

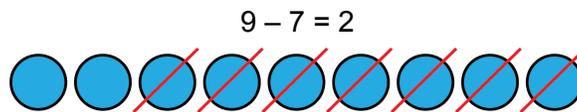


First Grade – Add and Subtract within 10

Dear Parents,

Your child is about to explore adding and subtracting within 10. To master this skill, your child will build on his or her knowledge of modeling, solving, and explaining word problems when joining and separating up to 10. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- How to solve adding, subtracting, and comparing word problems using objects and pictures within 10
- Strategies used to solve word problems up to 10, such as by using words, pictures, and number sentences:



- How to compose 10 with two or more numbers with or without objects:



While working with your child at home, you may find the following vocabulary terms helpful in your communication about adding and subtracting within 10. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Compose:** To put together
- **Decompose:** To take apart
- **Add:** To find the total or sum
- **Subtract:** To find the difference between two quantities or two numbers
- **Sum:** The answer to an addition problem or equation
- **Difference:** The answer to a subtraction problem or equation

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

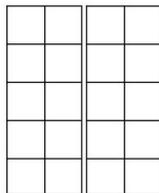
Tic-Tac-Toe: Try This At Home

Subtract from ____

1. Make cards numbered 1–10.
2. Pick up a card to select a starting number, and give your child a number to subtract from the starting number. Have him or her act it out or draw it if needed.
3. Continue to give your child different numbers to subtract from the same starting number for a few rounds, and then select a new starting number.

Fill the Ten Frame

1. Draw two ten frames on a piece of paper. Collect small items that can fit inside the ten frames, and make or find a die.
2. Have your child roll the die, and fill his or her ten frame to match the number rolled. Do the same for your turn.
3. Each time a player rolls, he or she fills the ten frame until they get exactly 10. If a player rolls a number that goes past 10, the board is cleared, and the player starts over.
4. Race to see who can fill their ten frame first.



Compose 10

1. Place a deck of cards into a pile, and flip over 5 cards.
2. Find the combinations that compose 10.
3. As you make a combination of 10, take those cards and place them to the side.
4. Replace the cards as you remove them. If you do not have any combinations that compose 10, draw five new cards.

Number Sentence Draw

1. Write out addition and subtraction number sentences that have the sum/difference left blank. You can write these on sticky notes, index cards, or slips of paper.
2. Have your child build or draw a picture of the number sentence, and write the answer in the blank.

**Free
Space**

Domino Sort

1. Take a sheet of paper and write out the sums for 1–10 at the top of the page.
 2. Pull out only dominoes whose numbers when added are equal to or less than 10.
 3. Have your child solve each domino sum, and place the domino on the paper under the matching sum.
- You could also have your child find the differences.

Tell Me a Story

1. Create or find two sets of cards numbered 1 to 5.
2. Have your child draw a card and start a word problem using that number of objects.
3. Continue the story by drawing your own number, and then have your child find the sum or difference.

Act It Out

1. Using your child's favorite sets of toys, make addition and subtraction word problems.
2. As you say the word problem, have your child act out the problem to find the sum or difference.

Card Math

1. Collect a stack of cards and pull out the numbers 1 to 5 so that the sums and differences stay within 10.
 2. Take turns flipping over two cards and adding to find the sum.
- If needed, you could have your child use objects or pictures to represent the problem.



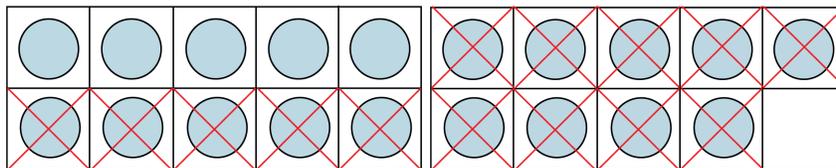
First Grade – Add and Subtract within 20

Dear Parents,

Your child is about to explore adding and subtracting within 20. To master this skill, your child will build on his or her knowledge of modeling, solving, and explaining word problems when joining and separating up to 10. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- How to solve adding, subtracting, and comparing word problems using objects and pictures within 20
- Strategies used to solve word problems up to 20, such as using words, pictures, and number sentences:

$$19 - 14 = 5$$



While working with your child at home, you may find the following vocabulary terms helpful in your communication about adding and subtracting within 20. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

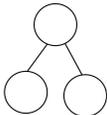
- **Add:** To find the total or sum
- **Subtract:** To find the difference between two quantities or two numbers
- **Sum:** The answer to an addition problem or equation
- **Difference:** The answer to a subtraction problem or equation
- **Equal:** The ability to show or generate a number that is the same as a given number or quantity

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

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Sincerely,

Tic-Tac-Toe: Try This At Home

<p>Add or Subtract War</p> <ol style="list-style-type: none">1. Find a deck of cards, and divide the deck into two equal piles.2. Decide between the two of you whether you are going to play by adding the numbers or by subtracting them.3. Each player flips over two cards and adds or subtracts them, and says the answer out loud.4. Whoever has the highest sum or difference gets all four cards. If they are equal, then you each turn over two more, and repeat until someone has the higher answer.5. The person who gets all of the cards in the deck is the winner.	<p>Math Libs</p> <ol style="list-style-type: none">1. Use the following word problem starter, and fill in funny words with your child.2. Use items around the house to work out the problem, and write a number sentence to solve. <p>_____ ran around the _____ and found _____.</p> <p>_____ dropped those _____ as he/she walked to the _____.</p> <p>How many _____ does he/she have left?</p>	<p>Numbered Toys</p> <ol style="list-style-type: none">1. Collect 20 of your child's favorite toys that are all the same type of item. These might be race cars, dolls, balls, action figures, etc.2. Label each toy with a number from 1 to 20 using a piece of painter's tape or a sticky dot.3. Create a makeshift number line with the toys in order from 1 to 20.4. Tell your child a word problem that he or she can work out by using the toys to find the answer.5. You could have your child write down the matching number sentence.
<p>Part-Part-Whole</p> <ol style="list-style-type: none">1. On a piece of paper, draw or have your child draw a part-part-whole circle set. (See below.)2. Give your child an addition or subtraction word problem. Have him or her fill in the part-part-whole circle set with the information, and write a number sentence to find the answer.3. Have your child underline the circle where the answer is. 	<p>Free Space</p>	<p>Beanbag Toss</p> <ol style="list-style-type: none">1. Draw circles using sidewalk chalk outside, close to your house. In each circle, put a number from 1 to 20.2. Have your child throw two beanbags or small objects into circles to choose two numbers.3. Have your child come up with a word problem using the two numbers, and then find the answer.
<p>Down to Zero</p> <ol style="list-style-type: none">1. Create a double ten frame on a sheet of paper for each player. Fill both ten frames with beads, beans, or some other small object.2. Each person rolls a die, and subtracts that many items from his or her ten frames. The winner is the first one to reach 0.	<p>Dot and Cover</p> <ol style="list-style-type: none">1. Take a large piece of construction paper, and have your child draw 20 dots across the top.2. Use a second sheet of paper to cover up some dots, and have your child write the number sentence that is represented by the picture.	<p>Number-Line Hop</p> <ol style="list-style-type: none">1. Create a number line from 0 to 20, using painter's tape on a floor in your home. If you want to do this outside, you could draw the line with sidewalk chalk.2. Give your child an addition or subtraction word problem (staying within 20). Have your child hop along the number line to find the answer.

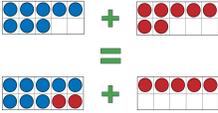
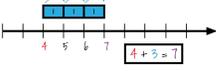
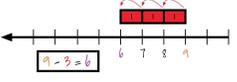


First Grade – Addition and Subtraction Strategies

Dear Parents,

Your child is about to explore addition and subtraction strategies. To master this skill, your child will build on his or her knowledge of modeling addition and subtraction within 20, and using pictures, objects, words, and number sentences to explain strategies. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Applying basic fact strategies to addition and subtraction problems within 20
These could include making a ten/building a ten, doubles (e.g., $3 + 3 = 6$), counting on, and counting back.

Make a ten/Build a ten  **Count on**  **Count back** 

- Understanding that the equal sign represents the phrase *the same as*.
- Solving for unknown terms in various positions of the number sentence

While working with your child at home, you may find the following vocabulary terms helpful in your communication about addition and subtraction strategies. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Sum:** The answer to an addition problem/equation
- **Difference:** The answer to a subtraction problem/equation
- **Make a ten:** To use or build a ten to solve a problem
- **Double:** A number added to itself or adding the same number twice
- **Count forward/on:** Use the counting words to count on, or forward, away from zero
- **Count backward/back:** Use the counting words to count back toward zero

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

<p>Double It</p> <ol style="list-style-type: none">1. On index cards or pieces of paper, write the numbers 1 to 10, large enough to be easily seen. Scatter the cards on the floor randomly.2. Have your child toss a ball or a beanbag to land on a number.3. Have your child double the number the ball lands on, and find the sum.	<p>Make a Ten</p> <ol style="list-style-type: none">1. Use or create flash cards with number sentences that have sums up to 20. Use beads, craft foam, and chenille stems to construct a rekenrek like the one below.2. Have your child enter the first number on the first row and the second number on the second row of the rekenrek.3. Help your child identify the 10 as the two 5s in red, and then find the remaining number leftover to find the sum. For example, for the number sentence $9 + 6$, the top row has 4 white to make 9, and the second row has 1 white to make 6, or a total of 5 white, so $10 + 5 = 15$ / $9 + 6 = 15$. 	<p>Equal or Not?</p> <ol style="list-style-type: none">1. Use four dice—two of one color, and two of another.2. Each person chooses a color of dice, and rolls them.3. Each person will add his or her dice numbers, and say the sum out loud.4. Have your child determine whether the sums are equal or not. If you want, you could have your child write down his or her number sentences.
<p>What Number Makes a 10?</p> <ol style="list-style-type: none">1. Draw a ten frame and gather some small objects that your child can use to fill it. These could be beans, beads, noodles, buttons, etc.2. Give your child a number, and have him or her build it in the ten frame, and then tell you how many more to make 10. <p>If you want, you can have your child write down the number sentence.</p>	<p>Free Space</p>	<p>What Comes Next?</p> <ol style="list-style-type: none">1. When you are in the car, at the store, in the bathtub, etc., give your child a set of 3 numbers in a row, and ask him or her to tell you the next three numbers after your starting three numbers.2. Here is one example: What comes after 10, 11, 12? (Your child should say, "13, 14, 15".)
<p>Count On</p> <ol style="list-style-type: none">1. Draw a number line on the ground using sidewalk chalk. You need it to go up to 20.2. Give your child a number sentence to solve, and have him or her count on with his or her body moving along the number line.	<p>Counting Down</p> <ol style="list-style-type: none">1. Give your child a starting number between 1 and 20.2. Have your child count back to 0 each time.	<p>Sum Race</p> <ol style="list-style-type: none">1. Create flash cards that have sums up to 20 on them.2. Go through the cards with your child as quickly as he or she can, and keep track of how fast he or she did it.3. Track your child's times over several days, and let him or her see the improvement.

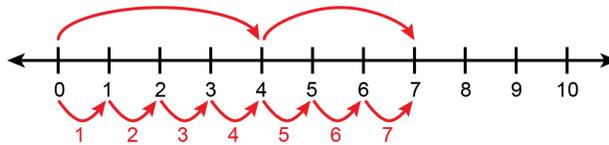


First Grade – Addition and Subtraction Problem Solving

Dear Parents,

Your child is about to explore addition and subtraction problem solving. To master this skill, your child will build on his or her knowledge of joining and separating objects to represent addition and subtraction, solving word problems using objects and drawings to find sums to 20 and differences within 20, and explaining the strategies used to solve problems, such as spoken words, concrete and pictorial models, and number sentences. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Joining and separating numbers to solve equations where the result, start, or change is unknown
- Comparing numbers in which the difference or set is unknown
- Solving one-step and multi-step word problems with two or three numbers
- Using strategies that include acting out problems using manipulatives as well as using pictorial models, number lines, and strip diagrams



?		
3	2	6

While working with your child at home, you may find the following vocabulary terms helpful in your communication about addition and subtraction problem-solving. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Add:** To find the total or the sum
- **Subtract:** To find the difference between two quantities or two numbers
- **Sum:** The answer to an addition problem or equation
- **Difference:** The answer to a subtraction problem or equation
- **Part:** A part or, in this case, a number that represents part of the whole
- **Whole:** A number that can be decomposed into parts

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

<p style="text-align: center;">Show and Tell</p> <ol style="list-style-type: none"> 1. Let your child choose some objects of which he or she has several, like coins or toy cars. 2. Count the items with your child. 3. Use the objects to make addition or subtraction word problems. Here is one example: If I give 20 of the coins from my collection to my sister, how many would I have left? 4. Have your child solve the problem he or she created. 	<p style="text-align: center;">Number Up or Down</p> <ol style="list-style-type: none"> 1. Draw a number line on a piece of paper. 2. Make up a word problem for your child to show on the number line. For example, Elizabeth reads for 15 minutes and she writes for 5 minutes. How many total minutes does she read and write? 4. Work with your child to show the word problem on the number line. 	<p style="text-align: center;">Draw It Up</p> <ol style="list-style-type: none"> 1. Take 5 note cards, and write a different number on each one. 2. Place the cards next to each other, and have your child add them. Or give a total number, place one card with it, and have your child find the difference. 3. Let your child manipulate the cards to show different ways to add and subtract the numbers.
<p style="text-align: center;">Describe and Go</p> <ol style="list-style-type: none"> 1. Choose an activity that you can do with your child (shopping, cooking, reading, playing outside). 2. Use the task to make addition or subtraction situations. Here is one example: We are on page 2. If we read to page 19, how many pages will we read? 3. Find the answer with your child, and challenge him or her to make up more situations. 	<h2>Free Space</h2>	<p style="text-align: center;">Growing Up</p> <ol style="list-style-type: none"> 1. Make up a story with your child about a child growing up. Talk about important things that would happen as we grow. 2. Use these situations to make problems to add and subtract. 3. Solve the problems that you make up together.
<p style="text-align: center;">When Do We Compare?</p> <ol style="list-style-type: none"> 1. Make a list of things that you can compare. 2. Here are some examples: We can compare the heights of everyone in our family. We can compare the amount of candy in my bag to the amount of candy in your bag. 3. Pick one scenario from the list to act out. 	<p style="text-align: center;">Reading + Math</p> <ol style="list-style-type: none"> 1. Read one of your child's favorite stories with him or her. 2. Work together to create a situation where one of the characters needs to add, or needs to subtract, or needs to both add and subtract. 3. Solve the problems that you create, and draw a picture of the character acting out the word problem. 	<p style="text-align: center;">Some Number</p> <ol style="list-style-type: none"> 1. Make up a situation with amounts, but leave out the numbers. 2. Ask your child how he or she would solve the problem. Here is one example: I had some bananas, and I got some more bananas. My friend had some apples. How many bananas and apples do we have in total?



First Grade – Data Analysis

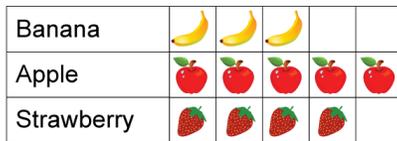
Dear Parents,

Your child is about to explore data analysis. To master this skill, your child will build on his or her knowledge of collecting, sorting, and organizing data into two or three categories to create real-object and picture graphs and drawing conclusions/making predictions about the data. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

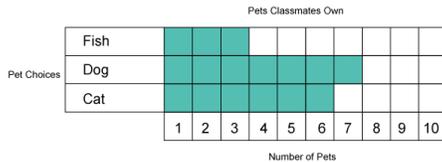
- Organizing up to three categories of data using tally marks and T-chart models
- Representing data in vertical or horizontal picture or bar graphs with intervals of one
- Drawing conclusions, creating questions, and answering questions about data using the graphs

While working with your child at home, you may find the following vocabulary terms helpful in your communication about data analysis. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Picture graph:** A graph constructed with pictures; the pictures match what is being sorted and represented in the graph



- **Bar graph:** A graph constructed with small bars or boxes



- **Tally marks:** A way to keep track of our data in which one set of marks represents 5
- **T-chart:** A chart to organize information

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

<p>Question of the Day</p> <ol style="list-style-type: none"> 1. Choose a question of the day that everyone who comes into your house has to answer. Example: Do you like chocolate chip ice cream or strawberry ice cream better? 2. Have each person put his or her name on a sticky note along with a picture of the item chosen. 3. Have your child count and label how many people like each choice and answer questions about the graph. Example: Which ice cream flavor is liked the least? 	<p>Toy Sort</p> <ol style="list-style-type: none"> 1. Gather several of a favorite toy or a small group of items, and have your child sort the toys into 2–3 categories. Make sure that you do not give your child too many categories. (Items might include toy cars, small figurines, dolls, etc.) 2. Once your child has sorted them into groups, guide him or her to create a picture graph by drawing each item and the number of each item. 3. Ask, “Which category has the most? Which one has the least?” 	<p>Magazine Graph</p> <ol style="list-style-type: none"> 1. Grab a bunch of magazines that might have items that your child likes in them. These could be flowers, toys, clothes, etc. 2. Ask your child a question about the items. Example: Which item is seen the most in this magazine, shoes or trees? 3. Allow your child to go through the magazine and cut out pictures that match the items that you named. 4. Have your child create a picture graph using the pictures and answer questions.
<p>Detective</p> <ol style="list-style-type: none"> 1. Your child is going to be the detective. Give your child a notebook and a question that he or she needs to ask people to answer, such as <i>What is your favorite color?</i> 2. Throughout the day, your child can ask people he or she comes into contact with the question and keep track in the notebook by drawing a tally of each person’s answer. 3. When your child has enough data, help him or her to organize the data and create a vertical or horizontal bar graph. 4. Ask questions about the data. 	<p>Free Space</p>	<p>Sidewalk Graph</p> <ol style="list-style-type: none"> 1. Have your child collect pine cones, leaves, and flowers from the yard and gather the data. 2. Give your child some sidewalk chalk to create a picture graph outside. 3. Once your child has the graph created, ask questions that will allow him or her to interpret and make predictions about the graph.
<p>Favorite Things</p> <ol style="list-style-type: none"> 1. Have your child pick a favorite thing to collect data about. Some ideas are favorite fruit, favorite vegetable, favorite sweet, etc. 2. Give your child a pencil and paper, and have him or her collect data from people he or she knows to create a bar graph. 	<p>Picture Graph</p> <ol style="list-style-type: none"> 1. Find real-life objects such as things found in nature, food, shoes, etc., and help your child take pictures of those objects. 2. Have your child create a picture graph using the pictures. 3. Ask questions about the data in the graph. 	<p>Questions</p> <ol style="list-style-type: none"> 1. Find a simple 2- or 3-category bar graph in a newspaper or online. 2. Have your child look at the graph and make predictions or answer questions using the data given.



First Grade – Classify Two-Dimensional Shapes

Dear Parents,

Your child is about to explore classifying two-dimensional shapes. To master this skill, your child will build on his or her knowledge of identifying and sorting regular and irregular circles, squares, triangles, and rectangles. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- How to identify circles, triangles, rectangles, squares (as special rectangles), rhombuses, and hexagons



- How to describe attributes of the 2-D shapes, such as sides and vertices
- How to classify and sort regular and irregular two-dimensional shapes

While working with your child at home, you may find the following vocabulary terms helpful in your communication about classifying two-dimensional shapes. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Classify:** To determine the name of a group of objects based on common attributes
- **Sort:** To group based on characteristics or attributes
- **Side:** A line that makes up a shape
- **Vertex/vertices:** A corner or point on a polygon where two lines meet
- **Circle:** A closed figure with one continuous curved side
- **Rectangle:** A polygon with 4 sides and 4 vertices, having opposite sides of equal length, and with right angles
- **Square:** A polygon with 4 sides and 4 vertices, having all sides of equal length, with right angles
- **Triangle:** A polygon with 3 sides and 3 vertices
- **Rhombus:** A polygon with 4 sides and 4 vertices, having the two pairs of sides that never meet (parallel) and having all sides of equal length
- **Hexagon:** A polygon with 6 sides and 6 vertices
- **Polygon:** A closed figure with all straight sides

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Sincerely,

Tic-Tac-Toe: Try This At Home

<p>Find and Count</p> <ol style="list-style-type: none">1. Give your child the name of a 2-D shape. You might also want to draw the shape on paper if your child needs it.2. Wherever you are (grocery store, home, school, car, etc.), have your child search to see how many of the given shape he or she can find.3. If you search for more than one shape, write down how many of each shape you find, and then compare to see which shape you saw the most and which shape you saw the least.	<p>Who Am I?</p> <ol style="list-style-type: none">1. List different attributes of a 2-D shape, and make up a riddle, such as the following: I have 4 sides that are all equal and 4 vertices. What shape am I?2. Have your child guess the name of the shape.3. Once your child gets the hang of it, have him or her give the clues for you to guess.	<p>Shape Sort</p> <ol style="list-style-type: none">1. Find different 2-D shapes from around your house, and place them in a basket.2. Guide your child to create a picture of a circle, a picture of a rectangle, a picture of a triangle, and a picture of a square on sticky notes or index cards.3. Have your child pick an object out of the basket, name it, and then place it under the correct label.4. Once all the items are sorted, have your child count the objects in each category, and then compare the amounts.
<p>Chalk Shapes</p> <ol style="list-style-type: none">1. Draw different two-dimensional shapes on the driveway or concrete outside.2. Have your child identify and label the sides and vertices on each shape.3. Help your child identify the name of each one.	<p>Free Space</p>	<p>Color All the _____.</p> <ol style="list-style-type: none">1. On a sheet of paper, draw many different two-dimensional shapes. Make sure to include circles, squares, rectangles, hexagons, rhombuses, and triangles.2. Name a shape, and have your child color in all of those shapes with one color.3. Have your child switch to a new color, and name a new shape to color in.
<p>Cut the Clay</p> <ol style="list-style-type: none">1. Give your child one container of modeling clay and a plastic knife.2. Help your child roll the modeling clay flat, and give him or her the name of a shape.3. Your child will use the plastic knife to cut the modeling clay into that shape, based on what he or she knows about how many sides the shape has.	<p>Classify</p> <ol style="list-style-type: none">1. Lay out several 2-D shapes. You can cut these out of paper, or find examples around your house.2. Ask your child to classify and sort them many times in different ways. Each time, discuss how your child sorted, and why.	<p>Swat a Shape</p> <ol style="list-style-type: none">1. Place cards showing different 2-D shapes randomly on a flat surface.2. Give your child a flyswatter, and call out a shape name.3. Have your child swat each picture that has that shape on it, and say the name of the shape. <p>If you say <i>rectangle</i>, pay attention to see if your child is swatting both squares and rectangles.</p>

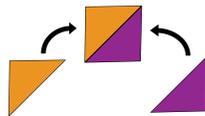


First Grade – Create and Compose Two-Dimensional Shapes

Dear Parents,

Your child is about to explore creating and composing two-dimensional shapes. To master this skill, your child will build on his or her knowledge of identifying and creating two-dimensional shapes from a variety of materials. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Creating two-dimensional shapes, including circles, triangles, rectangles, squares, rhombuses, and hexagons
- Joining 2, 3, or 4 figures to create a target shape



While working with your child at home, you may find the following vocabulary terms might be helpful in your communication about creating and composing two-dimensional shapes. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Compose:** To put together
- **Target shape:** A figure composed by joining shapes together when given specific properties or attributes

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

<p style="text-align: center;">Color In</p> <ol style="list-style-type: none"> 1. Have your child draw around twelve different 2-D shapes of varying sizes on a sheet of paper. 2. Name a shape, and have your child trace the shapes that match the one you name, and color them in. 3. Continue to name shapes until your child has traced and colored all the shapes. 	<p style="text-align: center;">Shape Pictures</p> <ol style="list-style-type: none"> 1. Use the Color In activity page your child drew and colored. 2. Have your child cut out the shapes, and experiment with different ways to put the shapes together to make different animals or objects. 3. You might also challenge your child to create a certain object with the shapes. Set a time limit to create it. 	<p style="text-align: center;">Can You Cut It?</p> <ol style="list-style-type: none"> 1. Start with a regular piece of paper and a pair of scissors. 2. Ask your child to use the scissors to make one cut to change the rectangle into two rectangles. 3. Ask your child if he or she can use two cuts and make the two rectangles into 4 triangles. You will probably need more than one piece of paper. Help your child to describe and identify what makes each shape different.
<p style="text-align: center;">Build It!</p> <ol style="list-style-type: none"> 1. Gather a variety of materials such as straws, craft sticks, toothpicks, chenille stems, etc., and have your child build the different two-dimensional shapes. 2. Challenge your child to see if he or she can build them in different sizes. 3. Make sure to include circles, squares, rectangles, hexagons, triangles, and rhombuses. 	<p style="font-size: 2em;">Free Space</p>	<p style="text-align: center;">Sensory Shapes</p> <ol style="list-style-type: none"> 1. Give your child a tray or plastic resealable bag with a small amount of material inside. This material might be shaving cream, rice, sprinkles, hair gel, shampoo, etc. 2. Have your child pick a shape card, or tell him or her the name of a shape. 3. Have your child create the shape in the sensory material and name it.
<p style="text-align: center;">Add On</p> <ol style="list-style-type: none"> 1. Have your child build a 2-D shape with straws or toothpicks. 2. Ask your child to add on a (insert name of shape) to create an object that you could see him or her making. 3. If your child cannot make the new shape, help him or her to create the added-on shape separately, and then move it to the original shape. 	<p style="text-align: center;">Shape Bubbles</p> <ol style="list-style-type: none"> 1. Use chenille stems to create bubble wands shaped like various 2-D shapes. 2. Allow your child to dip his or her wands into bubble solution, and see the similarities and differences between different shapes' bubbles. 	<p style="text-align: center;">Sidewalk Pictionary</p> <ol style="list-style-type: none"> 1. On sticky notes or index cards, write the names of various simple pictures that can be drawn with simple 2-D shapes. Examples include <i>house</i>, <i>dog</i>, <i>rocket</i>, and <i>flower</i>. 2. Have your child choose a card, and draw a picture with the sidewalk chalk, using only 2-D shapes. 3. Try to guess the object that your child created.



First Grade – Identify Three-Dimensional Solids

Dear Parents,

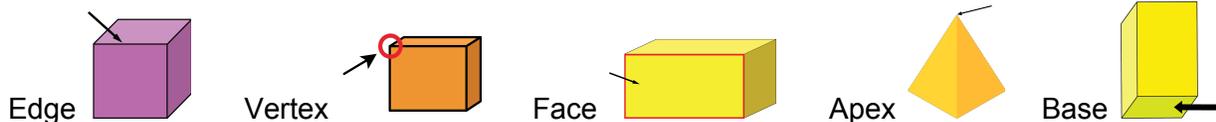
Your child is about to explore identifying three-dimensional solids. To master this skill, your child will build on his or her knowledge of identifying real-world 3-D solids such as cones, cylinders, spheres, and cubes; identifying the 2-D parts that make up the shapes; and sorting those shapes by their attributes. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Identifying, classifying, and sorting 3-D solids based on their attributes such as number of faces, edges, and vertices
- Identifying attributes that make a shape a 3-D solid and those that do not

While working with your child at home, you may find the following vocabulary terms helpful in your communication about identifying three-dimensional solids. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.



- **Sphere:** A solid with no faces, edges, or vertices
- **Cone:** A solid with exactly one circular base and one apex
- **Cylinder:** A solid with 2 bases that are circular, having no vertices or edges; surface is curved
- **Rectangular prism:** A solid with rectangular bases, and having 4 faces, 2 bases, 8 vertices, and 12 edges
- **Cube:** A rectangular prism with square sides, and having 4 faces, 2 bases, 8 vertices, and 12 edges
- **Triangular prism:** A solid with triangles for bases, having 5 faces, 6 vertices, and 9 edges
- **Attribute:** A characteristic or property of a solid



We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

<p>3-D Scavenger Hunt</p> <ol style="list-style-type: none"> 1. Take a sheet of paper and draw or write the names of 4–6 three-dimensional solids. These could include sphere, cylinder, cube, cone, triangular prism, or rectangular prism. 2. Send your child on a hunt around the house, at the store, in the car, etc. to find an example of each kind of solid on the paper. 3. Depending on where you are, as your child finds an example, have him or her place the actual item next to the paper, or draw a picture of it. 	<p>3-D Models</p> <ol style="list-style-type: none"> 1. Give your child modeling clay along with the name of a three-dimensional solid. 2. Help your child find an example and create a model of that solid using the modeling clay. 	<p>Test It: Stack, Roll, or Slide</p> <ol style="list-style-type: none"> 1. Help your child to collect different real-life examples of 3-D solids from around the house. 2. Have your child take turns testing the solid to see if it can stack, roll, and/or slide. 3. Sort the shapes as you learn what they can do.
<p>Build It!</p> <ol style="list-style-type: none"> 1. Use marshmallows and toothpicks, or gumdrops and toothpicks, to build the different 3-D solids. 2. For example, your child can build a triangular prism using marshmallows as vertices and toothpicks as edges. 	<p>Free Space</p>	<p>Who Am I?</p> <ol style="list-style-type: none"> 1. List different attributes of a 3-D solid, and make a riddle, such as the following: <i>I have 2 faces, and no edges or vertices. What solid am I?</i> 2. Have your child guess the name of the solid. 3. Once your child gets the hang of it, have him or her give the clues for you to guess.
<p>Swat a Solid</p> <ol style="list-style-type: none"> 1. Place cards showing different 3-D solids randomly on a flat surface. 2. Give your child a flyswatter, and call out a solid name. 3. Have your child swat each of the pictures with that solid on it, and say the name of the solid. 	<p>2-D or 3-D?</p> <ol style="list-style-type: none"> 1. Gather several different shapes that are either 2-D or 3-D. 2. Lay them out on the table or floor in front of your child. 3. Guide your child to sort the shapes based on whether they are 2-D or 3-D. 4. Ask why your child chose a shape to be 2-D or 3-D to make sure he or she can identify attributes about the shape. For example, a 3-D solid has edges and a face. 	<p>3-D Solid Face Trace</p> <ol style="list-style-type: none"> 1. Find a collection of real-life 3-D solids. 2. On a sheet of paper or a dry-erase board, trace around each face on the solid. 3. Identify the name of the 2-D shape that makes each face, and count how many faces each solid has.



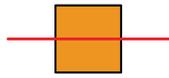
First Grade – Fractions

Dear Parents,

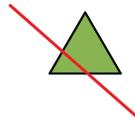
Your child is about to explore fractions. To master this skill, your child will build on his or her knowledge of identifying two-dimensional shapes and sharing objects with others. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Partitioning 2-D shapes into two and four equal parts
- Describing each partition using words. Students will NOT be writing fraction notation ($\frac{1}{2}$) until third grade. For example, $\frac{1}{2}$ will be written as “one half.”

- Exploring examples



and nonexamples



of halves and fourths

While working with your child at home, you may find the following vocabulary terms helpful in your communication about fractions. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Partition:** To break into parts
- **Fair shares:** When sharing, each gets an equal amount or equal part
- **Half/halves:** Dividing or partitioning an object/whole into **two** equal parts
- **Fourth:** Dividing or partitioning an object/whole into **four** equal parts

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

<p>Example/Nonexample</p> <ol style="list-style-type: none"> 1. Draw or print out a sheet of different 2-D shapes. 2. Partition the shapes to show examples of halves and fourths, and examples of NOT halves and NOT fourths. 3. Have your child cut them out and sort them into halves, fourths, NOT halves, and NOT fourths. 4. As your child sorts, have him or her discuss how he or she knows which group the pictures go in. 	<p>Partition It</p> <ol style="list-style-type: none"> 1. Find an area where you can draw a shape. This might be in the sand, on a dry-erase board, in the dirt, with chalk on a sidewalk, etc. 2. Ask your child to partition the shape into two or four equal pieces and describe it. <p>**Some ways your child may do this are:</p> <ul style="list-style-type: none"> • one equal part of two • one half • one equal part of four • one fourth 	<p>Fair Shares</p> <ol style="list-style-type: none"> 1. During snack time or after dinner if you are having dessert, allow your child to help you create equal shares of the dessert/snack. 2. Ask your child questions. Example: How many pieces will you need? 3. Show your child two plates and ask if the desserts are shared fairly. 4. You want your child to begin to understand what fair shares means.
<p>Halves</p> <ol style="list-style-type: none"> 1. Find a “tool” that your child can use for the day to halve things. This could be something like a wand, a pencil, or a stick. 2. When you are going about your day and see something that could be halved, ask your child to divide it into halves using the tool. 3. Check to see if your child is doing it correctly, and ask how many equal parts you need to make halves. 	<p>Free Space</p>	<p>Cookie Craze</p> <ol style="list-style-type: none"> 1. Bake a pan of cookies. 2. Using index cards or sticky notes, make cards that show one half, one fourth, NOT one half, and NOT one fourth. 3. After the cookies have cooled, when your child wants to eat one, have him or her draw a card. Cut the cookie to match what the card said, and then your child can eat it.
<p>Fraction Hunt</p> <ol style="list-style-type: none"> 1. Make a T-chart with Half and Fourth written at the top. 2. Send your child on a hunt around the house looking for examples of things that are partitioned in halves and fourths. 3. When your child has found all he or she can, count up and see which fraction your child found the most of. 	<p>Name the Fraction</p> <ol style="list-style-type: none"> 1. Make a deck of cards with pictures of halves and fourths drawn on them. 2. Go through the cards like flash cards, having your child name the fraction. 3. If your child gets it correct, then he or she keeps the card. If he or she gets it wrong, you keep it. 4. Whoever has the most cards at the end of the game is the winner. 	<p>I Spy</p> <ol style="list-style-type: none"> 1. When you are out and about and need to entertain your child, you can play I Spy with fractions. 2. Whoever starts the game says, I spy a fraction with two equal parts; what fraction do I see? 3. The other person looks around trying to find the fraction that was described.

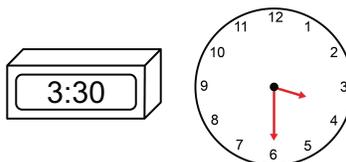


First Grade – Time

Dear Parents,

Your child is about to explore time. To master this skill, your child will build on his or her knowledge of the passage of time, counting forwards and backwards, and skip counting by 5s. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Using analog and digital clocks to tell time to the nearest hour and half hour



- Relating numbers on a clock to a circular number line
- Making connections between half hours and hours

While working with your child at home, you may find the following vocabulary terms helpful in your communication about time. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Hour:** Sixty minutes
- **Hour hand:** The short hand on an analog clock that shows the hour
- **Minute:** Sixty seconds
- **Minute hand:** The long hand on an analog clock that shows the minutes past the hour
- **Half hour/half past:** Thirty minutes past, halfway past the hour
- **O'clock:** Shows the hour position on the clock (For example, 5:00 is five o'clock.)
- **Clock:** A tool that shows the time of day

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

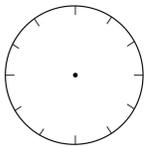
Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

Build a Clock

1. Create a clock face (like the one below) and number cards 1–12 on blank pieces of paper.
2. Turn the numbered cards facedown, and have your child choose a card, and place it in the right location on the clock face.
3. Your child will continue to choose cards until he or she has built the entire clock face correctly.



What Time Is It?

1. As you are out and about, keep an analog watch on you if possible. You can use a digital clock if you don't have an analog watch.
2. Whenever you notice that it is the hour or half hour, stop and ask your child to tell you what time it is.

Clock Hunt

1. On a piece of paper, create a T-chart with Digital on one side, and Analog on the other side.
2. Send your child off to keep track in some fashion of how many digital and analog clocks he or she can find around the house.

Analog	Digital

Clock Number Line

1. Use painter's tape to create a number line from 1–12.
2. Ask your child to find the middle of the number line (6) and discuss why it is the middle.
3. Give your child an o'clock time written on a card, and have him or her place it on the correct number line space that corresponds to it. For example, 1:00 will go on the 1 space on the number line.

**Free
Space**

Clock Hands

1. Give your child a time that is either an hour or half-hour time.
2. Ask your child to show where the hour or minute hand would be on the clock at _____. (Only choose one clock hand at a time.)

Chalk Clock

1. Create a clock face on the concrete somewhere outside. Collect a long stick and a short stick to represent the minute and the hour hands.
2. Give your child an hour or half-hour time to make by using the stick hands on the clock face.
3. Have your child write the digital time under the analog time, once he or she has the clock hands positioned correctly.

Can You Find the Time?

1. On index cards, write out digital hour and half-hour times.
2. Spread the digital time cards around the floor or on a table.
3. Ask your child, "Can you find 6:00?"
4. Have your child look at the cards, and locate the digital time that says 6:00.
5. Repeat with different times for the hour and half hour.

Schedule

1. As you go about your day, every hour and half hour, look at the clock and ask your child, what time is it?
2. Record the time and what is happening at that time.
3. At the end of the day, talk to your child about what things he or she does at certain times.



First Grade – Length

Dear Parents,

Your child is about to explore length. To master this skill, your child will build on his or her knowledge of naming a measurable attribute of an object such as length, capacity, or weight, and being able to compare objects to see which has more or less of a given attribute. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Using nonstandard units to measure the length of different objects
- Identifying length as the number of same-sized units laid end to end with no gaps or overlaps, and describing the length with a number and a unit



The pencil is 6 tiles long.

- Measuring one object with two different units and describing the difference in the measurement



The pencil is 8 tiles long or 5 paper clips long.

While working with your child at home, you may find the following vocabulary terms helpful in your communication about length. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Length:** How far something is from beginning to end
- **Compare:** To relate to; to measure
- **Attribute:** A characteristic or property of an object
- **Nonstandard:** A unit of measure that is not standard, such as paper clips, bear counters, etc.

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

Measure Through the House

1. Help your child find a unit that he or she would like to use to measure with. Make sure all the units are the same size. Some things that you could use are paper clips, beans, toy cars, noodles, etc.
2. Choose different items for your child to measure. Have your child record the measurement, and draw a picture of the item on a piece of paper or in a notebook.

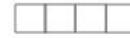
Object	Length

Footprint Battle

1. Make a list of 5 items that you and your child are going to measure using your foot and your child's foot as the units.
2. Measure the different items, making sure that your child starts at the beginning of the object and puts feet heel to toe as he or she counts. Measure the items using your own foot, too.
3. Record your answers, and then compare. Discuss why your measurements are different.

Measurement Treasure Hunt

1. Create a measurement tool that is equal to 2–6 linking cubes long. (Each cube can be shown on paper by an inch.)



2. Give your child the challenge to find 5 things in the room that are equal to the measurement tool that you created.
3. As your child finds things, have him or her create a list of the items.

What's Wrong with This?

1. Set up an area with something that you have measured incorrectly by making the mistakes kids usually make. You might use different units, overlap some units, or start in the middle of the object.
2. Ask your child, "What went wrong with my measurement?"

**Free
Space**

Food for Measure

1. Draw lines on a piece of paper.
2. Use your child's favorite snack food to measure the lines and record the measurement. Some foods that you could use are small crackers, mini marshmallows, pieces of cereal, etc.

What's My Length?

1. Trace around your child's body to create an outline with sidewalk chalk.
2. Using a nonstandard unit such as rocks, pencils, or crayons (making sure that they are the same size), measure different parts of the body that you traced on the concrete.
3. Help your child make predictions or estimates beforehand. After measuring, see if he or she was right.

Block Measurement

1. On a piece of paper, draw lines of varying lengths that you can measure using building blocks. (You want to check to make sure that the lines measure an exact number of blocks.)
2. Allow your child to measure using building blocks and write down the measurement including the unit (e.g., 5 building blocks).

Setting the Table

1. As you are making dinner, have your child set the table with everything that you will need (plates, forks, cups, and napkins).
2. Give your child a bag of beans or noodles to use to measure the different items needed for setting the table.
3. As your child measures, have him or her write down the measurements and answer questions, such as the following:
Which item was the longest/shortest? Are all the forks the same length?



First Grade – Compose and Decompose Numbers to 120

Dear Parents,

Your child is about to explore composing and decomposing numbers to 120. To master this skill, your child will build on his or her knowledge of composing and decomposing numbers up to 10 with objects and pictures. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Composing and decomposing numbers up to 120 in more than one way using concrete and pictorial models
- Representing numbers up to 120 in different ways using objects, pictures, expanded form, and standard form
- Determining the sum (up to 99) of a multiple of 10 and a one-digit number using concrete and pictorial models
- Using relationships to determine the number that is 10 more and 10 less than a given number up to 120

While working with your child at home, you may find the following vocabulary terms helpful in your communication about composing and decomposing numbers to 120. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Place value:** The value of a digit, depending on its place in a number
- **Digit:** Any one of the numerals 0 through 9
- **Compose:** To put together
- **Decompose:** To take apart
- **Hundreds:** Used to describe the hundreds place
- **Tens:** Used to describe the tens place
- **Ones:** Used to describe the ones place
- **Expanded form:** Writing a number to show the value of each digit
- **Standard form:** The simplest form of a number

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

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Sincerely,

Tic-Tac-Toe: Try This At Home

<p>Number Find and Describe</p> <ol style="list-style-type: none"> 1. Ask your child to find any number at home or while out with you. 2. Have your child describe to you the number of hundreds, tens, and ones in the number he or she chose. 	<p>Number Strips</p> <ol style="list-style-type: none"> 1. Write the numbers 0–9 on 10 strips of paper so that each strip has a different number. 2. Ask your child to build a number with a given amount of hundreds, tens, and ones. 3. Have your child say the number aloud and write the standard form. 4. Let your child challenge you to make strips, and then check your work. 	<p>Find a Hundred</p> <ol style="list-style-type: none"> 1. When you are out of the house, look for examples of the number 100 or more. 2. Ask your child to point out to you whenever he or she sees the number 100. 						
<p>Roll a Number</p> <ol style="list-style-type: none"> 1. Write the place values on a piece of paper. 2. Have your child roll a die for each place value from the ones to the tens, and record that number in expanded form. 3. When you reach the hundreds place, flip a coin. If you flip heads, record a 1 in the hundreds place. If you flip tails, record a 0 in the hundreds place. 4. Write the number in standard and word form. 	<p>Free Space</p>	<p>Take It Apart</p> <ol style="list-style-type: none"> 1. Write any number up to 120 on a piece of paper. 2. Have your child cut each digit of the number apart, but keep the digits in order. 3. Ask your child to draw each place value using the base ten models. <table border="1" data-bbox="1068 1117 1513 1180" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="width: 33%;">100</th> <th style="width: 33%;">10</th> <th style="width: 33%;">1</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">□</td> <td style="text-align: center;"> </td> <td style="text-align: center;">•</td> </tr> </tbody> </table>	100	10	1	□		•
100	10	1						
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<p>Place Value Addition</p> <ol style="list-style-type: none"> 1. Choose any number up to 120 and write it for your child to see. 2. Have your child name each digit and its place value (such as 1 in the hundreds place). 3. Ask your child how many of each place value he or she needs to add to make that number. 4. Have your child say aloud his or her addition sentence, such as 1 hundred plus 5 tens plus 8 ones is 158. 	<p>Counting Everywhere</p> <ol style="list-style-type: none"> 1. Look for ways that you can have your child help you count a number of things. 2. Some opportunities to count might include bagging produce at the grocery store, picking up toys from the floor, seeing people in your family, setting the dinner table with plates, forks, spoons, etc. 	<p>I Spy</p> <ol style="list-style-type: none"> 1. Choose a set of objects that equals a given number that you want to work on with your child. 2. Say, “I spy something that has a value of (insert number).” 3. Have your child look around the room for something that equals the number you stated, and then count the items out loud to prove that there are that many. 4. Switch roles, and have your child say, “I spy.” 						



First Grade – Compare and Order Numbers to 120

Dear Parents,

Your child is about to explore comparing and ordering numbers to 120. To master this skill, your child will build on his or her knowledge of comparing sets of objects with up to 20 in each set using comparative language and describing numbers up to 20. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Generating a number that is greater than or less than a given whole number up to 120
- Using place value and models, including number lines, to compare whole numbers up to 120 using comparative language such as *greater than*, *less than*, or *equal to*

hundreds	tens	ones

- Using the comparative symbols $>$, $<$, and $=$ to compare two numbers up to 100

While working with your child at home, you may find the following vocabulary terms helpful in your communication about comparing and ordering numbers to 120. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Greater than:** Larger in value when compared to another amount
- **Less than:** Lower in value when compared to another amount
- **Equal to:** Exactly the same in value when compared to another amount
- **Whole number:** A numerical value that contains no decimal or fractional value
- **Place value:** How much a digit is worth based upon its location in a number
- **Compare:** To describe the similarities and differences between two or more objects, sets, or numbers

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

Thank you for your support as your child begins this new learning adventure.

Sincerely,

Tic-Tac-Toe: Try This At Home

<p>Find the Symbol</p> <ol style="list-style-type: none">1. At home or when you are out with your child, look for examples of the greater than, less than, or equal to symbols in everyday items.2. For example, the 2 legs of a chair resemble the equal-to symbol (=).3. When your child finds the symbol, have him or her point it out and say its name.	<p>Spot It</p> <ol style="list-style-type: none">1. When you are doing activities like shopping, going to the movies, bowling, etc., find numbers with your child.2. Once you find one number together, find another, and help your child to decide if it is greater than, less than, or equal to the first number.3. Challenge your child to find the largest numbers he or she can.	<p>I Have, You Have</p> <ol style="list-style-type: none">1. Use note cards or small pieces of paper to write down several numbers that are less than or equal to 120.2. Flip the cards over so that you can't see the numbers.3. You and your child each pick 1 card, and then take turns completing the sentence: I have _____, and you have _____. My number is _____ (greater than, less than, or equal to) your number.
<p>My Number is...</p> <ol style="list-style-type: none">1. Let your child pick any number 120 or less.2. Say another number 120 or less.3. Your child will complete the sentence: My number is _____ (greater than, less than, or equal to) your number.	<p>Free Space</p>	<p>Give Me a...</p> <ol style="list-style-type: none">1. You or your child writes down a number on a piece of paper (120 or less).2. Flip a coin. If it lands on heads, your child will name a number that is greater than the written number. If it lands on tails, your child will name a number that is less than the written number.
<p>Deck of Numbers</p> <ol style="list-style-type: none">1. Using a deck of cards, create a number that is less than 120. You may choose randomly or let your child build the number.2. Continue to use the deck of cards to create a number that is equal to, a number that is greater than, and a number that is less than the first number that you made.3. Have your child write the numbers using the comparison symbols, such as $45 < 46$.	<p>Put It in Order</p> <ol style="list-style-type: none">1. You and your child will each write 4 different numbers on 4 different cards.2. Let your child pick 3 or 4 of the cards.3. Flip a coin. If it lands on the heads side, order the numbers from greatest to least. If the coin lands on the tails side, order the cards from least to greatest.4. Help your child place the cards in order.	<p>Draw to Compare</p> <ol style="list-style-type: none">1. Give your child 2 numbers.2. Ask him or her to draw a model to show both numbers. Let your child use the models to compare the 2 numbers.



First Grade – Money

Dear Parents,

Your child is about to explore money. To master this skill, your child will build on his or her knowledge of identifying coins as pennies, nickels, dimes, or quarters, and skip counting by 1s and 10s. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Recognizing pennies, nickels, dimes, and quarters by name and value
- Writing the value of a collection of coins using the number and cent symbol
- Counting groups of one type of coin by skip counting by 1s, 5s, and 10s
- Counting groups of mixed pennies, nickels, and dimes, by counting the larger amount first, and then the smaller amount

While working with your child at home, you may find the following vocabulary terms helpful in your communication about money. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Money:** Something used to buy goods and services
- **Coin:** A flat, round disc of metal used for money



- **Penny:** A coin worth one cent
- **Nickel:** A coin worth five cents
- **Dime:** A coin worth ten cents
- **Quarter:** A coin worth twenty-five cents

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

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Tic-Tac-Toe: Try This At Home

<p style="text-align: center;">Can You Find?</p> <ol style="list-style-type: none"> Place a few coins in front of your child. Try to keep it to 2–3 of each coin. Say: Can you find a quarter? Have your child find a quarter, and tell you how he or she knows it is a quarter. Repeat with the other coin names. 	<p style="text-align: center;">Coin Trade</p> <ol style="list-style-type: none"> Gather a lot of coins that include pennies, nickels, dimes, and quarters. Choose a coin and show it to your child, asking for the name and value. Have your child trade you different coins that will equal the same value. Here is one example: You give your child a dime, and your child trades you 10 pennies. 	<p style="text-align: center;">I Am a What?</p> <ol style="list-style-type: none"> Choose one of the four coins that your child is learning: penny, nickel, dime, or quarter. Give a clue to what the coin might be, such as the following: <i>I am a coin that has a value equal to 10 pennies. What am I?</i> You can use descriptors or value amounts; be creative! Continue giving clues until your child is able to guess.
<p style="text-align: center;">Coin Purse</p> <ol style="list-style-type: none"> Take 5–7 resealable bags, and fill each one with a different number of one kind of coin. Put only pennies in one bag, and only nickels in another bag, etc. Have your child choose a bag (coin purse), empty it, and count the coins using skip counting (by 1s, 5s, or 10s, depending on the type of coin). You can extend this by having your child write down the value with the cent sign. 	<h2 style="font-size: 2em;">Free Space</h2>	<p style="text-align: center;">Match My Value</p> <ol style="list-style-type: none"> On pieces of paper, index cards, or sticky notes, write different values using the number and cent sign. Your child will draw a card and use the coins given to make that amount. <p>You might start with only values using the same coins in a collection, and then, as your child gets better, you can start using values where he or she has to use a mixed combination.</p>
<p style="text-align: center;">Candy Store</p> <ol style="list-style-type: none"> Purchase several different snacks or treats that your child likes, and assign each treat a price using a sticky note or piece of paper. Give your child an allowance and say, “You may buy whatever snack or treat you would like, but you have to count out your money, and prove you have enough to purchase it.” <p>Remember to stay within one dollar.</p>	<p style="text-align: center;">Make a Dollar</p> <ol style="list-style-type: none"> Using only pennies, only nickels, or only dimes, help your child to skip count to find an amount equal to 100. Discuss how 100 cents is the same as one dollar, and see how many of each coin it takes to equal one dollar. You can extend this activity by seeing if you can find combinations of pennies, nickels, and dimes together to equal one dollar. 	<p style="text-align: center;">Coin Memory</p> <ol style="list-style-type: none"> Put different amounts of coins into groups on the table. Cover each group with an index card. On the floor or next to the covered coin collections, have cards with the different values that are represented under the cards. Have your child choose a value card and a coin collection to see if they are the same. If they are the same, have your child leave both showing. If they are not the same, have your child cover them back up and keep trying.



First Grade – Personal Financial Literacy

Dear Parents,

Your child is about to explore personal financial literacy. To master this skill, your child will build on his or her knowledge of the difference between wants and needs and income as a source of obtaining wants and needs. As your child extends his or her knowledge of this concept throughout first grade, he or she will learn the following concepts:

- Defining income as money earned from a job that can be used to purchase goods and services
- Differentiating between goods and services
- Describing the difference between spending and saving
- Discussing the definition of charity and the benefits of giving to a charity

While working with your child at home, you may find the following vocabulary terms helpful in your communication about personal financial literacy. These are terms your child will be encouraged to use throughout our explorations and during our math chats, which are short, whole-group discussions at the conclusion of each activity.

- **Money:** Something used to buy goods and services
- **Earn:** To deserve something based on a service or good
- **Income:** Money that you earn for working a job or providing goods
- **Gifts:** Presents that you do not have to pay for
- **Goods:** Items we buy, such as food and clothing
- **Services:** Actions that a person does for someone else
- **Wants:** Things that we do not need to survive, but would like to have
- **Needs:** Things that we need to survive
- **Spending:** Using money to pay for goods or services
- **Saving:** Putting away money for later
- **Charitable giving:** An activity (service) or gift that helps others

We will do many explorations in class to help your child learn these concepts from firsthand experiences. Encourage your child to share these experiences with you, and to teach you what he or she has learned. Ask your child to identify examples of what he or she is learning in everyday life, or use the attached page for ideas of activities to do at home to apply the concept your child is learning in class.

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Tic-Tac-Toe: Try This At Home

<p>Savings Stickers</p> <ol style="list-style-type: none"> Write down many examples of saving and spending. <ul style="list-style-type: none"> Saving: putting \$ in a savings account, putting \$ in a piggy bank, having your parents keep your \$ Spending: buying a toy, going to the movie, buying a game Have your child sort out the examples that you give to him or her. 	<p>Why Give?</p> <ol style="list-style-type: none"> Talk, write, and draw about what it means to give to a charity. Discuss the benefits for the charity, and the benefits for the person giving to the charity. Your child can pick something he or she would like to give one day, and then draw and write about it. 	<p>What Can We Do with Income?</p> <ol style="list-style-type: none"> Define <i>income</i> with your child. Determine some of the things that we need to buy with our income, and pick some things that your child would want to buy with income. Draw a picture of a need and a picture of a want.
<p>Sort It Out</p> <ol style="list-style-type: none"> Draw or print pictures that represent various people who provide goods or services (baker, doctor, delivery driver, artist, store clerk, librarian, etc.). Sort the pictures into two categories, goods and services, with your child. 	<p>Free Space</p>	<p>Volunteer Time</p> <ol style="list-style-type: none"> Find a local charity that you can spend time at with your child. Donate your time with your child, and talk about the experience.
<p>Income vs. Gifts</p> <ol style="list-style-type: none"> List examples of income and gifts (selling lemonade, getting money in a birthday card, babysitting, sharing money with your sister, earning money as a teacher, etc.). Work with your child to determine whether these examples are income or gifts. 	<p>Draw It Out</p> <ol style="list-style-type: none"> Draw a rectangle, and divide it diagonally, as pictured below:  <ol style="list-style-type: none"> On top, have your child draw a picture that represents spending \$, and on the bottom, have your child draw a picture that represents saving \$. 	<p>Errand Run</p> <ol style="list-style-type: none"> When you have several errands to run, take your child with you. Make it a point to talk about the goods that you are purchasing (e.g., groceries and clothing), and the services that you are paying for (e.g., dry cleaning and haircuts).