50 stickers? 60 stickers?
Solve two-step story problems about money.	I have 3 quarters and a nickel. How much money do I have? How much more do I need to have $1?

NAME _____ DATE _____

About the Mathematics in This Unit

Benchmarks	Examples
Understand that 100 can be seen as 1 hundred, 10 tens, and 100 ones.	 100 single stickers 10 strips of 10 1 sheet of 100
Understand that multiples of 100 (e.g., 200, 300, 400, etc.) are made up of a number (2, 3, 4, etc.) of hundreds.	300 = 3 groups of 100  "100, 200, 300"
Solve story problems with an unknown change.	Kira had 15 balloons. Her dad gave her some more. Then she had 20. How many did her dad give her? Sally had 15 balloons. She gave some to her mom. Then she had 10. How many did she give to her mom?
Solve story problems with an unknown start.	Kira had some balloons. Her dad gave her 5 more. Then she had 35. How many did Kira start with? Sally had some balloons. She gave 10 to her mom. Then she had 24. How many did Sally have at the beginning?

In our math class, students continue to engage in math problems and activities and share how they solve a given problem. Most importantly, children accurately solve math problems in ways that make sense to them. At home, encourage your child to explain his or her math thinking to you. In the coming weeks, you will receive suggestions for activities to do at home that further support the mathematics in this unit.

NAME DATE

Related Activities to Try at Home

Dear Family,

The activities suggested below are related to the mathematics we are currently working on in school. Doing them together can enrich your child's mathematical learning.

Addition and Subtraction Facts Your child has been practicing sets of addition and subtraction facts by playing games such as *Close to 20*, where the object is to select 3 cards that total as close to 20 as possible. They have also been reviewing facts using their sets of Fact Cards and sorting the cards into "Facts I Know" and "Facts I Am Still Working On." Occasionally your child may bring home 4–6 chosen facts they are still working on to practice and review.

Making One Dollar In class, we are learning about coin values and equivalencies of one dollar. Examine coins and ask your child to tell you about each coin. Discuss how much one dollar is worth in pennies, nickels, dimes, and quarters. Talk about equivalencies:

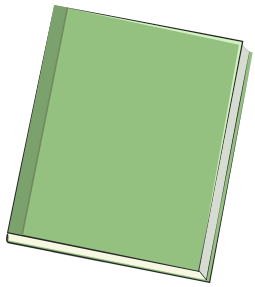
> "Here are 4 quarters. How much is this worth? Can you find another way to make $1.00?" "I have 7 dimes. How much more do I need to have $1.00?"

Skip Counting In school, we are practicing skip counting by 5s and 10s. Look for opportunities to practice skip counting by 2s, 5s, and 10s. Count together and see how high you can go. You can help your child see everyday examples of this skill by counting items such as shoes, fingers, or feet. Pose questions about situations that involve equal groups. For example: "I just took the bus with 15 other people. Can you tell me how many shoes were on the bus?" "When we are with the whole family, how many fingers are there?"

NAME DATE

Related Activities to Try at Home

Math and Literature Here are some children's books that contain ideas related to our work in this mathematics unit. Look for them in your local public library and read them together.



Hulme, Joy N. *Sea Sums*.
Jenkins, Emily. *Lemonade in Winter: A Book About Two Kids Counting Money*.
Neuschwander, Cindy. *Sir Cumference and All the King's Tens: A Math Adventure*.
Richards, Kitty. *It's About Time, Max! Math Matters Series*.
Wiesner, David. *Tuesday*.
Williams, Rozanne Lanczak. *The Coin Counting Book*.

Thank you for your continued interest and support.

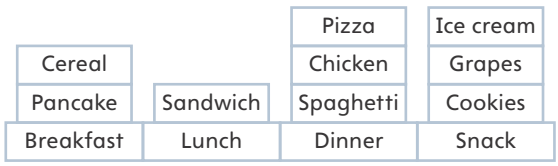
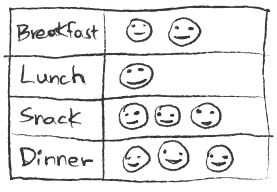
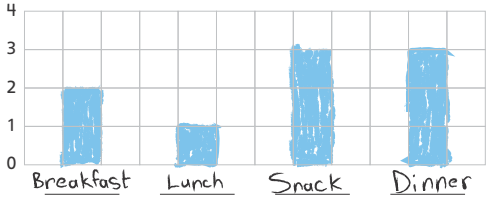
NAME DATE

About the Mathematics in This Unit

Dear Family,

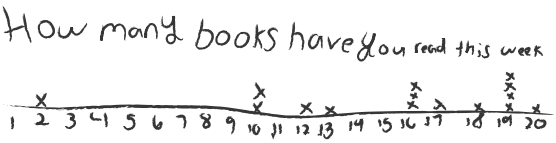
Our class is starting a new unit about data—the facts or information we collect about people and things in our world. Children will be posing questions, collecting and sorting information, and making representations of data as a way of sharing their findings with others. During this unit, students will make their own representations of data, and they will also make and interpret data represented on picture graphs, bar graphs, Venn diagrams, and line plots.

Throughout this unit, students will be working toward these goals:

Benchmarks	Examples
Organize a set of data with up to four categories.	What is your favorite food? 
Create, describe, and interpret a variety of data representations, including picture graphs and bar graphs.	"Only 1 person liked a lunch food best." "Dinner and snack are tied for most popular. Each has 3 people."  

NAME DATE

About the Mathematics in This Unit

Benchmarks	Examples
Order, represent, and describe a set of numerical data.	

In our math class, students continue to engage in math problems and activities and share how they solve a given problem. Most importantly, children accurately solve math problems in ways that make sense to them.

At home, encourage your child to explain his or her math thinking to you. In the coming weeks, you will receive suggestions for activities to do with your child that further support the mathematics in this unit.

NAME DATE

Related Activities to Try at Home

Dear Family,

The activities below are related to *Pockets, Teeth, and Guess My Rule*, the unit we are currently working on in math. Doing these activities together with an adult will help enrich your child's mathematical learning.

Finding Categories Help your child look for real-world situations in which items are sorted into categories. For example, in the grocery store, food is organized by section. At the library, books are sorted according to topic or type. At home, dirty laundry is often sorted into light and dark clothes and then resorted into a variety of piles when it is clean. Have a conversation with your child about other things he or she notices that are sorted and how they are sorted.

Guess My Rule This game focuses on looking at attributes or characteristics, and making categories. Students will bring home the directions when they play the game for homework. The game can be played repeatedly, using different categories and rules.

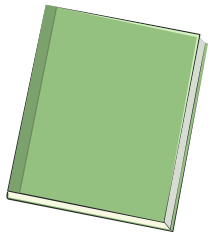
Animals Near My Home Ask your child to look near your home for different kinds of animals, from the smallest bug to the largest furry creature. Record each type of animal on an index card or small piece of paper. See what possible categories these animals might fit into. You can also play "Guess My Rule" with animals.

NAME DATE

Related Activities to Try at Home

Graph Hunt Look for and collect examples of graphs and representations of data. Check newspapers and magazines. Talk about what is represented by the graph. Is it clear? What data, or information, does the graph contain? Encourage your child to make graphs about things that are important to him or her.

Math and Literature Here are some suggestions of children's books that are related to our work on data.



Aber, Linda Williams. *Who's Got Spots?*
Jocelyn, Marthe. *Hannah's Collections.*
Leedy, Loreen. *The Great Graph Contest.*
Ochiltree, Dianne. *Bart's Amazing Charts.*

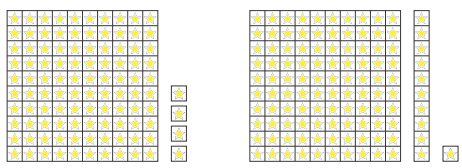
NAME DATE

About the Mathematics in This Unit

Dear Family,

We are beginning a new unit in mathematics called *How Many Tens? How Many Hundreds?*. In this third number unit of Grade 2, students continue to work on solving addition and subtraction problems, understanding place value and the composition of 3-digit numbers, and adding and subtracting 2-digit numbers. They also continue to practice addition and subtraction facts to 20 with the goal of becoming fluent with these facts by the end of Grade 2.

Throughout this unit, students will be working toward these goals:

Benchmarks	Examples
Solve a 2-step story problem that involves finding the difference between a 2-digit number and 100.	Franco has 35¢. Sally has 37¢. How much money do they need to buy a comic book that costs $1.00?
Understand that 3-digit numbers represent amounts of hundreds, tens, and ones.	234  *"There are two sheets of 100, 3 strips of 10, and 4 singles.* *There are two hundreds, 3 tens, and 4 ones.* *234 = 200 + 30 + 4."*
Read, write, count, and compare numbers to 1,000.	 104 < 111

NAME _____ DATE _____

About the Mathematics in This Unit

Benchmarks	Examples
Add/subtract 10 or 100 to/from numbers within 1,000.	Start number: 189 10 less: 179 · 10 more: 199 · 100 less: 89 · 100 more: 289
Add fluently within 100.	Chen had 57 stamps in his collection. His brother gave him 34 more. How many stamps does Chen have in his collection now? 57 + 34 = _____ 50 + 30 = 80 7 + 4 = 11 80 + 11 = 91
Solve comparison story problems with a bigger unknown.	Sally and Franco have some marbles. Sally has 22 marbles. Franco has 43 more marbles than Sally. How many marbles does Franco have?
Count by 5s, 10s, and 100s within 1,000.	405, 410, 415, 420, 425, 430 123, 133, 143, 153, 163, 173

In our math class, students continue to engage in math problems and activities and share how they solve a given problem. Most importantly, students accurately solve math problems in ways that make sense to them. At home, encourage your child to explain his or her math thinking to you. In the coming weeks, you will receive suggestions for activities to do at home that further support the mathematics in this unit.

NAME DATE

Related Activities to Try at Home

Dear Family,

The activities suggested below are related to the mathematics we are currently working on in school. Doing these activities together can enrich your child's mathematical learning.

Making One Dollar In class, we are learning about coin values and equivalencies of one dollar. Examine coins, and ask your child to tell you about each coin. Discuss how much one dollar is worth in pennies, nickels, dimes, and quarters. Talk about equivalencies: "Here are 4 quarters. How much is this worth? Can you find another way to make $1.00?" "I have 7 dimes. How much more do I need to have $1.00?"

15 Minutes More In this unit, we are continuing to work on telling time to the quarter hour (e.g., 12:45, 3:15). At home, your child can continue to work on telling time to the hour, half hour, and quarter hour. See whether your child can figure out what the time will be 1 hour, half an hour, or 15 minutes from now. "It is 6:15. What time will it be in 15 minutes? Can you make a picture of what the clock will look like then?"

Solving Addition and Subtraction Problems Look for 2-digit addition and subtraction situations at home, such as the following:

- There are 36 beans in this jar and 42 beans in this jar. If we pour all of the beans from both jars into a bowl, how many beans will there be altogether?
- If you have 95 cents and you spend 30 cents, how much will you have left?

Have a pencil and paper handy, and encourage your child to explain how he or she is solving the problems.

NAME DATE

Related Activities to Try at Home

Addition Combinations Bingo Make a Bingo board with the numbers 1–20 in a 4-by-5 grid. Turn over the top two cards from a deck of cards (ace to 10). Players cover the sum if it is on their board (e.g., cover 12 if 7 and 5 are turned over). Continue turning over cards and covering the sums until one player fills a complete row. That player says, "Bingo!"

Math and Literature Here are some children's books that contain ideas related to our work in this mathematics unit. You can find many of them in your local public library and read them together.

Jenkins, Emily. *Lemonade in Winter: A Book About Two Kids Counting Money.*
Leedy, Loreen. *Follow the Money.*
LoPresti, Angeline Sparagna. *A Place for Zero.*
Murphy, Stuart J. *The Penny Pot.*
Neuschwander, Cindy. *Sir Cumference and All the King's Tens.*
Richards, Kitty. *It's About Time, Max!*
Ross, Tony. *Centipede's One Hundred Shoes.*
Sayre, April Pulley. *One Is a Snail, Ten Is a Crab: A Counting by Feet Book.*
Sweeney, Joan. *Me Counting Time: From Seconds to Centuries.*
Wiesner, David. *Tuesday.*
Worth, Bonnie. *One Cent, Two Cents, Old Cent, New Cent: All About Money.*
Ziefert, Harriet. *You Can't Buy a Dinosaur with a Dime.*

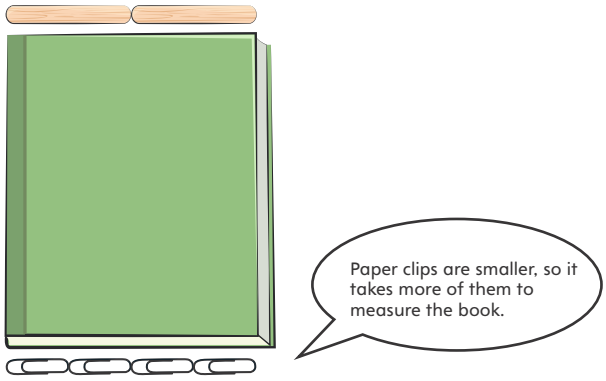
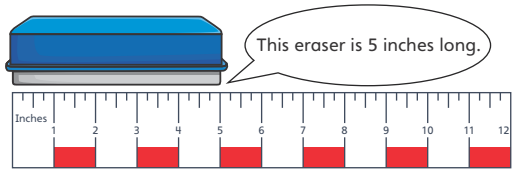
NAME DATE

About the Mathematics in This Unit

Dear Family,

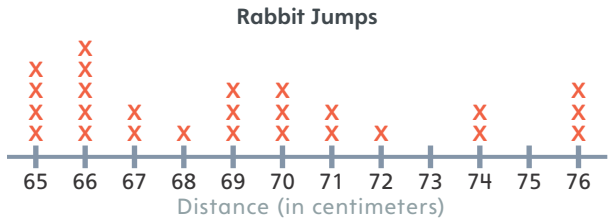
We are starting a new unit in mathematics called *How Far Can You Jump?* Students will be measuring lengths and distances and solving measurement story problems. We will work with a variety of measurement units, including nonstandard ones like shoe-lengths, craft sticks, paper clips, and cubes, as well as standard ones, like inches, feet, yards, centimeters, and meters.

Throughout this unit, students will be working toward these goals:

Benchmarks/Goals	Examples
Recognize that, when measuring the same length, larger units yield smaller counts (and vice versa).	
Estimate and measure lengths in inches, feet, centimeters, and meters.	

NAME _____ DATE _____

About the Mathematics in This Unit

Benchmarks/Goals	Examples
Represent measurement data on a line plot.	
Solve comparison and other story problems about lengths.	Jake jumped two times. 1st jump: 63 inches 2nd jump: 59 inches 1. How much longer was Jake's first jump than his second jump? 2. If you combine Jake's jumps, how far did he jump?

You will soon receive suggestions for activities to do at home that further support the mathematics in this unit. We look forward to sharing our measurement work with you.

NAME DATE

Related Activities to Try at Home

Dear Family,

The activities below are related to the unit we are currently working on in math: *How Far Can You Jump?* Doing the activities together will help enrich your child's mathematical learning.

Measuring with Your Foot Length Use the shoe-length of different members of your family to measure the same distance in heel-to-toe steps and ask your child the following questions: "How many parent feet is it from the door to the table? How many little brother feet measure the same distance?" You can also compare the lengths of the same count of different-sized feet. For example, each person does 10 heel-to-toe steps. "How far is 10 parent steps? How far is 10 second-grader steps?"

Practice Measuring with a Ruler Look closely at a ruler with your child. Notice the numbers and talk about what they represent. Use the ruler to first measure different objects around the house that are less than 12 inches. Then measure distances and objects that are greater than 12 inches. Compare measurements of the same object in centimeters and inches.

Body Benchmarks Use a ruler to find benchmarks on your child's body for one inch, one foot, and one centimeter. For example, the width of your child's thumb is a good benchmark for one centimeter. Experiment with using the benchmarks to measure. Measure an object with a body benchmark and then with a ruler. How close is the estimate made with a body benchmark to the measurement made with a ruler?

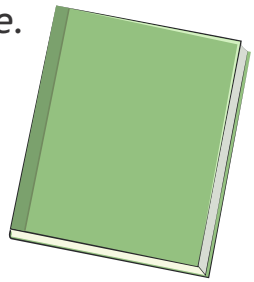
NAME DATE

Related Activities to Try at Home

Comparing Jumps This is a good activity for outdoors. Use chalk to mark a starting point and then measure how far different people jump. Talk about how to measure the jumps and compare the lengths. You might ask, "How much longer is this jump than that one?" or "How much farther would this person need to jump to go the same distance as that one?"

Math and Literature Here are some suggestions for children's books that contain ideas about linear measurement and time. Enjoy reading them together and discuss the mathematics you find.

Cleary, Brian P. *How Long or How Wide? A Measuring Guide.*
Pinczes, Elinor J. *Inchworm and a Half.*
Robbins, Ken. *For Good Measure.*
Schwartz, David M. *Millions to Measure.*
Sweeney, Joan. *Me and the Measure of Things.*



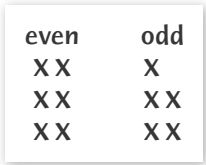
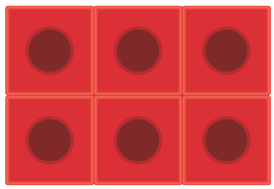
NAME DATE

About the Mathematics in This Unit

Dear Family,

Our class is beginning a new mathematics unit called *Partners, Teams, and Other Groups*. In this unit, students investigate odd and even numbers and work with equal groups. This unit lays the foundation for future work with multiplication.

Throughout this unit, we will be working toward the following goals:

Benchmarks	Examples
1. Define even and odd numbers in terms of numbers that can/cannot be organized into groups of two or two equal groups.	
2. Write an equation to express an even number as a sum of two equal addends.	$3+3=6$
3. Solve problems that involve equal groups.	Kira has 4 pairs of socks. How many socks does she have?
4. Write an addition equation to express the total number of objects in a rectangular array.	 $2+2+2=6$ $3+3=6$

Your child will bring home more information and activities about this unit in the next few days.

NAME DATE

Related Activities to Try at Home

Dear Family,

The activities below are related to the mathematics in *Partners, Teams, and Other Groups*. You can do these activities together to enrich your child's mathematical learning.

Odd and Even Numbers Ask your child to determine whether or not there are an odd or even number of specific items around your home. For example, are there an odd or even number of stairs, number of pieces of silverware, number of toy cars or stuffed animals?

Drawing Buildings Using your home or a familiar building, your child can count the number of rooms on 1 floor. Draw this floor and label what the different rooms are. Then ask questions such as, "If there are 2 floors in this building that have the same number of rooms, how many rooms would there be?" "How many rooms would there be on 3 floors?"

Making Buildings Use building blocks to make a building. Make the first floor of your building with each block representing one room. Discuss how many rooms there are and what the different rooms could be. Make a second floor that is exactly the same size and shape as the first. Use additional blocks to make the building higher, with each floor having the same number of rooms. As you add each floor, count the total number of rooms. Write down the total number of rooms for 1 floor, 2 floors, 3 floors, and so on. Ask, "What do you notice about how the total number of rooms changes?"

NAME _____ DATE _____

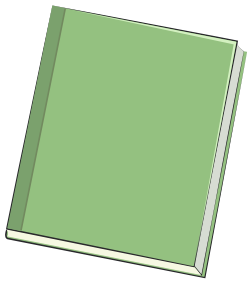
Related Activities to Try at Home

Animal Legs Choose an animal that your child likes (e.g., cats), and make a table about the number of cats and their legs (or paws, eyes, and so on). Start with 1 cat, and fill in how many legs 1 cat has. Then add another cat, and fill in the total number of legs that 2 cats have. Continue the table, and discuss the pattern that emerges. See whether your child can determine what comes next.

Cats	Legs
1	4
2	8
3	12
4	?

Math and Literature Here are some suggestions of children's books that contain ideas about odd and even numbers and equal groups.

Fisher, Doris. *My Even Day.*
Fisher, Doris. *One Odd Day.*
Jenkins, Steve. *Biggest, Strongest, Fastest.*
Murphy, Stuart J. *Beep Beep, Vroom Vroom!*
Murphy, Stuart J. *Leaping Lizards.*
Schwartz, David M. *If You Hopped Like a Frog.*



NAME DATE

About the Mathematics in This Unit

Dear Family,

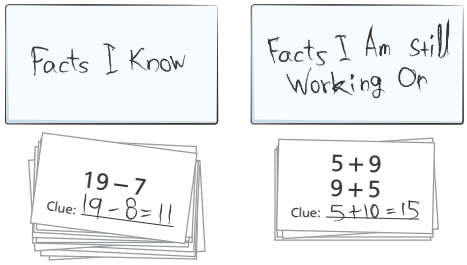
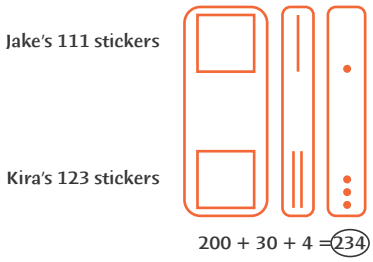
We are beginning our final unit in mathematics, called *Enough for the Class? Enough for the Grade?* In this unit, the fourth of four second grade units focused on addition and subtraction, students solve comparison story problems, develop fluency with subtraction within 100, and use representations to model and solve addition and subtraction problems about 3-digit numbers. They also achieve fluency with telling time to the nearest five minutes and should be fluent with the addition and subtraction facts they have been working on throughout the year.

Throughout this unit, students will be working toward these goals:

BENCHMARKS	EXAMPLES
Solve comparison story problems with a smaller unknown.	Kira has 35 stickers. Jake has 10 fewer stickers than Kira. How many stickers does Jake have? Kira has 35 stickers. She has 10 more stickers than Jake. How many stickers does Jake have?
Subtract fluently within 100.	Sally had 94 pennies. She gave 37 to Franco. How many pennies does Sally have now? 94 - 30 = 64 64 - 4 = 60 60 - 3 = 57 pennies

NAME _____ DATE _____

About the Mathematics in This Unit

BENCHMARKS	EXAMPLES
Tell time to the nearest 5 minutes.	What time is it?  8:05 P.M.
Demonstrate fluency with the addition and subtraction facts.	
Represent and solve addition and subtraction problems with 3-digit numbers.	

Students continue to engage in math problems and activities and share how they solve problems. At home, you can encourage your child to explain his or her math thinking to you as you engage in activities that further support the mathematics in this unit.

NAME DATE

Related Activities to Try at Home

Dear Family,

The activities suggested below are related to the mathematics we are currently working on in school. Doing them at home can enrich your child's mathematical learning.

Spend $1.00 We have been playing *Spend $1.00* at school. Children take turns rolling dice and then subtracting that amount (in cents) from one dollar. You can play this at home, or just pose problems about subtracting an amount from one dollar. Use coins to help your child think about how much money he or she would have left.

Solving Addition and Subtraction Problems Look for 2-digit and 3-digit addition and subtraction situations at home, such as the following:

- There are 36 blueberries in one container and 28 strawberries in another container. How many berries do we have?
- If you have 250 pennies in your piggy bank and you give 120 to your friend, how many pennies do you have left?

Have a pencil and paper available, and ask your child to explain how he or she is solving the problems. Encourage your child to make up problems for you to solve.

NAME _____ DATE _____

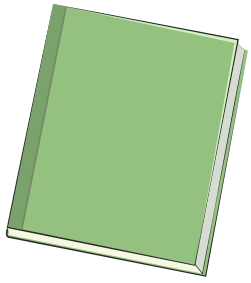
Related Activities to Try at Home

Cover Up Students are working on a new set of subtraction facts. Play *Cover Up* with your child to practice these facts.

11 − 5	13 − 7	15 − 8
11 − 6	14 − 4	16 − 6
12 − 3	14 − 5	16 − 7
13 − 3	15 − 5	17 − 7
13 − 4	15 − 6	17 − 8
13 − 6	15 − 7	18 − 8

Begin with some pennies (between 11 and 18). First ask your child to figure out how many pennies there are. When your child is not looking, cover up some of the pennies. Then, ask your child how many pennies he or she thinks are under the paper. For example, start with 11 pennies and cover up 5. Encourage your child to think about how many pennies are showing, and what combination would make 11. Encourage them to think about and use facts they know to help them (e.g., "How could knowing that 5 + 5 = 10 help?").

Math and Literature Here are some children's books that contain ideas related to our work in this unit that you and your child can read together. You can find many of them in your local public library.



Burns, Marilyn. *The $1.00 Word Riddle Book.*
Hulme, Joy N. *Sea Sums.*
Nolan, Helen. *How Much, How Many, How Far, How Heavy, How Long, How Tall Is 1000?*
Robinson, Elizabeth K. *Making Cents.*