

Summer Math 2019


Grades 1-2

MASTER Copy

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Suggested Paper Color Code: Blue

Math Matters Code for Grade Band: 

Summer Math Objectives: To review and reinforce these First Grade skills.

Major Work for First Grade: NY-1.OA.1 –

Use addition and subtraction within 20 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions. **Note:** Problems should be *represented* using objects, drawings, and equations with a symbol for the unknown number. Problems should be *solved* using objects or drawings, and equations.

NY Common Addition and Subtraction Situations (slightly modified CGI CHART)

Expectations for Grade 1: To use the whole chart, but not expect mastery of the most difficult until Grade 2.

Math Fluency for First Grade: NY-1.OA.6b-

Fluently add and subtract within 10. (mixture of just knowing some answers and use of strategies, such as patterns.)

NY-1.OA.8 – Determine the unknown whole number in an addition or subtraction equation with the unknown in all positions. e.g., Determine the unknown number that makes the equation true in each of the equations: $8 + ? = 11$ $__ - 3 = 5$ $6 + 6 = \square$

NY-1.OA.2- Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.

NY-1.OA.3 – Apply properties of operations as strategies to add and subtract. **Note:** Students need not use formal terms for

these properties. e.g., To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$.

NY-1.G.3 – Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as *two of*, or *four of* the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

NY Note: The First Grade materials were modified, replacing “compatible numbers” with “making 10.”

Summer Math Objectives: To review and reinforce these Second Grade skills.

Major Work for Second Grade: NY-2.OA.1 –

Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. Mastery of all word problems types on the “Common Addition and Subtraction Situations” Chart by end of Grade 2.

Math Fluency for Second Grade: NY-2.OA.2a- Fluently add and subtract within 20 using mental strategies. Strategies could include... using the relationship between addition and subtraction e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$

Math Fluency for Second Grade: NY-2.OA.2b - Know from memory all sums within 20 of two one-digit numbers. (*By the end of Grade 2*)

Math Fluency for Second Grade: NY-2.NBT– Fluently add and subtract within 100 **using strategies** based on place value, properties of operations, and or the relationship between addition and subtraction.

NY-2.G.3 – Partition circles and rectangles into two, three, or four equal shares. Describe the shares using the words *halves, thirds, half of, a third of*, etc. Describe the whole as *two halves, three thirds, four fourths*. Recognize that equal shares of identical wholes need not have the same shape.

NY Note: The fractions in the Math Matters materials were modified to stay within partitioning circles and rectangles in two, three and four equal shares.

Educator Packets (one per unit):

- **Target Number** directions and bull’s eye with numbers to select (*need a timer*)
- **Family Fun** Game Directions and Answer Key (*helpful: base ten blocks-tens and units, or linking cubes that can simulate tens and ones*)
- **CGI** Directions and Word Problems for grade band (*English and Spanish*)
- **Snack Fraction** of the week directions (*need: paper plate, napkin, plastic knife, snack of the week or substitute*)

Student Packets with both English and Spanish (one per unit):

- **Target Number** bull’s eye
- **Family Fun** cards for grade band
- **CGI** Graphic Organizer
- **Snack Fraction** Record Sheet
- **Family Fun** Game Board and “DIY” Game Pieces

Printing Note: Use a different color to print the packets for each grade level. This makes it easier for students in different grade bands to work together. Packets can be print two-sided.

Organization: Each Grade Band has the same four activities, organized in the same order, for each Unit. Students can do the same activity, but use the problems from their own packet.

In-Home Time Management: Students can work together on the Target Number and Family Fun Game. Students use the game cards from their separate Student Packets. The CGI word problems and Snack Fractions, however, often require more focused attention to the individual grade bands.

Summer School Time Management:

1. Warm up each day with Target Number.
2. Create a Daily Routine with the Family Fun game cards. Each row provides practice for different math skills. Select one card from each row. Pose the problems to students. Have the students fold paper into fourths, and then use each fourth to solve the

problem and hold up for you to check. Use three to four each day. (Differentiate for students in different grade bands, so everyone is solving problems, but different problems.)

3. Use the full Cognitive Guided Instruction protocol for the CGI word problems, two times a week.
 - a. All students work on the same problem.
 - b. Teacher walks between students, quietly asking individuals to explain the strategy/process they are using. This gives students a chance to self-correct.
 - c. When most students are done, ask two to three volunteers to share their process. First, they draw on

the board, and then they explain.

- d. As the instructor, you are looking for students who use different strategies (i.e. drawing pictures, using tallies, adding on, etc.)
 - e. Eventually, use this time for a class discussion about strategies that take more time or less time.
4. Let students play the actual Family Fun game at least once a week.
 5. Utilize the extra teaching lessons posted on the website for this grade to fill gaps in learning.
 6. Summer School Instructors can bring in extra activities to support the student practice in their math fluency and major works.

GETTING STARTED:

Distribute Student Packets so each student receives the grade band for the grade they completed in June. The packets have a symbol instead of the grade number so Educators can differentiate the math level for students as appropriate.

WARM UP: TARGET NUMBER Directions

The Educator gives students one number. Students have one minutes to write down as many different ways to represent the number. Everyone takes turns sharing what he or she wrote.


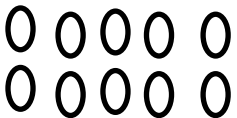
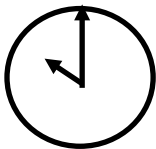
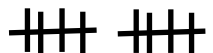
Key Points:

- Students are able to write solutions from their own math knowledge.
- Educators can work in examples related to the student's required math fluency and major works in math.
- The goal is for students to find **multiple and different (correct) responses** rather than limiting students to one correct strategy.

Process:

1. Select the Target Number for today. Students can write the number on their Bull's Eye.
 - a. All target numbers are fair to use with students in grades 1 through 8. All ages can start with the numbers 12 and 15. After these, you will need to give students in grades 1 to 8 the higher numbers, and use numbers 20 and under for any Kindergarten (rising First Grade) students in the group.
2. The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
3. Set the timer for one minute.
4. Educators play along, and write examples to share related to the students' required math fluencies:
5. At the end of the minute, students give ONE example at a time, going around the group a couple of times until all DIFFERENT responses are used. Students need to give **different** ways to represent the number. Writing, "7 + 3" is different from writing, "3 + 7". Drawing 7 circles and 3 circles is different from writing, "7 + 3."

Examples of some different ways to represent the number 10:

$7 + 3$	$10 + 0$	$17 - 7$	2×5	$100 / 10$
$3 + 7$	$0 + 10$	ten	5×2	$10/1$
				
One dozen eggs minus 2		$2 + 2 + 2 + 2 + 2$		$100 - 90$

FAMILY FUN GAME

All ages of students play the game together. On their turn, students use the game cards from their own packet to solve math problems at their own level.

Key Points:

- Unit 1 introduces the game and some of the Math Matters skills.
- Units 2 through 5 provide students practice all of the core math skills, except fractions, throughout the summer.

Process:

1. Each Student Packet has its own Family Fun Game Cards, allowing each student to participate with students who have different skills to practice.
2. Do not cut the cards apart to play the game. Starting with Lesson 2, the three cards in each row will usually practice the same skill.
3. Instead of students drawing a card, students select a problem from their packets. Students can select problems in the order they choose, BUT ask students to solve one problem from each row, before repeating from the row, so they practice each skill.

- a. Many students will read ahead, solving problems, to find the “easiest” ones while waiting for their next turn.
4. Game Directions are on the game board. Game boards are at the end of each Student Packet, so they are easy to pull off and use.
5. The best way to move around the board is to use dice. The Student Packets have a “Do It Yourself (DIY)” version to toss a small wad of paper onto a board of numbers.

CGI CHARTS

CGI is the **C**ognitive **G**uided **I**nstruction for primary students to solve math word problems. With a few changes, this chart is in New York State’s Next Generations Learning Standards for Pre-K to Grade 2, titled, “Common Addition and Subtraction Situations.” *(A copy of this chart is located at the end of this Educator Guide.)*

Key Points:

- NYS Next Generation Learning Standards include the same CGI Chart of word problems, with a few changes:
 - In the Educator Packets, the terms on the original (English) CGI Chart have been updated to represent the Next Generation terminology changes.
 - NYS Next Generation Learning Standards add a new category of word problems called, “Both Addends Unknown.” This new category has not been added to these summer math packets.
- The CGI process allows students to solve the problem in a way they understand, instead of the “right” way.
- Provides the Educator insight about the student’s math knowledge.
- Asks students to explain their solution process before asking for an answer.
- When there is a group of peers, the emphasis is on finding different solution paths, rather than one correct method.
- Eventually this can lead to a real discussion: Does a student’s method work for him or her? Has the student seen another method they are ready to try?

Process:

1. **Select one word problem.** The easiest wording to understand is in the top, left corner of the CGI Chart. The wording is more difficult as you move left and down.
 - a. Start students with the simplest word problems.
 - b. If a student struggles, stick with these for the summer so the student becomes secure. If students are confident, move to questions to the left, or down, to increase their understanding.
 - c. FYI -The word problems with a STAR on the CGI Chart are the problem-types targeted on the Grade 1 Assessment. ★ The word problems with a TRIANGLE are targeted on the Grade 2 Assessment. ▲

2. Have manipulatives and paper/pencil available for students to choose either medium for solving the problem.
3. **Read the problem to students once. Note:** Each problem has three sets of numbers for you to choose from to fill in the blanks. Use the set that works best for the student(s).
4. **Use the Graphic Organizer** to help students organize their notes and strategies.
5. **Read the problem again, and then teach students to take notes.** (As students demonstrate confidence, shift to giving students a chance to take their own notes.)
 - a. Prompt students with questions, and model writing notes. Use the Graphic Organizer.
 - b. Sample questions: What does the problem tell us first? [*Tod has \$3*] How can we write? [*T = \$3 (or a drawing)*]
 - c. What happens next? [*Tod needs more money to buy a toy that costs \$8*] How can we write? [*toy = \$8*]
 - d. What question do we have to answer? [*How many more dollars does Tod need to save?*] How can we write this? [*Save ___ more dollars*]
6. Give students time to solve. (*If struggling, prompt with, “What number does the problem start with?” Do you want to draw this or use manipulatives to recreate it? Then what happens?*)
7. Ask students to explain their process before asking them for an answer. This allows students time to self-correct and gives the Educator a clue about how the student is thinking.
8. At the end, look at the final answer together, to decide if it solves the problem. How would you say the answer in a sentence? [*Tod needs to save \$5 more.*]

Summer School Note: How to extend this to the full CGI process.

Walk around the group, quietly asking individuals to explain their process to you. When students seem stuck, prompt by re-asking them about their notes.

Take time to ask two to three volunteers to copy their process on a white board or large piece of construction paper. Then ask the students to explain their procedures. When selecting volunteers, it is a good idea to look for different strategies that are successful, instead of one, “best” method. The variety of examples and explanations will give all students a stronger understanding about math works.

Planning Note: In the original design, the word problems in the CGI Chart used the characters and events from one particular book, listed at the top of the chart. The class spent three days rereading and using the characters and plot from the one book.

While not as rich an experience for students who are not immersed in the particular story, the word problems still serve as good examples for the variety of one-step word problems.

Educator Note: Math Matters adds a new row of problems word problems in Grade Band 1-2 for practicing repeated addition and subtraction, otherwise known as multiplication and division.

SNACK FRACTIONS

Students separate a snack into a fractional portion. Decide if the portions are equal. Then eat.

Key Points:

- Equal portions matter when sharing real food
- All students use the same snack food
- Using the record sheet helps students transfer from the real to the symbolic

The Math Matters In-Home curriculum uses the following snacks:

- Unit 1 = String Cheese
- Unit 2 = Cup of Trail Mix
- Unit 3 = 6 pieces Beef Jerky
- Unit 4 = 100 calorie snack bags
- Unit 5 = 4 Graham Crackers and Nutella

Planning Note: Substitute snacks as needed to travel in cars and to fit the budget. If possible, have the substitute snack match the shape or number of the original, so the Fraction Record sheet still makes sense. For example, substituting something rectangular, like a breakfast bar, for the string cheese, or substituting a package with 6 cheese cracker sandwiches for the 6 pieces of beef jerky.

Summer School Note: The original Math Matters Summer School curriculum suggested the following snacks:

- Unit 1 = Apple, ice cream sandwich, string cheese
- Unit 2 = Guacamole and carrots, trail mix, cherry tomatoes and cheese
- Unit 3 = Dill pickle, beef jerky, raisin bread and banana
- Unit 4 = Fruit kabob, 100 calorie snack bag, graham cracker and peanut butter (check for allergies to peanut butter)
- Unit 5 = Laughing Cow cheese wedges, graham crackers and Nutella and strawberries (check for allergies to Nutella), bagels and cream cheese
- Unit 6 = Turkey wrap, personal pan pizza

Process:

- **Use the *Snack Fraction guidance*** in the Teacher Packet and Snack Fraction Record sheet in the Student Packet

Alternative Process:

- **Single student:** splits the food in the fractional amount practicing (half, fourth, third, etc.) and Migrant Educator discusses with student – are they fair shares? Are some portions larger/smaller? Have the student draw and write the fractional portion of a whole.
- **Partners:** each has whole food. Each splits the food in the fractional amount practicing (half, fourth, third, etc.) but the partner picks the portion (half, 2/4, 3/6) first. Have the students draw and write the fractional portion of a whole.

Recipe Note:

Trail Mix: (mix equal parts of each of the following)

- Peanuts, M&M's, Fish crackers (check for allergies to peanuts); or
- Chex Corn Cereal, Cheerios, dried fruit

(Optional) SUMMER ASSESSMENTS

Formal Summer Assessments

The formal Summer Assessments are based on the grade that a student completed. A student who completed Second Grade in June, but might be considered a (rising) Third Grader in the summer, should take the Summer Assessments for Grade 2. The questions are based on end-of-year mastery to maintain core math skills over the summer.

Note: Grades 1 and 2 receive the instruction together, but the students are assessed with different a pre-/post-tests. Each has different supplies to support the student.

- **Grade 1** uses a single crayon (✎) to code the papers students can see.
 - **For Grade 1, the Educator has a script to read** the full questions/problems to the student and the student has a student copy with fewer words to follow along and use to solve and write answer on.
 - **Extra Grade 1 Supplies:** 30 counters, a real sandwich and cutting supplies or scissors to cut the paper version attached to the assessment.
- **Grade 2** uses two crayons (✎✎) to code the papers students can see.
 - **For Grade 2, the student has a student copy to read the questions and solve on his or her own.** The Educator can assist the student with reading at this level, if needed.
 - No extra supplies suggested for Grade 2.

Next Generation Modifications: These assessments started as the Math Matters pre-tests and post-tests in English and Spanish. The assessments are now modified to align with the *New York State Next Generation Mathematics Learning Standards*.

- In the Grade 1 (✎) Assessments, the phrase “compatible numbers” was removed. Students just need to know “making ten.”

- In the Grade 2 (✎✎) Assessments, identifying fractions in two, three, four, six or eight equal shares has been modified to identify halves, thirds, and fourths.

Informal Assessments

Educators can observe when a student is able to complete the problems or not. When gaps in knowledge are observed, Educators can re-teach to those skills, to close the gaps in learning. When a student can complete a skill on his or her own, it is important for the student to continue practicing the skill to avoid summer loss.

CLOSING THE GAPS

Use this section for ideas when a student struggles with a particular skill.

Get curious and ask yourself:

- *Is this a NYS skill for a student who just completed First or Second Grade?*
- *Does the student just need a reminder and more practice?*
- *Did the student need a full lesson to re-introduce the skill?*
- *Does the student need to have both the English and Spanish packets to work with?*

You can follow up the next lesson:

- Plan to utilize your own examples during next week’s “Target Number” to support this skill. At the beginning of Family Fun, use one of the game’s examples to review the skill before playing the game.
- Review the Skill Lessons posted on the website for this grade band, to teach/ reteach the Summer Math skill for individual students.

Math Matters Note: These lessons were written for a classroom, and are called “TV Lessons” because they were also scripts and videotaped during Math Matters. For example, each lesson has a part for a puppet named Azulito. You will need to preview so you can adapt the script to your students and situation.

Lessons Posted (nysmigrant.org, Resource Library, Summer Math, Grade Band 1-2, Math Lessons)

NY-1.OA.3- (Make ten) Apply properties of operations as strategies to add and subtract. (e.g., to make a ten first, when adding $2 + 6 + 4$)

- Lesson references the math term, “Compatible Numbers,” but NYS uses, “make ten.”
- Supplies for Students
 - Two colors of linking cubes, 10 of each color (or substitute 20 counters)

NY-2.OA.2a-(Fact Families) using the relationship between addition and subtraction e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$; and

NY-1.OA.8- Determine the unknown whole number in an addition or subtraction equation

- Students use graphic of a house to make the addition/subtraction Fact Families from set of numbers.
- Supplies for Students
 - Two colors of linking cubes, 10 of each color (or substitute 20 counters)

NY-2.NBT- fluently add and subtract within 100 *using strategies* based on place value

- Part 1 introduces students to the basic understanding for the addition and subtraction of two-digit numbers, requiring “regrouping.” Students begin by using the base ten blocks to represent quantities on place value chart, then move to using numbers on a place value chart.
- Supplies for Students
 - Base Ten Blocks: (1) Hundred flat, (13) tens, (18) units
 - (4) 6-sided dice

Internet Access Note: On-line Base Ten manipulatives can be used on the coolmath4kids website: <https://www.coolmath4kids.com/manipulatives/base-ten-blocks>

NYS Next Generation Expectations for Kindergarten, Grade 1 and Grade 2 Common Addition and Subtraction Situations

e.g., using objects or drawings to represent the problem

In the chart below, the four unshaded (white) subtypes are expectations in Kindergarten. Grade 1 and 2 students work with all subtypes. Darker shading indicates the four difficult subtypes that students should work with in Grade 1 but need not master until Grade 2.

Common Addition and Subtraction Situations		Result Unknown	Change Unknown	Start Unknown
Add To		<p><i>A</i> bunnies sat on the grass. <i>B</i> more bunnies hopped there. How many bunnies are on the grass now?</p> $A + B = \square$	<p><i>A</i> bunnies were on the grass. Some more bunnies hopped there. Then there were <i>C</i> bunnies. How many bunnies hopped over to the first <i>A</i> bunnies?</p> $A + \square = C$	<p>Some bunnies were sitting on the grass. <i>B</i> more bunnies hopped there. Then there were <i>C</i> bunnies. How many bunnies were on the grass before?</p> $\square + B = C$
		<p><i>C</i> apples were on the table. I ate <i>B</i> apples. How many apples are on the table now?</p> $C - B = \square$	<p><i>C</i> apples were on the table. I ate some apples. Then there were <i>A</i> apples. How many apples did I eat?</p> $C - \square = A$	<p>Some apples were on the table. I ate <i>B</i> apples. Then there were <i>A</i> apples. How many apples were on the table before?</p> $\square - B = A$
Take From				
Put Together/ Take Apart		<p>Total Unknown</p> <p><i>A</i> red apples and <i>B</i> green apples are on the table. How many apples are on the table?</p> $A + B = \square$	<p>Both Addends Unknown</p> <p>Grandma has <i>C</i> flowers. How many can she put in her red vase and how many in her blue vase?</p> $C = \square + \square$	<p>Addend Unknown</p> <p><i>C</i> apples are on the table. <i>A</i> are red and the rest are green. How many apples are green?</p> $A + \square = C$ $C - A = \square$
Compare		<p>Difference Unknown</p> <p><i>"How many more?"</i> version: Lucy has <i>A</i> apples. Julie has <i>C</i> apples. How many more apples does Julie have than Lucy?</p> <hr style="border-top: 1px dashed black;"/> <p><i>"How many fewer?"</i> version: Lucy has <i>A</i> apples. Julie has <i>C</i> apples. How many fewer apples does Lucy have than Julie?</p> $A + \square = C$ $C - A = \square$	<p>Bigger Unknown</p> <p><i>Version with "More":</i> Julie has <i>B</i> more apples than Lucy. Lucy has <i>A</i> apples. How many apples does Julie have?</p> <hr style="border-top: 1px dashed black;"/> <p><i>Version with "Fewer":</i> Lucy has <i>B</i> fewer apples than Julie. Lucy has <i>A</i> apples. How many apples does Julie have?</p> $A + B = \square$	<p>Smaller Unknown</p> <p><i>Version with "More":</i> Julie has <i>B</i> more apples than Lucy. Julie has <i>C</i> apples. How many apples does Lucy have?</p> <hr style="border-top: 1px dashed black;"/> <p><i>Version with "Fewer":</i> Lucy has <i>B</i> fewer apples than Julie. Julie has <i>C</i> apples. How many apples does Lucy have?</p> $C - B = \square$ $\square + B = C$



Pre-/Post- Supplies

	<p>Educator Script: Educator reads to the student for the assessment. This has more detail than the student copy.</p> <p>Student Copy: Student has simple wording to follow along what the Educator is reading, and then uses to solve for the answers.</p>
	<p>Number Line and blank Number Bonds. <i>Included in Student Copy for student to pull off and have the choice to use or not.</i></p>
	<p>30 counters so the student has the choice to use or not.</p>
	<p>Real Sandwich,* paper plate, plastic knife</p>

*A paper graphic of a sandwich is attached to the Student Copy as a paper alternative. The student(s) would need scissors to cut.




Pre-Test Educator Script and Answer Key

Read to individual student or to a group. Distribute Student Copies. Tell students to pull off the last page with number line so they have it handy to use.

<p>NY-1.OA.1</p> <p>Extra Supplies student can use for strategy to solve during the whole assessment.</p> <ul style="list-style-type: none"> • Number line • Blank number bond • Counters <p>CGI – Add to, Result Unknown</p> <p><input type="text"/> 1</p> <p>Answer: nineteen</p> <p>Strategy: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Award 1 point for strategy and answer. Students must have both correct to earn 1 point.</p>	<p>1</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did.</p> <p><i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno de los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>Marcos planted 12 flowers on Monday. He planted 7 more flowers on Tuesday. How many flowers did Marcos plant?</p> <p><i>Marcos plantó 12 flores el lunes. Plantó 7 flores más el martes. ¿Cuántas flores plantó Marcos?</i></p> <p>Now look at your problem solving tools. Select a way to solve the problem as I read the story again.</p> <p><i>Ahora miren los objetos que tienen para resolver el problema. Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia.</i></p> <p>(Read the story again and provide time for students to solve it.)</p> <p>Show me how you solved the problem.</p> <p><i>Muéstrenme cómo resolvieron el problema.</i></p>
<p>NY-1.OA.8</p> <p><input type="text"/> 2</p> <p>Answer:seventeen</p> <p>Scoring: Award 1 point for correct answer.</p>	<p>2</p> <p><input type="text"/> - 8 = 9</p> <p>What number makes this sentence true? Use any strategy you wish to solve the problem. Write the number in the box.</p> <p><i>¿Qué número hace que la frase sea verdad? Utilicen la estrategia que quieran para resolver el problema. Escriban el número correcto en la caja.</i></p>



<p>NY-1.OA.1</p> <p>CGI – Put Together/ Take Apart, Total Unknown</p> <p><input type="checkbox"/> 3a</p> <p>Answer: sixteen</p> <p>Scoring: Award 1 point for the answer</p> <p><input type="checkbox"/> 3b</p> <p>Strategy Point: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Award 1 point for the strategy.</p>	<p>3</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did.</p> <p><i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno de los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>On the playground there were 9 children on the swings and 7 children in line for the slide. How many children were on the playground? <i>En el patio de la escuela había 9 niños en los columpios y 7 niños en fila esperando su turno en el tobogán. ¿Cuántos niños había en el patio?</i></p> <p>Now look at your problem solving tools. Select a way to solve the problem as I read the story again. <i>Ahora miren los objetos que tienen para resolver el problema.</i> Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia. (Read the story again and provide time for students to solve it.)</p> <p>Show me how you solved the problem. <i>Muéstrenme cómo resolvieron el problema.</i></p>
<p>NY-1.OA.1</p>	<p>4</p> <p>Look at the shapes. <i>Miren las formas.</i></p> <div style="text-align: center;">  </div>



<p><input type="checkbox"/> 4</p> <p>There are fourteen shapes. Number sentence a should be circled.</p> <p>Scoring: Award one point for student correctly answering both parts.</p>	<p>How many shapes are there? _____ ¿Cuántas formas hay? _____</p> <p>Which number sentence below matches the shapes? ¿Cuál de las frases numéricas que hay abajo representa las formas?</p> <p>A $8 + 6 = 14$</p> <p>B $8 + 5 = 13$</p> <p>C $7 + 6 = 13$</p> <p>D $9 + 5 = 14$</p>
<p>NY-1.OA.1</p> <p>CGI - Compare, Difference Unknown (<i>fewer</i>)</p> <p><input type="checkbox"/> 5a</p> <p>Answer: seven</p> <p>Scoring: Award 1 point for the answer</p> <p><input type="checkbox"/> 5b</p> <p>Strategy Point: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Award 1 point for the strategy.</p>	<p>5</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did. <i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno de los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>Eduardo baked 13 cookies. Monica baked 6 cookies. How many fewer cookies did Monica bake than Eduardo? <i>Eduardo preparó 13 galletas. Mónica preparó 6 galletas. ¿Cuántas galletas preparó Mónica menos que Eduardo?</i></p> <p>Now look at your problem solving tools. Select a way to solve the problem as I read the story again. <i>Ahora miren los objetos que tienen para resolver el problema. Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia.</i> (Read the story again and provide time for students to solve it.) Show me how you solved the problem. <i>Muéstrenme cómo resolvieron el problema.</i></p>



<p>NY-1.OA.1</p> <p>CGI – Take From, Result Unknown</p> <p><input type="checkbox"/> 6</p> <p>Answer: seven</p> <p>Strategy Point: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Students must have both the correct answer and strategy to earn 1 point.</p>	<p>6</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did.</p> <p><i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno de los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>Kendra caught 15 bugs. 8 of them crawled away. How many bugs does she have now? Kendra cazó 15 insectos. 8 de ellos se escaparon. ¿Cuántos insectos tiene ahora?</p> <p>Now look at your problem solving tools. Select a way to solve the problem as I read the story again. Ahora miren los objetos que tienen para resolver el problema.</p> <p>Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia. (Read the story again and provide time for students to solve it.)</p> <p>Show me how you solved the problem Muéstrenme cómo resolvieron el problema.</p>
<p>NY-1.OA.2 NY-1.OA.3</p> <p><input type="checkbox"/> 7</p> <p>Answer: circle the eight and the two</p> <p>Scoring: Award 1 point for circling the two correct numbers.</p>	<p>7</p> <p>Look at this number sentence. Miren esta frase numérica.</p> <p style="text-align: center;">8 + 2 + 14 = 24</p> <p>Circle the numbers that make 10).</p> <p>Señalen con un círculo los números que hacen 10.</p>





<p>NY-1.G.3</p> <p>Materials: 1 whole sandwich (peanut butter, cheese, your choice) Plastic knife 2 paper desert plates (or use the paper alternative sandwich and scissors)</p> <p><input type="checkbox"/> 8a</p> <p>Scoring: Award 1 point if the student divides the sandwich in approximately equal parts and can use the term fourths.</p> <p><input type="checkbox"/> 8b</p> <p>Scoring: Award 1 point for the explanation (key words listen for: equal, same amount/size).</p>	<p>8</p> <p>Cut the sandwich so that 4 children may share it equally. <i>Corten el sándwich para que 4 niños puedan compartirlo igualmente.</i> (Wait until finished.)</p> <p>What do you call these equal parts? <i>¿Qué otro nombre tienen estas partes iguales?</i> (Pause)</p> <p>Show or tell me how you know they are equal. <i>Muéstrame or dime como sabes que son iguales.</i> (Pause and watch for comparison)</p>
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Student Name: _____

Educators: Please remember to use the script provided to administer this assessment.

<input type="checkbox"/> 1 1 point	1 Marcos planted 12 flowers on Monday. He planted 7 more flowers on Tuesday. How many flowers did Marcos plant?
<input type="checkbox"/> 2 1 point	2 $\square - 8 = 9$
<input type="checkbox"/> 3a 1 Point Answer <input type="checkbox"/> 3b 1 Point Strategy	3 On the playground there were 9 children on the swings. 7 children were in line for the slide. How many children were on the playground?

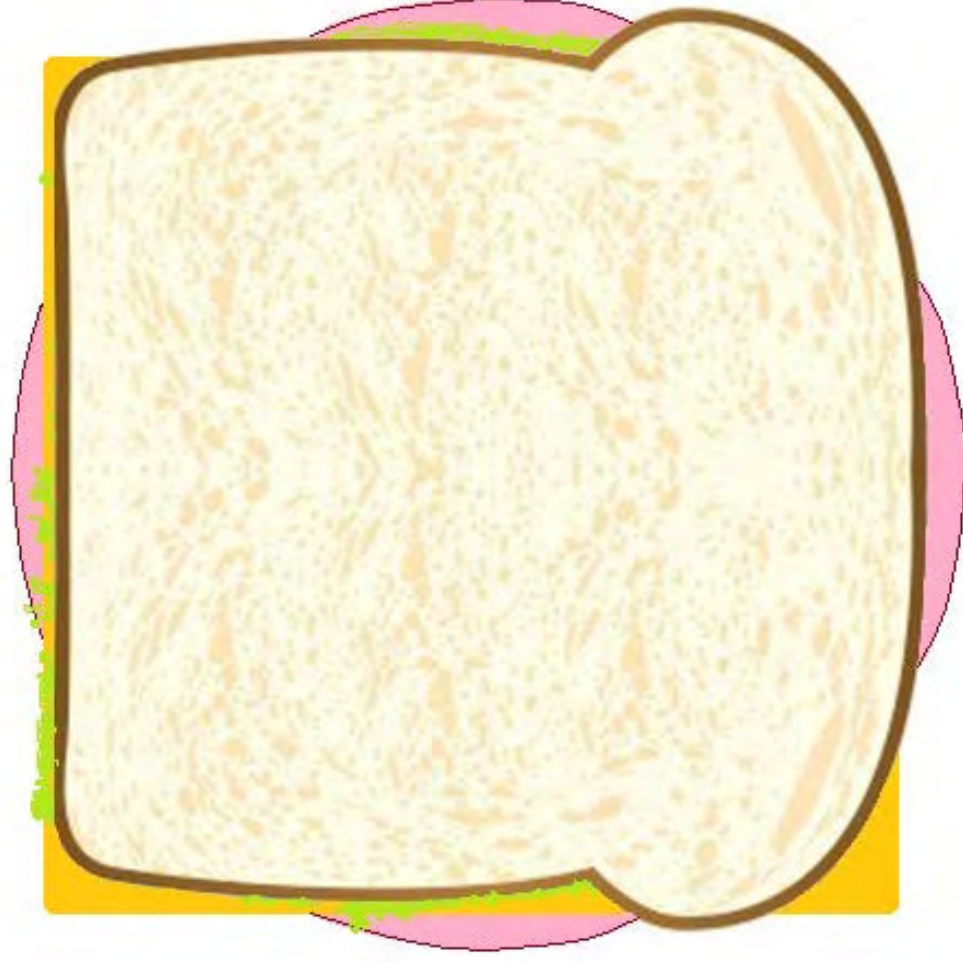
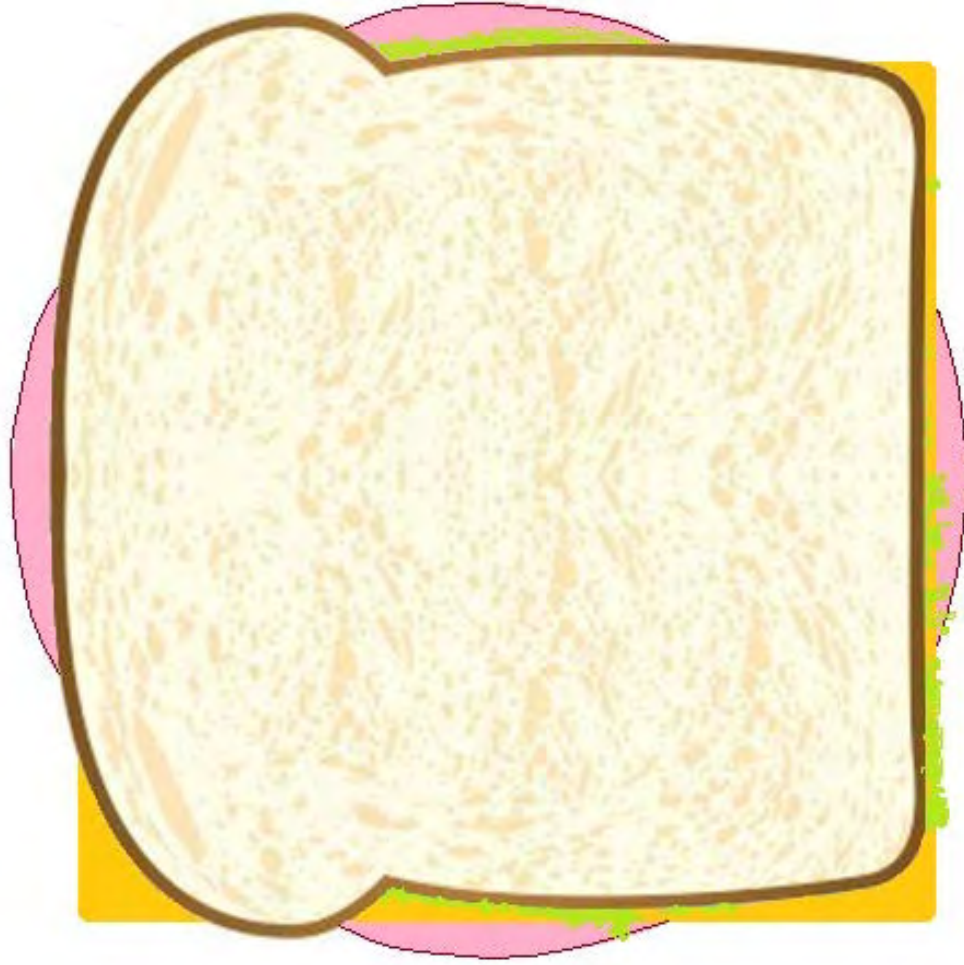
Student Name: _____

<p><input type="checkbox"/> 4 1 Point</p>	<p>4</p> <p> </p> <p>How many shapes are there? _____</p> <p>Which number sentence below matches the shapes? Circle your answer.</p> <p>A $8 + 6 = 14$</p> <p>B $8 + 5 = 13$</p> <p>C $7 + 6 = 13$</p> <p>D $9 + 5 = 14$</p>
<p><input type="checkbox"/> 5a 1 Point Answer</p> <p><input type="checkbox"/> 5b 1 Point Strategy</p>	<p>5</p> <p>Eduardo baked 13 cookies. Monica baked 6 cookies. How many fewer cookies did Monica bake than Eduardo?</p>

Student Name: _____

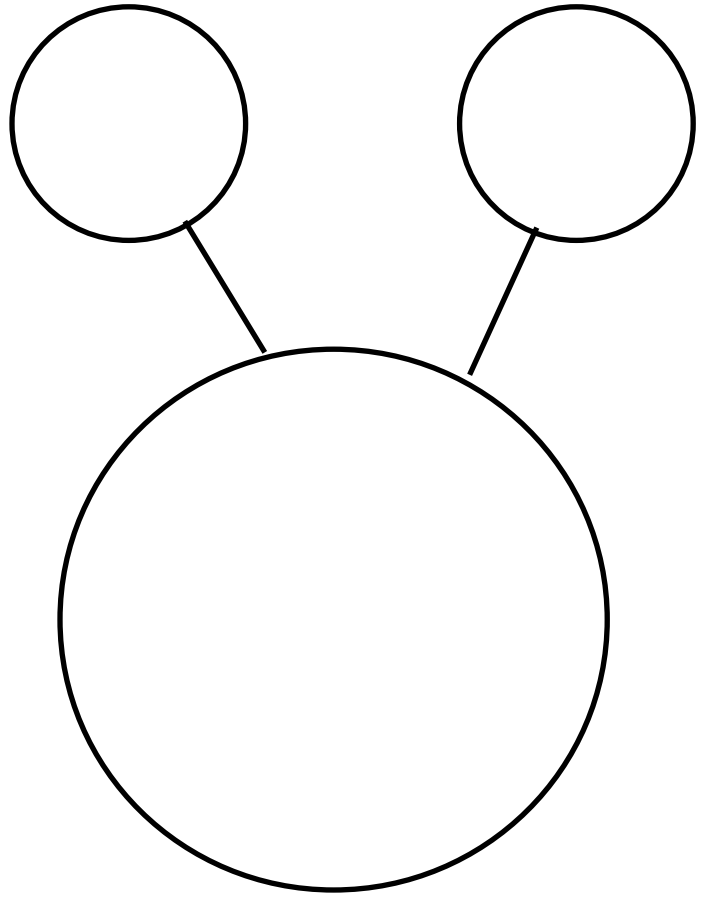
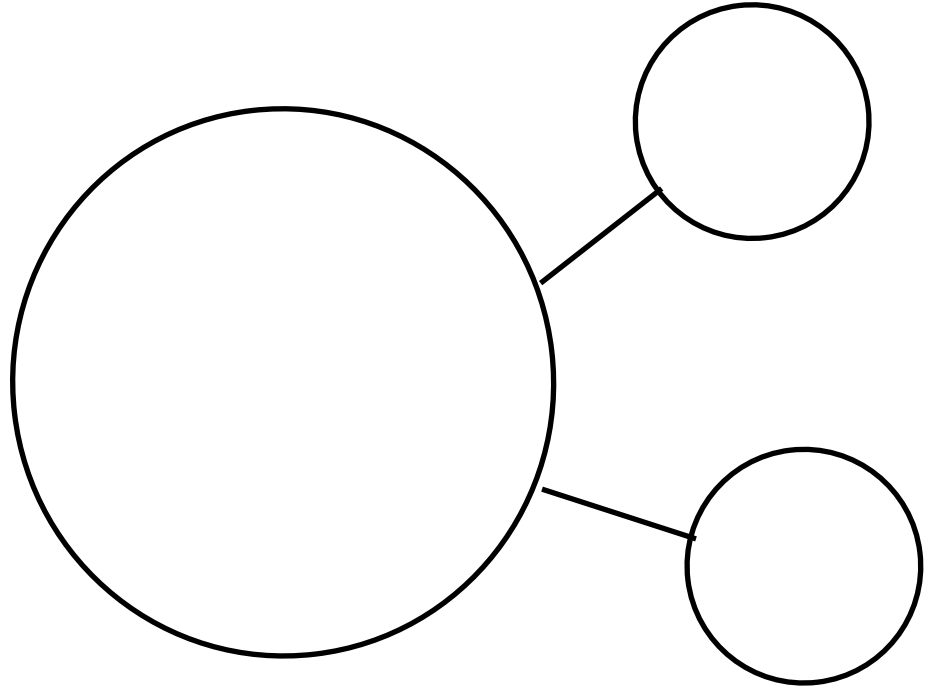
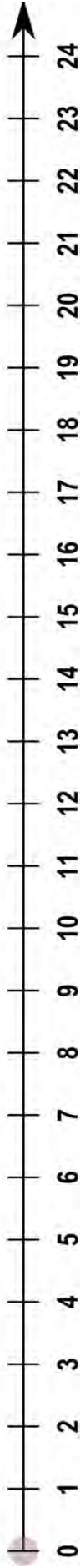
<input type="checkbox"/> 6 1 Point	6 Kendra caught 15 bugs. 8 of them crawled away. How many bugs does she have now?
<input type="checkbox"/> 7 1 Point	7. Look at this number sentence. $8 + 2 + 14 = 24$ Circle the numbers that make 10.
<input type="checkbox"/> 8a 1 Point Answer <input type="checkbox"/> 8b 1 Point Explanation	8 Cut this sandwich so that 4 children may share it equally. What do you call these equal parts? Show or tell me how you know they are fair shares?
_____/11 TOTAL EARNED POINTS	

Kindergarten Assessment #9 Paper Sandwich to cut.



Paper Sandwich to cut.

Kindergarten Assessment #9




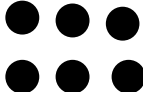
Nombre _____

Educators: Please remember to use the script provided to administer this assessment.

<input type="checkbox"/> 1 1 punto	1 Marcos plantó 12 flores el lunes. Plantó 7 flores más el martes. ¿Cuántas flores plantó Marcos?
<input type="checkbox"/> 2 1 punto	2 $\square - 8 = 9$
<input type="checkbox"/> 3a 1 punto respuesta <input type="checkbox"/> 3b 1 punto estrategia	3 En el patio de la escuela había 9 niños en los columpios. 7 niños estaban en fila esperando su turno en el tobogán. ¿Cuántos niños había en el patio?

Nombre _____

Teachers: Please remember to use the script provided to administer this assessment.

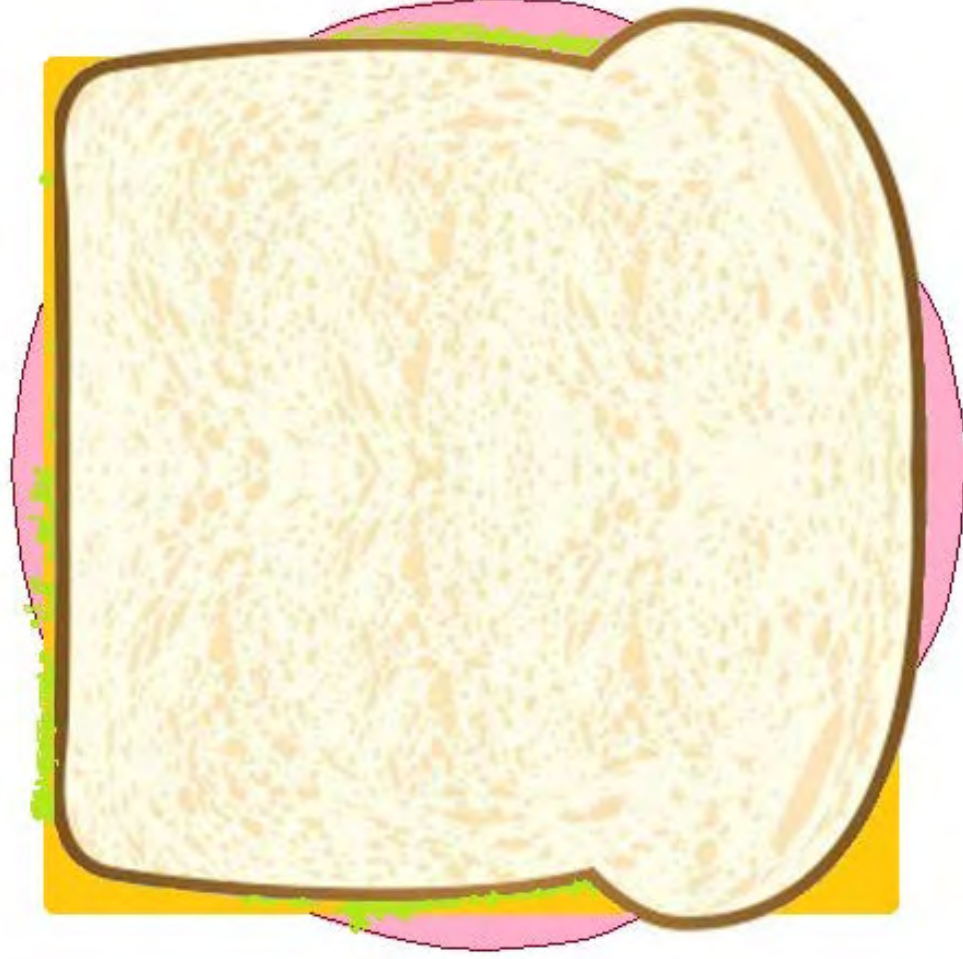
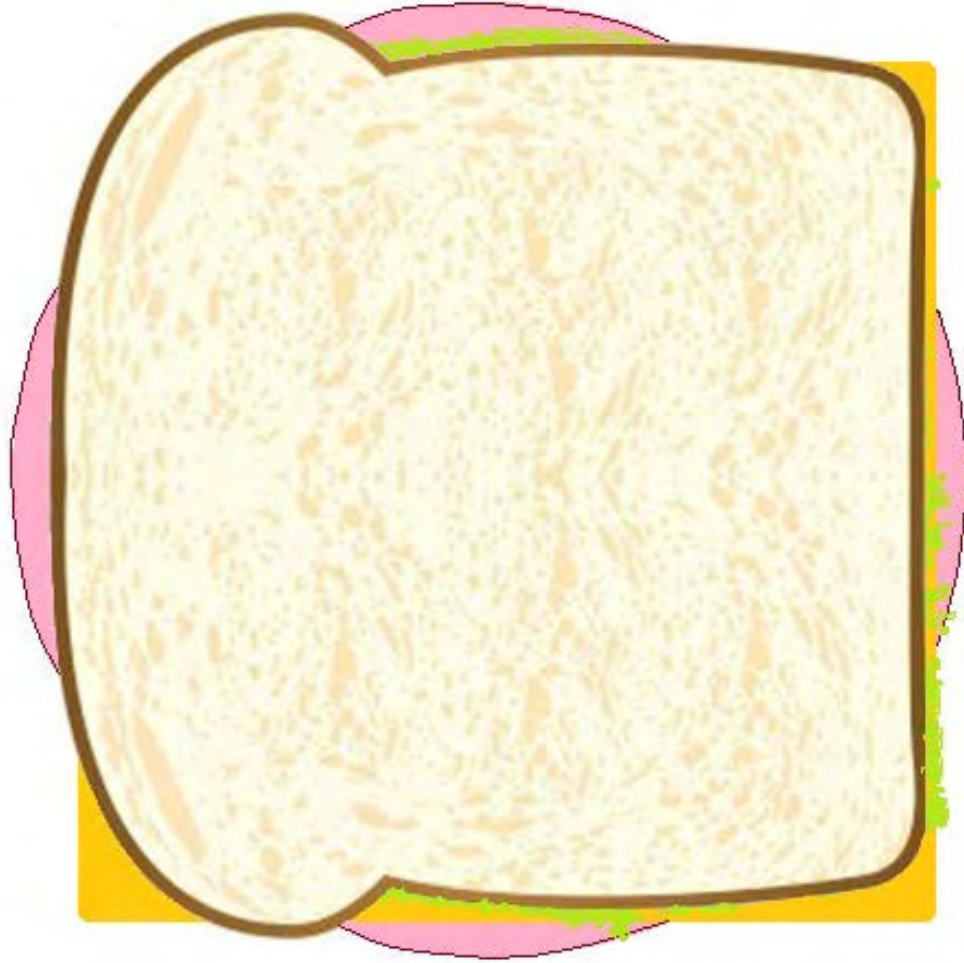
<p><input type="checkbox"/> 4 1 punto</p>	<p>4</p> <p> </p> <p>¿Cuántas formas hay? _____</p> <p>¿Cuál de estas frases numéricas representan las formas? Señala tu respuesta con un círculo.</p> <p>A $8 + 6 = 14$</p> <p>B $8 + 5 = 13$</p> <p>C $7 + 6 = 13$</p> <p>D $9 + 5 = 14$</p>
<p><input type="checkbox"/> 5a 1 punto respuesta <input type="checkbox"/> 5b 1 punto estrategia</p>	<p>5</p> <p>Eduardo preparó 13 galletas. Mónica preparó 6 galletas. ¿Cuántas galletas preparó Mónica menos que Eduardo?</p>

Nombre _____

<input type="checkbox"/> 6 1 punto	6 Kendra cazó 15 insectos. 8 de ellos se escaparon. ¿Cuántos insectos tiene ahora?
<input type="checkbox"/> 7 1 punto	7 Miren esta oración numérica. $8 + 2 + 14 = 24$ Señalen con un círculo los números que hacen 10.
<input type="checkbox"/> 8a 1 punto <input type="checkbox"/> 8b 1 punto explicación	8 Corten el sándwich para que 4 niños puedan compartirlo igualmente. ¿Qué otro nombre tienen estas partes iguales? Muéstrame or dime cómo sabes que son partes iguales.

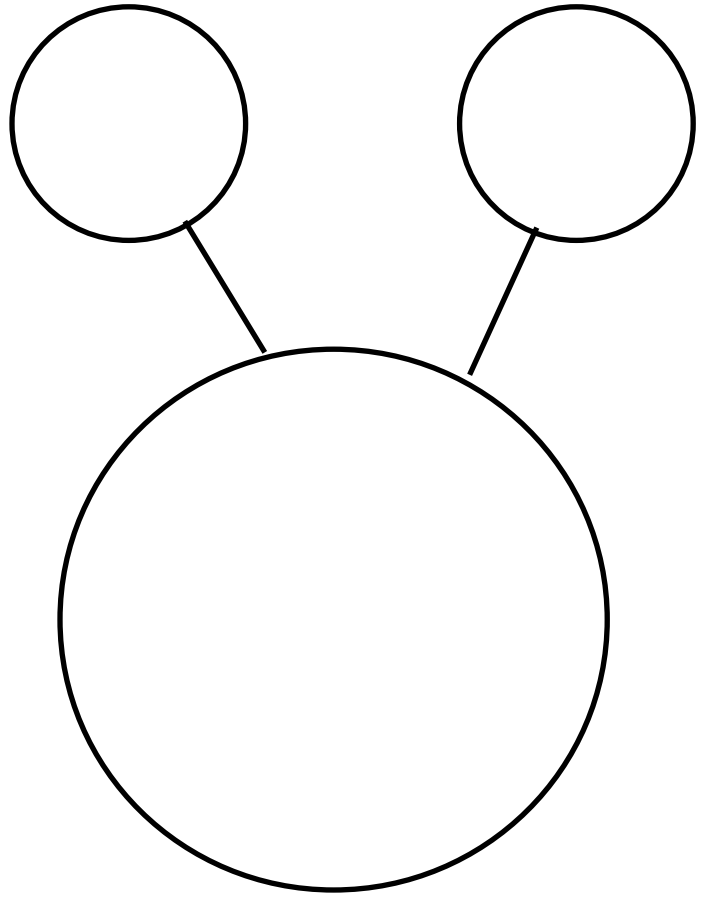
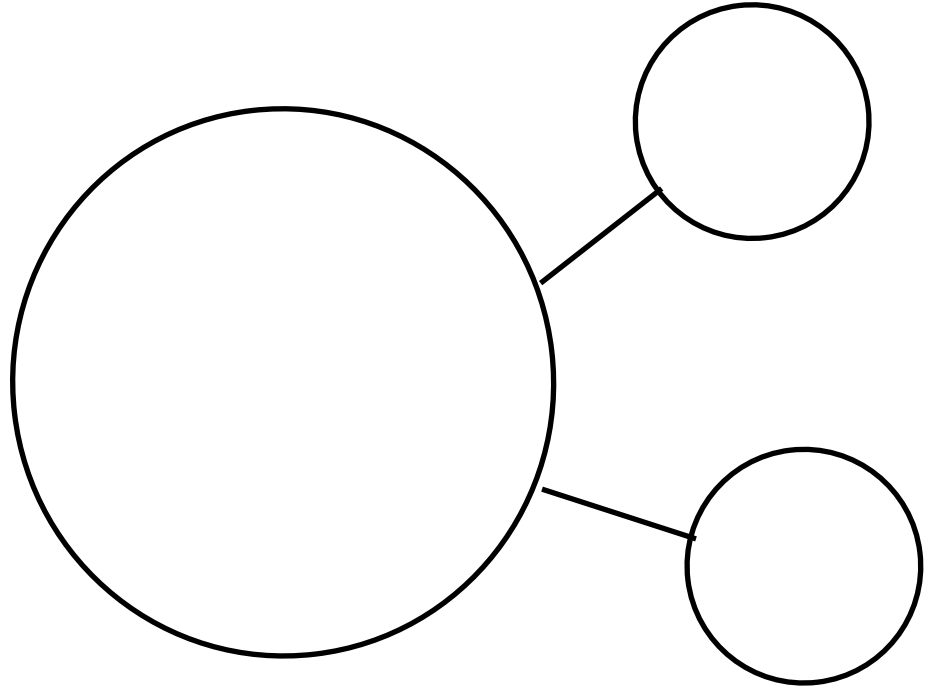
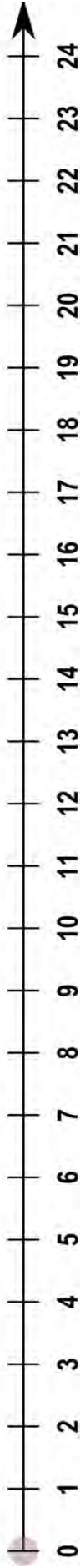
_____/11 Total Points

Kindergarten Assessment #9 Paper Sandwich to cut.



Paper Sandwich to cut.

Kindergarten Assessment #9

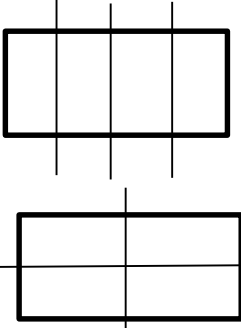




Note: “Strategy” refers to any method that could lead to the correct answer. Students may use a correct strategy and still get an incorrect answer.

Objective/Needs	Problems
<p>NY-2.OA.2a</p> <p>1- Award 1 point for having all four, related number sentences.</p>	<p>1. Use the following numbers to make a <i>Fact Family</i>.</p> <p style="text-align: center;">16 9 7</p> <p>$9 + 7 = 16$ $7 + 9 = 16$ $16 - 9 = 7$ $16 - 7 = 9$</p> <p><i>Student has to write all four number sentences, to award the point.</i></p>
<p>NY-2.OA.2b</p> <p>2-Award 1 point for the answer.</p>	<p>2.</p> <p style="text-align: center;">15 $- 7 = 8$</p>
<p>NY-2.OA.1</p> <p>CGI – Add To, Result Unknown</p> <p>3a-Award 1 point for the correct answer</p> <p>3b-Award 1 point for showing a reasonable strategy</p>	<p>3. Marcos planted 14 flowers. His brother planted 12 flowers. How many flowers did they plant together? Show your work.</p> <p>Answer: 26 flowers</p> <p>Strategy Point: <i>Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</i></p> <p><i>You can ask students to explain their thinking of their strategy is not clear.</i></p> <p>Note: Writing labels is important to stress during instruction. However, for the purpose of this assessment, students do not lose credit when the label is missing.</p>
<p>NY-2.NBT</p> <p>4a-Award 1 point for the correct answer.</p> <p>4b-Award 1 point for showing a reasonable strategy.</p>	<p>4. Solve:</p> <p style="text-align: center;">23 - 17</p> <p>Show your work.</p> <p>Answer: 6</p> <p>Strategy Point: <i>Students may use any reasonable strategy to solve the problem including drawing a pictures, traditional algorithm (using numbers and a process). You can ask students to explain their thinking if their strategy is not clear.</i></p>



<p>NY-2.OA.1</p> <p>CGI – Add To, Change Unknown</p> <p>5a-Award 1 point for the correct answer.</p> <p>5b-Award 1 point for showing a reasonable strategy</p>	<p>5. Roger counted his pennies and found that he had 39 in one piggy bank. He needs 50 pennies. How many more pennies does he need? Show your work.</p> <p><i>Answer: 11 pennies</i></p> <p>Strategy Point: Students may choose to use any reasonable strategy such as drawing a picture, breaking apart, traditional algorithm (using numbers and a process), number line, etc.</p> <p><i>You can ask students to explain their thinking if the strategy is unclear.</i></p> <p>Note: Writing labels is important to stress during instruction. For the purpose of this assessment, students do not lose credit when the label is missing.</p>
<p>NY-2.OA.1</p> <p>CGI – Compare, Difference Unknown</p> <p>6a-Award 1 point for the correct answer.</p> <p>6b-Award 1 point for showing a reasonable strategy</p>	<p>6. Rosa’s big brother bicycled 48 miles last month. He bicycled 19 more miles than Rosa. How many miles did Rosa bicycle last month? Show your work.</p> <p><i>Answer: 29 miles</i></p> <p>Strategy Point: Students may choose to use any reasonable strategy such as drawing a picture, breaking apart, traditional algorithm (using numbers and a process), number line, etc.</p> <p><i>You can ask students to explain their thinking if the strategy is unclear.</i></p> <p>Note: Writing labels is important to stress during instruction. For the purpose of this assessment, students do not lose credit when the label is missing.</p>
<p>NY-2.G.3</p> <p>7-Award 1 point if the student both answers the question and follows the directions to divide the rectangle.</p>	<p>7. You are sharing the cake equally with yourself and 3 friends.</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;">  </div> <div> <p>What fractional part of the cake will each of you receive? <i>Answer: 1/4</i></p> <p>Use the rectangle to draw how you will divide the cake. <i>Student draws lines to approximate 4 equal portions.</i></p> </div> </div>



Name _____

Problems	
<input type="checkbox"/> 1 1 Point	<p>1. Use the following numbers to make a <i>Fact Family</i>.</p> <p style="text-align: center;">16 9 7</p>
<input type="checkbox"/> 2 1 Point	<p>2.</p> <p style="text-align: center;"><input style="width: 50px; height: 50px; border: 1px solid black;" type="text"/> - 7 = 8</p>
<input type="checkbox"/> 3a 1 Point Answer <input type="checkbox"/> 3b 1 Point Strategy	<p>3. Marcos planted 14 flowers. His brother planted 12 flowers. How many flowers did they plant together?</p> <p>Show your work.</p>



Name _____

<input type="checkbox"/> 4a 1 Point Answer <input type="checkbox"/> 4b 1 Point Strategy	4. Solve: 23-17 Show your work.
<input type="checkbox"/> 5a 1 Point Answer <input type="checkbox"/> 5b 1 Point Strategy	5. Roger counted his pennies and found that he had 39 in one piggy bank. He needs 50 pennies. How many more pennies does he need? Show your work.
<input type="checkbox"/> 6a 1 Point Answer <input type="checkbox"/> 6b 1 Point Strategy	6. Rosa's big brother bicycled 48 miles last month. He bicycled 19 more miles than Rosa. How many miles did Rosa bicycle last month? Show your work.



Name _____

7

1 Point Answer

Must have both parts to be correct.

7. You are sharing the cake equally with yourself and 3 friends.

What fractional part of the cake will each of you receive?

Use the rectangle below to show how you will divide the face into fractional parts.



/11

Total Points



Nombre: _____

Problemas	
<input type="checkbox"/> 1 1 punto	<p>1. Utiliza los números siguientes para componer una familia de hechos (fact family).</p> <p>16 9 7</p>
<input type="checkbox"/> 2 1 punto	<p>2.</p> <p><input type="text"/> - 7 = 8</p>
<input type="checkbox"/> 3a 1 punto respuesta <input type="checkbox"/> 3b 1 punto estrategia	<p>3. Marcos plantó 14 flores. Su hermano plantó 12 flores. ¿Cuántas flores plantaron en total?</p> <p>Muestra tu trabajo.</p>



Nombre: _____

<p><input type="checkbox"/> 4a 1 punto respuesta</p> <p><input type="checkbox"/> 4b 1 punto estrategia</p>	<p>4. Resuelve:</p> <p>23 - 17</p> <p>Muestra tu trabajo.</p>
<p><input type="checkbox"/> 5a 1 punto respuesta</p> <p><input type="checkbox"/> 5b 1 punto estrategia</p>	<p>5. Roger contó sus centavos y descubrió que tenía 39 en una alcancía. Roger necesita 50 centavos. ¿Cuántos centavos más necesita?</p> <p>Muestra tu trabajo.</p>
<p><input type="checkbox"/> 6a 1 punto respuesta</p> <p><input type="checkbox"/> 6b 1 punto estrategia</p>	<p>6. El hermano mayor de Rosa recorrió un total de 48 millas en bicicleta el mes pasado. Recorrió 19 millas más que Rosa. ¿Cuántas millas en bicicleta recorrió Rosa el mes pasado?</p> <p>Muestra tu trabajo.</p>

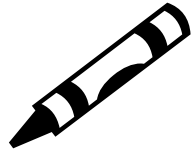
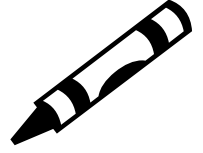


Nombre: _____

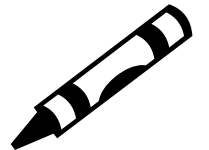
<p><input type="checkbox"/> 7 1 punto respuesta <i>La respuesta tiene que tener las dos partes.</i></p>	<p>7. Estás compartiendo un pastel en partes iguales con 3 amigos.</p> <p>¿Qué fracción del pastel va a recibir cada uno?</p> <p>Usando el rectángulo dibuja cómo vas a dividir el pastel en partes fraccionales.</p> <div data-bbox="548 793 1013 1041" style="border: 1px solid black; width: 286px; height: 118px; margin: 0 auto;"></div>
<p style="text-align: right;">/11</p> <hr/> <p>Total Points</p>	

Summer Math

Educator Packet



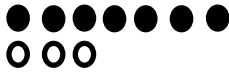
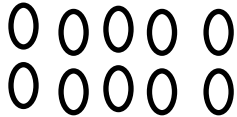
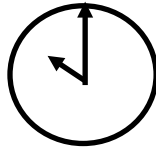
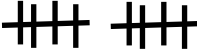
Unit 1



Warm up: Target Number

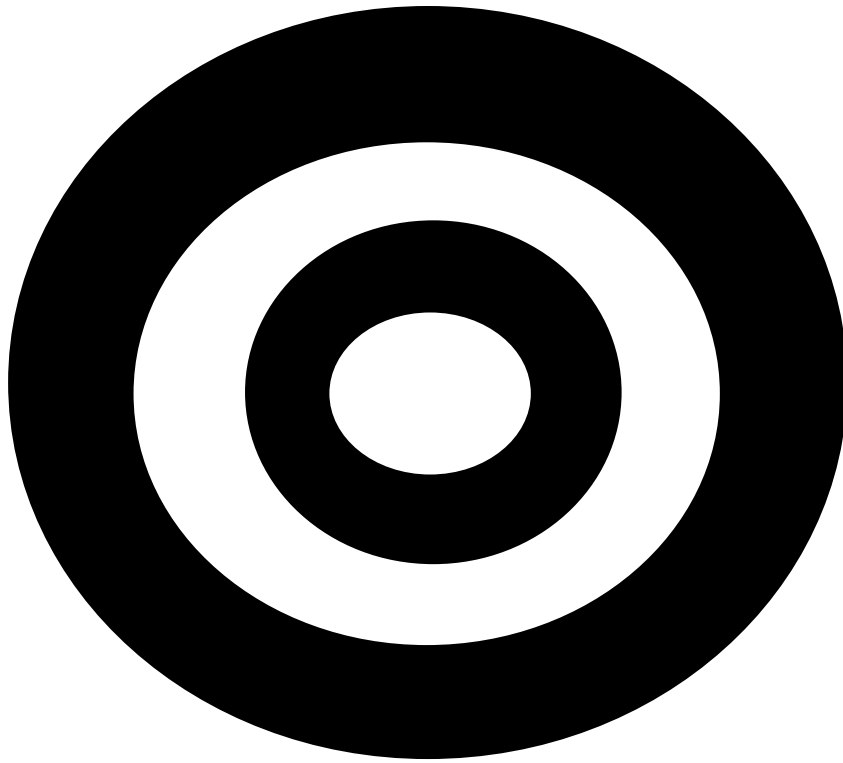
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, students give ONE example at a time, going around the group a couple of times until all DIFFERENT responses are used. Students need to give **different** ways to represent the number. Writing, "7 + 3" is different from writing, "3 + 7". Drawing 7 circles and 3 circles is different from writing, "7 + 3."

Examples of some different ways to represent the number 10:

$7 + 3$	$10 + 0$	$17 - 7$	2×5	$100 / 10$	$20/2$
$3 + 7$	$0 + 10$	ten	5×2	$10/1$	10×1
					
One dozen eggs take away 2		$2 + 2 + 2 + 2 + 2$			$100 - 90$

Required [Math] Fluencies

Kindergarten	Add and subtract within 5	Procedural Fluency: can easily use a process to figure out the answer (for example, using manipulatives, diagrams)
Grade 1	Add and subtract within 10	Procedural Fluency
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2); Add and subtract within 100	Automaticity by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 3	Single digit products and quotients (product automaticity by the end of Grade 3)	Automaticity for Products by the end of Grade 3
	Add and subtract within 1,000	Procedural Fluency
Grade 4	Add and subtract within 1,000,000	Procedural Fluency



Target Number

Suggested Target Numbers: Start with 12 and 15 for everyone for the first two sessions. Afterwards, numbers over 20 are fair for all grade bands except for the DOG ICON, which should just use numbers under 20.

12

15

24

36

60

48

100

45

90

50

75

More choices:

9

18

6

20

FAMILY FUN GAME Directions

Key Points:

- Starting with Unit 2, the Family Fun Game gives students repeated practice in each of the Math Matters skills. This allows students to practice all of the skills throughout the summer.

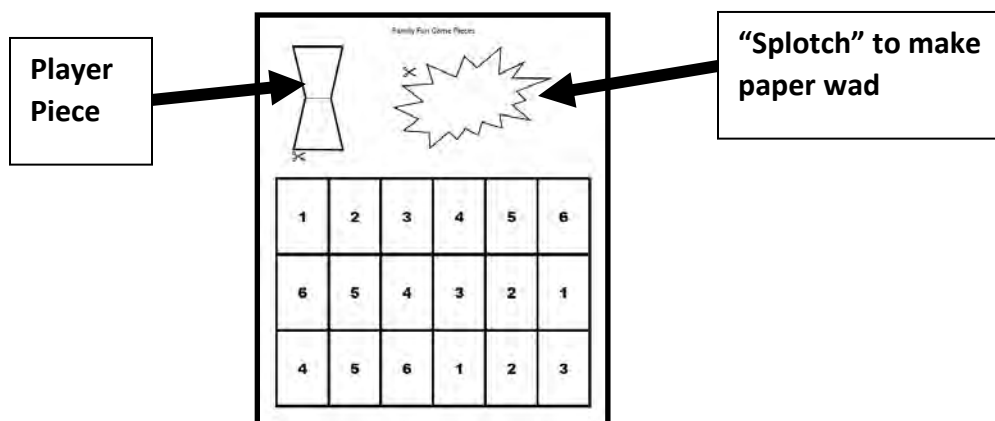
Process:

- Each Student Packet has its own Family Fun Game Cards, allowing each student to participate with students who have different skills to practice.
- Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
- Instead of students drawing a card, students select a problem from their grade band sheets. Students can select problems in the order they choose, BUT ask students to solve one problem from each row, before repeating from the row, so they practice each skill.
- Game Directions are on the game board. Game boards are at the end of each Student Packet, so they are easy to pull off and use.
- The best way to move around the board is to use dice. The Student Packets have a “Do It Yourself (DIY)” version to toss a small wad of paper onto a board of numbers.
- Many students end up reading all of the problems in between turns as they search for the “best” ones to answer.

Do It Yourself (DIY) Game Pieces

Player: Cut the outside of the double trapezoid. Fold in half to make the player. If more than one student has the same color, students can write their names on the playing piece.

If you don't have a 6-sided die: Cut around the jagged “splotch” shape and wad the paper into a ball. Toss the ball onto the number board to find number of spaces to move.



BLM Unit 1 Family Fun Game Answer Key - All Levels

Problem Letter	Kinder (pink)	1-2 (blue)	3-4 (green)	5-6 (yellow)	7-8 (peach)
A	5¢ (cents)	\$32	0.15	2.35	18 boys : 22 girls
B	6¢ (cents)	\$42	0.2	1.2 or 1.20	11 girls : 20 total
C	7¢ (cents)	\$55	0.42	0.42	12 boys : 27 total
D	8¢ (cents)	\$78	0.05	13%	16 red : 27 total
E	9¢ (cents)	\$62	1/4	1%	9 cups
F	10¢ (cents)	\$82	2/8	34%	1 1/3 cups
G	6¢ (cents)	\$28	1/3	25% and 1/4	18 cups
H	7¢ (cents)	\$12	2/6	50% and 1/2	10 cups
I	8¢ (cents)	\$8	10	75% and 3/4	7.5 ounces
J	10¢ (cents)	\$10	3	1/4 ^{2.35}	\$36
K	13¢ (cents)	\$32	9	3/8	25 shirts
L	15¢ (cents)	\$25	1	3/5	16 shirts
M	11¢ (cents)	\$15	6	3/8	20 blocks
N	12¢ (cents)	\$21	3	2/5	7.2 minutes
O	9¢ (cents)	\$45	15	3/6 or 1/2	Martin runs faster. Martin runs 12 blks/6 min and Alicia runs 10 blks/6 min
P	14¢ (cents)	\$37	8	8.2	5 gallons
Q	13¢ (cents)	\$3	9	9.01	425 miles
R	16¢ (cents)	\$19	28	151.2	\$5.00

CGI CHARTS:

With a few changes, this chart is in New York State's Next Generations Learning Standards for Pre-K to Grade 2, titled, "Common Addition and Subtraction Situations."

Key Points:

- Allows students to solve the problem in a way they understand, instead of the "right" way.
 - **NY-1.OA.1** – Use addition and subtraction within 20 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions.
 - ...using objects, drawings and equations with a symbol to represent the unknown.
 - **NY-2.OA.1** – Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.
 - Mastery of all word problems types on the "Common Addition and Subtraction Situations" Chart by end of Grade 2.

Process:

- **Pick one word problem.**
 - Start easy (top left corner of CGI Chart, then work to the left and down as students show confidence.
 - Or use the STAR (Grade 1) ★ or the TRIANGLE (Grade 2) ▲ for types of word problems on the summer math assessments.
- Read the problem to students, using the choice of differentiated numbers to fill in the blanks.
- Read again and encourage students to take notes on the graphic organizer. (modeling, teaching the first time)
- Give students time to solve. (If struggling, prompt with, "What number does the problem start with?" Do you want to draw this or use manipulatives to recreate it?)
- Have manipulatives and paper for students to choose either medium for solving the problem.
- Ask students to explain their process before asking them for an answer. This allows students time to self-correct and gives the Educator a clue about how the student is thinking.
- At the end, look at the final answer together, to decide if it solves the problem. How would you say this in a sentence?

Unit 1 CGI Problems for *Tightwad Tod*



<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Add To</p>	<p><i>(Result Unknown)</i> ★ ▲</p> <p>Tod had ___ pennies. His brother gave him ___ pennies. How many pennies does Tod have now?</p> <p>(5, 4) (15, 3) (20, 4)</p>	<p><i>(Change Unknown)</i> ▲</p> <p>Tod had ___. How many more dollars does Tod need to save in order to have ___ for a new toy?</p> <p>(\$3, \$8) (\$5, \$10) (\$10, 13)</p>	<p><i>(Start Unknown)</i></p> <p>Tod had some money to spend. His brother gave him ___. Now Tod has ___ to spend. How much money did Tod have to start?</p> <p>(\$3, \$10) (\$5, \$15) (\$12, \$15)</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Take From</p>	<p><i>(Results Unknown)</i> ★</p> <p>Tod had _____ dollars. He spent ___ dollars for a present. How many dollars does he have now?</p> <p>(10, 5) (15, 5) (100, 25)</p>	<p><i>(Change Unknown)</i></p> <p>Tod had \$____. He spent some of it at the mall and now he has \$____. How much money did he spend at the mall?</p> <p>(10, 6) (15, 9) (100, 25)</p>	<p><i>(Start Unknown)</i></p> <p>Tod had some money. He spent \$____ at the mall. Now he has \$____. How much money did Tod have to start?</p> <p>(4, 6) (18, 9) (20, 5)</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Put Together/ Take Apart</p>	<p><i>(Total Unknown)</i> ★</p> <p>Tod went shopping. He spent \$___ on snacks and \$___ on toys. How much money did he spend all together?</p> <p>(5, 20) (10, 30) (50, 50)</p>		<p><i>(Addend Unknown)</i></p> <p>Tod had ___ coins in his piggy bank. ___ were pennies and the rest were dimes. How many were dimes?</p> <p>(20, 5) (50, 10) (100, 60)</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Compare</p>	<p><i>(Difference Unknown)</i> ★ ▲</p> <p>Tod had _____ dollars. His brother, Ernest, had _____ dollars. How many more dollars did Tod have than Ernest?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Bigger Unknown)</i></p> <p>Tod had _____ dollars. His brother, Ernest, had _____ dollars more than Tod had. How many dollars did Ernest have?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Smaller Unknown)</i></p> <p>Ernest spent ___ dollars. That's ___ dollars more than Tod spent. How many dollars did Tod spend?</p> <p>(5, 3) (10, 5) (25, 20)</p>



Unir	<p><i>(Resultados desconocidos)</i> ★▲</p> <p>Tod tenía ___ centavos. Su hermano le dio ___ centavos. ¿Cuántos tiene ahora?</p> <p>(5, 4) (15, 3) (20, 4)</p>	<p><i>(Cambio desconocido)</i> ▲</p> <p>Tod tenía ____. ¿Cuántos necesita para tener ___ para poder comprar un nuevo juguete?</p> <p>(\$3, \$8) (\$5, \$10) (\$10, 13\$)</p>	<p><i>(Inicio desconocido)</i></p> <p>Tod tenía dinero para gastar. Su hermano le dio ____. Ahora Tod tiene ___ para gastar. ¿Cuánto dinero tenía al empezar?</p> <p>(\$3, \$10) (\$5, \$15) (\$12, \$15)</p>
	<p><i>(Resultados desconocidos)</i> ★</p> <p>Tod tenía ___ dólares. Compró un regalo de ___ dólares. ¿Cuántos dólares le quedan?</p> <p>(10, 5) (15, 5) (100, 25)</p>	<p><i>(Cambio desconocido)</i></p> <p>Tod tenía \$___. Gastó algo en el centro comercial y ahora le quedan \$___. ¿Cuánto dinero se gastó en el centro comercial?</p> <p>(10, 6) (15, 9) (100, 25)</p>	<p><i>(Inicio desconocido)</i></p> <p>Tod tenía algo de dinero. Gastó \$___ y ahora le quedan \$___. ¿Cuánto dinero tenía al empezar?</p> <p>(4, 6) (18, 9) (20, 5)</p>
Separar	<p><i>(Todo desconocido)</i> ★</p> <p>Tod fue de compras. Gastó \$___ en meriendas y \$___ comprando juguetes. ¿Cuánto dinero gastó en total?</p> <p>(5, 20) (10, 30) (50, 50)</p>		<p><i>(Parte desconocida)</i></p> <p>Tod tenía ___ monedas en su banquito. Tenía ___ centavos y lo demás monedas de diez centavos. ¿Cuántas monedas de diez centavos tenía?</p> <p>(5, 20) (10, 50) (60, 100)</p>
	<p><i>(Diferencia desconocida)</i> ★▲</p> <p>Tod tenía ___ dólares. Su hermano, Ernesto, tenía ___ dólares. ¿Cuántos dólares de más tenía Tod?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Cantidad a comparar desconocida)</i></p> <p>Tod tenía ___ dólares. Su hermano, Ernesto, tenía ___ dólares más que Tod. ¿Cuántos dólares tenía Ernesto?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Referente desconocido)</i></p> <p>Ernesto gastó ___ dólares. Eran ___ dólares más que gastó Tod. ¿Cuántos dólares gastó Tod?</p> <p>(5, 3) (10, 5) (25, 20)</p>
Parte- Todo	<p><i>(Todo desconocido)</i> ★</p> <p>Tod fue de compras. Gastó \$___ en meriendas y \$___ comprando juguetes. ¿Cuánto dinero gastó en total?</p> <p>(5, 20) (10, 30) (50, 50)</p>		<p><i>(Parte desconocida)</i></p> <p>Tod tenía ___ monedas en su banquito. Tenía ___ centavos y lo demás monedas de diez centavos. ¿Cuántas monedas de diez centavos tenía?</p> <p>(5, 20) (10, 50) (60, 100)</p>
	<p><i>(Diferencia desconocida)</i> ★▲</p> <p>Tod tenía ___ dólares. Su hermano, Ernesto, tenía ___ dólares. ¿Cuántos dólares de más tenía Tod?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Cantidad a comparar desconocida)</i></p> <p>Tod tenía ___ dólares. Su hermano, Ernesto, tenía ___ dólares más que Tod. ¿Cuántos dólares tenía Ernesto?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Referente desconocido)</i></p> <p>Ernesto gastó ___ dólares. Eran ___ dólares más que gastó Tod. ¿Cuántos dólares gastó Tod?</p> <p>(5, 3) (10, 5) (25, 20)</p>
Comparar	<p><i>(Todo desconocido)</i> ★</p> <p>Tod fue de compras. Gastó \$___ en meriendas y \$___ comprando juguetes. ¿Cuánto dinero gastó en total?</p> <p>(5, 20) (10, 30) (50, 50)</p>		<p><i>(Parte desconocida)</i></p> <p>Tod tenía ___ monedas en su banquito. Tenía ___ centavos y lo demás monedas de diez centavos. ¿Cuántas monedas de diez centavos tenía?</p> <p>(5, 20) (10, 50) (60, 100)</p>
	<p><i>(Diferencia desconocida)</i> ★▲</p> <p>Tod tenía ___ dólares. Su hermano, Ernesto, tenía ___ dólares. ¿Cuántos dólares de más tenía Tod?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Cantidad a comparar desconocida)</i></p> <p>Tod tenía ___ dólares. Su hermano, Ernesto, tenía ___ dólares más que Tod. ¿Cuántos dólares tenía Ernesto?</p> <p>(10, 5) (20, 10) (25, 10)</p>	<p><i>(Referente desconocido)</i></p> <p>Ernesto gastó ___ dólares. Eran ___ dólares más que gastó Tod. ¿Cuántos dólares gastó Tod?</p> <p>(5, 3) (10, 5) (25, 20)</p>

Math Objectives

- Separate a whole into two equal parts and use appropriate language to describe the parts such as one out of two equal parts.
- Partition objects into two equal parts and name the parts halves.
- Represent the fraction half numerically.

Language Objectives

- Explain why each portion is half.
- Share-write what is a half.

Vocabulary

half
fair shares
equal pieces
one out of two equal pieces

Materials:

STUDENT ACTIVITY (per partner pair):

- BLM String Cheese Snack Fractions
- BLM String Cheese to Share
- 1 string cheese per pair.
- 1 plastic knife
- 2 paper dessert plates
- 2 paper towels
- 1 scissors per student
- 1 ruler and marker per student
- 1 glue stick per student
- Chart paper with three questions:
 1. How do you know that each portion is half?
 2. How do you describe this fraction?
 3. How do you represent this fraction in numbers?

Put a copy of the record sheet string cheese snack fraction cut apart at the top of the chart with the question

Unit 1, Lesson 3

1st – 2nd

Snack Fractions



Children should wash their hands before this activity if using food items.

Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

Objective:

Today you are going to share a snack with one other friend. You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. And you will be able to write the number representation of the fraction.

TODAY:

Divide the students into partners, giving each student first the BLMs String Cheese Snack Fractions and the paper representation of string cheese (*either the BLM String Cheese to share or cream-colored strips of paper cut to size of string cheese*).

Ask each student to share the paper string cheese as if s/he were cutting in fair shares for one other person. Let students share their cuts. Did they all share the same (*could be horizontal, vertical*)? Prove that the parts are halves by laying the pieces on top of one another – these are congruent halves, same size, same shape. Show students how to write the fraction numerically, making sure you use a horizontal line and NOT a diagonal fraction line. Tell students that the bottom number, or denominator, tells you how many pieces the whole is cut into, and the upper number, or numerator, tells you how many pieces in your portion – one out of two equal pieces. Students then complete the record sheet as before, but adding the numerical representation of half.

Now distribute the actual snacks, having the students share string cheese between them. If the partners had divided the paper differently, they will have to decide how to share the real snack.

Snack Fraction Writing: Chart Paper

Have the students answer the three chart questions. A student may scribe, or you may scribe for them. Leave the chart in the room for reference.

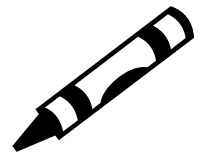
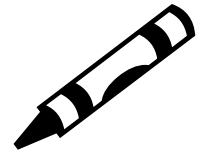
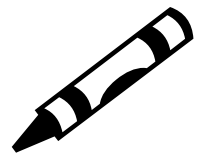
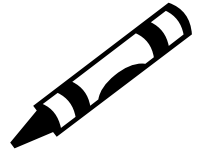
Objectives: Read the objectives. How did we accomplish these in our snack fraction lesson?

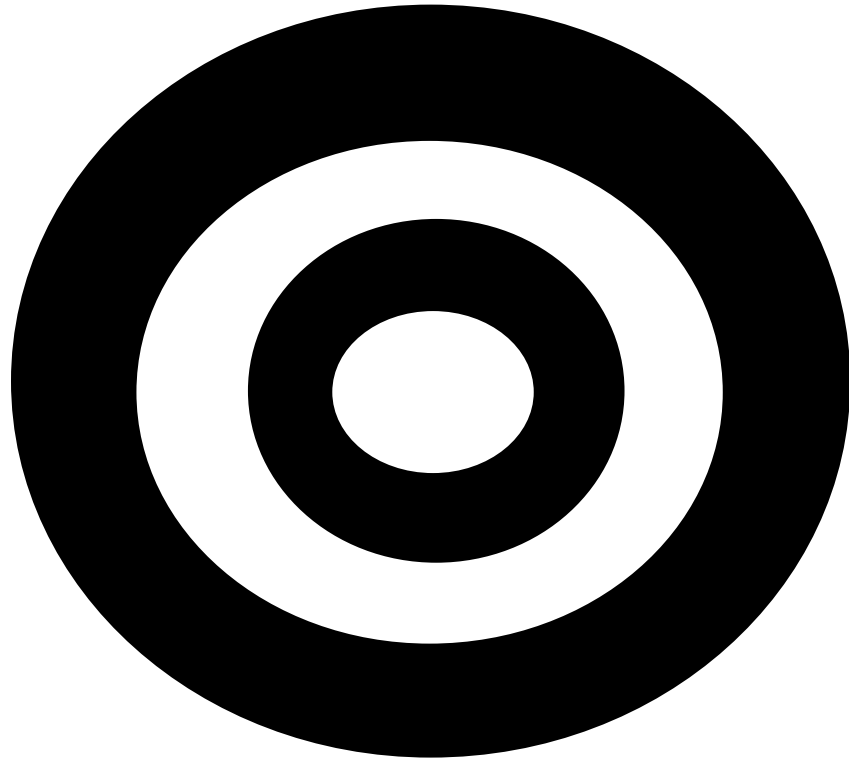
Summer Math

Student Packet/Paquete de alumno

Unit 1

English/Español





Target Number



Printed on Blue –one set per partners for class; one set per student for home. (There are two pages of cards.)

<p>A. Three \$10 bills Two \$1 bills</p> <p><i>Tres billetes de \$10</i> <i>Dos billetes de \$1</i></p>	<p>B. Four \$10 bills Two \$1 bills</p> <p><i>Cuatro billetes de \$10</i> <i>Dos billetes de \$1</i></p>	<p>C. Five \$10 bills Five \$1 bills</p> <p><i>Cinco billetes de \$10</i> <i>Cinco billetes de \$1</i></p>
---	--	--

<p>D. Seven \$10 bills Eight \$1 bills</p> <p><i>Siete billetes de \$10</i> <i>Ocho billetes de \$1</i></p>	<p>E. Six \$10 bills Two \$1 bills</p> <p><i>Seis billetes de \$10</i> <i>Dos billetes de \$1</i></p>	<p>F. Eight \$10 bills Two \$1 bills</p> <p><i>Ocho billetes de \$10</i> <i>Dos billetes de \$1</i></p>
---	---	---

<p>G. Two \$10 bills Eight \$1 bills</p> <p><i>Dos billetes de \$10</i> <i>Ocho billetes de \$1</i></p>	<p>H. One \$10 bills Two \$1 bills</p> <p><i>Un billete de \$10</i> <i>Dos billetes de \$1</i></p>	<p>I. Zero \$10 bills Eight \$1 bills</p> <p><i>Cero billetes de \$10</i> <i>Ocho billetes de \$1</i></p>
---	--	---

Printed on Blue –one set per partners for class; one set per student for home. (There are two pages of cards.)

J.

Tod had \$20.
He spent \$10.
What did he have left?

*Tod tenía \$20.
Gastó \$10.
¿Cuánto le sobró?*

K.

Tod had \$42.
He spent \$10.
What did he have left?

*Tod tenía \$42.
Gastó \$10.
¿Cuánto le sobró?*

L.

Tod had \$35.
He spent \$10.
What did he have left?

*Tod tenía \$35.
Gastó \$10.
¿Cuánto le sobró?*

M.

Tod had \$25.
He spent \$10.
What did he have left?

*Tod tenía \$25.
Gastó \$10.
¿Cuánto le sobró?*

N.

Tod had \$31.
He spent \$10.
What did he have left?

*Tod tenía \$31.
Gastó \$10.
¿Cuánto le sobró?*

O.

Tod had \$55.
He spent \$10.
What did he have left?

*Tod tenía \$55.
Gastó \$10.
¿Cuánto le sobró?*

P.

Tod had \$47.
He spent \$10.
What did he have left?

*Tod tenía \$47.
Gastó \$10.
¿Cuánto le sobró?*

Q.

Tod had \$13.
He spent \$10.
What did he have left?

*Tod tenía \$13.
Gastó \$10.
¿Cuánto le sobró?*

R.

Tod had \$29.
He spent \$10.
What did he have left?

*Tod tenía \$29.
Gastó \$10.
¿Cuánto le sobró?*

CGI Graphic Organizer

(Notes)

Show your work:

Answer: _____
(label)

Explain your strategy:

(Notes)

Show your work:

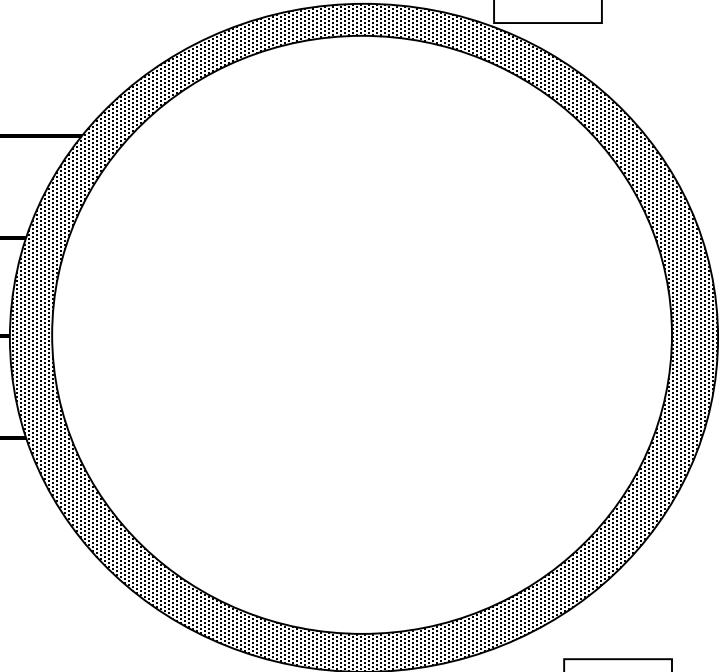
Answer: _____
(label)

Explain your strategy:

My name is _____

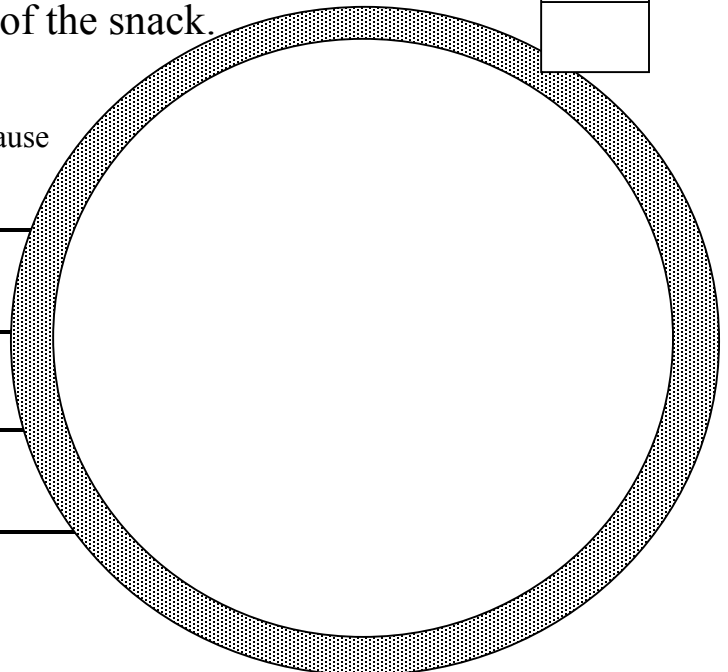
This is my plate and my fair share of the snack.

My share is called a _____ because




This is my friend's plate and fair share of the snack.

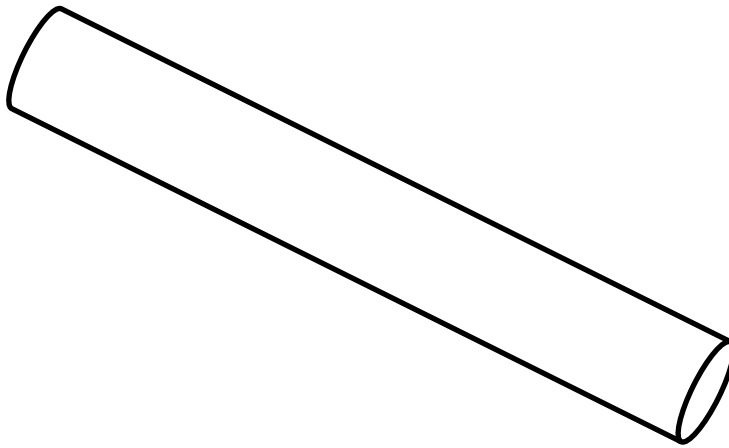
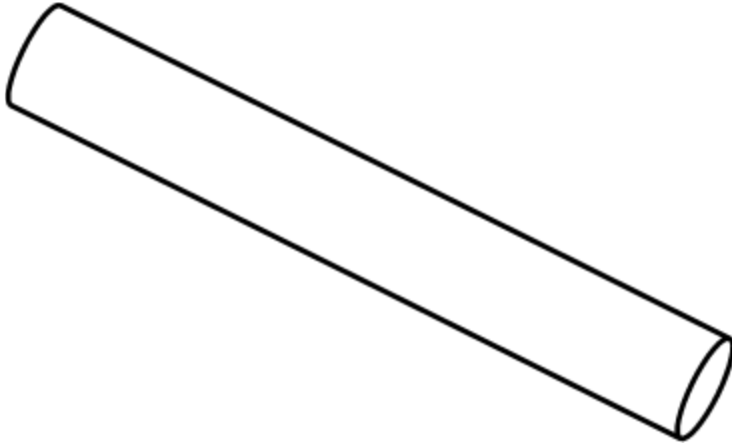
My friend's share is called a _____ because



BLM Unit 1, Snack Fractions Lesson 3

String Cheese to Share 

There are snacks for two students on this page. Students are to use a straight edge to draw the line to cut the snack in half, then use scissors to cut the snack in half, then glue the half to each plate pictured on the BLM String Cheese Snack Fractions.





Generic Family Fun Game Board

Materials Generic to All Units:

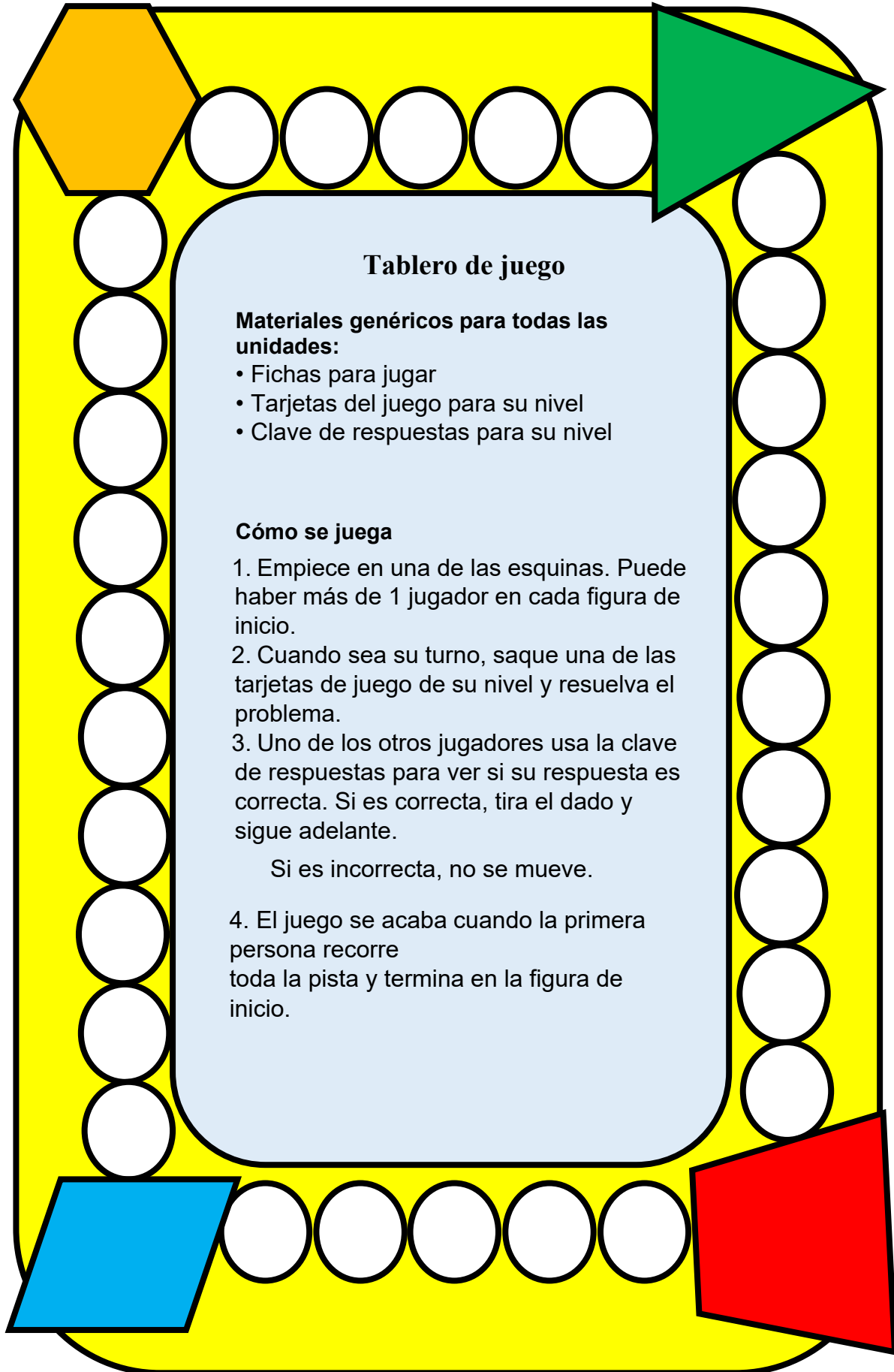
- Game Markers
- Game Cards for your Level
- Answer Key for your Level

Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, roll the die and move ahead.

If incorrect, do not move.

4. Game is over when the first person runs the entire track, ending back on the starting shape.



Tablero de juego

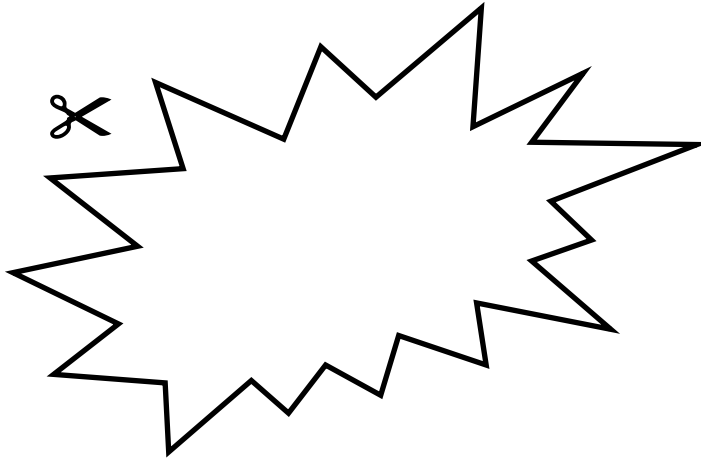
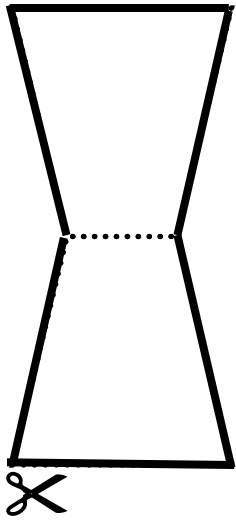
Materiales genéricos para todas las unidades:

- Fichas para jugar
- Tarjetas del juego para su nivel
- Clave de respuestas para su nivel

Cómo se juega

1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira el dado y sigue adelante.
Si es incorrecta, no se mueve.
4. El juego se acaba cuando la primera persona recorre toda la pista y termina en la figura de inicio.

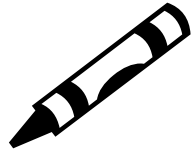
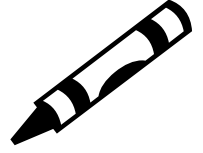
Family Fun Game Pieces



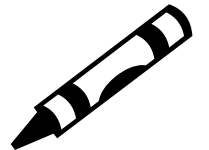
1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet



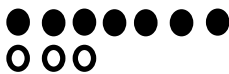
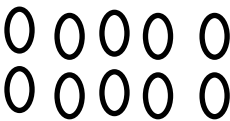
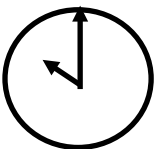
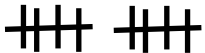
Unit 2



Warm up: Target Number

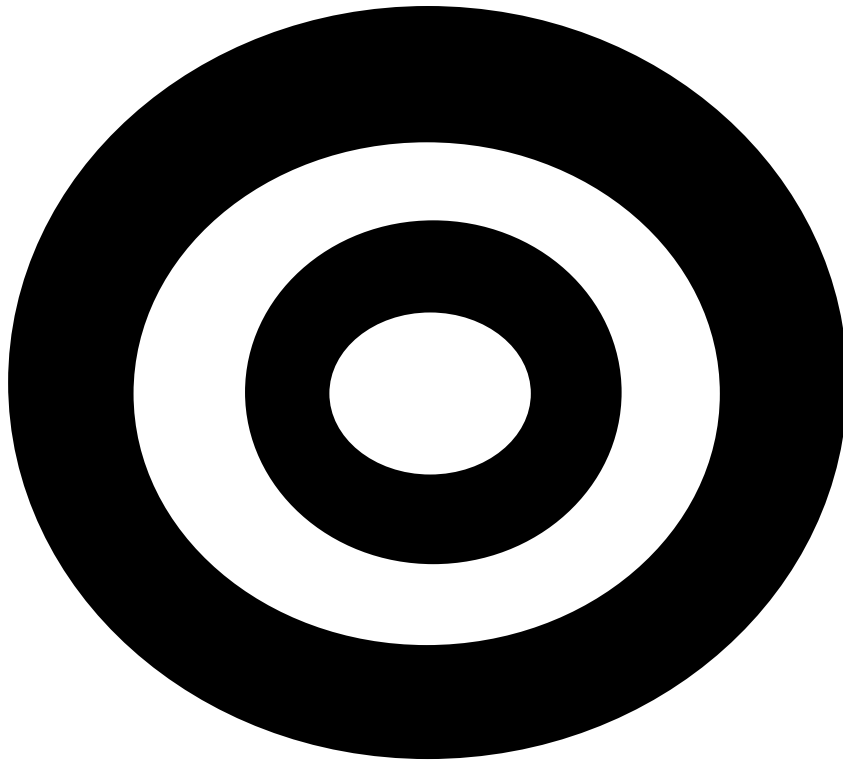
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, students give ONE example at a time, going around the group a couple of times until all DIFFERENT responses are used. Students need to give **different** ways to represent the number. Writing, "7 + 3" is different from writing, "3 + 7". Drawing 7 circles and 3 circles is different from writing, "7 + 3."

Examples of some different ways to represent the number 10:

$7 + 3$	$10 + 0$	$17 - 7$	2×5	$100 / 10$	$20/2$
$3 + 7$	$0 + 10$	ten	5×2	$10/1$	10×1
					
One dozen eggs take away 2		$2 + 2 + 2 + 2 + 2$			$100 - 90$

Required [Math] Fluencies

Kindergarten	Add and subtract within 5	Procedural Fluency: can easily use a process to figure out the answer (for example, using manipulatives, diagrams)
Grade 1	Add and subtract within 10	Procedural Fluency
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2); Add and subtract within 100	Automaticity by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 3	Single digit products and quotients (product automaticity by the end of Grade 3)	Automaticity for Products by the end of Grade 3
	Add and subtract within 1,000	Procedural Fluency
Grade 4	Add and subtract within 1,000,000	Procedural Fluency



Target Number

Suggested Target Numbers: Start with 12 and 15 for everyone for the first two sessions. Afterwards, numbers over 20 are fair for all grade bands except for the DOG ICON, which should just use numbers under 20.

12

15

24

36

60

48

100

45

90

50

75

More choices:

9

18

6

20

FAMILY FUN GAME Directions

Key Points:

- Starting with Unit 2, the Family Fun Game gives students repeated practice in each of the Math Matters skills. This allows students to practice all of the skills throughout the summer.

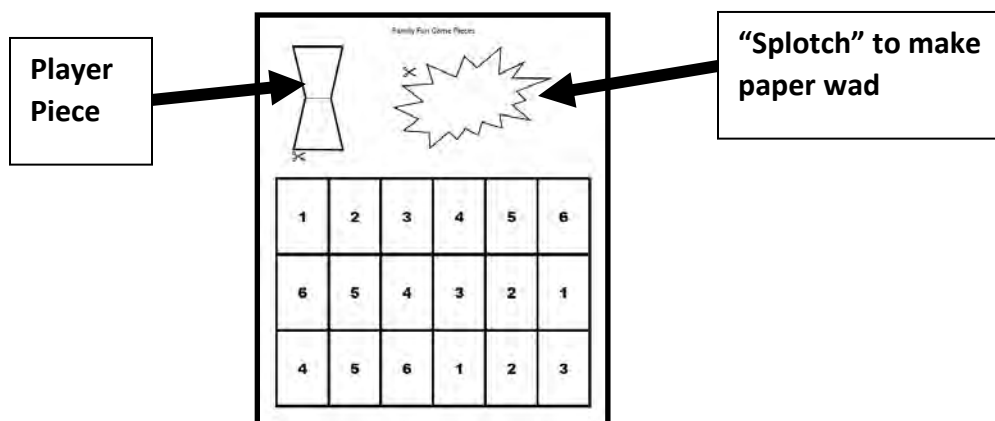
Process:

- Each Student Packet has its own Family Fun Game Cards, allowing each student to participate with students who have different skills to practice.
- Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
- Instead of students drawing a card, students select a problem from their grade band sheets. Students can select problems in the order they choose, BUT ask students to solve one problem from each row, before repeating from the row, so they practice each skill.
- Game Directions are on the game board. Game boards are at the end of each Student Packet, so they are easy to pull off and use.
- The best way to move around the board is to use dice. The Student Packets have a “Do It Yourself (DIY)” version to toss a small wad of paper onto a board of numbers.
- Many students end up reading all of the problems in between turns as they search for the “best” ones to answer.

Do It Yourself (DIY) Game Pieces

Player: Cut the outside of the double trapezoid. Fold in half to make the player. If more than one student has the same color, students can write their names on the playing piece.

If you don't have a 6-sided die: Cut around the jagged “splotch” shape and wad the paper into a ball. Toss the ball onto the number board to find number of spaces to move.



BLM Unit 2 Family Fun Game Answer Key - All Levels

Problem Letter	Kinder	1-2	3-4	5-6	7-8
A	10 ¢	\$46	$2 \times 5 = 10$ $5 \times 2 = 10$ $10 \div 2 = 5$ $10 \div 5 = 2$	1.25	50% increase
B	10 ¢	\$59	$5 \times 4 = 20; 20 \div 4 = 5$	1.21	75% increase
C	12 ¢	\$45	$3 \times 6 = 18; 18 \div 6 = 3$	0.22	20% decrease
D	11 cents	\$40	42	three-sixths or half	$\frac{8 \text{ oz}}{1 \text{ c}} = \frac{x \text{ oz}}{3 \text{ c}}$
E	10 cents	\$90	8	five-eighths	$\frac{16 \text{ oz}}{1 \text{ lb}} = \frac{x \text{ oz}}{4 \text{ lb}}$
F	12 cents	\$85	45	three-eighths	$\frac{36 \text{ in}}{1 \text{ yd}} = \frac{72 \text{ in}}{x \text{ yd}}$
G	15 cents	\$37	5 blouses	\$108.55	\$0.60 or 60¢
H	14 cents	\$52	\$4 each	6.4 miles	\$1.75
I	18 cents	\$26	4 in each row	50.2 miles	\$0.90 or 90¢
J	$6 + 4$	$2 + 7 = 9$ $7 + 2 = 9$ $9 - 2 = 7$ $9 - 7 = 2$	0.76	9	\$13.14
K	$5 + 5$	$7 + 3 = 10$ $3 + 7 = 10$ $10 - 7 = 10$ $10 - 3 = 7$	0.08	7	\$18.90
L	$1 + 9$	$6 + 9 = 15$ $9 + 6 = 15$ $15 - 9 = 6$ $15 - 6 = 9$	0.19	9	\$15.90
M	10, 20, 30, 40, 50, 60, 70, 80, 90, 100	22 perch	$\frac{9}{10}$	14	\$2.59
N	9 ants	6 fish were left	$\frac{6}{10}$	42	\$7.50
O	5 bugs	10 tadpoles left	$\frac{4}{10}$	16	\$4.58
P	4 coyotes	8, 2 make 10	0.33 , 0.5	one-thrid	\$1.64
Q	7 sage leaves	1, 9 make 10	11.99	three-sixths or half	\$2.36
R	$5 - 1 = 4$	3, 7 make ten	Drew	five-eighths	\$3.75

CGI CHARTS:

With a few changes, this chart is in New York State's Next Generations Learning Standards for Pre-K to Grade 2, titled, "Common Addition and Subtraction Situations."

Key Points:

- Allows students to solve the problem in a way they understand, instead of the "right" way.
 - **NY-1.OA.1** – Use addition and subtraction within 20 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions.
 - ...using objects, drawings and equations with a symbol to represent the unknown.
 - **NY-2.OA.1** – Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.
 - Mastery of all word problems types on the "Common Addition and Subtraction Situations" Chart by end of Grade 2.

Process:

- **Pick one word problem.**
 - Start easy (top left corner of CGI Chart, then work to the left and down as students show confidence.
 - Or use the STAR (Grade 1) ★ or the TRIANGLE (Grade 2) ▲ for types of word problems on the summer math assessments.
- Read the problem to students, using the choice of differentiated numbers to fill in the blanks.
- Read again and encourage students to take notes on the graphic organizer. (modeling, teaching the first time)
- Give students time to solve. (If struggling, prompt with, "What number does the problem start with?" Do you want to draw this or use manipulatives to recreate it?)
- Have manipulatives and paper for students to choose either medium for solving the problem.
- Ask students to explain their process before asking them for an answer. This allows students time to self-correct and gives the Educator a clue about how the student is thinking.
- At the end, look at the final answer together, to decide if it solves the problem. How would you say this in a sentence?

Unit 2 CGI Problems for *Water Habitats*



Add To	<p><i>(Result Unknown)</i> ★ ▲</p> <p>There were ___ alligators in the swamp. ___ more alligators crawled into the swamp. How many alligators are in the swamp now?</p> <p>(7, 3) (13, 25) (15, 25)</p>	<p><i>(Change Unknown)</i> ▲</p> <p>Alligator in the swamp caught ___ fish. How many more fish will he need to catch in order to have ___ fish, enough for his supper?</p> <p>(2, 8) (11, 21) (10, 12)</p>	<p><i>(Start Unknown)</i></p> <p>There were some hippos in the river. ___ more hippos joined them. Now there are ___ hippos in the river. How many hippos were in the river to start?</p> <p>(4, 6) (5, 10) (10, 16)</p>
Take From	<p><i>(Result Unknown)</i> ★</p> <p>There were ___ eggs in duck nests in the pond. ___ of them hatched. How many eggs are there now?</p> <p>(10, 5) (22, 2) (13, 9)</p>	<p><i>(Change Unknown)</i></p> <p>There were ___ duck eggs in nests in the pond. Some of them hatched. Now there are ___ duck eggs. How many eggs hatched?</p> <p>(10,7) (16, 6) (24, 5)</p>	<p><i>(Start Unknown)</i></p> <p>There were some duck eggs in nests in the pond. ___ of them hatched. Now there are ___ eggs. How many eggs were there to start?</p> <p>(2, 8) (13, 12) (21, 8)</p>
Put Together/ Take Apart	<p><i>(Total Unknown)</i> ★</p> <p>There were ___ sea stars and ___ sea snails in the tide pool. How many sea creatures were in the tide pool all together?</p> <p>(2, 8) (10, 32) (17, 19)</p>	<p><i>(Addend Unknown)</i></p> <p>There were ___ sea creatures in the tide pool. ___ were sea stars and the rest were sea snails. How many sea snails were there?</p> <p>(10, 1) (15, 12) (23, 9)</p>	
Compare	<p><i>(Difference Unknown)</i> ★ ▲</p> <p>Colorful coral live in the coral reef. The red coral was ___ inches tall. The yellow coral was ___ inches tall. How much taller was the red coral than the yellow coral?</p> <p>(10, 9) (23, 12) (22, 19)</p>	<p><i>(Bigger Unknown)</i></p> <p>Colorful coral live in the coral reef. The red coral was ___ inches tall. It was ___ inches shorter than the yellow coral. How tall was the yellow coral?</p> <p>(5, 5) (13, 4) (15, 9)</p>	<p><i>(Smaller Unknown)</i></p> <p>Colorful coral live in the coral reef. The red coral was ___ inches tall. It was ___ inches taller than the yellow coral. How tall was the yellow coral?</p> <p>(10, 3) (10, 7) (25, 9)</p>

Unit 2 CGI Problems for Water Habitats



<p>Unir</p>	<p><i>(Resultados desconocidos)</i> ★ ▲</p> <p>Había _____ cocodrilos en el pantano. _____ cocodrilos más se arrastraron al pantano. ¿Cuántos cocodrilos hay ahora en el pantano?</p> <p>(7, 3) (13, 25) (15, 25)</p>	<p><i>(Cambio desconocido)</i> ▲</p> <p>Un cocodrilo en el pantano atrapo _____ peces. ¿Cuántos peces más tiene que atrapar para _____ peces para su comida?</p> <p>(2, 8) (11, 21) (10, 12)</p>	<p><i>(Inicio desconocido)</i></p> <p>Había unos hipopótamos en el río. _____ hipopótamos más bajaron al río. Ahora hay _____ hipopótamos en el río. ¿Cuántos hipopótamos había en el río para empezar?</p> <p>(4, 6) (5, 10) (10, 16)</p>
<p>Separar</p>	<p><i>(Resultados desconocidos)</i> ★</p> <p>Había _____ huevos en los nidos de patos en la laguna. _____ de ellos dieron polluelos. ¿Cuántos huevos no dieron polluelos?</p> <p>(10, 5) (22, 2) (13, 9)</p>	<p><i>(Cambio desconocido)</i></p> <p>Había _____ huevos en los nidos de patos de la laguna. Algunos de ellos dieron polluelos. _____ de ellos no dieron polluelos. ¿Cuántos huevos dieron polluelos?</p> <p>(10,7) (16, 6) (24, 5)</p>	<p><i>(Inicio desconocido)</i></p> <p>Había algunos huevos en los nidos de patos de la laguna. _____ de ellos dieron polluelos. Ahora hay _____ huevos. ¿Cuántos huevos había para empezar?</p> <p>(2, 8) (13, 12) (21, 8)</p>
<p>Parte - Todo</p>	<p><i>(Todo desconocido)</i> ★</p> <p>Había _____ estrellas de mar y _____ caracoles de mar en el charco de marea. ¿Cuántas estrellas y caracoles había en el charco de marea?</p> <p>(2, 8) (10, 32) (17, 19)</p>		<p><i>(Parte desconocida)</i></p> <p>Había un total de _____ estrellas y caracoles de mar en el charco de marea. Si hubiera _____ estrellas de mar en el charco de marea, ¿cuántos caracoles habría?</p> <p>(10, 1) (15, 12) (23, 9)</p>
<p>Comparar</p>	<p><i>(Diferencia desconocida)</i> ★ ▲</p> <p>Coloridos corales viven en el arrecife. Un coral rojo medía _____ pulgadas de alto. Un coral amarillo medía _____ pulgadas de alto. ¿Cuánto más alto es el coral rojo que el coral amarillo?</p> <p>(10,9) (23, 12) (22, 19)</p>	<p><i>(Cantidad a comparar desconocida)</i></p> <p>Coloridos corales viven en el arrecife. El coral rojo medía _____ pulgadas de alto y tenía _____ pulgadas menos que el coral amarillo. ¿Cuánto medía el coral amarillo?</p> <p>(5, 5) (13, 4) (15, 9)</p>	<p><i>(Referente desconocido)</i></p> <p>Coloridos corales viven en el arrecife. El coral rojo medía _____ pulgadas. Medía _____ pulgadas menos que el coral amarillo. ¿Cuánto medía el coral amarillo?</p> <p>(10, 3) (10, 7) (25, 9)</p>

Math Objectives

- Use concrete models to represent and name fractional parts of a whole and parts of a set of objects (fourths and halves).
- Use appropriate language to describe parts of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

Language Objectives

- Explain why each portion is a fourth/ half.
- Share-write what is a fourth or a half.

Vocabulary

half, halves
fourth, fourths
fair shares
equal pieces

Materials:

Teacher and Student Pairs

NOTE: you can certainly provide the 2 cups/partner Trail Mix already mixed if you prefer – would cut down on the 1/2 c measuring cups you need to provide, and time to mix

- 2 cups **trail mix/pair** mix equal parts of :
 - 1/2 c pecans,
 - 1/2 c semi-chocolate chips
 - 1/2 c granola
 - 1/2 c raisins
- one 2-cup measuring cup
- four 12 oz plastic cups
- 2 napkins
- two ½ cup measuring cups
- 2 scissors
- 2 rulers
- 2 markers
- 2 glue sticks
- **BLM** Trail Mix Fractions

Unit 2, Lesson 2

1st – 2nd

Snack Fractions



Children should wash their hands before this activity if using food items.

Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

Objective:

Today you and a partner are going to pretend to share a snack with a friend, but the snack will be shared in four portions. (*Show the four plates in your demo set.*) You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. You will be able to write the fraction in numbers, and to explain the fractional parts you’ve divided into.

TODAY: Teacher demonstration of halves

You have the option today of using pre-mixed trail mix, or having the students mix their own before they divide it up in fractional parts. Either way, once there is a 2-cup portion for each partner, tell them that once again today they must pretend that they are sharing the snack among four people.

QUESTIONING (before division of snack)

- How many parts will there be? (*four*)
- What fractional part would each person get if there were four people? (*one-fourth*)
- Would you rather have one-fourth of this snack or one-half? Why? (*Let this discussion run its course so that you can see if students understand fractional comparisons. They probably cannot verbalize yet about relative size of denominators, but they should begin to see that 1/2 is definitely > 1/4.*)
- Will you be sharing fractional parts of a whole or fractional parts of a set of objects? (*fractional parts of a whole cup*)

If you need to walk through the activity with the students, please feel free to do so; otherwise, let them decide how to divide the snack and what to call the division. Do let them know that the plastic cups are to hold their fractional portions rather than paper plates today – less mess.

Unit 2, Lesson 2

1st – 2nd

Snack Fractions - continued



Before you have them take their snacks, walk the students through the **BLM Trail Mix Fractions**. Students are to cut out the rectangle, fold it into fourths, cut and glue one-fourth to the plate on the record sheet; then answer the trail mix question on the BLM. You may write a class answer to the “because,” but students should also write their own, or at least copy the class to the BLM, as the Snack Fraction Writing task.

SNACK Eating: Now tell the partners that they may each have half of the snack. How much will each receive? (*two plastic cups worth*) Ask, “Which is the greater amount of the snack, one-fourth or one-half?” (*response*) How do you know? If you were going to compare these two fractions, what would you say: $\frac{1}{2}$ $\frac{1}{4}$? Can you make two comparison statements?

Snack Fraction Writing: BLM Trail Mix Fractions

Students identify the fractional part and complete the “because” statement on the record sheet.

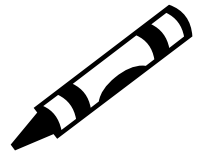
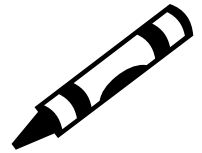
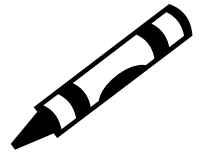
Objectives: Review what you learned and how you learned it.

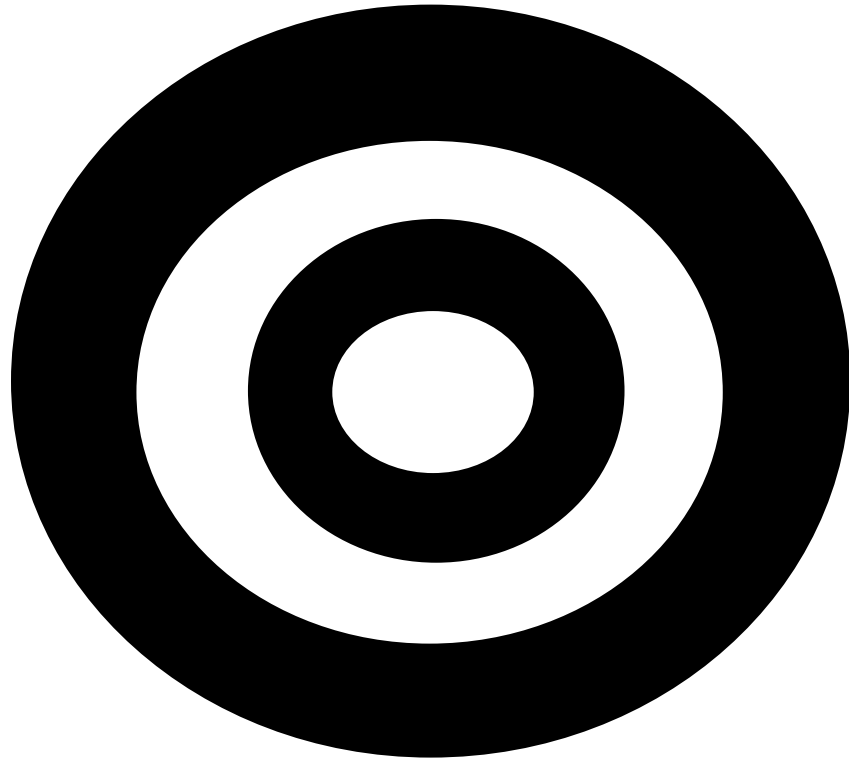
Summer Math

Student Packet/Paquete de alumno

Unit 2

English/Español





Target Number

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

BLM Unit 2, Follow-up Lesson 3

Family Fun Game Cards

Print on Blue cardstock –One set per partners for class; one set per student for home. (There are two pages of cards.)

Cards A – I are review. Cards J – R are Unit 2 skills.

A.

**Four \$10 bills
Six \$1 bills**

*Cuatro billetes de \$10
Seis billetes de \$1*

B.

**Five \$10 bills
Nine \$1 bills**

*Cinco billetes de \$10
Nueve billetes de \$1*

C.

**Four \$10 bills
Five \$1 bills**

*Cuatro billetes de \$10
Cinco billetes de \$1*

D.

Tod had \$50.
He spent \$10.
What did he have
left?

*Tod tenía \$50.
Gastó \$10.
¿Cuánto le sobró?*

E.

Tod had \$100.
He spent \$10.
What did he have
left?

*Tod tenía \$100.
Gastó \$10.
¿Cuánto le sobró?*

F.

Tod had \$95.
He spent \$10.
What did he have
left?

*Tod tenía \$95.
Gastó \$10.
¿Cuánto le sobró?*

G.

Tod had \$47.
He spent \$10.
What did he have
left?

*Tod tenía \$47.
Gastó \$10.
¿Cuánto le sobró?*

H.

Tod had \$62.
He spent \$10.
What did he have
left?

*Tod tenía \$62.
Gastó \$10.
¿Cuánto le sobró?*

I.

Tod had \$36.
He spent \$10.
What did he have
left?

*Tod tenía \$36.
Gastó \$10.
¿Cuánto le sobró?*

BLM Unit 2, Follow-up Lesson 3

Family Fun Game Cards

Print on Blue Cardstock –One set per partners for class; one set per student for home. (There are two pages of cards.)

J.

Use the following numbers to make a fact family.

2, 7, 9

Usa los números siguientes para hacer una familia de hechos.

2, 7, 9

K.

Use the following numbers to make a fact family.

7, 3, 10

Usa los números siguientes para hacer una familia de hechos.

7, 3, 10

L.

Use the following number to make a fact family.

6, 9, 15

Usa los números siguientes para hacer una familia de hechos.

6, 9, 15

M.

The eagle caught 12 trout and 10 perch before he flew away. How many fish did he catch?

El águila atrapó 12 truchas y 10 salmones antes de irse volando. ¿Cuántos peces atrapó?

N.

15 colorful fish swam in the coral reef. 9 darted away. How many fish were left?

15 peces de colores nadan en el coral del arrecife. 9 se van huyendo. ¿Cuántos peces se quedaron?

O.

19 tadpoles swam near the shore. An egret ate 9 of them. How many tadpoles were left?

19 renacuajos nadan cerca de la orilla. Una garza se come 9 de ellos. ¿Cuántos renacuajos quedan?

P. Look at this number sentence.

$$8 + 7 + 2 = 17$$

Which numbers make 10?

Mira esta oración numérica.

$$8 + 7 + 2 = 17$$

¿Qué números hacen 10?

Q. Look at this number sentence.

$$1 + 9 + 3 = 13$$

Which numbers make 10?

Mira esta oración numérica.

$$1 + 9 + 3 = 13$$

¿Qué números hacen 10?

R Look at this number sentence.

$$1 + 7 + 3 = 11$$

Which numbers make 10?

Mira esta oración numérica.

$$1 + 7 + 3 = 11$$

¿Qué números hacen 10?

CGI Graphic Organizer

(Notes)

Show your work:

Answer: _____
(label)

Explain your strategy:

(Notes)

Show your work:

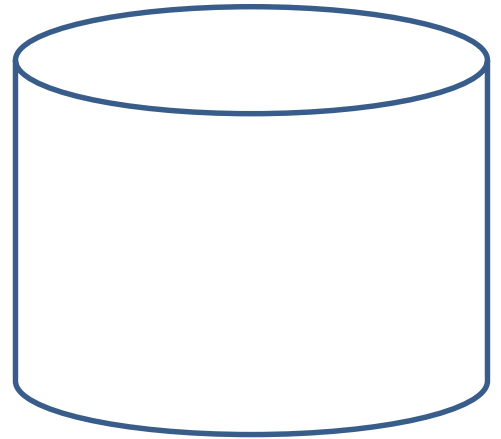
Answer: _____
(label)

Explain your strategy:

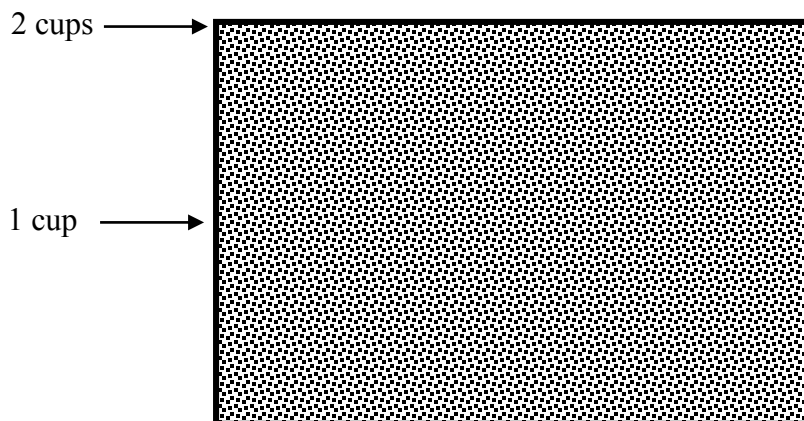
My name is _____

What do you call these fractional parts? _____

How do you know they are fractional parts?



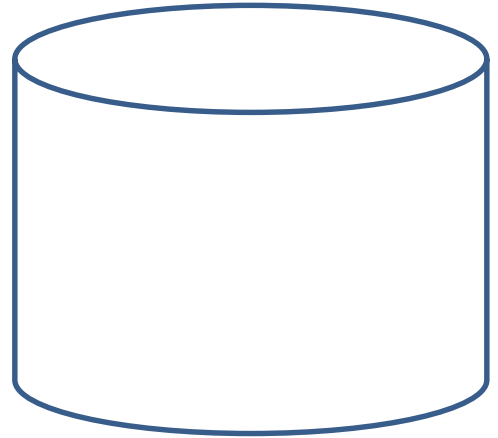
Cut out the rectangle below. Use the rectangle to show how you would divide the snack into the fractional parts by cutting it into the equal pieces. Glue your portion to the snack glass above.



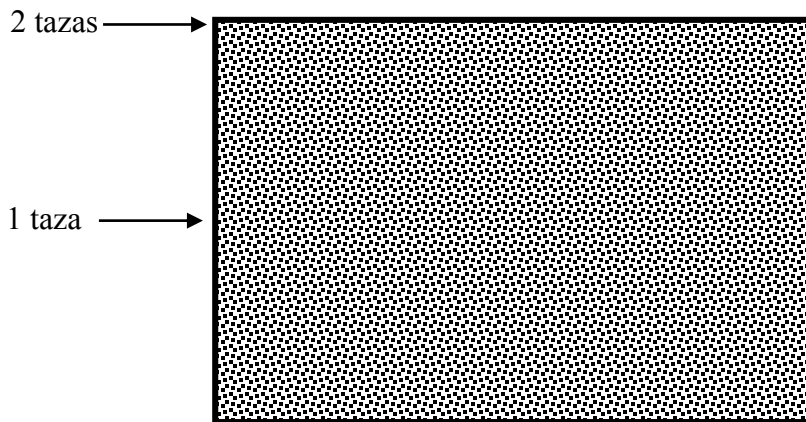
Mi nombre es _____

¿Cómo se llaman estas partes fraccionales?

¿Cómo sabes que son partes fraccionales? .



Usa el rectángulo para mostrar como dividirías el bocadillo en partes fraccionales al cortarlo en partes iguales. Peg las porciones en el vaso arriba.





Generic Family Fun Game Board

Materials Generic to All Units:

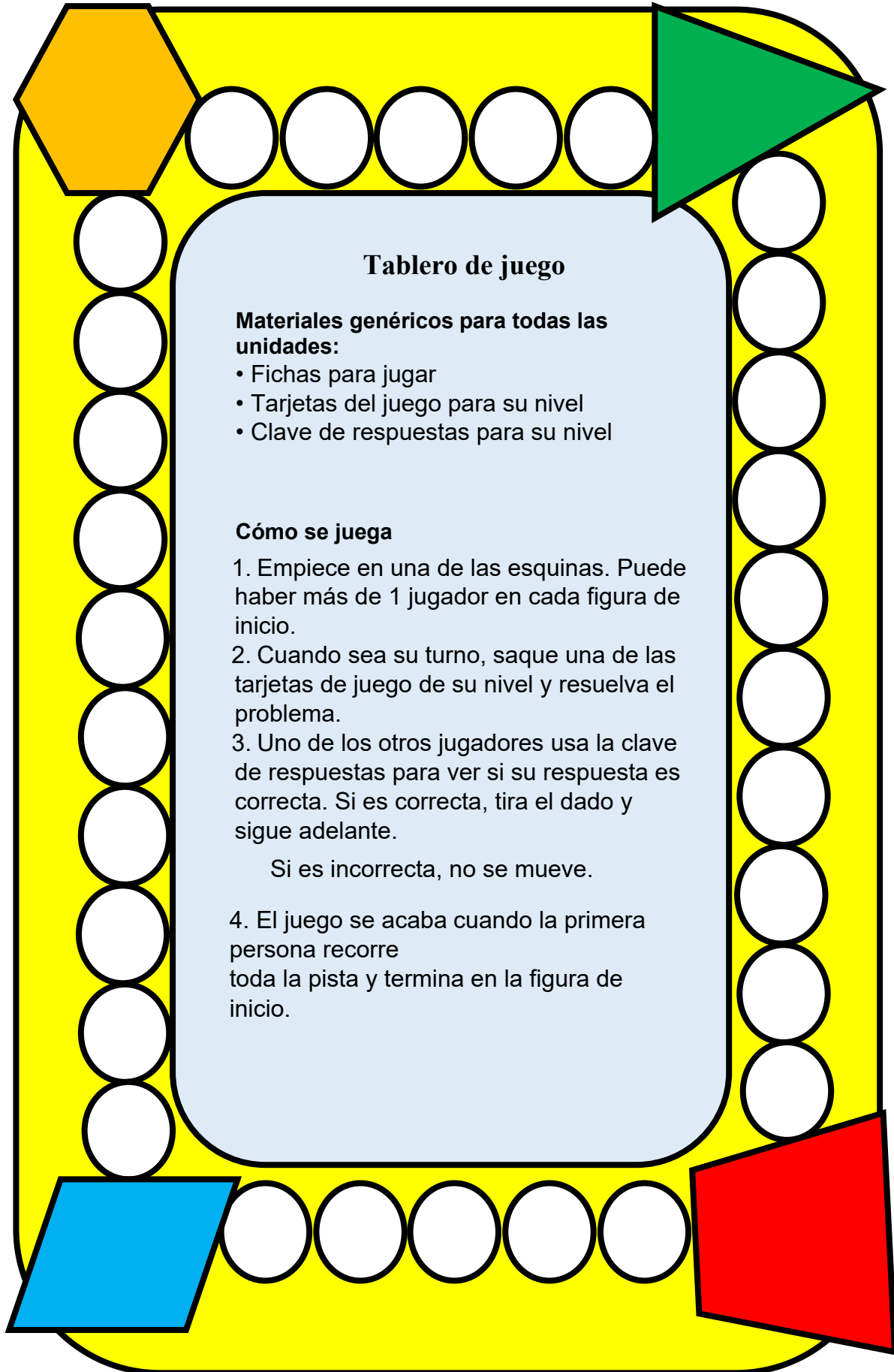
- Game Markers
- Game Cards for your Level
- Answer Key for your Level

Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, roll the die and move ahead.

If incorrect, do not move.

4. Game is over when the first person runs the entire track, ending back on the starting shape.



Tablero de juego

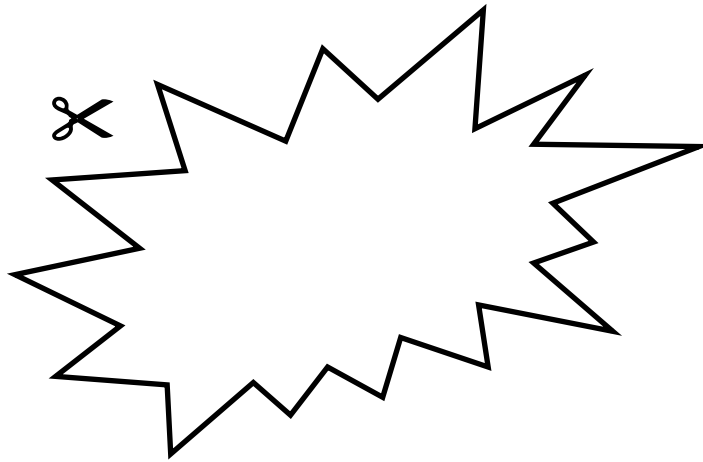
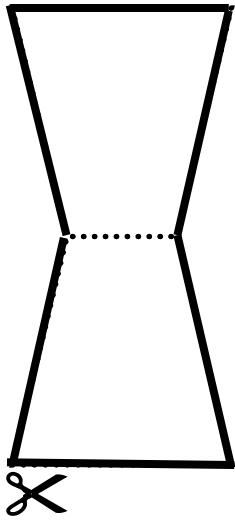
Materiales genéricos para todas las unidades:

- Fichas para jugar
- Tarjetas del juego para su nivel
- Clave de respuestas para su nivel

Cómo se juega

1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira el dado y sigue adelante.
Si es incorrecta, no se mueve.
4. El juego se acaba cuando la primera persona recorre toda la pista y termina en la figura de inicio.

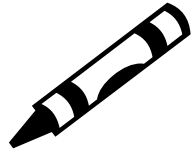
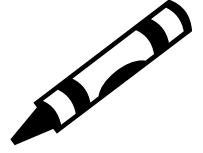
Family Fun Game Pieces



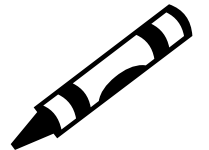
1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet



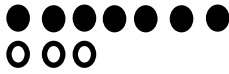
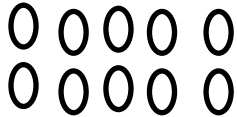
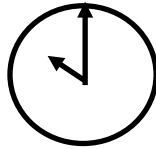
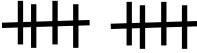
Unit 3



Warm up: Target Number

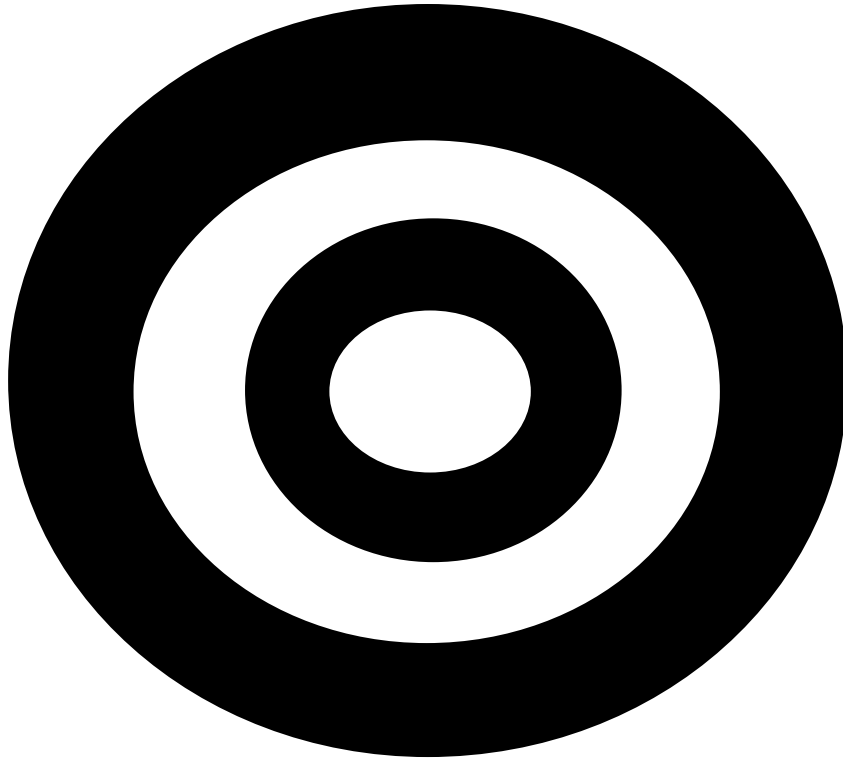
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, students give ONE example at a time, going around the group a couple of times until all DIFFERENT responses are used. Students need to give **different** ways to represent the number. Writing, "7 + 3" is different from writing, "3 + 7". Drawing 7 circles and 3 circles is different from writing, "7 + 3."

Examples of some different ways to represent the number 10:

$7 + 3$	$10 + 0$	$17 - 7$	2×5	$100 / 10$	$20/2$
$3 + 7$	$0 + 10$	ten	5×2	$10/1$	10×1
					
One dozen eggs take away 2		$2 + 2 + 2 + 2 + 2$			$100 - 90$

Required [Math] Fluencies

Kindergarten	Add and subtract within 5	Procedural Fluency: can easily use a process to figure out the answer (for example, using manipulatives, diagrams)
Grade 1	Add and subtract within 10	Procedural Fluency
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2); Add and subtract within 100	Automaticity by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 3	Single digit products and quotients (product automaticity by the end of Grade 3)	Automaticity for Products by the end of Grade 3
	Add and subtract within 1,000	Procedural Fluency
Grade 4	Add and subtract within 1,000,000	Procedural Fluency



Target Number

Suggested Target Numbers: Start with 12 and 15 for everyone for the first two sessions. Afterwards, numbers over 20 are fair for all grade bands except for the DOG ICON, which should just use numbers under 20.

12

15

24

36

60

48

100

45

90

50

75

More choices:

9

18

6

20

FAMILY FUN GAME Directions

Key Points:

- Starting with Unit 2, the Family Fun Game gives students repeated practice in each of the Math Matters skills. This allows students to practice all of the skills throughout the summer.

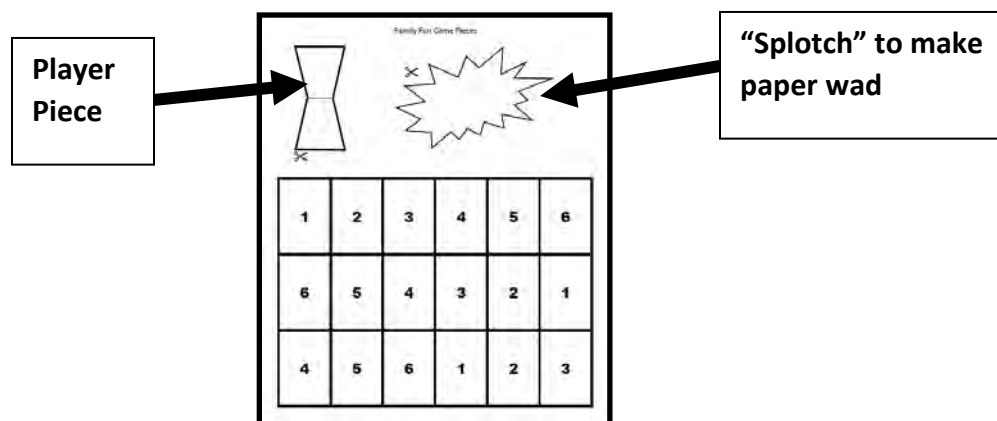
Process:

- Each Student Packet has its own Family Fun Game Cards, allowing each student to participate with students who have different skills to practice.
- Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
- Instead of students drawing a card, students select a problem from their grade band sheets. Students can select problems in the order they choose, BUT ask students to solve one problem from each row, before repeating from the row, so they practice each skill.
- Game Directions are on the game board. Game boards are at the end of each Student Packet, so they are easy to pull off and use.
- The best way to move around the board is to use dice. The Student Packets have a “Do It Yourself (DIY)” version to toss a small wad of paper onto a board of numbers.
- Many students end up reading all of the problems in between turns as they search for the “best” ones to answer.

Do It Yourself (DIY) Game Pieces

Player: Cut the outside of the double trapezoid. Fold in half to make the player. If more than one student has the same color, students can write their names on the playing piece.

If you don't have a 6-sided die: Cut around the jagged “splotch” shape and wad the paper into a ball. Toss the ball onto the number board to find number of spaces to move.



BLM Unit 3, Follow-Up Lesson 3 Family Fun Game All Level Answer Key

Problem	Kinder (pink)	1-2 (blue)	3-4 (green)	5-6 (yellow)	7-8 (peach)
A	15 dots Number 15	$7 + 6 = 13$ $6 + 7 = 13$ $13 - 7 = 6$ $13 - 6 = 7$	0.9	2.26	7.5 units
B	5 butterflies Number 5	$5 + 8 = 13$ $8 + 5 = 13$ $13 - 5 = 8$ $13 - 8 = 5$	0.06	1/6	36 units
C	9 stars Number 9	$7 + 9 = 16$ $9 + 7 = 16$ $16 - 9 = 7$ $16 - 7 = 9$	0.4	32,770.77	5 units
D	Count out 8 counters	8, 2 make ten	solve for 169	210.55	25 x 30
E	Count out 15 counters	3, 7 make ten	solve for 143	0.75	10.42 feet
F	Count out 10 counters	5, 5 make ten	solve for 195	0.07	L = 7 inches W = 2.8 inches
G	12 ants	$14 + 5 = 19$ Sue read 19 picture books.	0.45, 0.75	0.05, 5%	\$0.20
H	10 leaves	$13 - 9 = 4$ Eddie picked up 4 fewer rocks.	0.7 0.56	9	\$4
I	3 bugs	Divided into 2 equal or same size pieces.	0.08 0.9	18	\$1.33 or \$1.34
J	2 eggs	4 tens and 5 ones (now count them) 45	4/6 They are equivalent	4 tiles 1 color 1 tile another color	\$10.75 (pennies difference for rounding is acceptable)
K	10 eggs	3 tens and 9 ones (now count them) 39	1/2 5/8 is just a little more than a half; 1/3 is smaller than 1/2	5 tiles 1 color 3 tiles another color	\$26.22 (pennies difference for rounding is acceptable)
L	8 were brown	6 tens and 6 ones (now count them) 66	1/4 They are equivalent	3 tiles 1 color 7 tiles another color	\$14.09 (pennies difference for rounding is acceptable)
M	Penny	5	$8/10 = 0.8$	3:4 and 3/4	1.5 hr or 1 1/2 hours
N	Penny	12	$4/10 = 0.4$	6:1 and 6/1	3 hours
O	Dime	46	$7/10 = 0.7$	3:5 and 3/5	9 hours
P	Blue set On bottom	Ally had 33 cupcakes.	$5 \times 4 = 20$ $4 \times 5 = 20$ $20 \div 5 = 4$ $20 \div 4 = 5$	$x = 3$	$16/1 = x/3$ OR $1/16 = 3/x$
Q	9 (red) ovals on right	12 cupcakes were not eaten.	24	$x = 9$	$12/1 = x/4$ OR $1/12 = 4/3$
R	10 (red) hearts on left	17 cupcakes were left.	5	$x = 9$	$36/1 = x/12$ OR $1/36 = 12/x$

CGI CHARTS:

With a few changes, this chart is in New York State's Next Generations Learning Standards for Pre-K to Grade 2, titled, "Common Addition and Subtraction Situations."

Key Points:

- Allows students to solve the problem in a way they understand, instead of the "right" way.
 - **NY-1.OA.1** – Use addition and subtraction within 20 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions.
 - ...using objects, drawings and equations with a symbol to represent the unknown.
 - **NY-2.OA.1** – Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.
 - Mastery of all word problems types on the "Common Addition and Subtraction Situations" Chart by end of Grade 2.

Process:

- **Pick one word problem.**
 - Start easy (top left corner of CGI Chart, then work to the left and down as students show confidence.
 - Or use the STAR (Grade 1) ★ or the TRIANGLE (Grade 2) ▲ for types of word problems on the summer math assessments.
- Read the problem to students, using the choice of differentiated numbers to fill in the blanks.
- Read again and encourage students to take notes on the graphic organizer. (modeling, teaching the first time)
- Give students time to solve. (If struggling, prompt with, "What number does the problem start with?" Do you want to draw this or use manipulatives to recreate it?)
- Have manipulatives and paper for students to choose either medium for solving the problem.
- Ask students to explain their process before asking them for an answer. This allows students time to self-correct and gives the Educator a clue about how the student is thinking.
- At the end, look at the final answer together, to decide if it solves the problem. How would you say this in a sentence?

Unit 3 CGI Problems for *The Monster in the Mattress*



<p>Add To</p>	<p><i>(Result Unknown)</i> ★ ▲ ___ of Abuelo’s grandchildren were playing in the yard. ___ more grandchildren came out to play. How many grandchildren in all? (10, 6) (8,7) (5, 8)</p>	<p><i>(Change Unknown)</i> ▲ Abuelo’s grandchildren had ___ green frogs. How many more frogs do the children need to find so that they will have ___ green frogs all together? (15, 25) (7, 12) (9, 17)</p>	<p><i>(Start Unknown)</i> Abuelo’s grandchildren had some frogs. They caught ___ more frogs. Now they have ___ frogs. How many frogs did they have to start? (6, 13) (9, 15) (4, 12)</p>
<p>Take From</p>	<p><i>(Result Unknown)</i> ★ ___ of Abuelo’s grandchildren were playing in the yard. ___ children went in for a drink. How many children are playing now? (17, 7) (18, 9) (16, 7)</p>	<p><i>(Change Unknown)</i> Abuelo’s grandchildren had ___ frogs. Some frogs hopped away. Now there are ___ frogs. How many frogs hopped away? (19, 10) (15, 7) (14, 6)</p>	<p><i>(Start Unknown)</i> Abuelo’s grandchildren had some green frogs. ___ frogs hopped away. Now there are ___ frogs. How many frogs did the children have to start? (6, 8) (9, 5) (4, 13)</p>
<p>Put Together/ Take Apart</p>	<p><i>(Total Unknown)</i> ★ Abuelo’s grandchildren had ___ green frogs and ___ white frogs. How many frogs did they have in all? (7, 5) (4, 8) (5, 9)</p>		<p><i>(Addend Unknown)</i> Abuelo had ___ candles on his birthday cake. ___ were lit and the rest were not. How many candles were not lit? (50, 25) (50, 13) (50, 37)</p>
<p>Compare</p>	<p><i>(Difference Unknown)</i> ★ ▲ Abuelo’s grandchildren had ___ green frogs and ___ white frogs. How many fewer green frogs did they have than white frogs? (7, 13) (8, 17) (9, 14)</p>	<p><i>(Bigger Unknown)</i> Abuelo’s grandchildren had ___ green frogs. They had ___ more white frogs than green frogs. How many white frogs did they have? (5, 6) (8, 9) (12, 7)</p>	<p><i>(Smaller Unknown)</i> Abuelo’s grandchildren had ___ green frogs. They had ___ more green frogs than white frogs. How many white frogs did they have? (15, 7) (18, 9) (19, 6)</p>

Unit 3 CGI Problems for *The Monster in the Mattress*



	Multiplication	Measurement Division	Partitive Division
Grouping and Partitioning	<p>Abuela decorated Abuelo's birthday cake with lots of candles. She arranged them in ___ rows. There were ___ candles in each row. How many candles in all?</p> <p>(3, 20) (10, 6) (12, 5)</p>	<p>Abuela decorated Abuelo's birthday cake with ___ candles. She put ___ candles in each row. How many rows were there?</p> <p>(60, 10) (60, 5) (60, 30)</p>	<p>Abuela decorated Abuelo's birthday cake with ___ candles. She put the same number of candles in each row. There were ___ rows. How many candles did she put in each row?</p> <p>(70, 7) (70, 35) (70, 10)</p>

Unit 3 CGI Problems for *The Monster in the Mattress*



Unir	<p><i>(Resultado desconocido)</i> ★ ▲</p> <p>___ de los nietos de Abuelo jugaban afuera. ___ nietos mas salieron a jugar. ¿Cuántos nietos hay en total?</p> <p>10, 6 8, 7 5, 8</p>	<p><i>(Cambio desconocido)</i> ▲</p> <p>Los nietos de Abuelo tenían ___ ranas verdes. ¿Cuántas ranas más necesitan encontrar para tener ___ ranas verdes en total?</p> <p>15, 25 7, 12 9, 17</p>	<p><i>(Inicio desconocido)</i></p> <p>Los nietos de Abuelo tenían algunas ranas. Atraparon ___ ranas más. Ahora tienen ___ ranas. ¿Cuántas ranas tenían al empezar?</p> <p>6, 13 9, 15 4, 12</p>
	Separar	<p><i>(Resultado desconocido)</i> ★</p> <p>___ de los nietos de Abuelo jugaban afuera. ___ muchachos entraron en la casa para una bebida. ¿Cuántos nietos están jugando ahora?</p> <p>17, 7 18, 9 16, 7</p>	<p><i>(Cambio desconocido)</i></p> <p>Los nietos de Abuelo tenían ___ ranas. Algunas ranas salieron saltando. Ahora hay ___ ranas. ¿Cuántas ranas salieron saltando?</p> <p>19, 10 15, 7 14, 6</p>
Parte-Parte-Entero		<p><i>(Total desconocido)</i> ★</p> <p>Los nietos de Abuelo tenían ___ ranas verdes y ___ ranas blancas. ¿Cuántas ranas tenían en total?</p> <p>7, 5 4, 8 5, 9</p>	

Unit 3 CGI Problems for *The Monster in the Mattress*



Comparar	<p><i>(Diferencia ★▲ desconocida)</i></p> <p>Los nietos de Abuelo tenían ___ ranas verdes y ___ ranas blancas. ¿Cuántas ranas verdes menos tenían que ranas blancas?</p> <p>7, 13 8, 17 9, 14</p>	<p><i>(Comparar a cantidad desconocida)</i></p> <p>Los nietos de Abuelo tenían ___ ranas verdes . Tenían ___ ranas blancas más que ranas verdes. ¿Cuántas ranas blancas tenían?</p> <p>5, 6 8, 9 12, 7</p>	<p><i>(Referente desconocido)</i></p> <p>Los nietos de Abuelo tenían ___ ranas verdes . Tenían ___ ranas verdes más que ranas blancas. ¿Cuántas ranas blancas tenían?</p> <p>15, 7 18, 9 19, 6</p>
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	Multiplicación	División de medidas	División partitiva
Agupamiento y división	<p>Abuela decoró el pastel de cumpleaños de Abuelo con muchas velas. Las arregló en ___ filas. Había ___ velas en cada fila. ¿Cuántas velas hay en total?</p> <p>3, 20 10, 6 12, 5</p>	<p>Abuela decoró el pastel de cumpleaños de Abuelo con ___ velas. Metió ___ velas en cada fila. ¿Cuántas filas había?</p> <p>60, 10 60, 5 60, 30</p>	<p>Abuela decoró el pastel de cumpleaños de Abuelo con ___ velas. Metió el mismo número de velas en cada fila. Había ___ filas. ¿Cuántas velas había en cada fila?</p> <p>70, 7 70, 35 70, 10</p>

Math Objectives

- Use concrete models to represent and name fractional parts of a whole (thirds).
- Use concrete models to represent and name fractional parts of a set of objects (thirds).
- Use appropriate language to describe parts of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

Language Objectives

- Explain why each portion is a third.
- Share-write what is a third.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

Vocabulary

thirds
fair shares
equal pieces

STUDENT ACTIVITY (per partner pair):

- **BLM Jerky Fractions**
- 6 small beef jerky pieces
- 2 paper plates
- 2 paper towels
- Chart paper with question:
How do you know that each portion is a third? Put a copy of the record sheet at the top of the chart with the question.

Unit 3, Lesson 2

1st – 2nd

Snack Fractions



Children should wash their hands before this activity if using food items.

Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

Today you are going to share six pieces of jerky, but you are going to pretend that there are THREE of you to share the pickle.

- If you were sharing with three, what would your fractional part of the jerky be? (*one-third, or one out of three pieces*)
- If jerky is your favorite snack, would you rather have $\frac{1}{2}$ of a pickle or $\frac{1}{3}$ of the jerky? Explain your thinking.

Record Sheet: Before really sharing the jerky with a partner, decide how to share the paper jerky into thirds. Cut out your portion of the paper jerky and glue it to the picture of the paper plate.

SNACK Eating: Now tell the partners that they may each have half of the snack. How much will each receive? Ask, “Which is the greater amount of the snack, one-third or one-half? (*response*) How do you know?”

Snack Fraction Writing: BLM Jerky Fractions

Students identify the fractional part and complete the “because” statement on the record sheet.

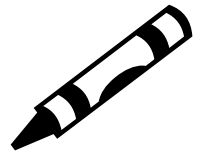
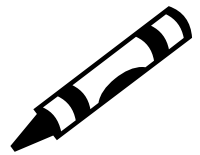
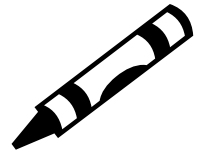
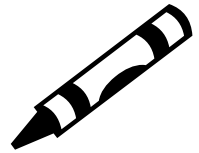
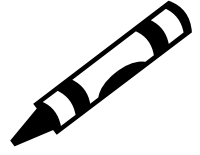
Objectives: review what you learned and how you learned it.

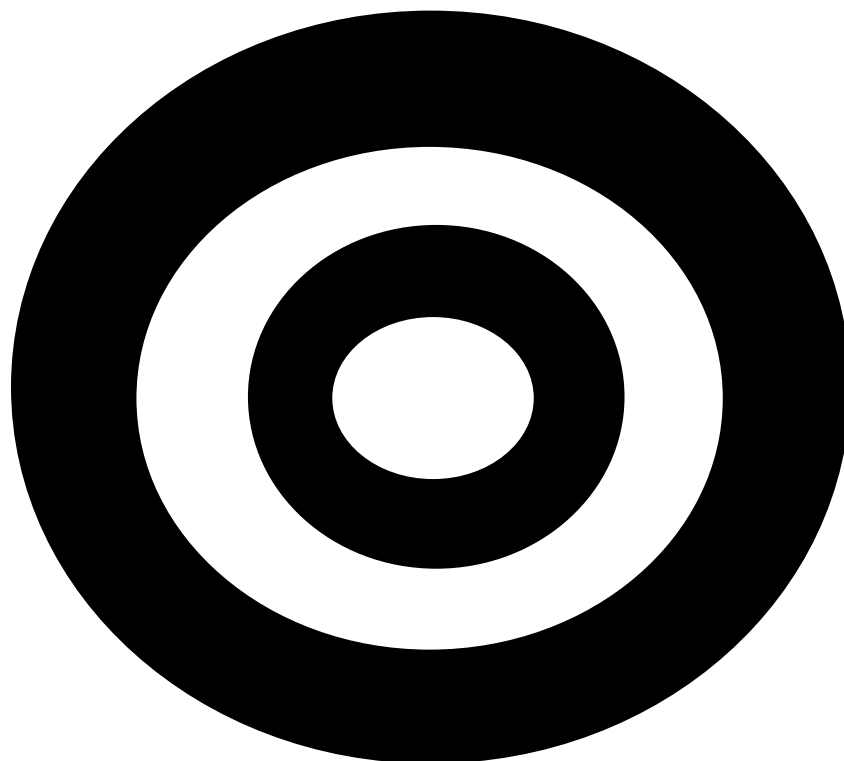
Summer Math

Student Packet/Paquete de alumno

Unit 3

English/Español



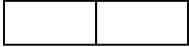


Target Number

BLM 1st-2nd Unit 3, Follow-up Lesson 3**Family Fun Game Cards**

Printed on Blue –One set per partners for class; one set per student for home. (There are 2 pages of cards.)

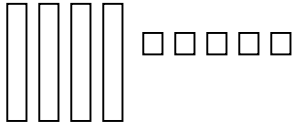
Cards A – I are review. Cards J – R are Unit 3 skills.

<p>A.</p> <p>Use the following numbers to make a fact family.</p> <p><i>Usa los números siguientes para hacer una familia de hechos (fact family)</i></p> <p>7, 6, 13</p>	<p>B.</p> <p>Use the following numbers to make a fact family.</p> <p><i>Usa los números siguientes para hacer una familia de hechos (fact family)</i></p> <p>5, 8, 13</p>	<p>C.</p> <p>Use the following numbers to make a fact family.</p> <p><i>Usa los números siguientes para hacer una familia de hechos (fact family)</i></p> <p>7, 9, 16</p>
<p>D. Look at this number sentence.</p> <p>$4 + 8 + 2 = 14$</p> <p>Which numbers make 10?</p> <p><i>Mira esta oración numérica.</i></p> <p>$4 + 8 + 2 = 14$</p> <p><i>¿Qué números hacen 10?</i></p>	<p>E. Look at this number sentence.</p> <p>$3 + 8 + 7 = 18$</p> <p>Which numbers make 10?</p> <p><i>Mira esta oración numérica.</i></p> <p>$3 + 8 + 7 = 18$</p> <p><i>¿Qué números hacen 10?</i></p>	<p>F. Look at this number sentence.</p> <p>$5 + 8 + 5 = 18$</p> <p>Which numbers make 10?</p> <p><i>Mira esta oración numérica.</i></p> <p>$5 + 8 + 5 = 18$</p> <p><i>¿Qué números hacen 10?</i></p>
<p>G.</p> <p>Sue read 14 picture books at school. She read 5 more books at home. How many books did she read?</p> <p><i>Sara leyó 14 libros de dibujos en la escuela. Leyó unos 5 más en casa. ¿Cuántos libros leyó?</i></p>	<p>H.</p> <p>Gary picked up 13 rocks. Eddie picked up 9 rocks. How many fewer rocks did Eddie pick up?</p> <p><i>Gary recogió 13 piedras. Eddie recogió 9 piedras. ¿Cuántas piedras menos recogió Eddie?</i></p>	<p>I.</p> <div style="text-align: center;">  </div> <p>How do you know these fair shares are halves?</p> <p><i>¿Cómo sabes que estas partes son mitades?</i></p>

Printed on Blue –One set per partners for class; one set per student for home. (There are 2 pages of cards.)

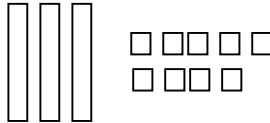
Cards A – I are review. Cards J – R are Unit 3 skills.

J.
What is the value of the base ten blocks?



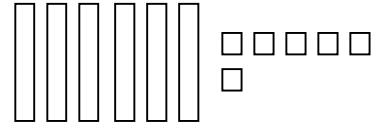
¿Cuál es el valor de los bloques de base diez?

K.
What is the value of the base ten blocks?



¿Cuál es el valor de los bloques de base diez?

L.
What is the value of the base ten blocks?



¿Cuál es el valor de los bloques de base diez?

M.

$$23 - 18$$

N.

$$41 - 29$$

O.

$$63 - 17$$

P.

Ally had 23 fewer cupcakes than Mary had. If Mary had 56 cupcakes, how many did Ally have?

Ally tenía 23 pastelitos menos que María. Si María tenía 56 pastelitos, ¿cuántos tenía Ally?

Q.

Sarah took 48 cupcakes to the party. 36 of them were eaten. How many cupcakes were not eaten?

Sarah llevó 48 pastelitos a la fiesta. Se comieron 36. ¿Cuántos pastelitos no se comieron?

R.

Merel baked 41 cookies. Her children ate 24 of them. How many cookies were left?

Merel horneó 41 galletas. Sus hijos se comieron 24. ¿Cuántas galletas quedaron?

CGI Graphic Organizer

(Notes)

Show your work:

Answer: _____
(label)

Explain your strategy:

(Notes)

Show your work:

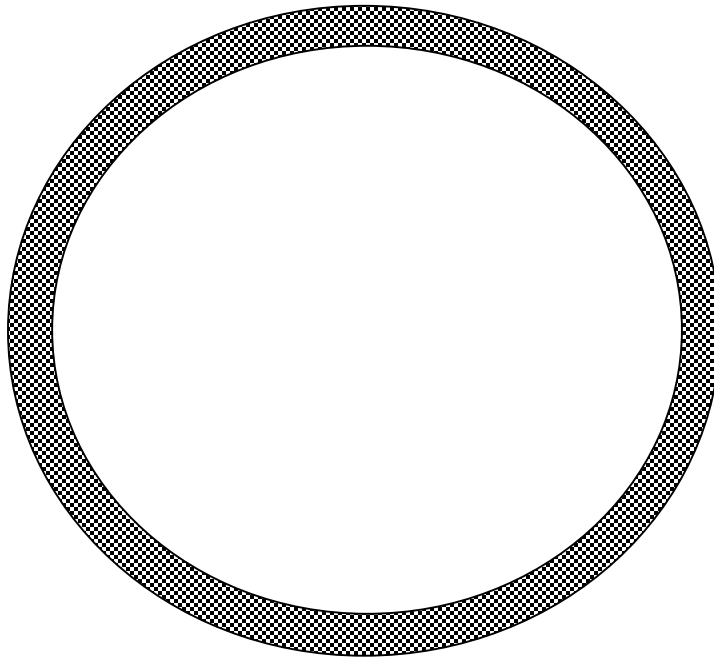
Answer: _____
(label)

Explain your strategy:

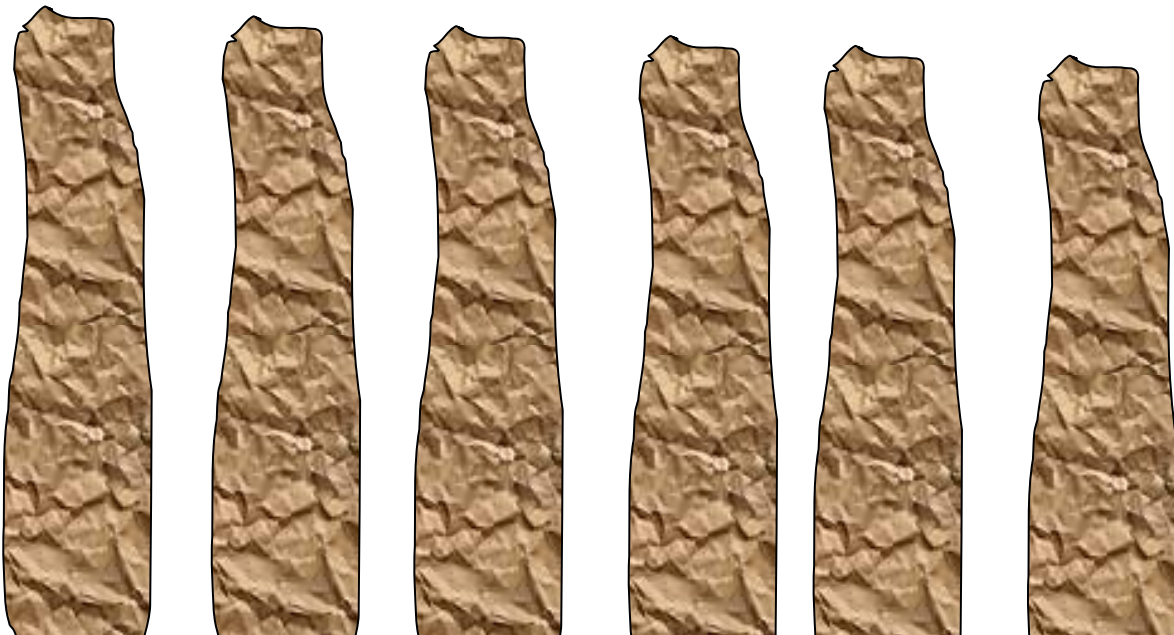


My name is _____

This is my plate with my jerky half.



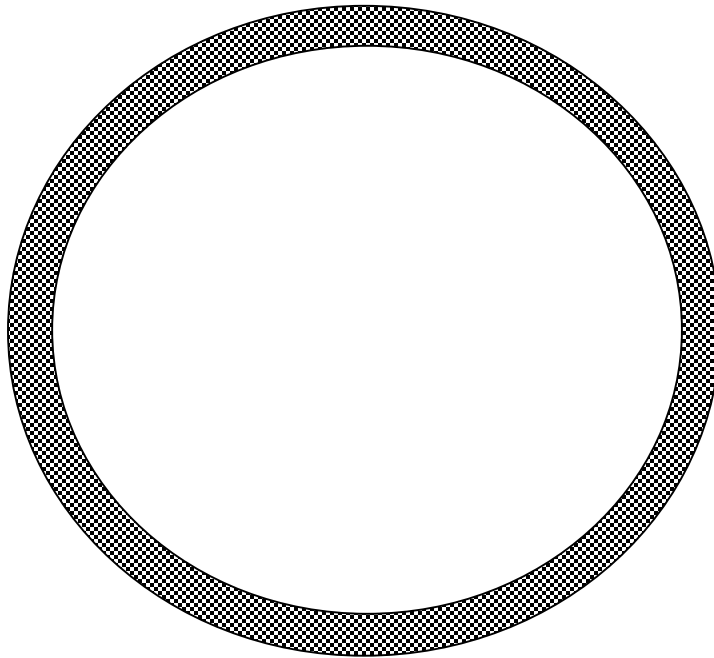
Cut out the jerky pieces below. Divide the jerky pictures into thirds. Glue your third to the snack plate above.





Mi nombre es _____

Este es mi plato con mi mitad de la carne seca (jerky).



Corta las tiritas de carne seca. Divídelas en tercios. Pega tu tercio en al platillo arriba.





Generic Family Fun Game Board

Materials Generic to All Units:

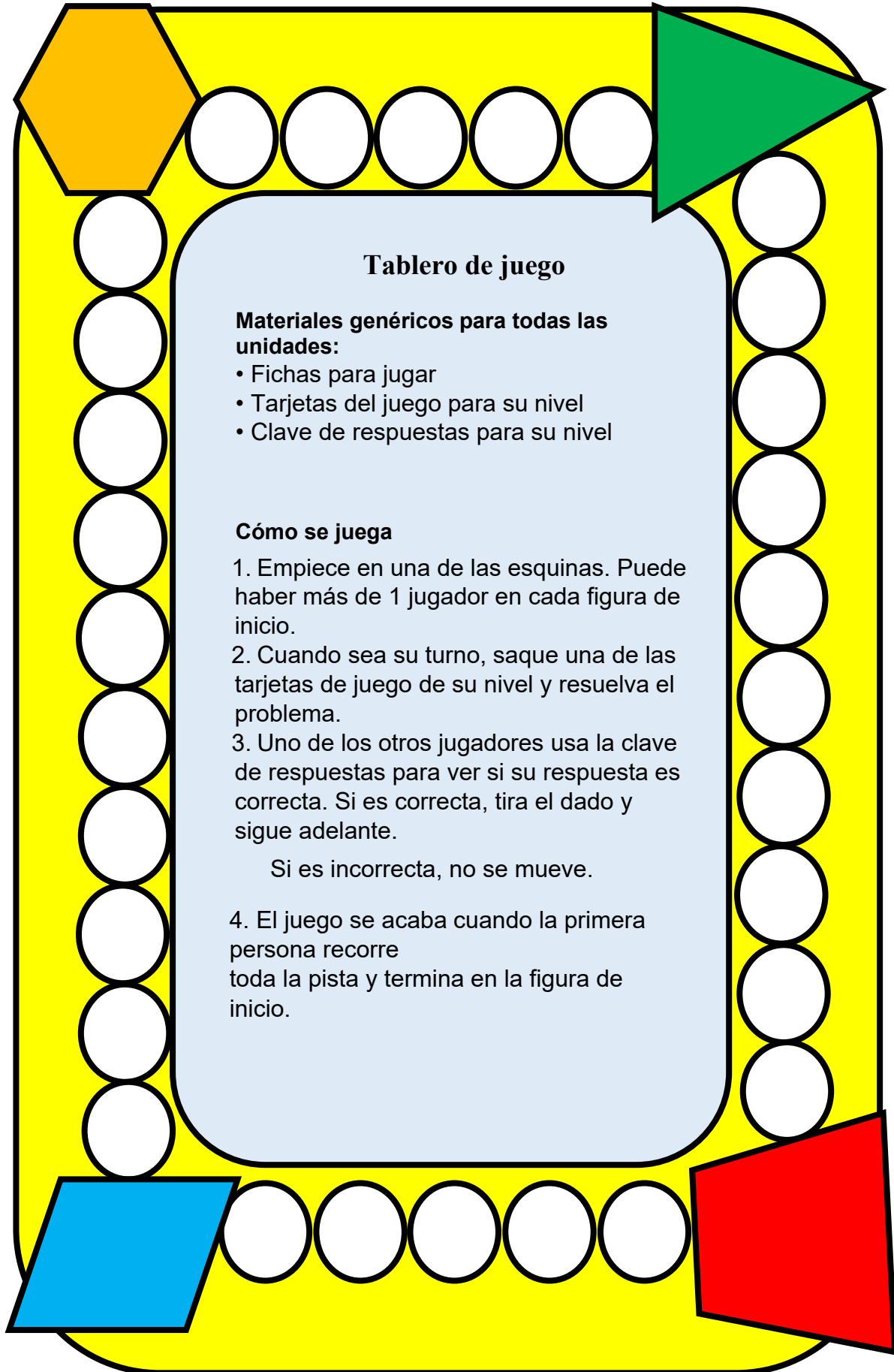
- Game Markers
- Game Cards for your Level
- Answer Key for your Level

Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, roll the die and move ahead.

If incorrect, do not move.

4. Game is over when the first person runs the entire track, ending back on the starting shape.



Tablero de juego

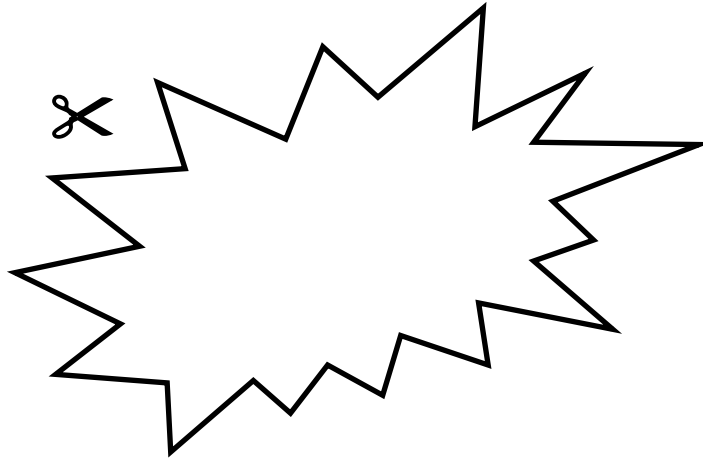
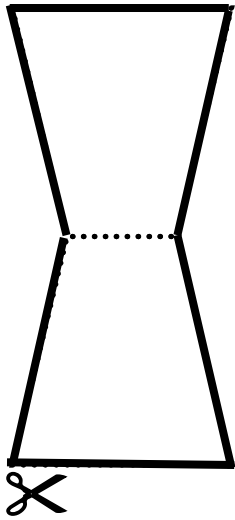
Materiales genéricos para todas las unidades:

- Fichas para jugar
- Tarjetas del juego para su nivel
- Clave de respuestas para su nivel

Cómo se juega

1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira el dado y sigue adelante.
Si es incorrecta, no se mueve.
4. El juego se acaba cuando la primera persona recorre toda la pista y termina en la figura de inicio.

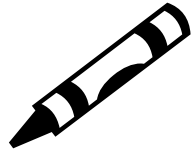
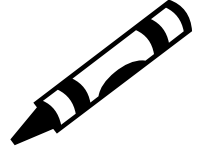
Family Fun Game Pieces



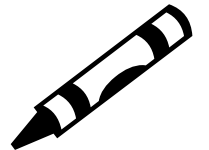
1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet



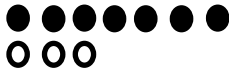
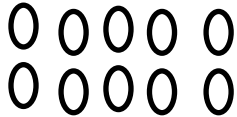
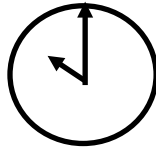
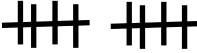
Unit 4



Warm up: Target Number

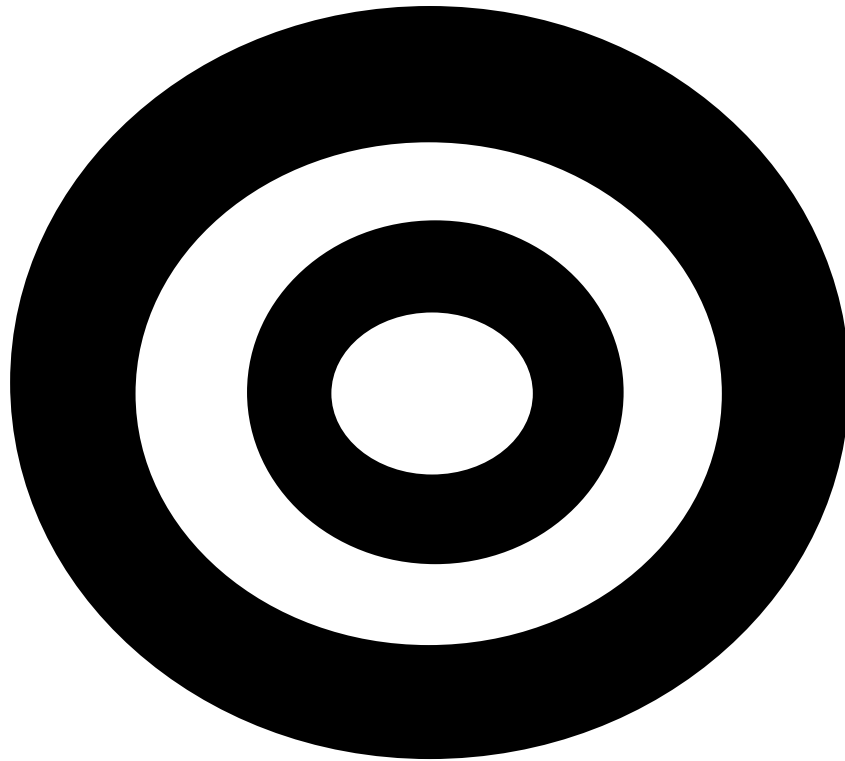
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, students give ONE example at a time, going around the group a couple of times until all DIFFERENT responses are used. Students need to give **different** ways to represent the number. Writing, "7 + 3" is different from writing, "3 + 7". Drawing 7 circles and 3 circles is different from writing, "7 + 3."

Examples of some different ways to represent the number 10:

$7 + 3$	$10 + 0$	$17 - 7$	2×5	$100 / 10$	$20/2$
$3 + 7$	$0 + 10$	ten	5×2	$10/1$	10×1
					
One dozen eggs take away 2		$2 + 2 + 2 + 2 + 2$			$100 - 90$

Required [Math] Fluencies

Kindergarten	Add and subtract within 5	Procedural Fluency: can easily use a process to figure out the answer (for example, using manipulatives, diagrams)
Grade 1	Add and subtract within 10	Procedural Fluency
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2); Add and subtract within 100	Automaticity by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 3	Single digit products and quotients (product automaticity by the end of Grade 3)	Automaticity for Products by the end of Grade 3
	Add and subtract within 1,000	Procedural Fluency
Grade 4	Add and subtract within 1,000,000	Procedural Fluency



Target Number

Suggested Target Numbers: Start with 12 and 15 for everyone for the first two sessions. Afterwards, numbers over 20 are fair for all grade bands except for the DOG ICON, which should just use numbers under 20.

12

15

24

36

60

48

100

45

90

50

75

More choices:

9

18

6

20

FAMILY FUN GAME Directions

Key Points:

- Starting with Unit 2, the Family Fun Game gives students repeated practice in each of the Math Matters skills. This allows students to practice all of the skills throughout the summer.

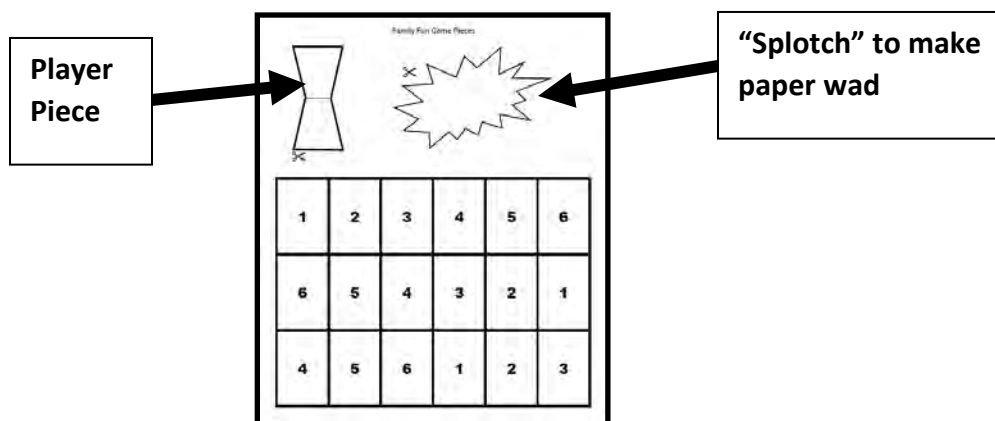
Process:

- Each Student Packet has its own Family Fun Game Cards, allowing each student to participate with students who have different skills to practice.
- Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
- Instead of students drawing a card, students select a problem from their grade band sheets. Students can select problems in the order they choose, BUT ask students to solve one problem from each row, before repeating from the row, so they practice each skill.
- Game Directions are on the game board. Game boards are at the end of each Student Packet, so they are easy to pull off and use.
- The best way to move around the board is to use dice. The Student Packets have a “Do It Yourself (DIY)” version to toss a small wad of paper onto a board of numbers.
- Many students end up reading all of the problems in between turns as they search for the “best” ones to answer.

Do It Yourself (DIY) Game Pieces

Player: Cut the outside of the double trapezoid. Fold in half to make the player. If more than one student has the same color, students can write their names on the playing piece.

If you don't have a 6-sided die: Cut around the jagged “splotch” shape and wad the paper into a ball. Toss the ball onto the number board to find number of spaces to move.



BLM Unit 4, Follow-Up Lesson 3 Family Fun Game All Level Answer Key

Problem Letter	Kinder (pink)	1-2 (blue)	3-4 (green)	5-6 (yellow)	7-8 (peach)
A	14 ants	8 + 7 = 15 7 + 8 = 15 15 - 7 = 8 15 - 8 = 7	0.8	$6\frac{1}{4}$ or 6.25	3
B	4 eggs	5 + 7 = 12 7 + 5 = 12 12 - 7 = 5 12 - 5 = 7	0.80	$\frac{5}{8}$ or 0.625 cups	6
C	7 brown	8 + 9 = 17 9 + 8 = 17 17 - 9 = 8 17 - 8 = 9	0.08	\$423,294,920.10	4
D	Shows 10 counters Number 10	38	8	2134.448	scale factor 3
E	Shows 15 counters Number 15	23	63	\$7400 down	scale factor 3
F	Shows 12 counters Number 12	38	49	10% water	fifth term 20
G	Penny	17	156 flowers	\$48.50 tax	Length: 3078 mm Width: 1368 mm
H	Penny	4, 6 make ten	5 eggs	\$33 late fee	Height: 0.64 feet
I	Dime	3, 7 make ten	21 pounds	\$375 earned	2.56 inches
J	2 pieces are the same size, fair	Path B is longer.	$4\frac{3}{4}$	\$39.64	20 total candies
K	Cuts card in 2 equal pieces	Path A is shorter	$9\frac{1}{3}$	\$12.20 tip	\$157.50 total bill
L	Halves OR 1 out of 2 equal pieces	A is shorter than B. B is longer than A.	$99\frac{2}{4}$	25% tip	99 total chickens
M	13 drops of water	49 jelly beans	The 4 facts for $8 \times 4 = 32$	no. labels flipped	\$57 sales price
N	3 thorns	35 fewer	The 4 facts for $6 \times 9 = 54$	yes. scale factor of (x6)	\$31.25 sales price
O	10 miles	52 miles	$7 \times 8 = 56$ $8 \times 7 = 56$ $56 / 7 = 8$ $56 / 8 = 7$	60 students: 1 bus	120 cookies
P	Set of 5 counters Set of 8 counters Mouse (8) had more	18 more	Equivalent to $\frac{1}{3}$ can be $\frac{2}{6}$ or $\frac{3}{9}$ or $\frac{4}{12}$	30 notes hit	66 or 67 cents
Q	Set of 12 counters Set of 11 counters Lion (12) saw more	31 bananas	Equivalent to $\frac{1}{2}$ can be $\frac{2}{4}$ or $\frac{3}{6}$ or $\frac{4}{8}$	$\frac{17}{12}$ or $1\frac{5}{12}$	\$37.89 total cost
R	Set of 12 counters Set of 13 counters Mouse (13) saw more more	28 times	Equivalent to $\frac{1}{4}$ can be $\frac{2}{8}$ or $\frac{3}{12}$ or $\frac{4}{16}$	$4\frac{1}{8}$	3 hours

CGI CHARTS:

With a few changes, this chart is in New York State's Next Generations Learning Standards for Pre-K to Grade 2, titled, "Common Addition and Subtraction Situations."

Key Points:

- Allows students to solve the problem in a way they understand, instead of the "right" way.
 - **NY-1.OA.1** – Use addition and subtraction within 20 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions.
 - ...using objects, drawings and equations with a symbol to represent the unknown.
 - **NY-2.OA.1** – Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.
 - Mastery of all word problems types on the "Common Addition and Subtraction Situations" Chart by end of Grade 2.

Process:

- **Pick one word problem.**
 - Start easy (top left corner of CGI Chart, then work to the left and down as students show confidence.
 - Or use the STAR (Grade 1) ★ or the TRIANGLE (Grade 2) ▲ for types of word problems on the summer math assessments.
- Read the problem to students, using the choice of differentiated numbers to fill in the blanks.
- Read again and encourage students to take notes on the graphic organizer. (modeling, teaching the first time)
- Give students time to solve. (If struggling, prompt with, "What number does the problem start with?" Do you want to draw this or use manipulatives to recreate it?)
- Have manipulatives and paper for students to choose either medium for solving the problem.
- Ask students to explain their process before asking them for an answer. This allows students time to self-correct and gives the Educator a clue about how the student is thinking.
- At the end, look at the final answer together, to decide if it solves the problem. How would you say this in a sentence?

Unit 4 CGI Problems for Aesop's Fables



<p>Add To</p>	<p><i>(Result Unknown)</i> ★ ▲</p> <p>___ mice were having a meeting in the barn to figure out how to avoid the cat. ___ more barn mice came to the meeting. How many mice are at the meeting now?</p> <p>6, 7 8, 5 19, 18</p>	<p><i>(Change Unknown)</i> ▲</p> <p>There were ___ pebbles in the pitcher. How many more pebbles will crow need to put in the pitcher in order to have ___ pebbles in the pitcher, enough to get a drink?</p> <p>12, 27 18, 41 29, 12</p>	<p><i>(Start Unknown)</i></p> <p>There were some pebbles in the pitcher. Crow put ___ more pebble(s) in the pitcher. Now there are ___ pebbles in the pitcher. How many pebbles were in the pitcher to start?</p> <p>6, 15 20, 35 17, 26</p>
<p>Take From</p>	<p><i>(Result Unknown)</i> ★</p> <p>There were ___ mice meeting in the barn to figure out how to avoid the cat. ___ mice scampered away. How many mice are in the barn now?</p> <p>35, 10 17, 9 22, 13</p>	<p><i>(Change Unknown)</i></p> <p>There were ___ mice meeting in the barn to figure out how to avoid the cat. Some mice scampered away. Now there are ___ mice at the meeting. How many mice scampered away?</p> <p>12, 5 21, 11 27, 8</p>	<p><i>(Start Unknown)</i></p> <p>Crow had a pile of pebbles. He dropped ___ in the pitcher. Now he has ___ pebbles in the pile. How many pebbles were in the pile to start?</p> <p>12, 13 17, 8 9, 15</p>
<p>Put Together/ Take Apart</p>	<p><i>Total Unknown</i> ★</p> <p>Crow dropped ___ small pebbles and ___ big pebble(s) into the pitcher. How many pebbles did he drop into the pitcher all together?</p> <p>8, 6 16, 4 19, 15</p>		<p><i>(Addend Unknown)</i></p> <p>Crow dropped ___ pebbles into the pitcher. ___ were big and the rest were small. How many pebbles were small?</p> <p>14, 5 19, 11 22, 7</p>
<p>Compare</p>	<p><i>(Difference Unknown)</i> ★ ▲</p> <p>The stag had lots of points on his antlers. There were ___ points on his left antler, and ___ on his right antler. How many fewer points on the left antler than the right?</p> <p>12, 15 14, 18 15, 21</p>	<p><i>(Bigger Unknown)</i></p> <p>Crow dropped ___ small pebbles into the pitcher. He dropped ___ more big pebble(s) than small pebbles. How many big pebbles did he drop into the pitcher?</p> <p>8, 3 6, 9 19, 5</p>	<p><i>(Smaller Unknown)</i></p> <p>Crow has ___ smooth pebbles. He has ___ more smooth pebbles than rough pebbles. How many rough pebbles does Crow have?</p> <p>9, 5 8, 7 15, 7</p>

Unit 4 CGI Problems for *Aesop's Fables*



Grouping and Partitioning	Multiplication	Measurement Division	Partitive Division
	<p>Crow has ___ piles of pebbles. There are ___ pebbles in each pile. How many pebbles does Crow have in all?</p> <p style="text-align: center;">3, 10 6, 5 9, 2</p>	<p>Cat counted ___ mouse feet. There are four feet on each mouse. How many mice were there?</p> <p style="text-align: center;">8 16 32</p>	<p>There are ___ mice that want to have teams to try to put a bell on the cat. If there are ___ teams, how many mice will be on each team if all of the teams have an equal number of mice?</p> <p style="text-align: center;">15, 5 18, 3 20, 10</p>

Unit 4 CGI Problems for Aesop's Fables



<p style="text-align: center;">Unir</p>	<p>(Resultado Desconocido) ★▲</p> <p>___ ratones estaban reunidos en el granero para pensar cómo evitar al gato. Otros ___ ratones de granero más vinieron a la reunión. ¿Ahora cuántos ratones hay en la reunión?</p> <p style="text-align: center;">6, 7 8, 5 9, 8</p>	<p>(Cambio Desconocido) ▲</p> <p>Había ___ piedras en la jarra. ¿Cuántas piedras más tendrá que poner el cuervo en la jarra para tener ___ piedras en la jarra, suficientes para poder beber un trago?</p> <p style="text-align: center;">12, 27 18, 41 29, 12</p>	<p>(Inicio Desconocido)</p> <p>Había algunas piedras en la jarra. El cuervo puso ___ piedra(s) más en la jarra. Ahora hay ___ piedras en la jarra. ¿Cuántas piedras había al principio en la jarra?</p> <p style="text-align: center;">6, 15 20, 35 17, 26</p>
<p style="text-align: center;">Separar</p>	<p>(Resultado Desconocido) ★</p> <p>Había ___ ratones reunidos en el granero para pensar cómo evitar al gato. ___ ratones se escabulleron. ¿Ahora cuántos ratones hay en el granero?</p> <p style="text-align: center;">35, 10 17, 9 22, 13</p>	<p>(Cambio Desconocido)</p> <p>There were ___ mice meeting in the barn to figure out how to avoid the cat. Some mice scampered away. Now there are ___ mice at the meeting. How many mice scampered away?</p> <p style="text-align: center;">12, 5 21, 11 27, 8</p>	<p>(Inicio Desconocido)</p> <p>Crow had a pile of pebbles. He dropped ___ in the pitcher. Now he has ___ pebbles in the pile. How many pebbles were in the pile to start?</p> <p style="text-align: center;">12, 13 17, 8 9, 15</p>
<p style="text-align: center;">Parte-Parte Entero</p>	<p>(Entero Desconocido) ★</p> <p>El cuervo dejó caer ___ piedras pequeñas y ___ piedra(s) grande en la jarra. ¿Cuántas piedras dejó caer en la jarra en total?</p> <p style="text-align: center;">8, 6 16, 4 19, 15</p>	<p style="text-align: center;">(Parte Desconocida)</p> <p>El cuervo dejó caer ___ piedras en la jarra. ___ eran grandes y el resto, pequeñas. ¿Cuántas piedras eran pequeñas?</p> <p style="text-align: center;">14, 5 19, 11 22, 7</p>	
<p style="text-align: center;">Comparar</p>	<p>(Diferencia Desconocida) ★▲</p> <p>El ciervo tiene muchas puntas en sus astas. Había ___ puntas en su asta izquierda, y ___ en su asta derecha. ¿Cuántas puntas menos había en la izquierda respecto de la derecha?</p> <p style="text-align: center;">12, 15 14, 18 15, 21</p>	<p>(Cantidad Desconocida)</p> <p>El cuervo dejó caer ___ piedras pequeñas en la jarra. Dejó caer ___ piedra(s) grande(s) más que piedras pequeñas. ¿Cuántas piedras grandes dejó caer en la jarra?</p> <p style="text-align: center;">8, 3 6, 9 19, 5</p>	<p>(Referente Desconocido)</p> <p>El cuervo tiene ___ piedras lisas. Tiene ___ piedras lisas más que piedras de superficie irregular. ¿Cuántas piedras de superficie irregular tiene el Cuervo?</p> <p style="text-align: center;">9, 5 8, 7 15, 7</p>

Unit 4 CGI Problems for Aesop's Fables



	Multiplicación	División de medidas	División partitiva
Grouping and Partitioning	El cuervo tiene ___ pilas de piedras. Ahora hay ___ piedras en cada pila. ¿Cuántas piedras en total tiene el Cuervo?	El gato contó ___ pies de ratón. Cada ratón tiene cuatro pies. ¿Cuántos ratones había?	Hay ___ ratones que quieren formar equipos para tratar de poner un cascabel al gato. Si hay ___ equipos, ¿cuántos ratones habrá en cada equipo si todos los equipos tienen igual número de ratones?
	3, 10 6, 5 9, 2	8 16 32	15, 5 18, 3 20, 10

Math Objectives

- Use concrete models to represent and name fractional parts of a whole (thirds).
- Use concrete models to represent and name fractional parts of a set of objects (thirds).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

Language Objectives

- Explain why each portion is a third.
- Share-write what is a third.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

Vocabulary

thirds
fair shares
equal pieces

(per group 3, per teacher):

- **BLM** Snack Bag Fractions
- 3 bags of 100 calorie snacks (1 bag per student)
- 3 paper plates
- 3 paper towels
- scissors
- glue stick
- Chart paper with question: **Did your snack bags divide your snack into fair shares? Why or why not?** Work as a class to decide if the snacks provided in each bag gave each partner fair shares of today's snack, or thirds.

Unit 4, Lesson 2

1st – 2nd

Snack Fractions



Children should wash their hands before this activity if using food items.

Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

Once again our snack fraction is a little different today. Today you will begin with the actual food. But before you can eat your snack, you must compare.

(Divide students into groups of three. If you need to have a pair, they must use you as a third in their group.)

Each of these snack bags has the same weight of snack inside, and does say that if you eat the entire bag, you will have eaten a 100 calorie snack. But does that mean that the same number of snacks are in each bag? If each of you has a snack bag, do you think that you will have fair shares, the same NUMBER of each snack inside?
(discussion)

We're going to find out. Let's look at our Record sheet to see what is expected of us.

Looking at the sheet, what do you think you each must do first?
(count the snacks in your own bag)

Then, what do you think you must do? *(Share the count with the others on your team. Fill in your own record sheet with the counts.)*

What do you think you will do with the sentence stems? *(Cut out the comparison words at the bottom of the page, then use the counts from the bags and the comparison words to compare the amounts in each bag. Glue the words into place.)*

Finally, you need to make a decision about whether you had fair shares based on the number of snacks in each of your bags. Circle “did” or “did not” to complete the sentence at the bottom of your record sheet. I should hear a lot of discussion in your groups about comparing, more than, less than, and equal to. When will you use the phrase “equal to?”
(when the two bags have the same number of snack items in them)

OK, work with your team to count, compare and complete your record sheet. Then we'll compare notes before you enjoy your snack.

Unit 4, Lesson 2

1st – 2nd

Snack Fractions - continued



QUESTIONS:

- How many snacks do each of you have in your bags?
- How will you use that information to compare the three bags of snacks?
- Explain to me how you know that you have compared all three snacks using the sentence stems.

Discuss all of their findings, and then complete the Snack Fraction Writing assignment before they enjoy their snacks.

Snack Fraction Writing: Chart

Did your snack bags divide your snack into fair shares? Why or why not?

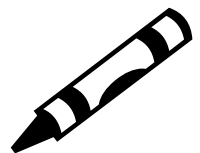
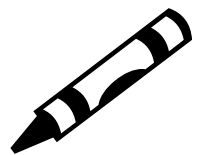
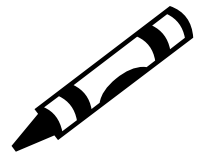
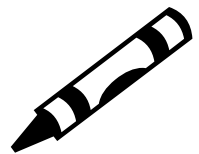
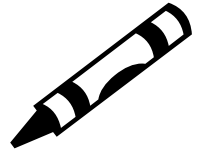
Objectives: Review what you learned and how you learned it.

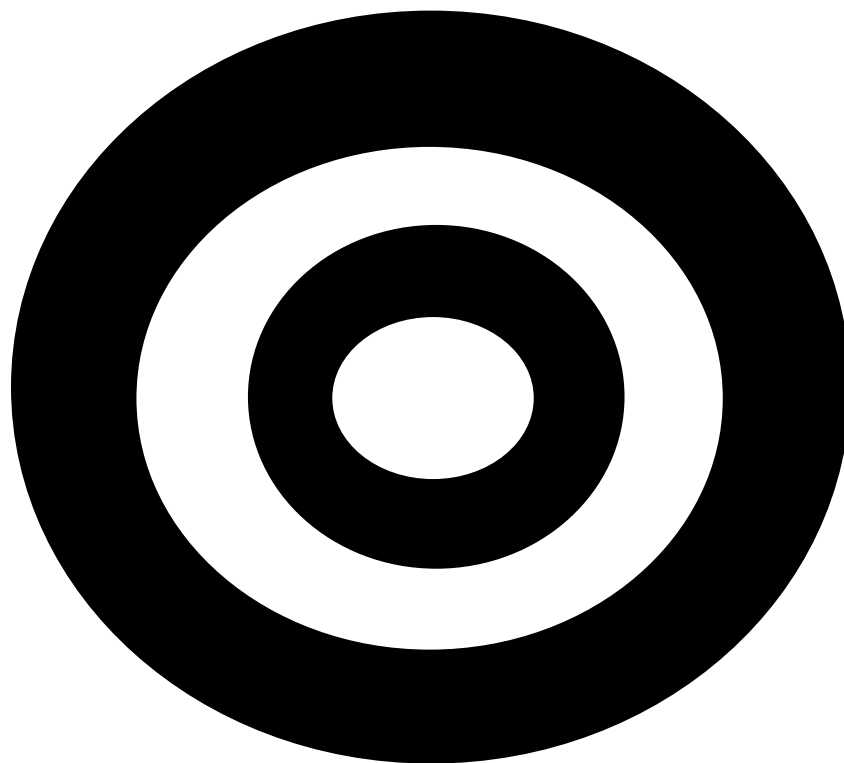
Summer Math

Student Packet/Paquete de alumno

Unit 4

English/Español



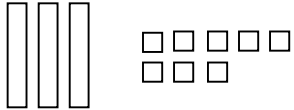


Target Number

Printed on Blue –One set per partners for class; one set per student for home. (There are two pages of cards.)

Cards A – O are review. Cards P – D¹ are Unit 3 skills.

<p>A. Use the following numbers to make a fact family.</p> <p><i>Usa los siguientes números para hacer una familia de hechos.</i></p> <p>8, 7, 15</p>	<p>B. Use the following numbers to make a fact family.</p> <p><i>Usa los siguientes números para hacer una familia de hechos.</i></p> <p>5, 7, 12</p>	<p>C. Use the following numbers to make a fact family.</p> <p><i>Usa los siguientes números para hacer una familia de hechos.</i></p> <p>8, 9, 17</p>
--	--	--

<p>D. What is the value of the base ten blocks?</p> <p><i>¿Cuál es el valor de los bloques de base diez?</i></p> 	<p>E.</p> <p>51 - 28</p>	<p>F.</p> <p>57 - 19</p>
--	---------------------------------	---------------------------------

Diversión en Familia

Printed on Blue –One set per partners for class; one set per student for home. (There are two pages of cards.)

G.

$$55 - 38$$

H.

Look at this number sentence. Which numbers make ten?

Mira esta oración numérica.

¿Qué números hacen 10?

$$4 + 8 + 6 = 18$$

I.

Look at this number sentence. Which numbers make ten?

Mira esta oración numérica.

¿Qué números hacen 10?

$$3 + 5 + 7 = 15$$

J.

Compare

Path A is 6 inches long.

Path B is 9 inches long.

Which path is longer?

Compara

La ruta A tiene 6 pulgadas de largo.

La ruta B tiene 9 pulgadas de largo.

¿Cuál ruta es más larga?

K.

Compare

Path A is 12 inches long.

Path B is 14 inches long.

Which path is shorter?

Compara

La ruta A tiene 12 pulgadas de largo.

La ruta B tiene 14 pulgadas de largo.

¿Cuál ruta es más corta?

L.

Use comparison words to describe these lines.

Path A is 5 inches long.

Path B is 9 inches long.

Utiliza palabras de comparación para describir estas líneas.

La ruta A tiene 5 pulgadas de largo.

La ruta B tiene 9 pulgadas de largo.

Printed on Blue –One set per partners for class; one set per student for home. (There are two pages of cards.)

M.

Mouse ate 43 jelly beans. His sister ate 6 more than Mouse ate. How many jelly beans did Mouse's sister eat?

Mouse comió 43 jaleas. Su hermana comió 6 jaleas más que Mouse. ¿Cuántas jaleas se comió la hermana de Mouse?

N.

62 big camels marched in a line. 27 small camels marched in a line. How many fewer small camels were there than large camels?

62 camellos grandes caminaban en fila. 27 camellos pequeños caminaban en fila. ¿Cuántos camellos pequeños menos había comparado con los camellos grandes?

O.

Solve
Camel walked 67 miles. Monkey walked 15 miles less than Camel. How many miles did Money walk?

*Resuelve
El camello caminó 67 millas. El mono caminó 15 millas menos que el camello. ¿Cuántas millas caminó el mono?*

P.

Crow dropped 32 pebbles into the glass of water. He needed to drop 50 pebbles into the glass. How many more pebbles must he drop?

El cuervo dejó caer 32 piedras en el vaso de agua. Necesitaba dejar caer 50 piedras en el vaso. ¿Cuántas piedras más debe dejar caer?

Q.

Monkey ate 15 bananas. That was 16 less than his friend Mouse. How many bananas did Mouse eat?

El mono comió 15 bananas. Eso fue 16 menos que su amigo Mouse. ¿Cuántas bananas comió Mouse?

R.

Mouse ran up the banister 16 times. Rat ran up the banister 12 more times than Mouse. How many times did Rat run up the banister?

Mouse subió corriendo el pasamanos 16 veces. Rat subió corriendo el pasamanos 12 veces más que Mouse. ¿Cuántas veces subió corriendo Rat el pasamanos?

CGI Graphic Organizer

(Notes)

Show your work:

Answer: _____
(label)

Explain your strategy:

(Notes)

Show your work:

Answer: _____
(label)

Explain your strategy:

Mi nombre es _____

Mi bolsa tenía _____ piezas en ella.



La bolsa de uno de mis compañeros de equipo tenía _____ piezas en ella.




La otra bolsa tenía _____ piezas en ella.



_____ piezas son _____ piezas.

_____ piezas son _____ piezas.

_____ piezas son _____ piezas.

 Nuestras bolsas de bocadillos (sí no) dividían nuestro bocadillo en porciones equitativas, tercios.

Corta las tarjetas de comparación abajo.
Decide que comparación describe tu merienda.
Pega la tarjeta arriba en la frase de comparación.

más que	más que	más que
menos que	menos que	menos que
igual a	igual a	igual a

My name is _____

My bag had _____ pieces in it.



The bag of one of my team mates had _____ pieces in it.



The other bag had _____ pieces in it.



_____ pieces are _____ pieces.

_____ pieces are _____ pieces.

_____ pieces are _____ pieces.

Our snack bags (did / did not) divide our snack into fair share, thirds.



Cut out the comparison word cards below.
Decide which comparison word matches your snack.
Glue the comparison word card to the comparison statement.

more than	more than	more than
less than	less than	less than
equal to	equal to	equal to



Generic Family Fun Game Board

Materials Generic to All Units:

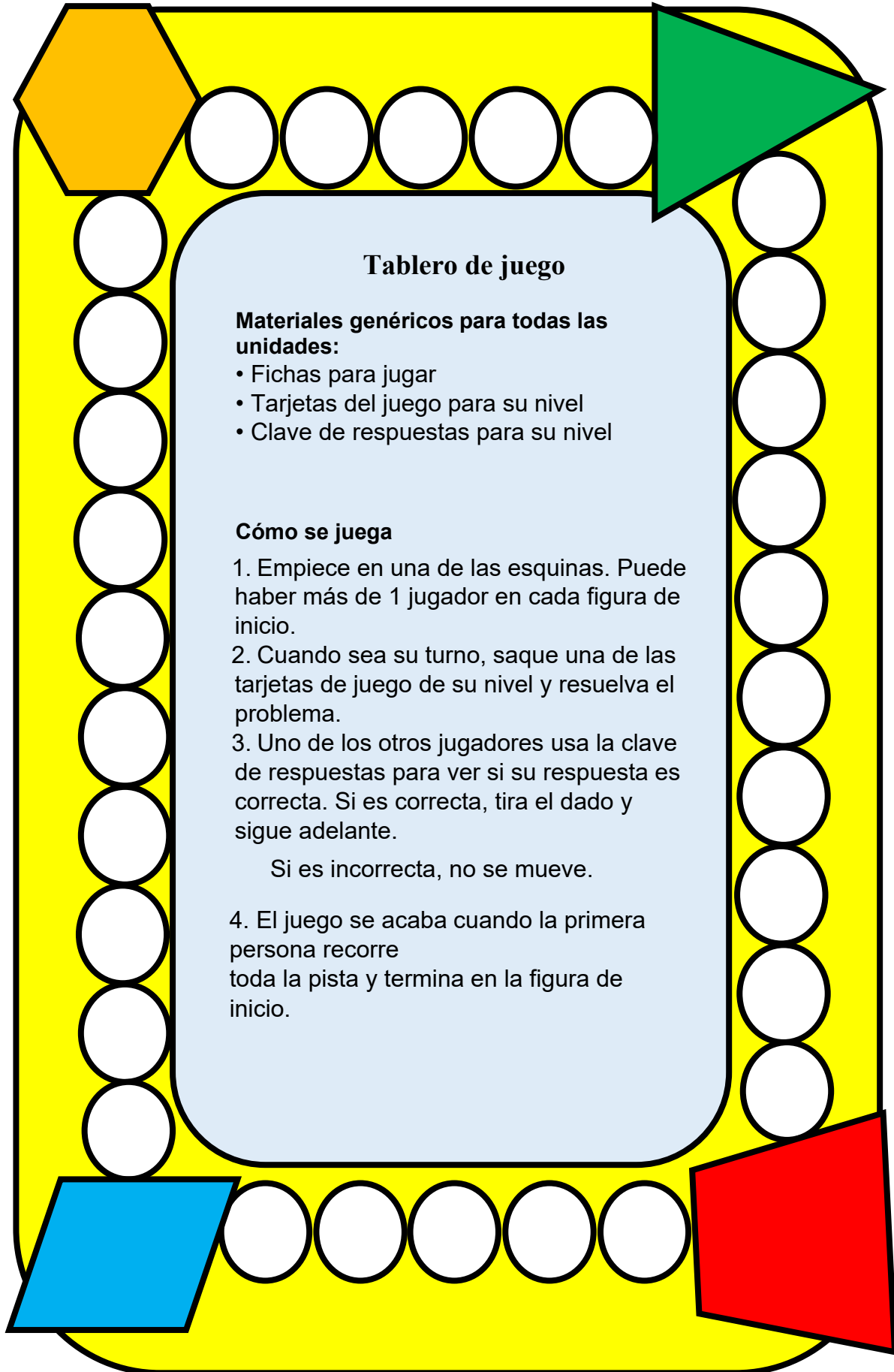
- Game Markers
- Game Cards for your Level
- Answer Key for your Level

Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, roll the die and move ahead.

If incorrect, do not move.

4. Game is over when the first person runs the entire track, ending back on the starting shape.



Tablero de juego

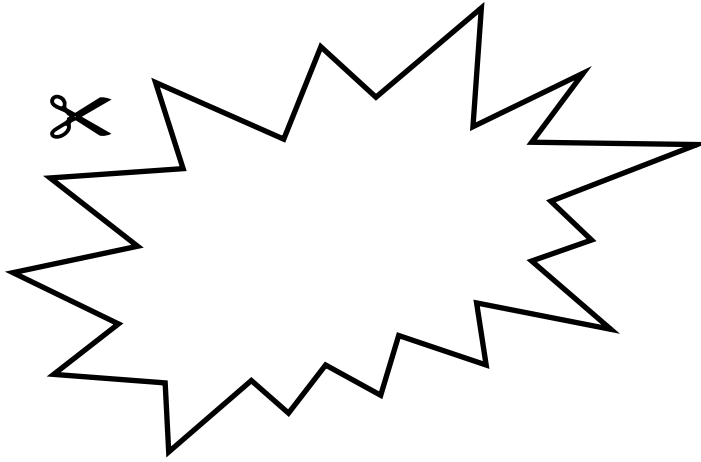
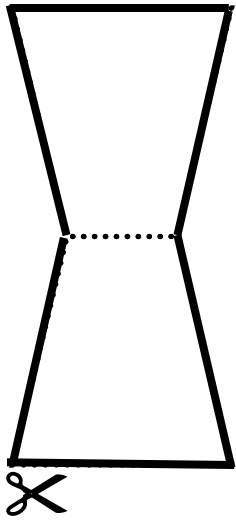
Materiales genéricos para todas las unidades:

- Fichas para jugar
- Tarjetas del juego para su nivel
- Clave de respuestas para su nivel

Cómo se juega

1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira el dado y sigue adelante.
Si es incorrecta, no se mueve.
4. El juego se acaba cuando la primera persona recorre toda la pista y termina en la figura de inicio.

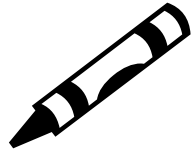
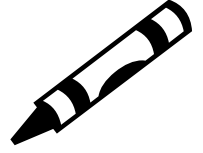
Family Fun Game Pieces



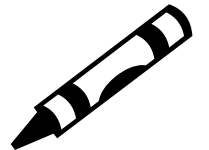
1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet



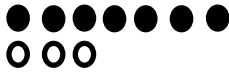
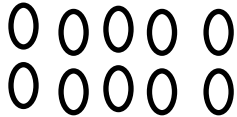
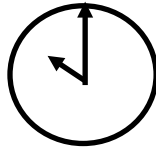
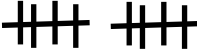
Unit 5



Warm up: Target Number

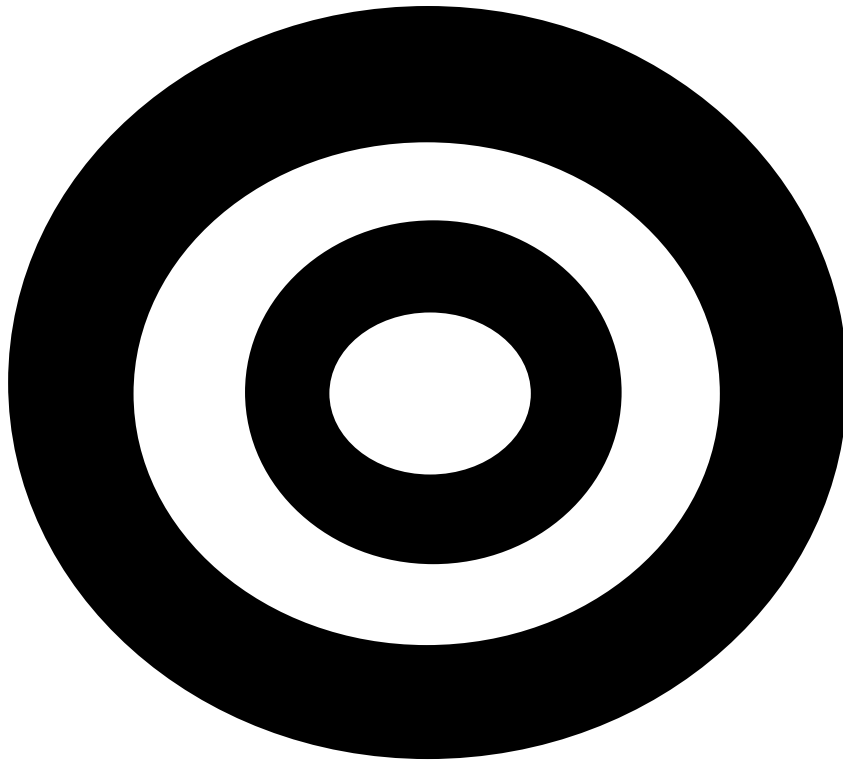
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, students give ONE example at a time, going around the group a couple of times until all DIFFERENT responses are used. Students need to give **different** ways to represent the number. Writing, "7 + 3" is different from writing, "3 + 7". Drawing 7 circles and 3 circles is different from writing, "7 + 3."

Examples of some different ways to represent the number 10:

$7 + 3$	$10 + 0$	$17 - 7$	2×5	$100 / 10$	$20 / 2$
$3 + 7$	$0 + 10$	ten	5×2	$10 / 1$	10×1
					
One dozen eggs take away 2		$2 + 2 + 2 + 2 + 2$			$100 - 90$

Required [Math] Fluencies

Kindergarten	Add and subtract within 5	Procedural Fluency: can easily use a process to figure out the answer (for example, using manipulatives, diagrams)
Grade 1	Add and subtract within 10	Procedural Fluency
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2); Add and subtract within 100	Automaticity by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 3	Single digit products and quotients (product automaticity by the end of Grade 3)	Automaticity for Products by the end of Grade 3
	Add and subtract within 1,000	Procedural Fluency
Grade 4	Add and subtract within 1,000,000	Procedural Fluency



Target Number

Suggested Target Numbers: Start with 12 and 15 for everyone for the first two sessions. Afterwards, numbers over 20 are fair for all grade bands except for the DOG ICON, which should just use numbers under 20.

12

15

24

36

60

48

100

45

90

50

75

More choices:

9

18

6

20

FAMILY FUN GAME Directions

Key Points:

- Starting with Unit 2, the Family Fun Game gives students repeated practice in each of the Math Matters skills. This allows students to practice all of the skills throughout the summer.

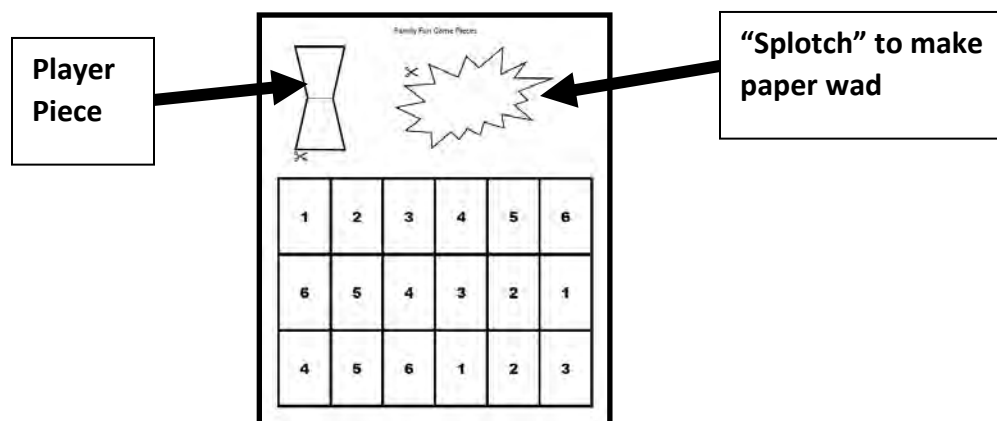
Process:

- Each Student Packet has its own Family Fun Game Cards, allowing each student to participate with students who have different skills to practice.
- Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
- Instead of students drawing a card, students select a problem from their grade band sheets. Students can select problems in the order they choose, BUT ask students to solve one problem from each row, before repeating from the row, so they practice each skill.
- Game Directions are on the game board. Game boards are at the end of each Student Packet, so they are easy to pull off and use.
- The best way to move around the board is to use dice. The Student Packets have a “Do It Yourself (DIY)” version to toss a small wad of paper onto a board of numbers.
- Many students end up reading all of the problems in between turns as they search for the “best” ones to answer.

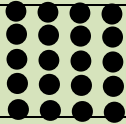
Do It Yourself (DIY) Game Pieces

Player: Cut the outside of the double trapezoid. Fold in half to make the player. If more than one student has the same color, students can write their names on the playing piece.

If you don't have a 6-sided die: Cut around the jagged “splotch” shape and wad the paper into a ball. Toss the ball onto the number board to find number of spaces to move.



BLM Unit 5, Follow-Up Lesson 3 Family Fun Game All Level Answer Key

Problem Letter	Kinder (pink)	1-2 (blue)	3-4 Iguana Tales Specific information about strategies in 3-4 packets	5-6 (yellow)	7-8 (orange)
A	15 beans counted Number 15	2, 8 make ten	\$79.99	0.5	8
B	9 beans counted Number 9	1, 9 make ten	1/2 (or any equivalence)	$8\frac{1}{8}$	10
C	10 beans counted Number 10	7 + 9 = 16 9 + 7 = 16 16 - 9 = 7 16 - 7 = 9	1cpf 2/3, 1 cpf 3/4	\$0.01	0.12 cm
D	2 cicadas	8 + 7 = 15 7 + 8 = 15 15 - 7 = 8 15 - 8 = 7		1,111,111,110	87.5 feet OR 87.50 feet OR 87 1/2 feet
E	8 mice	Last week: 12 miles This week: 11 Total: 12+11=33miles	63	54.657 grams salt	$\frac{3 \text{ ft}}{1 \text{ yd}} = \frac{x \text{ ft}}{9 \text{ yd}}$
F	9 leaves	David read 24 books.	7 balloons	11.92% chemical B	$\frac{16 \text{ oz}}{1 \text{ lb}} = \frac{x \text{ oz}}{5 \text{ lb}}$
G	Penny	14	5 pennies	\$27.45 tax	\$.26 OR 26 cents
H	Nickel	17	30 muffins	\$350 tip	\$.40 OR 40 cents
I	Penny	13	0.02	\$90 interest	\$687.50
J	Top bar	one fourth OR One out of 4 equal pieces	0.75	\$230 charged	\$31.25
K	9 dots	Circle divided into 4 equal parts	Finished number line	3 cups cashews	3 hours
L	Bar on left	Lucy ate 4 cookies.	8.99	10% tip	4 hours
M	Must cut or tear card into approximately 2 equal pieces	Bob walked 4 miles.	$\frac{1}{4} = 0.4$	False. Scale factor not consistent	\$428
N	Halves, or 1 out of 2 equal pieces	7	0.07	True. Scale factor = ($\div 4$) or ($\times \frac{1}{4}$)	\$1030.00
O	Both pieces are the same size	17		120 cotton balls: 1 bag	\$18.34 or \$18.35
P	7 flowers	65		48 babies	\$59.34
Q	4 flowers	80		$\frac{12}{12}$ or 1 whole $\frac{7}{7}$	200
R	0 frogs	85		$\frac{2}{15}$	96

CGI CHARTS:

With a few changes, this chart is in New York State’s Next Generations Learning Standards for Pre-K to Grade 2, titled, “Common Addition and Subtraction Situations.”

Key Points:

- Allows students to solve the problem in a way they understand, instead of the “right” way.
 - **NY-1.OA.1** – Use addition and subtraction within 20 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions.
 - ...using objects, drawings and equations with a symbol to represent the unknown.
 - **NY-2.OA.1** – Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.
 - Mastery of all word problems types on the “Common Addition and Subtraction Situations” Chart by end of Grade 2.

Process:

- **Pick one word problem.**
 - Start easy (top left corner of CGI Chart, then work to the left and down as students show confidence.
 - Or use the STAR (Grade 1) ★ or the TRIANGLE (Grade 2) ▲ for types of word problems on the summer math assessments.
- Read the problem to students, using the choice of differentiated numbers to fill in the blanks.
- Read again and encourage students to take notes on the graphic organizer. (modeling, teaching the first time)
- Give students time to solve. (If struggling, prompt with, “What number does the problem start with?” Do you want to draw this or use manipulatives to recreate it?)
- Have manipulatives and paper for students to choose either medium for solving the problem.
- Ask students to explain their process before asking them for an answer. This allows students time to self-correct and gives the Educator a clue about how the student is thinking.
- At the end, look at the final answer together, to decide if it solves the problem. How would you say this in a sentence?



<p>Add To</p>	<p><i>(Result Unknown)</i> ★ ▲</p> <p>There were ___ spotted pigs on the truck. The farmer loaded ___ more pigs on the truck. How many pigs are on the truck now?</p> <p>10, 4 6, 7 8, 9</p>	<p><i>(Change Unknown)</i> ▲</p> <p>The children made ___ adobe bricks. How many adobe bricks do they need to make in order to have ___ bricks, enough for a flower box planter?</p> <p>10, 18 7, 15 9, 20</p>	<p><i>(Start Unknown)</i></p> <p>The farmer loaded some pigs on his truck. His farm hand loaded ___ more pigs on the truck. Now there are ___ pigs on the truck. How many pigs were on the truck to start?</p> <p>4, 11 5, 8 6, 9</p>
<p>Take From</p>	<p><i>(Result Unknown)</i> ★</p> <p>There were ___ little gourds drying on the vine. ___ gourds were too dry and fell off. How many gourds are on the vine now?</p> <p>10, 6 13, 6 17, 8</p>	<p><i>(Change Unknown)</i></p> <p>There were ___ pigs on the truck. The farmer unloaded some and now there are ___ pigs on the truck. How many pigs did the farmer unload?</p> <p>20, 10 18, 8 16, 7</p>	<p><i>(Start Unknown)</i></p> <p>There were some little gourds drying on the vine. Maria picked ___ to make into bird houses. Now there are ___ gourds on the vine. How many gourds were on the vine to start?</p> <p>6, 6 7, 7 9, 9</p>
<p>Put Together/ Take Apart</p>	<p><i>(Total Unknown)</i> ★</p> <p>There were ___ crates of oranges and ___ crates of coffee on the cargo truck. How many crates in all?</p> <p>15, 10 13, 12 8, 6</p>		<p><i>(Addend Unknown)</i></p> <p>There were ___ crates of cargo on the truck. ___ crates were oranges and the rest were coffee beans. How many crates were coffee beans?</p> <p>15, 5 14, 8 17, 9</p>
<p>Compare</p>	<p><i>(Difference Unknown)</i> ★ ▲</p> <p>There were ___ crates of oranges and ___ crates of vanilla on the truck. How</p>	<p><i>(Bigger Unknown)</i></p> <p>There were ___ crates of vanilla on the truck. There were ___ more crates of oranges than vanilla. How</p>	<p><i>(Smaller Unknown)</i></p> <p>In the cargo truck there were ___ crates of coffee. That's ___ more crates of coffee than vanilla. How</p>



	<p>many more crates of oranges than vanilla?</p> <p>15, 13 17, 7 21, 18</p>	<p>many crates of oranges were there?</p> <p>10, 4 6, 7 4, 9</p>	<p>many crates of vanilla are there?</p> <p>12, 4 14, 6 21, 12</p>
	Multiplication	Measurement Division	Partitive Division
Grouping and Partitioning	<p>There are ___ corn stalks in a row of corn. There are ___ ears of corn on one stalk. How many ears of corn in all?</p> <p>15, 2 20, 3 25, 4</p>	<p>A truck carrying oranges from Veracruz hauls ___ bags of oranges. If there are ___ bags of oranges in each crate, how many crates are there?</p> <p>100, 10 100, 5 45, 3</p>	<p>The children made ___ adobe bricks. If they stack them in ___ piles, how many bricks will be in each pile?</p> <p>25, 5 30, 5 55, 5</p>



<p style="text-align: center;">Unir</p>	<p><i>(Resultado desconocido)</i> ★ ▲</p> <p>Había ___ cerdos con manchas en el camión. El granjero cargó ___ cerdos más en el camión. ¿Cuántos cerdos hay ahora en el camión?</p> <p style="text-align: center;">10, 4 6, 7 8, 9</p>	<p><i>(Cambio desconocido)</i> ▲</p> <p>Los niños hicieron ___ ladrillos de adobe. ¿Cuántos ladrillos de adobe tienen que hacer para tener ___ ladrillos, suficientes para una jardinera para plantar flores?</p> <p style="text-align: center;">10, 18 7, 15 9, 20</p>	<p><i>(Inicio desconocido)</i></p> <p>El granjero cargó algunos cerdos en su camión. Su bracero cargó ___ cerdos más en el camión. Ahora hay ___ cerdos en el camión. ¿Cuántos cerdos había en el camión al principio?</p> <p style="text-align: center;">4, 11 5, 8 6, 9</p>
<p style="text-align: center;">Separar</p>	<p><i>(Resultado desconocido)</i> ★</p> <p>Había ___ pequeñas calabazas secándose en la mata. ___ calabazas estaban demasiado secas y se cayeron. ¿Ahora cuántas calabazas hay en la mata?</p> <p style="text-align: center;">10, 6 13, 6 17, 8</p>	<p><i>(Cambio desconocido)</i></p> <p>Había ___ cerdos en el camión. El granjero descargó algunos y ahora hay ___ cerdos en el camión. ¿Cuántos cerdos descargó el granjero?</p> <p style="text-align: center;">20, 10 18, 8 16, 7</p>	<p><i>(Inicio desconocido)</i></p> <p>Había unas pequeñas calabazas secándose en la mata. María recogió ___ para fabricar pajareras. Ahora hay ___ calabazas en la mata. ¿Cuántas calabazas había en la mata al principio?</p> <p style="text-align: center;">6, 6 7, 7 9, 9</p>
<p style="text-align: center;">Parte-Parte-Entero</p>	<p><i>(Entero desconocido)</i> ★</p> <p>Había ___ cajones de naranjas y ___ cajones de café en el camión de carga. ¿Cuántos cajones serían en total?</p> <p style="text-align: center;">15, 10 13, 12 8, 6</p>		<p><i>(Parte desconocido)</i></p> <p>Había ___ cajones de carga en el camión. ___ cajones contenían naranjas y el resto contenía granos de café. ¿Cuántos contenían granos de café?</p> <p style="text-align: center;">15, 5 14, 8 17, 9</p>



Comparar	<p><i>(Diferencia desconocido)</i> ★▲</p> <p>Había ___ cajones de naranjas y ___ cajones de vainilla en el camión de carga. ¿Cuántos cajones de naranjas más había comparado con las de vainilla?</p> <p>15, 13 17, 7 21, 18</p>	<p><i>(Cantidad Desconocida)</i></p> <p>Había ___ cajones de vainilla en el camión. Había ___ cajones más de naranja que de vainilla. ¿Cuántos cajones de naranjas había?</p> <p>10, 4 6, 7 4, 9</p>	<p><i>(Referente Desconocido)</i></p> <p>En el camión de carga había ___ cajones de café. Eso es ___ cajones más de café que de vainilla. ¿Cuántos cajones de vainilla hay?</p> <p>12, 4 14, 6 21, 12</p>
	Multiplicación	División de medidas	División partitiva
Formación de grupos y Partición	<p>Hay ___ plantas de maíz en una hilera de maíz. Hay ___ mazorcas en una planta. ¿Cuántas son las mazorcas en total?</p> <p>15, 2 20, 3 25, 4</p>	<p>Un camión que transporta naranjas desde Veracruz transporta ___ bolsas de naranjas. Si hay ___ bolsas de naranja en cada cajón, ¿cuántos cajones hay?</p> <p>100, 10 100, 5 45, 3</p>	<p>Los niños hicieron ___ ladrillos de adobe. Si los ordenan en ___ pilas, ¿cuántos ladrillos habrá en cada pila?</p> <p>25, 5 30, 5 55, 5</p>

Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths, eighths).
- Use concrete models to represent and name fractional parts of a set of objects (fourths, eighths).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

Language Objectives

- Explain why each portion is a fourth/eighth.
- Share-write what is a fourth or eighth.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

Vocabulary

fourths
eighths
fair shares
equal pieces

Materials

- **BLM** Crackers and Nutella Fractions – 1 per student

Per partners

- 4 whole graham cracker sheets
- 2 T Nutella
- 2 paper plates
- 2 paper towels
- 2 plastic knives
- Chart paper with question:
How do you know each person would have (one-fourth or one-eighth) of the snack?

Unit 5, Lesson 21st – 2nd**Snack Fractions**

Children should wash their hands before this activity if using food items.

Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

We are going to share our snack together in halves. How many people will be sharing the snack if we share in halves? (2) How do you know? Halves are two equal pieces of a whole or set.

(Distribute the snack materials)

- What do you see that you are going to share today? (4 graham crackers and 2 T Nutella)
- Talk to your partner about how you will share that fairly between you.

(Give them time to talk about how they will share it. In the meantime, draw several sets of four rectangles to represent the crackers and two circles to represent the Nutella. When students have discussed in partners, have them explain their plans to the class. Use their descriptions to divide the drawings on the board to show their plans. As a class, decide if the plan will divide the snack into two equal parts, or halves. Ask if anyone shared a different way. When all plans have been discussed and verified, students should share their snack.)

Today, our record sheet doesn't really have much to do with our actual snack. Let's look at the record sheet. *(Read the top portion to the students. Ask the questions below. Let them divide the circle into the fourths, and write the fractional part each would receive. Then read the second portion. Ask the questions below, and let the students divide that circle into eighths and write the fractional part each would receive.)*

QUESTIONS:

- How many people will be dividing this cup of Nutella?
- How do you know?
- What fractional part of the Nutella will each person receive?
- What does one (fourth / eighth) mean?

Snack Fraction Writing: BLM Crackers and Nutella Fractions

How do you know each person would have one (fourth, then eighths) of the snack?

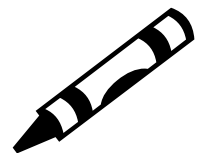
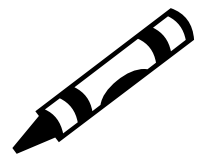
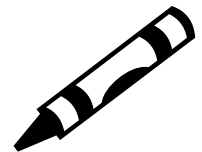
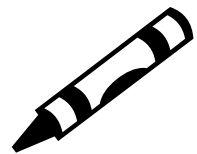
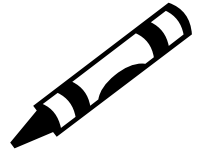
Objectives: Review what you learned and how you learned it.

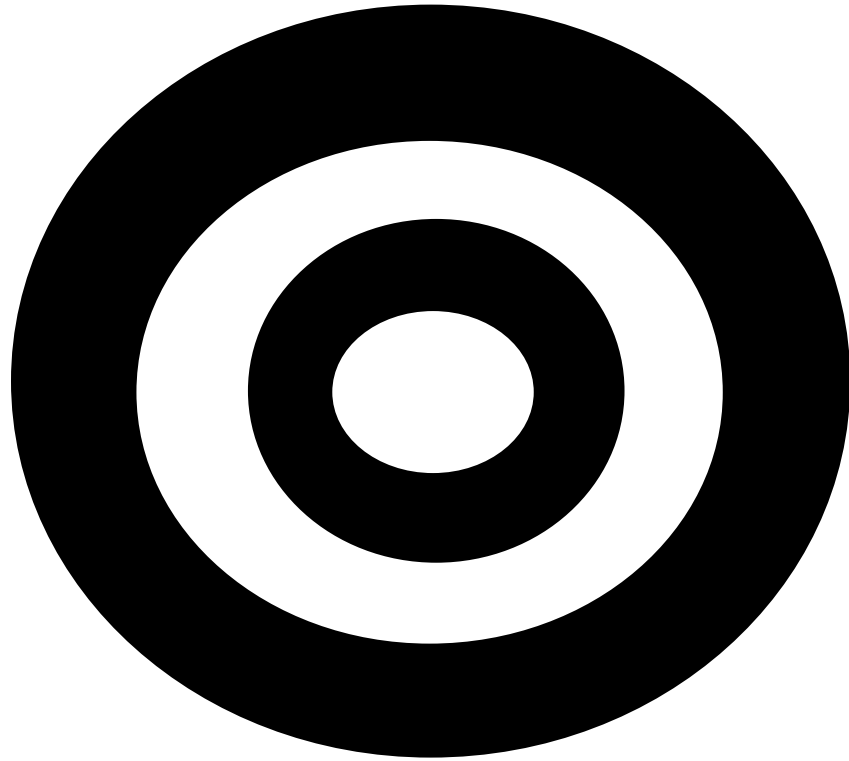
Summer Math

Student Packet/Paquete de alumno

Unit 5

English/Español





Target Number

Printed on Blue –One set per partners for class; one set per student for home. (There are two pages of cards.)

A. Look at this number sentence.
Which numbers make 10?

*Mira esta oración numérica.
¿Qué números hacen 10?*

$$4 + 2 + 8 = 14$$

B. Look at this number sentence.
Which numbers make 10?

*Mira esta oración numérica.
¿Qué números hacen 10?*

$$1 + 5 + 9 = 15$$

C. Use the following numbers to make a fact family.

Usa los siguientes números para hacer una familia de hechos.

7, 9, 16

D. Use the following numbers to make a fact family.

Usa los siguientes números para hacer una familia de hechos.

8, 7, 15

E. Gary walked 12 miles last week. He walked 11 more miles this week. How many miles did Gary walk in both weeks?

Gary caminó 12 millas la semana pasada. Caminó 11 millas más esta semana. ¿Cuántas millas caminó Gary las dos semanas?

F. David read 15 books in 3 weeks. He read 9 more books this week. How many books did David read?

David leyó 15 libros en 3 semanas. Leyó 9 libros más esta semana. ¿Cuántos libros leyó?

Printed on Blue –One set per partners for class; one set per student for home. (There are two pages of cards.)

G.

$$\square - 8 = 6$$

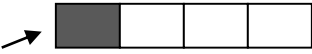
H.

$$\square - 8 = 9$$

I.

$$\square - 5 = 8$$

J.



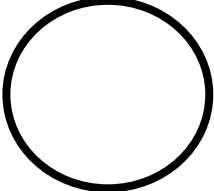
What do you call this fair share?

¿Cómo llamas a esta parte igual?

K.

Fair share the circle for yourself and 3 friends.

Comparte el círculo igualmente entre tú y 3 amigos.



L.

Ralph ate 9 cookies. That was 5 cookies more than Lucy ate. How many cookies did Lucy eat?

Ralph comió 9 galletas. Esto fue 9 galletas más que comió Lucy. ¿Cuántas galletas comió Lucy?

M.

Katy walked 12 miles.
She walked 8 more miles
than Bob. How many
miles did Bob walk?

*Katy caminó 12 millas.
Caminó 8 millas más que
Bob. ¿Cuántas millas
caminó Bob?*

N.

Solve
Resuelve

$$14 - 7$$

O.

Solve
Resuelve

$$24 - 7$$

P.

Solve
Resuelve

$$27 + 38$$

Q.

Solve
Resuelve

$$43 + 37$$

R.

Solve
Resuelve

$$39 + 46$$

CGI Graphic Organizer

(Notes)

Show your work:

Answer: _____
(label)

Explain your strategy:

(Notes)

Show your work:

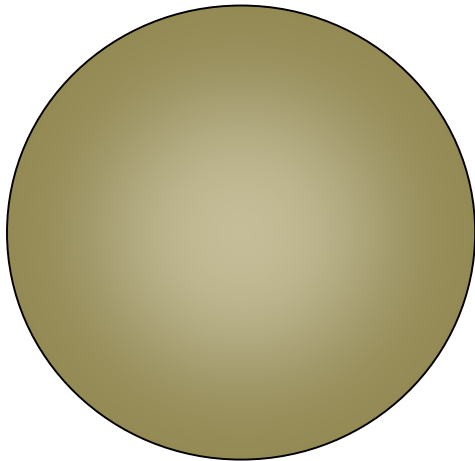
Answer: _____
(label)

Explain your strategy:



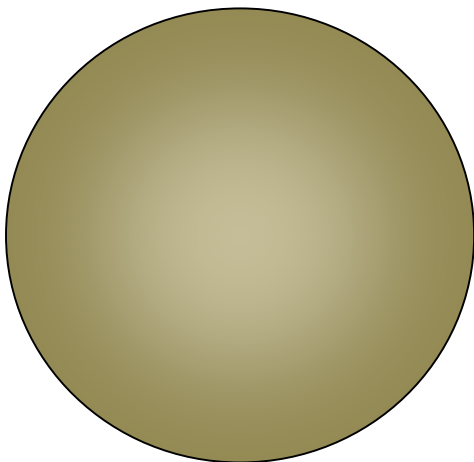
My name is _____

Mrs. Guerra put the Nutella into a big cup so that Ellie and her 3 friends could share it. They took a knife and cut the Nutella into fair shares. Draw how you would divide the Nutella so that everyone has an equal share.



What fractional part of the Nutella will each person receive?

Mrs. Romo put the Nutella into a big cup so that Marcos and his 7 friends could share it. They took a knife and cut the Nutella into fair shares. Draw how you would divide the Nutella so that everyone has an equal share.



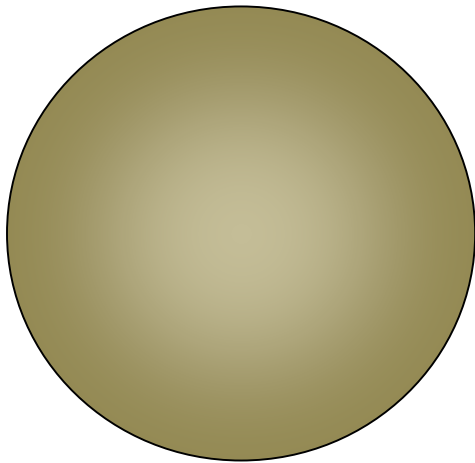
What fractional part of the Nutella will each person receive?



Mi nombre es _____

La señora Guerra puso la Nutella en un recipiente grande para que Ellie y sus 3 amigos pudieran compartirla. Tomaron un cuchillo y cortaron la Nutella en partes iguales.

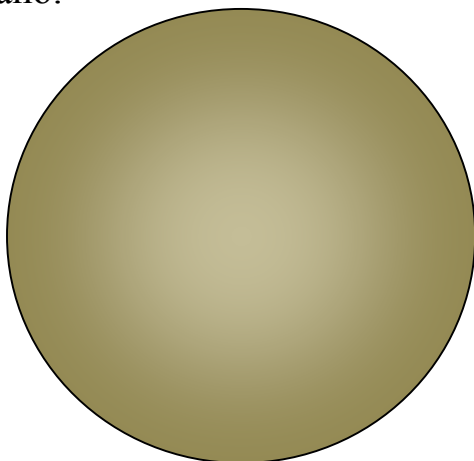
Dibuja cómo dividirías la Nutella para que cada uno tenga una pieza de igual tamaño.



¿Qué parte expresada en fracción de la Nutella recibirá cada persona?

La señora Romo puso la Nutella en un recipiente grande para que Marcos y sus 7 amigos pudieran compartirla. Tomaron un cuchillo y cortaron la Nutella en partes iguales.

Dibuja cómo dividirías la Nutella para que cada uno tenga una pieza de igual tamaño.



¿Qué parte expresada en fracción de la Nutella recibirá cada persona?



Generic Family Fun Game Board

Materials Generic to All Units:

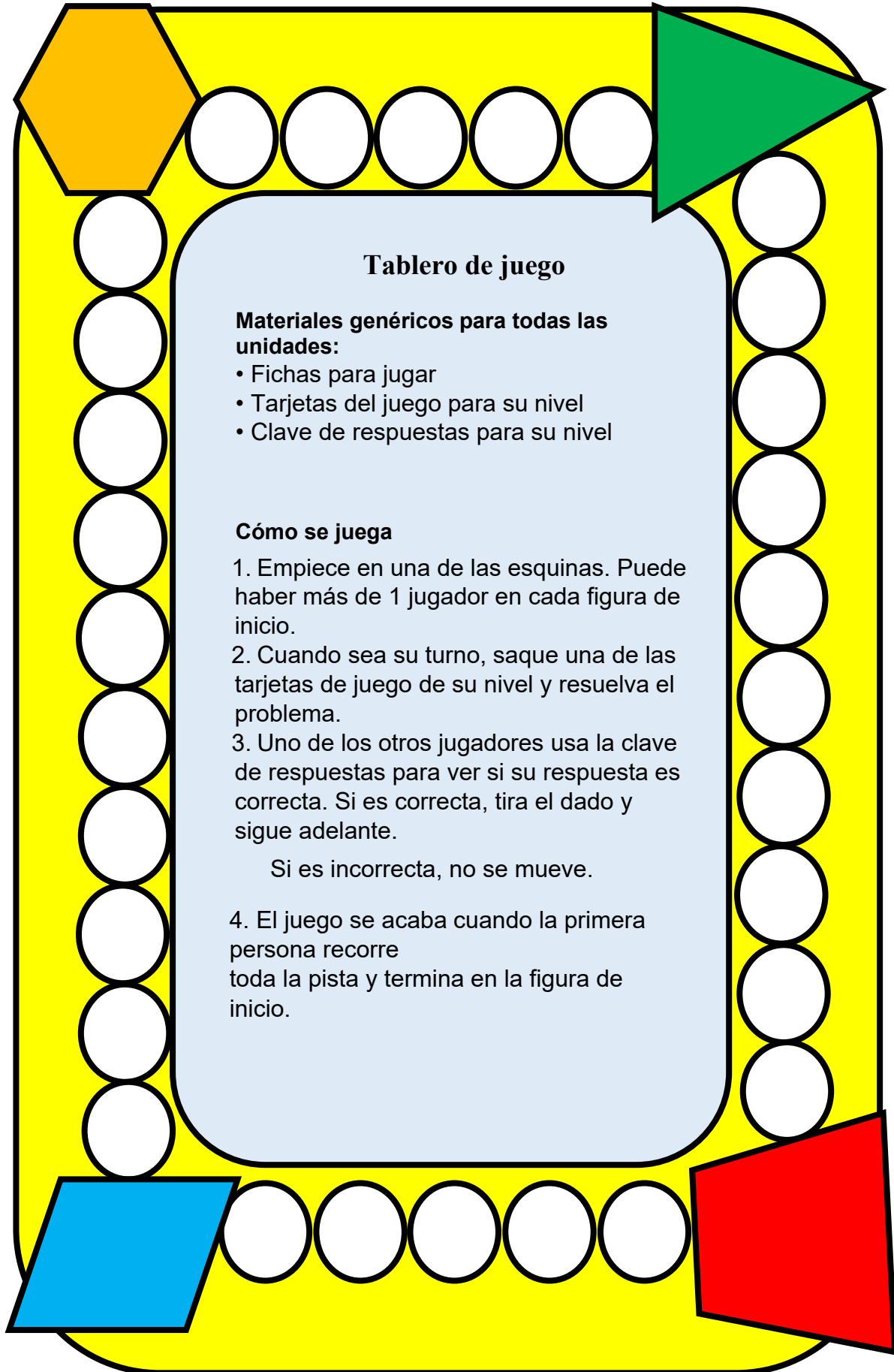
- Game Markers
- Game Cards for your Level
- Answer Key for your Level

Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, roll the die and move ahead.

If incorrect, do not move.

4. Game is over when the first person runs the entire track, ending back on the starting shape.



Tablero de juego

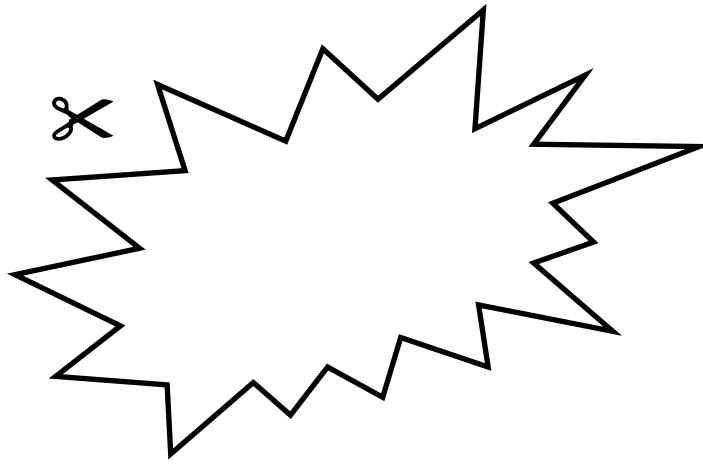
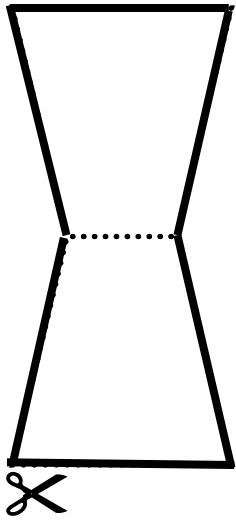
Materiales genéricos para todas las unidades:

- Fichas para jugar
- Tarjetas del juego para su nivel
- Clave de respuestas para su nivel

Cómo se juega

1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira el dado y sigue adelante.
Si es incorrecta, no se mueve.
4. El juego se acaba cuando la primera persona recorre toda la pista y termina en la figura de inicio.

Family Fun Game Pieces



1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Literature Vocabulary

habitat
oceans
colorful
blend
shore
tide pool
swamp
lake

Math Vocabulary

add
subtract
compare
regroup
tens
ones
math movie
fact families
compatible numbers

Materials

- Unifix or Linking cubes (two 1-color trains per student)
- Fact Family Houses of sums of 10 from Fact Family Match game
- **BLM** Compatible Numbers on the Number Line – 3 per student

Time Clue

BB = 2 minutes

CI = 24 minutes

AC = 2 minutes

ELPS (*English Language Proficiency Standards*)
2A,2B,2F,2I,3A,3E,3H

CCRS (*College and Career Readiness Standards*)

ELA

II.B.1; III.B.1,2,3; IV.A.2,3;
IV.B.1,2,3

MATH

I.A.1; I.B.1; VIII.B.1,2; IX.A.1;
IX.B.1,2; IX.C.1,3; X.A.1,2

CROSS DISCIPLINARY

I.A.1,2; I.B.1,2,3,4; I.C.1,2,3;
II.A.2

Unit 2, Lesson 2

1st – 2nd

TV Lesson



Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.

Math Objectives:

- Solve addition and subtraction problems.
- Recognize fact families.
- Understand what the equal sign means.
- Identify sums of ten as compatible numbers.
- Use a number line to represent sums and differences.

Language Objectives:

- Listen to the TV Teacher.
- Speak: Explain fact families and how they can help you learn basic facts.
- Speak: Explain how compatible numbers help you add and subtract.
- Read TV Teacher's notes on the TV and the record sheet.
- Write the compatible number combinations on the number lines.

Building Background, Math

TEACHER: We have two new objectives to tackle today. We are going to take a closer look at our fact family houses for 10, and we're going to use number lines. Boys and girls, can you tell your teacher what a **number line** is? (*pause, then to Azulito*)

AZULITO: Well, it sounds like a line with numbers on it.

TEACHER: That is exactly what a **number line** is, Azulito, and we can use a number line to represent addition and subtraction just like we used the cubes.

We're also going to look again at the sums of 10 fact families. These are very special numbers we can call "friendly numbers."

Mathematically we call them **compatible numbers**. There's another one of our vocabulary words! (*Show, say, students repeat.*) It just means that the numbers add together to make 10. They are a sum of 10 fact family.

We're going to use our fact family sums of 10 houses, our cubes, and number lines to model these **compatible numbers**.

 **SMART BOARD**

Create the number lines, models, number sentences from fact family houses of 10.

Unit 2, Lesson 2

1st – 2nd



TV Lesson - continued

Comprehensible Input, Math

TEACHER: Let's lay out all of our sums of 10 fact family houses. It doesn't matter what order they are in as long as you can quickly get the fact family we want to work with next. (*show yours*)

Be sure your two 10-cube trains are handy. (*show yours*)

Now, let's take a look at our **BLM** Compatible Numbers on the Number Line.

First of all, take a few minutes, boys and girls, to explore these number lines. They are all the same. What do you observe on the top number line? Classroom Teachers, please collect their thoughts on the board of chart paper. (*Give them a fair amount of time to explore, then you and Azulito talk about the following attributes, writing them on the board.*)

- Straight line with arrows at each end – what do you suppose the arrows at each end means? (*The line goes on in both directions – we're just showing the numbers in a small part of it.*)
- There are straight lines spaced pretty equally apart with numbers under them. These are the numbers on the number line. What numbers do we have? (*zero through 10*)
- So (*pointing from zero to 1*), from here to here is ONE space. We have marked off 10 spaces on this number line. (*Count each space, starting at zero and run your finger or some marker to the next number on top of the number line to show the distance between the two lines.*)
- There are four number lines for every compatible numbers fact family. Why do you suppose we would have four number lines for each? Tell your Classroom Teachers, boys and girls. (*pause*) We have four number lines because most of the fact families will have four number sentences and we want to represent all of them.
- You may have seen more attributes of the line. Good for you! You are very observant!

Let's use all of our strategies available to us now to represent compatible numbers. What are compatible numbers?

AZULITO: Sums of 10 fact families

Unit 2, Lesson 2

1st – 2nd

TV Lesson - continued



TEACHER: Let's start with the sums of 10 fact family 2, 8, 10. Please find that house, boys and girls, and lay it where you can see it (*do so as students find theirs*). This fact family is a compatible number fact family.

Now use the cubes to make this sum of 10 fact family. How will you do that? Remember to use two colors. (*Pause, then show yours – two of one color, eight of the other.*) This train is a **compatible number** train.

We have our compatible number fact family house, and we have our compatible number train.

Let's use the number line now. There are many ways to use a number line. This is one way to use it.

What do you suppose you'll need to write at the top of each set of four numbers lines (*the compatible numbers fact family*)? Our first one is 2, 8, 10. (*Ask students to write on theirs while you write on yours.*)

We can add in any order we want to. I think I'll start with the smallest addend first, the two. We have to start at zero. (*Put your pencil at zero and make a little dot.*) Now we're going to jump over just like one of our water habitat frogs, two spaces. (*Make the jump shallow, just passing the vertical lines. Count the space to one, but do NOT dip down with the pencil. Count the space to two and jump down on the intersection of two line. Place a dot and make that jump line an arrow that ends on two.*)

AZULITO: That represents our 2!

TEACHER: Now we want to add on to the two. What do we have to do? Tell your teacher where you will start and how far your habitat frog will need to jump now. (*pause*)

We'll start on the two and jump eight spaces. (*Use the same format of counting the spaces but skipping over the numbers to land on 10.*)



Process for this Activity

- Choose the Sums of 10 Fact Family.
- Find the fact family house.
- Make the compatible number train from the cubes that represent this fact family.
- Represent the compatible numbers fact family on the number line.
- Write the number sentence above the number line to coincide with the jump lines the numbers represent.

Unit 2, Lesson 2

1st – 2nd

TV Lesson - continued



That is the first addition sentence of our **compatible number** fact family to be represented on the number line. Write the number sentence just above the jumping arrows (*do so, making sure the 2 is over the 2 line, the + is where the two jumping lines meet, the 8 is over the 8 jumping line and the =10 is over the ten.*)

AZULITO: And I see why the dot and the arrows on the jumping lines are important! When I look at your number line, I can see that the dot is where you started. The arrows on your jumping lines tell me which direction you went. I like this number line!

TEACHER: Then let's represent the second addition number sentence for this **compatible numbers** fact family. What is the second addition sentence? Tell your teacher, boys and girls, then we'll see if Azulito knows (*pause*).

AZULITO: Let's see, our fact family is 2, 8, 10. We have already represented $2 + 8 = 10$, so we need $8 + 2 = 10$. Let's do it! (*Repeat the same process.*)

TEACHER: We have represented both of our addition compatible number sentences for 2, 8, 10. What about the subtraction. Where do you think we should start on the number line for our subtraction problems? Girls and boys, please tell your Classroom Teachers where we should begin. (*pause*)

We'll start on the 10! We'll just make our jump lines in reverse, so that old habitat frog will be jumping back to zero now. Let's represent $10 - 2 = 8$. (*Read 10 subtract 2 equals 8.*) (*Follow the same process in reverse. The habitat frog jumps from 10 back two spaces, landing on 8.*)



TEACHER: This time I'm going to write the number sentence a little different $8 = 10 - 2$. Is that OK? Boys and girls, tell your Classroom Teacher why that is OK.

AZULITO: It's OK because it doesn't matter which side of the equal sign the answer is on. I can say $10 - 2 = 8$ or I can say that $8 = 10 - 2$. It's the same thing!

Process for this Activity

- Choose the Sums of 10 Fact Family.
- Find the fact family house.
- Make the compatible number train from the cubes that represent this fact family.
- Represent the compatible numbers fact family on the number line.
- Write the number sentence above the number line to coincide with the jump lines the numbers represent.

Classroom Teachers

Circulate the room to make sure that all students understand how to use the number line to add and subtract.

You will need to complete this assignment during the Follow-up Lesson, using the same format.

Unit 2, Lesson 2

1st – 2nd

TV Lesson - continued



Process for this Activity

- Choose the Sums of 10 Fact Family.
- Find the fact family house.
- Make the compatible number train from the cubes that represent this fact family.
- Represent the compatible numbers fact family on the number line.
- Write the number sentence above the number line to coincide with the jump lines the numbers represent.

Azulito's Corner

Unit 2, Lesson 2

How did your measurement lab compare to Lesson 1 measurement lab? Did the length of the fish change? Did the number of inch worms it took to measure change from the number of big paperclips it took to measure the fish in lesson 1? Why do you think that is so?

TEACHER: Correct – Now, we have one last subtraction sentence with the compatible numbers fact family to represent on the number line. Boys and girls, tell your teacher what the number sentence is and how you will represent it on your number line. (*Give time, then represent $10 - 8 = 2$ using the same process.*)

TEACHER: Well done. Boys and girls, How have we represented our compatible number fact families today? What strategies have we used to model them? (*pause*)

AZULITO: We use cube trains, fact family houses, the number line and number sentences. We used four different strategies today!

(If you have time to do another compatible number fact family, do so; otherwise Classroom Teachers will complete the assignment in the Follow-up Lesson. When you have done all you have time for, continue below. Be sure to end with Azulito explaining something.)

TEACHER: Good thinking, Azulito. You explained that very well. And now, I think you have a little task that you would like to explain to the boys and girls out there. This one sounds a little fishy!

AZULITO: Well, I suppose it is fishy – remember those fish you measured in Lessons 1 and today? Well, I have some questions about what you found out about their measures (*explain task*).

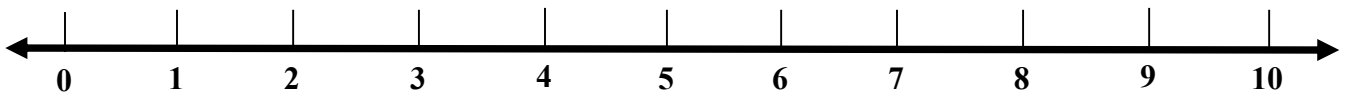
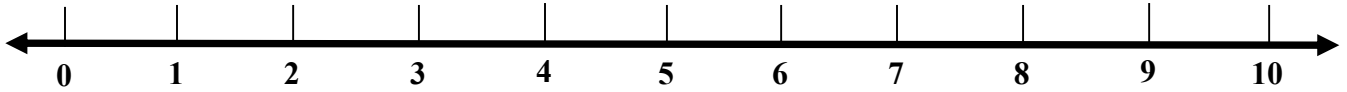
TEACHER: Thank you, Azulito! These are interesting questions. I can't wait to see how all of you respond!

Objectives: And now before we go, let's review what we have learned today! (*do so*)

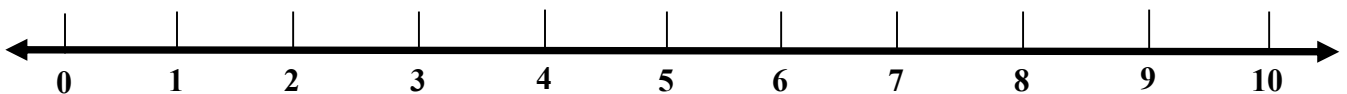
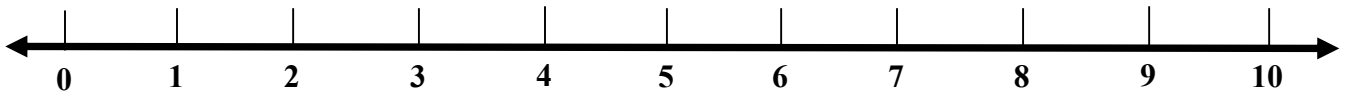


(Three per student)

Compatible Numbers (sums of 10 fact family) _____, _____, _____



Compatible Numbers (sums of 10 fact family) _____, _____, _____



Literature Vocabulary

habitat
oceans
colorful
blend
shore
tide pool
swamp
lake

Math Vocabulary

add
subtract
compare
regroup
tens
ones
math movie
fact families
compatible numbers

Materials

- Unifix or Linking cubes (two 1-color trains per student)
- **BLM TM** Fact Family Houses from TM Lesson (TV Teacher should have one filled out with all of the addition sentences.)

Time Clue

BB = 2 minutes

CI = 24 minutes

AC = 2 minutes

ELPS (*English Language Proficiency Standards*)
2A,2B,2F,2I,3A,3E,3H

CCRS (*College and Career Readiness Standards*)

ELA

II.B.1; III.B.1,2,3; IV.A.2,3;
IV.B.1,2,3

MATH

I.A.1; I.B.1; VIII.B.1,2; IX.A.1;
IX.B.1,2; IX.C.1,3; X.A.1,2

CROSS DISCIPLINARY

I.A.1,2; I.B.1,2,3,4; I.C.1,2,3;
II.A.2

Unit 2, Lesson 1

1st – 2nd

TV Lesson



Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.

Math Objectives:

- Solve addition and subtraction problems.
- Recognize fact families.
- Understand what the equal sign means.

Language Objectives:

- Listen to the TV Teacher.
- Speak: Explain fact families and how they can help you learn basic facts.
- Speak: Discuss your solution strategies.
- Read TV Teacher's notes on the TV.
- Write the fact families.

Building Background, Math

TEACHER: We're going to learn more about Fact Families during this unit. You know, understanding Fact Families can help us in our addition and subtraction. When we know our facts quickly, we can spend more time thinking about the problems they are used in! Did you know boys and girls, that when you know a fact family, you know FOUR different math facts – two addition and two subtraction!

AZULITO: Oh, that sounds good to me! But there are only addition number sentences in our Fact Family houses for nine?

Comprehensible Input, Math

TEACHER: Well, then, let's find out those subtraction sentences. Let's make a 2-color train for our first Fact Family house of nine. Let's work on the 1, 8, 9 house. What would that train look like boys and girls? Please make one addition train for this family. (*pause*)

AZULITO: That would be one (*color*) cubes and eight (*color*) cubes. And if I flip the train over, I have eight (*color*) cubes and one (*color*) cube. It's the same train, but the cubes are in a different order.

TEACHER: Well done. Boys and girls, I can see that most of you agree with Azulito! Make sure you have a $1 + 8 = 9$ train with your two colors of cubes. (*slight pause*) Now, subtract one (*pause*). How many cubes do you have left?

**SMART BOARD**

Create the models, number sentences and fact family houses.

Unit 2, Lesson 1**1st – 2nd****TV Lesson** - continued

AZULITO: That's easy, I have eight cubes left.

TEACHER: We had nine cubes, we subtracted one cube, and we have eight cubes left. What would that number sentence look like boys and girls? Please tell your teacher. *(pause)* The number sentence is $9 - 1 = 8$ *(read 9 subtract 1 = 8)*.

Alright, put your fact family train back together again, This time, subtract the eight cubes. *(do so)* How many cubes do you have left? *(pause)* There is only one cube left. And how would you write that number sentence? Once again, please tell your classroom teacher. *(pause)* $9 - 8 = 1$ *(read 9 subtract 8 = 1)*.

Find your 1, 8, 9 fact family house. You should already have the two addition sentences for the family on the top floor, or the two lines on top in the house. What are those two addition sentences? Let's read them together. $1 + 8 = 9$ $8 + 1 = 9$.

Now we have our two subtraction sentences. They'll go on the lower floor of the house. Write the two subtraction sentences on the lower two lines. $9 - 1 = 8$ *(9 subtract 1 = 8)* and $9 - 8 = 1$.

AZULITO: I see what you mean about knowing FOUR math facts. There are two addition and two subtraction for this house. WOW, all I have to do is remember one little fact family, and I have four different facts. I like this!!

TEACHER: Let's investigate more fact families. Find the house for 2, 7, 9. *(Repeat the same process.)*

(Complete the chart with the subtraction problems using the same format, leaving $0 + 9 = 9$ for last.)

AZULITO: We still have one house left. $0 + 9 = 0$

TEACHER: We certainly do, Azulito. I left that for last because I wanted the boys and girls to see something very special about zero. Boys and girls, do you remember anything very special about adding and subtracting zero? Tell your classroom teacher what you know. *(pause)*

Let's work with this one just a bit. The model is a little different.

Unit 2, Lesson 1

1st – 2nd

TV Lesson - continued



First, let's make the model for $0 + 9 = 9$. How would I do that boys and girls? What does that number sentence mean? (*pause*)

AZULITO: It means that I have NO cubes of one color and nine cubes of another.

TEACHER: Correct – everyone please make a $0 + 9$ train (*pause and make yours*). I have no (*color*) cubes, and I have nine (*color*) cubes. That makes nine cubes in all. And my number sentence is $0 + 9 = 9$. It's harder to see the flip, but imagine that the zero color is at the end. (*flip*) Now what number sentence do we have?

AZULITO: Nine of one color and none of the other color. That would be $9 + 0 = 9$.

TEACHER: Well done. Boys and girls, can you tell your Classroom Teacher what one of the subtraction sentences would be (*pause*)? $9 - 0 = 9$. And the other subtraction sentence? (*pause*) $9 - 9 = 0$.

Hmm, looking at these four number sentences, can you tell what is so special about the number zero? (*bit of a pause*)

AZULITO: Well, if I don't add anything to my cubes, then I have what I started with – zero means NO CUBES. And if I don't subtract anything from my cubes, then I have what I started with. Zero means NO CUBES.

TEACHER: Good thinking, Azulito. You explained that very well. When you add zero to any number or subtract zero from any number, you still have the same number. I know that I heard that same thinking from many of the boys and girls out there! GREAT JOB!

AZULITO: And speaking of explaining our thinking, I'd like to explain the Azulito Corner to you now (*do so*).

TEACHER: Thank you, Azulito! We love to see your strategies for solving problems!

Objectives: And now before we go, let's review what we have learned today! (*do so*)

Azulito's Corner Unit 2 Lesson 1

Tell us all the different strategies used today to solve your CGI problem. Share your class posters if you can.

LM - TM Unit 2, Lesson 1
(One per student)



Fact Family Houses

9

0

9

8

2

7

9

6

9

4

5



Fact Family Houses

BLM Unit 2, TV Lesson 1

Literature Vocabulary

tin
flour
flower
dent
footprint
mystery
solve

Math Vocabulary

two-digit numbers
tens and ones
regroup
exchange
trade

Materials

- Base ten blocks – 1 hundred, 18 tens, 18 units per student
4 dice per pair of students

BLM Combining Tens and Ones - 1 per student

Time Clue

BB = 1 minutes

CI = 26 minutes

AC = 1 minutes

ELPS (*English Language Proficiency Standards*)
2B, 2C, 2F, 2H, 2I, 3D, 3E, 3G

CCRS (*College and Career Readiness Standards*)

ELA
II.B.1; III.B.1,2,3; IV.A.2,3;
IV.B.1,2,3

MATH
I.A.1; I.B.1; VIII.B.1,2; IX.A.1;
IX.B.1,2; IX.C.1,3; X.A.1,2

CROSS DISCIPLINARY
I.A.1,2; I.B.1,2,3,4; I.C.1,2,3;
II.A.2

SMART BOARD

Create the models.

	□	□	□	□	□
	□	□			

Unit 3, Lesson 1

1st – 2nd

TV Lesson

Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.

Math Objectives:

- Create sets of tens and ones using concrete objects to describe, Compare, and order whole numbers.
- Model addition (and subtraction) of two-digit numbers with objects, pictures, words, and numbers.

Language Objectives:

- Explain the process of adding 2-digit numbers.
- Use the math vocabulary during the activity.
- Discuss solution strategies.

Building Background, Math

You were creating 2-digit numbers during your classroom lesson. We'll be creating 2-digit numbers and adding them today. Let's add a simple pair of numbers.

Comprehensible Input, Math

Please use the base ten blocks to represent the number 15. (*Pause before you demo by showing the digits 15 and saying, "That would be 1 ten and 5 units, placing the blocks as you describe them."*)

Now, I want to add 12 to that. How would you represent 12 using the fewest number of base ten blocks? (*Pause, then write the digits 12 on the board, placing the appropriate blocks while you say, "that would be 1 ten and 2 ones."*)

Let's combine the two sets. I like to start with the ones. How many ones or unit cubes do we have? (*Response time; then add them aloud: five add two equals seven units.*)

Do we need to trade?

AZULITO: You could have also asked if you need to regroup or exchange.

Yes, that is correct, Azulito. Trade, regroup and exchange are the same names for taking 10 of the smaller place value and exchanging them for one of the next larger place value. Here we are taking ten ones and trading them for one ten. (*physically do so*)

Now, do we have enough ones to trade, exchange, regroup for a ten?

Unit 3, Lesson 1

1st – 2nd

TV Lesson - continued



AZULITO: No we don't. We need 10 units to trade for one ten. We don't have enough.

TEACHER: Excellent. So we now have seven units. How many tens do we have when we combine the two sets? (*pause, then count 1 ten add 1 ten equals 2 tens*)

So when we add 15 and 12, our answer or sum is 27.

AZULITO: That was easy! Can we try a harder one?

TEACHER: Of course. Let's find the sum of 27 and 15. What are the fewest number of base ten blocks you can use to make 27? Please tell your teacher, girls and boys. (*pause, then say and demo 2 tens and 7 ones*) And what are the fewest number of blocks we can use to make 15? (*same process*)

Let's combine the two sets. What is the sum of 7 and 5? (*pause*)

AZULITO: I know – the sum of 7 and 5 is 12! I counted on (*demo*).

TEACHER: Do we have enough to regroup? (*response time*) Yes we do. We have more than 10 units. Let's take 10 of these units and regroup them for one ten. (*Do so physically, counting out the 10 units, and physically "trading" them in for the one ten which you put in the row of tens and tell students to do so.*)

Now, how many ones do we have? (*pause*) We have 2 ones. And how many tens do we have? (*pause*) We have 4 tens 10, 20, 30 and the exchanged 10 makes 40. Our number is 4 tens and 2 ones or 42.

You have a record sheet, **BLM** Combining Tens and Ones. Let's write what we just modeled.

First, you see that we have our number sentence 27 add 15 equals.

Now, we modeled that with base ten blocks. Let's draw the base ten blocks, but instead of rectangles and squares, let's just draw lines for tens and dots for ones. We have 2 tens (*draw 2 lines horizontally*) and we have 7 ones. (*Draw 7 dots, in rows of 5.*) I like to draw my units in sets of five so I can easily see when I have ten.

Reminder:

Use the terms Regroup, Trade and Exchange interchangeably. These are common terms being used in curriculum today across the USA. We need to promote flexibility in our students' thinking so that they can see that the action is much more important than the verbal label we put on it. As long as we are mathematical in our verbiage so the word describes what we are mathematically accomplishing, the word is acceptable.

Unit 3, Lesson 1

1st – 2nd

TV Lesson - continued



Now, let's draw the second number we modeled. (*Demonstrate the same way, telling students to do the same.*)

Now, when we combine, let's draw circles around all of the units that make ten. (*do so*) We exchanged these 10 units for 1 ten. What did we do with that ten?

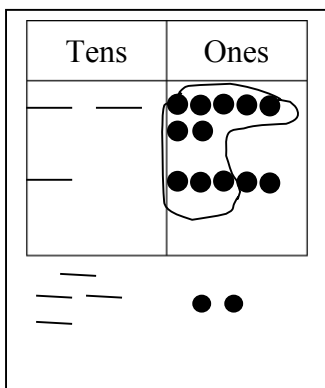
AZULITO: We put it over the rest of the tens.

TEACHER: Yes we did. So let's draw our little ten line here so we can combine it with the other tens (*do so as per the model*).

How many ones do we have left in the ones? (2)

How many tens do we have now? (4)

What is the sum of 27 and 15? 42



Now let's show what we did using numbers to represent the quantities.

We had 2 tens (*write 2 in tens column*) and 7 ones (*write 7 in the ones column*); and we had 1 ten (*write as demonstrated*) and 5 ones (*write as demonstrated*). We found that we had 12 ones (*write in the cloud*), which is 2 ones and 1 ten (*write as demonstrated*).

Once we finished all of our trading, we have a total of 4 tens and 2 ones.

AZULITO: Now I see what my older brother is doing when he adds big numbers. I understand that now!

TEACHER: Very good, Azulito, very good! Why don't we try a couple more problems to help you and the boys and girls have a picture in your mind of the base ten blocks. We'll be using the blocks for awhile, but once you have a picture of the blocks, and can really see what you are doing when you trade, regroup, exchange, AND you learn your basic addition and subtraction facts, you'll be solving problems more quickly and easily!

Tens	Ones
1	
2	7
1	5
4	2



Unit 3, Lesson 1

1st – 2nd

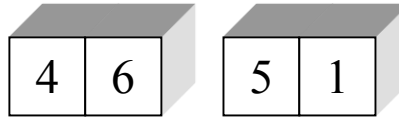


TV Lesson - continued

AZULITO: OK, I'm ready! Are you ready boys and girls? But, I see that you have four dice. What are you going to do with the dice?

TEACHER: In the next two problems, we are going to throw the four dice and make two 2-digit numbers to add together. The girls and boys are going to play a game in their follow-up activity, so we can practice that part of the game now.

We're going to throw the four dice at the same time. (*do so*)
Make any two 2-digit numbers using them (*just take two dice and put them side by side so you see the 2-digit number; then do the same for the other pair – here's an example*).



Now we'll follow the steps we did in our first problem.

Process:

1. Model with base tens to the side of the record sheet, making sure you ask if you have enough units to trade, then doing so if necessary. **WARNING:** you are working with dice, so you might need to trade ten 10s for a hundred. That's OK – make it a natural progression. You can make a ten in a column, therefore you need to trade.
2. Draw a picture of the model in the first table.
3. Ask if there are enough units to trade, if so, do so.
4. Look at the tens column. If you had to regroup, simply do so by circling the 10 tens, then drawing a small square to the left of the tens column.
5. Work through the numerical representation. If you had to exchange for 10 tens, just draw a little cloud out to the left of the addition sign. Count by TENS when you add up the tens column so you actually get to 100. You want to write the actual sum in the cloud. Students need to see that we take short cuts when writing numbers.

AZULITO: I get it! I get it! And you can teach me the game after we leave. Before we go, I want to tell the girls and boys about my Azulito's Corner task for today. It's going to be fun!

TEACHER: Thank you, Azulito. It sounds like you and I will learn new strategies from our students! And now, let's see what we learned today and how we learned it!

Objectives: And now before we go, let's review what we have learned today! (*do so*)

Reminder:

Use the terms Regroup, Trade and Exchange interchangeably. These are common terms being used in curriculum today across the USA. We need to promote flexibility in our students' thinking so that they can see that the action is much more important than the verbal label we put on it. As long as we are mathematical in our verbiage so the word describes what we are mathematically accomplishing, the word is acceptable.

Azulito's Corner

Lesson 1

Talk about your strategy for finding the missing number in What's Missing. Please post all of the different strategies used in your class.



$$\begin{array}{r} 27 \\ + 15 \\ \hline \end{array}$$

Tens	Ones

Tens	Ones

$$\begin{array}{r} + \\ \hline \\ \hline \end{array}$$

Tens	Ones

Tens	Ones

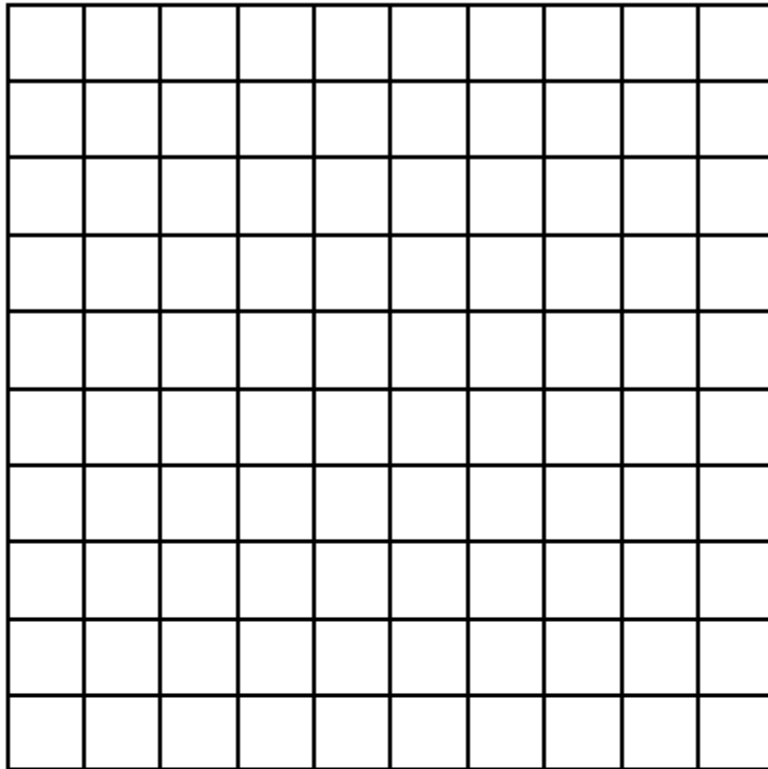
$$\begin{array}{r} + \\ \hline \\ \hline \end{array}$$

Tens	Ones

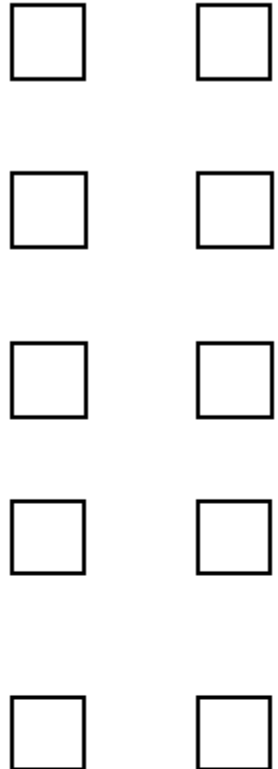
Tens	Ones

Paper Base Ten blocks

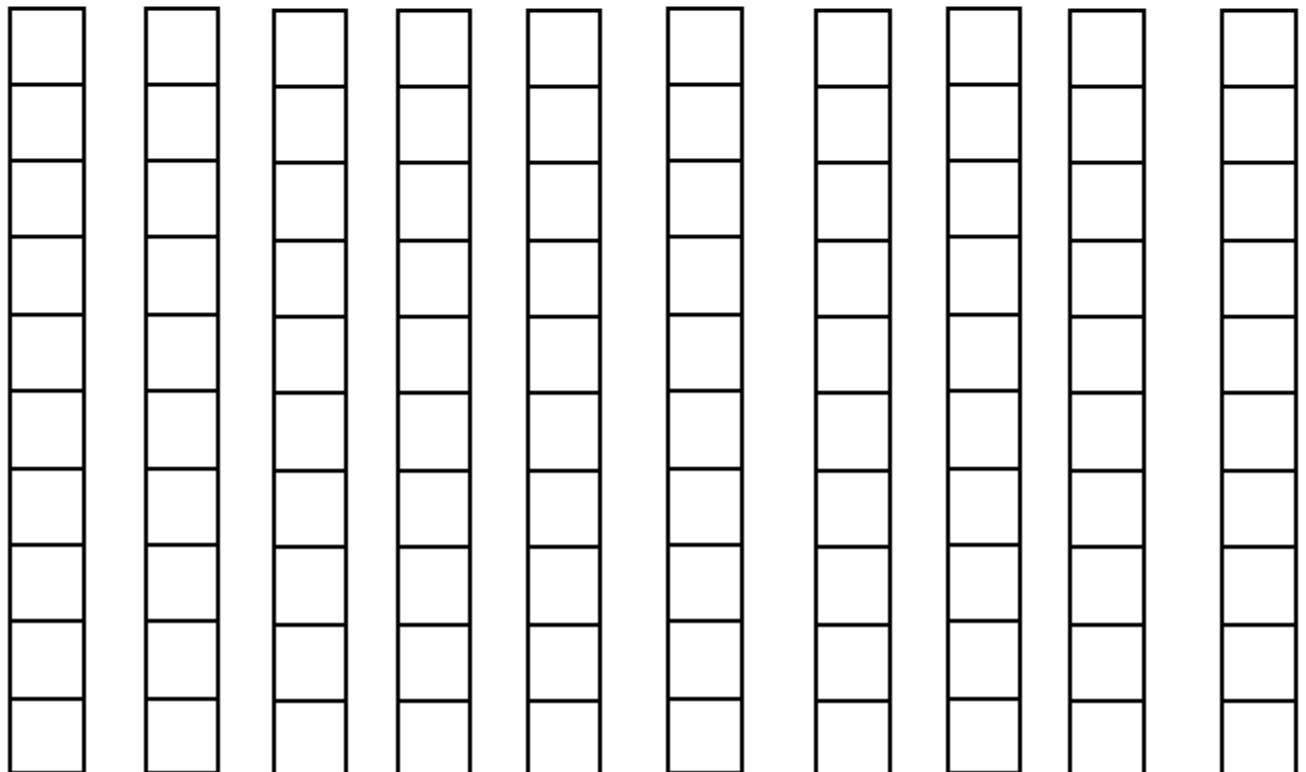
Hundreds flat



Ones



Tens





Pre-/Post- Supplies

	<p>Educator Script: Educator reads to the student for the assessment. This has more detail than the student copy.</p> <p>Student Copy: Student has simple wording to follow along what the Educator is reading, and then uses to solve for the answers.</p>
	<p>Number Line and blank Number Bonds. <i>Included in Student Copy for student to pull off and have the choice to use or not.</i></p>
	<p>30 counters so the student has the choice to use or not.</p>
	<p>Real Sandwich,* paper plate, plastic knife</p>

*A paper graphic of a sandwich is attached to the Student Copy as a paper alternative. The student(s) would need scissors to cut.





Post-Test Educator Script and Answer Key

Read to individual student or to a group. Distribute Student Copies. Tell students to pull off the last page with number line so they have it handy to use.

<p>NY-1.OA.1</p> <p>Extra Supplies student can use for strategy to solve during the whole assessment.</p> <ul style="list-style-type: none"> • Number line • Blank number bond • Counters <p>CGI – Add to, Result Unknown</p> <p><input type="checkbox"/> 1</p> <p>Answer: nineteen</p> <p>Strategy: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Award 1 point for strategy and answer. Students must have both correct to earn 1 point.</p>	<p>1</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did.</p> <p><i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno de los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>Marcos planted 14 flowers on Monday. He planted 5 more flowers on Tuesday. How many flowers did Marcos plant?</p> <p><i>Marcos plantó 14 flores el lunes. Plantó 5 flores más el martes. ¿Cuántas flores plantó Marcos?</i></p> <p>Now look at your problem solving tools. Select a way to solve the problem as I read the story again.</p> <p><i>Ahora miren los objetos que tienen para resolver el problema. Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia.</i></p> <p>(Read the story again and provide time for students to solve it.)</p> <p>Show me how you solved the problem.</p> <p><i>Muéstrenme cómo resolvieron el problema.</i></p>
<p>NY-1.OA.8</p> <p><input type="checkbox"/> 2</p> <p>Answer:seventeen</p> <p>Scoring: Award 1 point for correct answer.</p>	<p>2</p> <p><input type="text" value="15"/> - 6 = 9</p> <p>What number makes this sentence true? Use any strategy you wish to solve the problem. Write the number in the box.</p> <p><i>¿Qué número hace que la frase sea verdad? Utilicen la estrategia que quieran para resolver el problema. Escriban el número correcto en la caja.</i></p>



Post-Test Educator Script and Answer Key

<p>NY-1.OA.1</p> <p>CGI – Put Together/ Take Apart, Total Unknown</p> <p><input type="checkbox"/> 3a</p> <p>Answer: fourteen</p> <p>Scoring: Award 1 point for the answer</p> <p><input type="checkbox"/> 3b</p> <p>Strategy Point: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Award 1 point for the strategy.</p>	<p>3</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did.</p> <p><i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno de los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>On the playground there were 8 children on the swings and 6 children in line for the slide. How many children were on the playground?</p> <p><i>En el patio de la escuela había 8 niños en los columpios y 6 niños en fila esperando su turno en el tobogán. ¿Cuántos niños había en el patio?</i></p> <p>Now look at you r problem solving tools. Select a way to solve the problem as I read the story again. Ahora miren los objetos que tienen para resolver el problema. Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia. (Read the story again and provide time for students to solve it.)</p> <p>Show me how you solved the problem. Muéstrenme cómo resolvieron el problema.</p>
<p>NY-1.OA.1</p>	<p>4</p> <p>Look at the shapes. <i>Miren las formas.</i></p> <div style="text-align: center;">   </div>



Post-Test Educator Script and Answer Key

<p><input type="checkbox"/> 4</p> <p>There are fourteen shapes. Number sentence d should be circled.</p> <p>Scoring: Award one point for student correctly answering both parts.</p>	<p>How many shapes? <i>¿Cuántas formas hay?</i> _____</p> <p>Which number sentence below matches the shapes? <i>¿Cuál de las frases numéricas que hay abajo representa las formas?</i></p> <p>A $8 + 6 = 14$</p> <p>B $8 + 5 = 13$</p> <p>C $7 + 6 = 13$</p> <p>D $9 + 5 = 14$</p>
<p>NY-1.OA.1</p> <p>CGI - Compare, Difference Unknown (<i>fewer</i>)</p> <p><input type="checkbox"/> 5a</p> <p>Answer: five</p> <p>Scoring: Award 1 point for the answer</p> <p><input type="checkbox"/> 5b</p> <p>Strategy Point: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Award 1 point for the strategy.</p>	<p>5</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did.</p> <p><i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>Eduardo baked 12 cookies. Monica baked 7 cookies. How many fewer cookies did Monica bake than Eduardo?</p> <p><i>Eduardo preparó 12 galletas. Mónica preparó 7 galletas. ¿Cuántas galletas preparó Mónica menos que Eduardo?</i></p> <p>Now look at your problem solving tools. Select a way to solve the problem as I read the story again.</p> <p><i>Ahora miren los objetos que tienen para resolver el problema. Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia.</i> (Read the story again and provide time for students to solve it.)</p> <p>Show me how you solved the problem. <i>Muéstrenme cómo resolvieron el problema.</i></p>



Post-Test Educator Script and Answer Key

<p>NY-1.OA.1</p> <p>CGI – Take From, Result Unknown</p> <p><input type="checkbox"/> 6</p> <p>Answer: nine</p> <p>Strategy Point: Students could solve by drawing a picture, using an algorithm (using numbers and a process), drawing and using a number line – any reasonable strategy is acceptable.</p> <p>Scoring: Students must have both the correct answer and strategy to earn 1 point.</p>	<p>6</p> <p>I am going to read you a math story. The first time I read it, close your eyes and see the math movie in your mind. The second time I read it, solve the problem using one of the tools you have on your desk. Show me what you did.</p> <p><i>Voy a leerles un cuento de matemáticas. La primera vez que lo lea, cierren los ojos y vean las imágenes matemáticas en su mente. La segunda vez que lo lea, resuelvan el problema utilizando uno de los objetos que tienen sobre la mesa. Muéstrenme lo que hicieron.</i></p> <p>Kendra caught 16 bugs. 7 of them crawled away. How many bugs does she have now? Kendra cazó 16 insectos. 7 de ellos se escaparon. ¿Cuántos insectos tiene ahora?</p> <p>Now look at your problem solving tools. Select a way to solve the problem as I read the story again. <i>Ahora miren los objetos que tienen para resolver el problema.</i></p> <p><i>Seleccionen una manera de resolver el problema mientras les vuelvo a leer la historia.</i> (Read the story again and provide time for students to solve it.)</p> <p>Show me how you solved the problem. <i>Muéstrenme cómo resolvieron el problema.</i></p>
<p>NY-1.OA.2 NY-1.OA.3</p> <p><input type="checkbox"/> 7</p> <p>Answer: circle the seven and the three</p> <p>Scoring: Award 1 point for circling the two correct numbers.</p>	<p>7</p> <p>Look at this number sentence. <i>Miren esta frase numérica.</i></p> <p style="text-align: center;">7 + 3 + 19 = 29</p> <p>Circle the numbers that make 10.</p> <p><i>Señalen con un círculo los números que hacen 10.</i></p>



Post-Test Educator Script and Answer Key

<p>NY-1.G.3</p> <p>Materials: 1 whole sandwich (peanut butter, cheese, your choice) Plastic knife 2 paper desert plates (or use the paper alternative sandwich and scissors)</p> <p><input type="checkbox"/> 8a</p> <p>Scoring: Award 1 point if the student divides the sandwich in approximately equal parts and can use the term fourths.</p> <p><input type="checkbox"/> 8b</p> <p>Scoring: Award 1 point for the explanation (key words listen for: equal, same amount/size).</p>	<p>8</p> <p>Cut the sandwich so that 4 children may share it equally. <i>Corten el sándwich para que 4 niños puedan compartirlo igualmente.</i> (Wait until finished.)</p> <p>What do you call these equal? <i>¿Qué otro nombre tienen estas partes iguales?</i> (Pause)</p> <p>Show or tell me how you know they are equal. <i>Muéstrame o dime como sabes que son iguales.</i> (Pause and watch for comparison)</p>


 **Post-Test-Student Copy**

Student Name: _____

Educators: Please remember to use the script provided to administer this assessment.

<p><input type="checkbox"/>1 1 Point</p>	<p>1</p> <p>Marcos planted 14 flowers on Monday. He planted 5 more flowers on Tuesday. How many flowers did Marcos plant?</p>
<p><input type="checkbox"/>2 1 Point</p>	<p>2</p> <p><input type="text"/> - 6 = 9</p>
<p><input type="checkbox"/>3a 1 Point Answer <input type="checkbox"/>3b 1 Point Strategy</p>	<p>3</p> <p>On the playground there were 8 children on the swings. 6 children were in line for the slide. How many children were on the playground?</p>

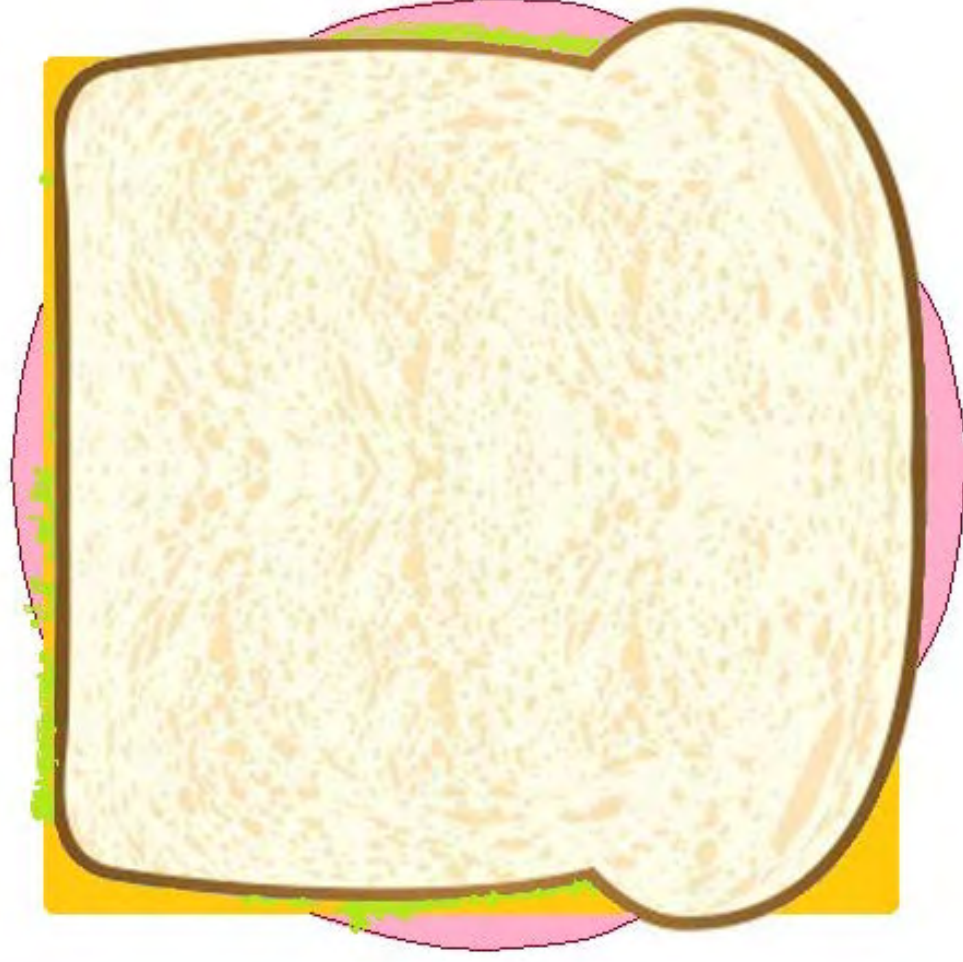
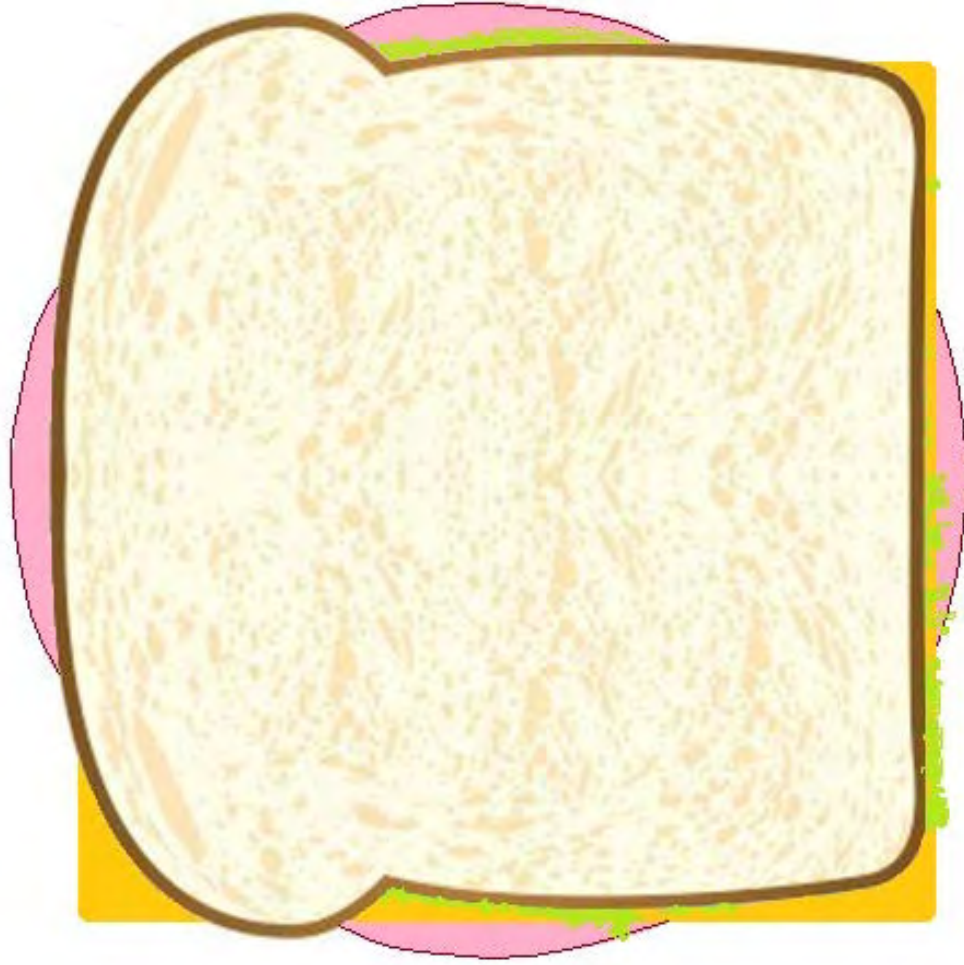
Student Name: _____

<p><input type="checkbox"/> 4 1 Point</p>	<p>4</p> <p></p> <p>How many shapes are there? _____</p> <p>Which number sentence below matches the shapes?</p> <p>Circle your answer.</p> <p>A $8 + 6 = 14$</p> <p>B $8 + 5 = 13$</p> <p>C $7 + 6 = 13$</p> <p>D $9 + 5 = 14$</p>
<p><input type="checkbox"/> 5a 1 Point Answer</p> <p><input type="checkbox"/> 5b 1 Point Strategy</p>	<p>5</p> <p>Eduardo baked 12 cookies. Monica baked 7 cookies. How many fewer cookies did Monica bake than Eduardo?</p>

Student Name: _____

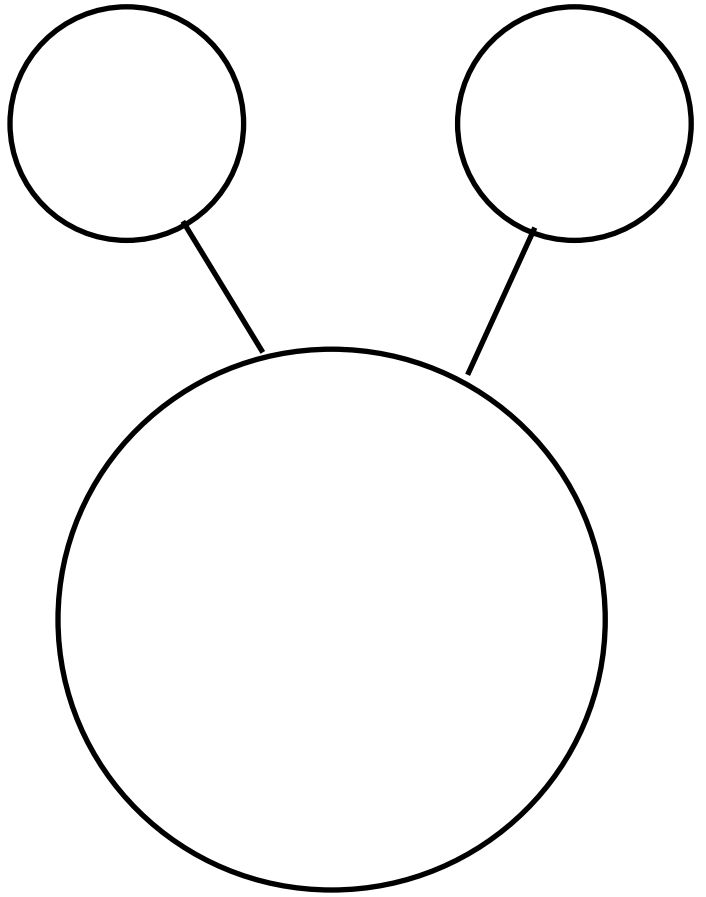
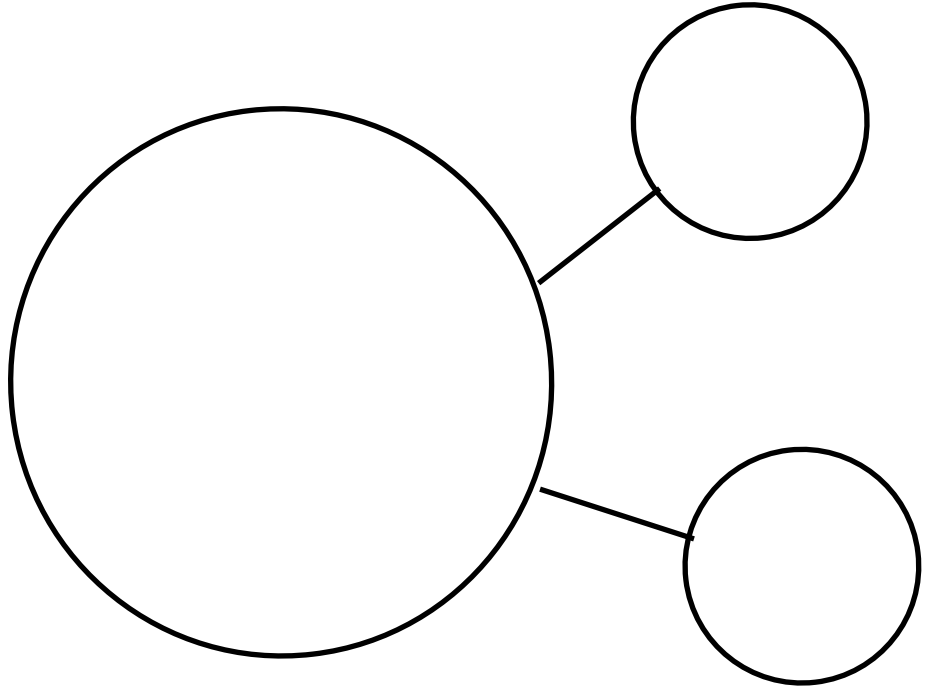
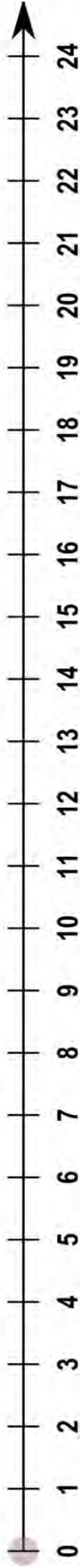
<input type="checkbox"/> 6 1 Point Answer	6 Kendra caught 16 bugs. 7 of them crawled away. How many bugs does she have now?
<input type="checkbox"/> 7 1 Point	7 Look at this number sentence. $7 + 3 + 19 = 29$ Circle the numbers that make 10.
<input type="checkbox"/> 8a 1 Point Answer <input type="checkbox"/> 8b 1 Point Explanation	8 Cut this sandwich so that 4 children may share it equally. What do you call these equal parts? Show or tell me how you know they are fair shares?
_____/11 Total Points Earned	

Kindergarten Assessment #9 Paper Sandwich to cut.



Paper Sandwich to cut.

Kindergarten Assessment #9





Nombre _____

Educators: Please remember to use the script provided to administer this assessment.

<input type="checkbox"/> 1 1 punto	1 Marcos plantó 14 flores el lunes. Plantó 5 flores más el martes. ¿Cuántas flores plantó Marcos.
<input type="checkbox"/> 2 1 punto	2 $\square - 6 = 9$
<input type="checkbox"/> 3a 1 punto respuesta <input type="checkbox"/> 3b 1 punto estrategia	3 En el patio de la escuela había 8 niños en los columpios. 6 niños estaban en fila esperando su turno en el tobogán. ¿Cuántos niños había en el patio?

Nombre _____

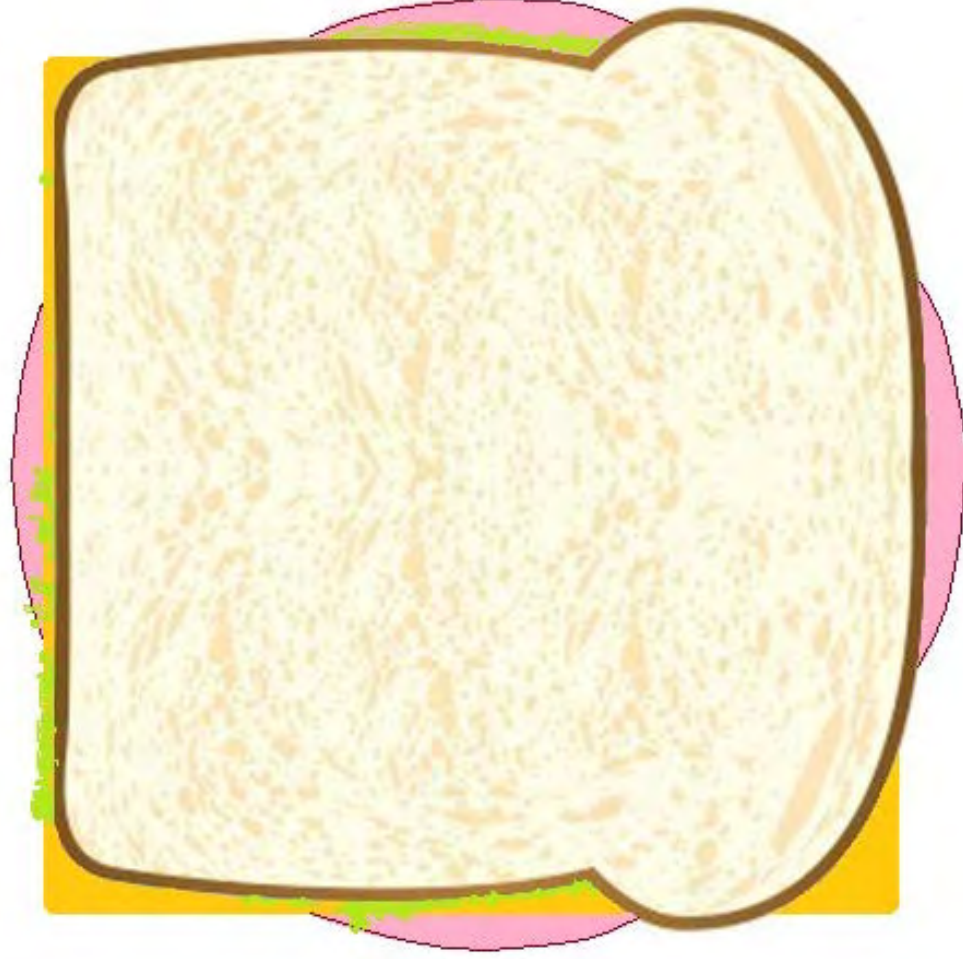
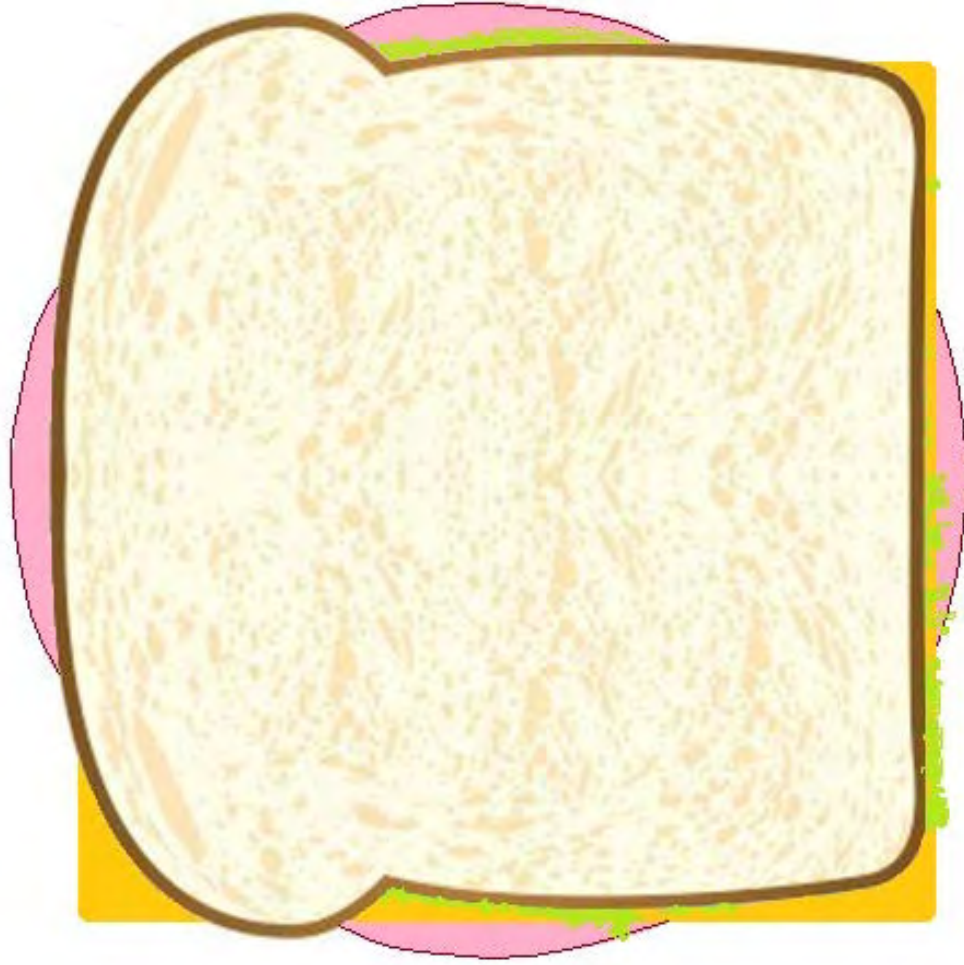
<p><input type="checkbox"/> 4 1 punto</p>	<p>4</p> <p> </p> <p>¿Cuántas formas hay? _____</p> <p>¿Cuál de estas frases numéricas representan las formas? Señala tu respuesta con un círculo.</p> <p>A $8 + 6 = 14$</p> <p>B $8 + 5 = 13$</p> <p>C $7 + 6 = 13$</p> <p>D $9 + 5 = 14$</p>
<p><input type="checkbox"/> 5a 1 punto respuesta <input type="checkbox"/> 5b 1 punto estrategia</p>	<p>5</p> <p>Eduardo preparó 12 galletas. Mónica preparó 7 galletas. ¿Cuántas galletas preparó Mónica menos que Eduardo?</p>



Nombre _____

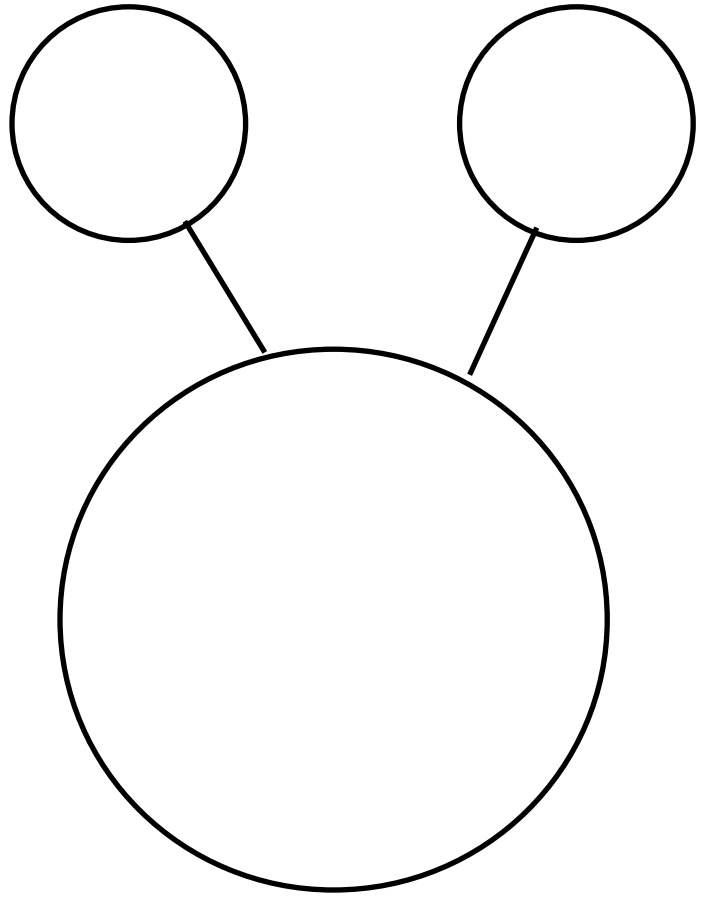
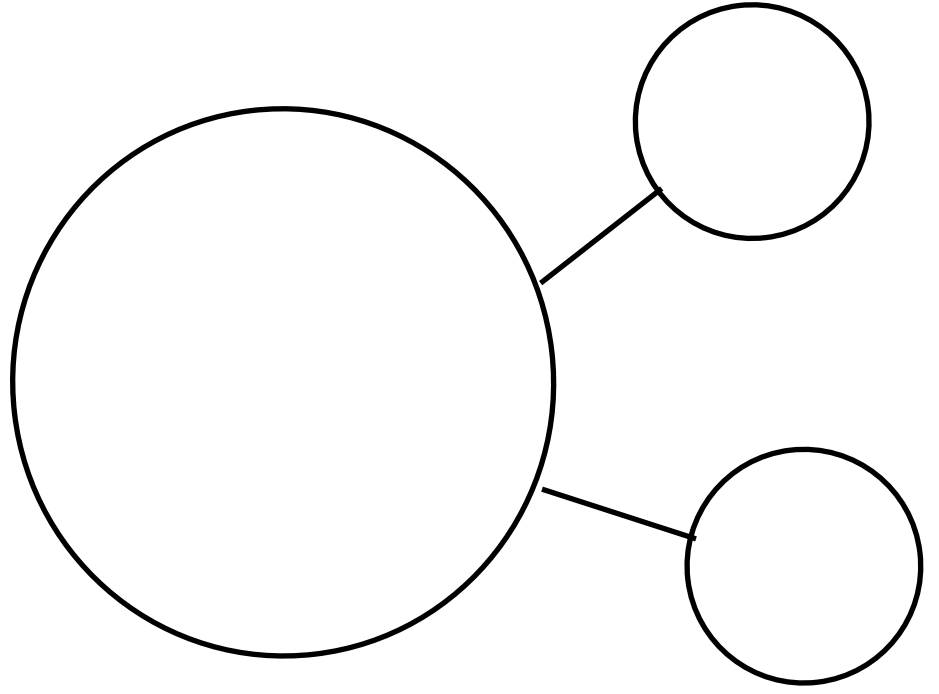
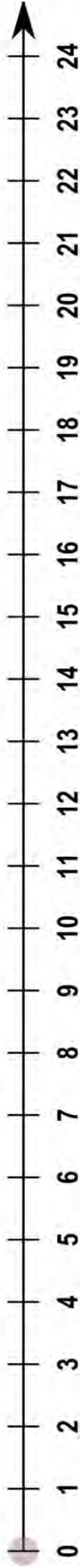
<input type="checkbox"/> 6 1 punto respuesta	6 Kendra cazó 16 insectos. 7 de ellos se escaparon. ¿Cuántos insectos tiene ahora?
<input type="checkbox"/> 7 1 punto	7 Miren esta oración numérica. $7 + 3 + 19 = 29$ Señalen con un círculo los números que hacen 10.
<input type="checkbox"/> 8a 1 punto <input type="checkbox"/> 8b 1 punto explicación	8 Corten el sándwich para que 4 niños puedan compartirlo igualmente. ¿Qué otro nombre tienen estas partes iguales? Muéstrame o dime cómo saben que son partes iguales.
_____/11 Total Earned Points	

Kindergarten Assessment #9 Paper Sandwich to cut.



Paper Sandwich to cut.

Kindergarten Assessment #9





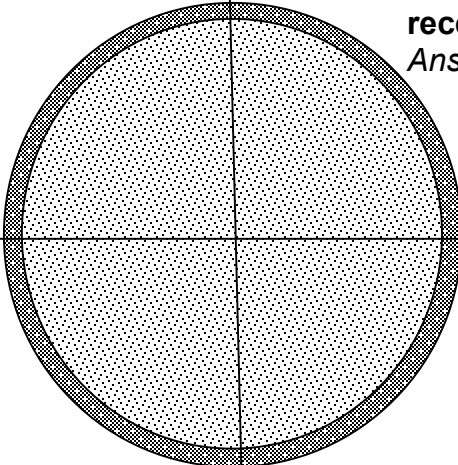
Note: “Strategy” refers to any method that could lead to the correct answer. Students may use a correct strategy and still get an incorrect answer.

Objective/Needs	Problems
<p>NY-2.OA.2a</p> <p>1- Award 1 point for having all four, related number sentences.</p>	<p>1. Use the following numbers to make a <i>Fact Family</i>.</p> <p style="text-align: center;">15 8 7</p> <p style="text-align: center;">$8 + 7 = 15$ $7 + 8 = 15$ $15 - 7 = 8$ $15 - 8 = 7$</p> <p style="text-align: center;"><i>Student has to write all four number sentences, to award the point.</i></p>
<p>NY-2.OA.2b</p> <p>2-Award 1 point for the answer.</p>	<p>2.</p> <div style="text-align: center; border: 2px solid blue; padding: 10px; width: fit-content; margin: 0 auto;"> $13 - 6 = 7$ </div>
<p>NY-2.OA.1</p> <p>CGI – Add To, Result Unknown</p> <p>3a-Award 1 point for the correct answer</p> <p>3b-Award 1 point for <i>showing</i> a reasonable strategy</p>	<p>3. Marcos planted 15 flowers. His brother planted 10 flowers. How many flowers did they plant together? Show your work.</p> <p><i>Answer: 25 plants.</i></p> <p>Strategy Point: <i>Students may choose to use any reasonable strategy such as drawing a picture, breaking apart, traditional algorithm (using numbers and a process), drawing and using a number line, etc.</i></p> <p><i>You can ask students to explain their thinking if the strategy is unclear.</i></p> <p>Note: <i>Writing labels is important to stress during instruction.</i></p> <p><i>For the purpose of this assessment, students do not lose credit when the label is missing.</i></p>
<p>.... .NBT</p>	<p>4. Solve: 26 - 18 Show your work.</p>



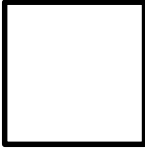
<p>4a-Award 1 point for the correct answer. 4b-Award 1 point for showing a reasonable strategy.</p>	<p>Answer: 8</p> <p>Strategy Point: Students may choose to use any reasonable strategy such as drawing a picture, breaking apart, traditional algorithm (using numbers and a process), draw and use a number line, etc.</p> <p>You can ask students to explain their thinking if the strategy is unclear.</p>
<p>NY-2.OA.1</p> <p>CGI – Add To, Change Unknown</p> <p>5a-Award 1 point for the correct answer. 5b-Award 1 point for showing a reasonable strategy</p>	<p>5. Roger counted his pennies and found that he had 79 in one piggy bank. He needs 90 pennies. How many more pennies does he need? Show your work.</p> <p>Answer: 11 pennies.</p> <p>Strategy Point: Students may choose to use any reasonable strategy such as drawing a picture, breaking apart, traditional algorithm (using numbers and a process), number line, etc.</p> <p>You can ask students to explain their thinking if the strategy is unclear.</p> <p>Note: Writing labels is important to stress during instruction. For the purpose of this assessment, students do not lose credit when the label is missing.</p>
<p>NY-2.OA.1</p> <p>CGI – Compare, Difference Unknown</p> <p>6a-Award 1 point for the correct answer. 6b-Award 1 point for showing a reasonable strategy</p>	<p>6. Rosa’s big brother bicycled 73 miles last month. He bicycled 39 more miles than Rosa. How many miles did Rosa bicycle last month? Show your work.</p> <p>Answer: 34 miles.</p> <p>Strategy Point: Students may choose to use any reasonable strategy such as drawing a picture, breaking apart, traditional algorithm (using numbers and a process), drawing and using number line, etc.</p> <p>You can ask students to explain their thinking if the strategy is unclear.</p> <p>Note: Writing labels is important to stress during instruction. For the purpose of this assessment, students do not lose credit when the label is missing.</p>



<p>NY-2.G.3</p> <p><i>7-Award 1 point if the student both answers the question and follows the directions to divide the rectangle.</i></p>	<p>7. You are sharing the pizza equally with yourself and 3 friends.</p> <p>What fractional part of the pizza will each of you receive? <i>Answer: 1/4</i></p>  <p>Use the circle to draw how you will divide the pizza.</p> <p><i>Student draws lines to approximate 4 equal shares.</i></p>
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 **Post-Test**

Name: _____

<input type="checkbox"/> 1 1 Point	<p>1. Use the following numbers to make a <i>Fact Family</i>.</p> <p style="text-align: center;">15 8 7</p>
<input type="checkbox"/> 2 1 Point	<p>2.</p> <p style="text-align: center;"> — 6 = 7</p>
<input type="checkbox"/> 3a 1 Point Answer <input type="checkbox"/> 3b 1 Point Strategy	<p>3. Marcos planted 15 flowers. His brother planted 10 flowers. How many flowers did they plant together?</p> <p>Show your work.</p>

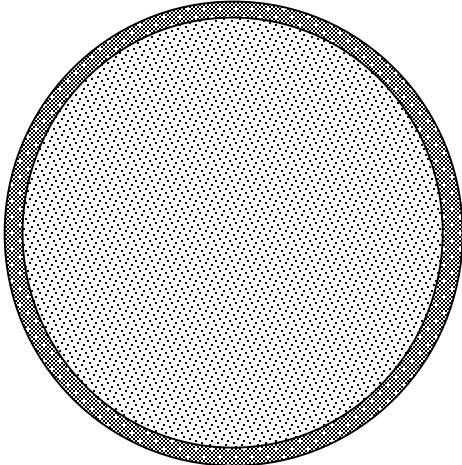
 **Post-Test**

Name: _____

<input type="checkbox"/> 4a 1 Point Answer <input type="checkbox"/> 4b 1 Point Strategy	4. Solve: 26 - 18 Show your work.
<input type="checkbox"/> 5a 1 Point Answer <input type="checkbox"/> 5b 1 Point Strategy	5. Roger counted his pennies and found that he had 79 in one piggy bank. He needs 90 pennies. How many more pennies does he need? Show your work.
<input type="checkbox"/> 6a 1 Point Answer <input type="checkbox"/> 6b 1 Point Strategy	6. Rosa's big brother bicycled 73 miles last month. He bicycled 39 more miles than Rosa. How many miles did Rosa bicycle last month? Show your work.

 **Post-Test**

Name: _____

<p><input type="checkbox"/> 7 1 Point Answer <i>Must have both parts to be correct.</i></p>	<p>7. You are sharing the pizza equally with yourself and 3 friends.</p> <p>What fractional part of the pizza will each of you receive?</p> <p>Use the circle below to draw how you will divide the pizza into fractional parts.</p> 
<p><u> </u> /11 Total Points</p>	



Post-Test

SPANISH

Nombre: _____

<input type="checkbox"/> 1 1 punto	<p>1. Utiliza los números siguientes para componer una familia de hechos (fact family).</p> <p style="text-align: center;">15 8 7</p>
<input type="checkbox"/> 2 1 punto	<p>2.</p> <p style="text-align: center;"><input type="text"/> - 6 = 7</p>
<input type="checkbox"/> 3a 1 punto respuesta	<p>3. Marcos plantó 15 flores. Su hermano plantó 10 flores. ¿Cuántas flores plantaron en total?</p> <p>Muestra tu trabajo.</p>
<input type="checkbox"/> 3b 1 punto estrategia	



Post-Test

SPANISH

Nombre: _____

<p><input type="checkbox"/> 4a 1 punto respuesta</p> <p><input type="checkbox"/> 4b 1 puntos estrategia</p>	<p>4. Resuelve:</p> <p style="text-align: center;">26 - 18</p> <p style="text-align: center;">Muestra tu trabajo.</p>
<p><input type="checkbox"/> 5a 1 punto respuesta</p> <p><input type="checkbox"/> 5b 1 punto estrategia</p>	<p>5. Roger contó sus centavos y descubrió que tenía 79 en una alcancía. Roger necesita 90 centavos. ¿Cuántos centavos más necesita?</p> <p style="text-align: center;">Muestra tu trabajo.</p>
<p><input type="checkbox"/> 6a 1 punto respuesta</p> <p><input type="checkbox"/> 6b 1 punto estrategia</p>	<p>6. El hermano mayor de Rosa recorrió un total de 73 millas en bicicleta el mes pasado. Recorrió 39 millas más que Rosa. ¿Cuántas millas en bicicleta recorrió Rosa el mes pasado?</p> <p style="text-align: center;">Muestra tu trabajo.</p>



Post-Test

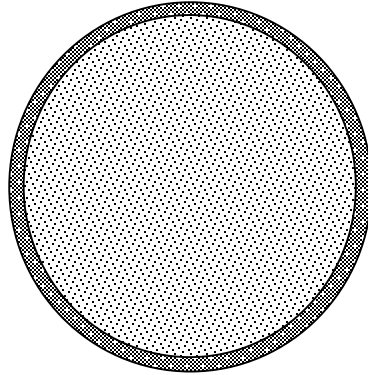
Nombre: _____

7
1 punto
respuesta
*La respuesta
tiene que
tener las dos
partes.*

7. **Estás compartiendo un pizza en partes iguales con 3 amigos.**

¿ Qué fracción del pizza van a recibir cada uno?

Usa el círculo para dibujar cómo vas a dividir el pizza en partes fraccionales.



 /11
Total Points