Summer Math Grade Completed: K Educator Guide for Units 1-5

Suggested Paper Color Code: **PINK**

Math Matters Code for Grade Band: ***Icon***

Summer Math Objectives: To review and reinforce the following Kindergarten skills

Major Works for Kindergarten: Addition and Subtraction concepts including **NY-K.OA.1:** Represent addition and subtraction using objects, fingers, pennies, drawings, sounds, acting out situations, verbal explanations, expressions, equations, or other strategies. **Note**: Drawings need not show details, but should show the mathematics in the problem.

Math Fluency for Kindergarten: **NY-K.OA.5:** Add and Subtract within 5

NY-K.CC.5a and 5b: Count to answer "how many" questions. As many as 20 things arranged in a line, circle or array. Up to 10 objects when scattered.

NY-K.CC.6: Compare two objects to see which one has "more of"/"less of" the measurable attribute. For example, longer/shorter; taller/shorter

New: **NY-K.MD.4:** Explore coins (pennies, nickels, dimes, and quarters) and begin identifying pennies and dimes.

NY Note: Beginning to identifying coins is new for Kindergarten under the NYS Next Generation Mathematics Learning Standards. Finding "fair shares" and "half" continues to be a Grade 1 skill in NY. Many end-of-year Kindergarten students are ready to explore these concepts with food.

Educator Packet with English and Spanish (one per unit):

- ***Target Number*** directions and bull's eye with numbers to select *(need a timer)*
- ***Family Fun*** Game Directions and Answer Key (manipulatives – 20 counters plus 1 dime and 10 pennies)
- ***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 Packet with English and Spanish (one per unit):

- ***Target Number*** bull's eye
- ***Family Fun*** cards for grade band
- ***CGI*** Word Problem Work Space
- ***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 printed 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 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:

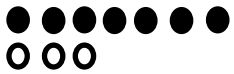
- Students are able to write solutions from their own math knowledge.
- Educators can work in examples related to the student's required math fluency and major works in math.
- The goal is for students to find ***multiple and different (correct) responses*** rather than limiting students to one correct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

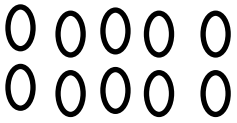
Process:

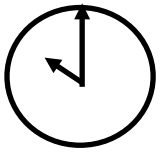
1. Select a Target Number for today. Students can write the number on their Bull's Eye page.
    a. All target numbers are fair to use with students in grades 1 through 8, but "Kinders" should use numbers 20 and under. All ages can start with the numbers 12 and 15. After these, you will need to give students in grades 1 to 8 the higher numbers, and use numbers under 20 for any "Kinders" 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."

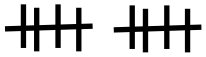
Examples of some different ways to represent the number 10:

7 + 3	10 + 0	17 – 7	2 x 5	100 / 10	20/2
3 + 7	0 + 10	ten	5 x 2	10/1	10 x 1









One dozen eggs take away 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 together with students who have different skills to practice.
2. Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
    a. Many students will read ahead, solving problems, to find the "easiest" ones while waiting for their next turn.
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.
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 from the original (English) CGI Charts 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.
- Ask students explain their solution process before asking for the 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. Look for the word problem(s) on the chart with a STAR - ★
2. For "Kinders," start with the "ADD TO - (Result Unknown)" and the "TAKE FROM - (Result Unknown)" word problems from the Unit's CGI Chart.
    a. If a student struggles, stick with these for the summer so the student becomes secure. Otherwise, you can proceed to the "PUT TOGETHER/TAKE APART – (Total Unknown)" word problems.
3. Have manipulatives and paper for students to choose either medium for solving the problem.
4. 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).
5. Read the problem again, and then teach students to take notes.
    a. Prompt students with questions, and model writing notes. (Kindergarten Students Packets have a mostly blank page called, "Word Problem Work Space," to use for this.)

b. What did Deena start with? *5 pennies.* How can we write? *D 5 (or draw 5 circles)*
c. What happens next? *She gets 3 more.* How can we write? *+3 (or draw 3 circles)*
d. What question do we have to answer? *How many does Deena have now?* How can we write this? *D has ___?*

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?)
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? *("Deena has 8 pennies now.")*

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, not just the "best" method. The variety of examples and explanations will give all students a stronger understanding about math works.

Planning Note: Each CGI Chart uses characters and events from a particular book, listed at the top of the page. While the identified books relate to math topics, it is more efficient to focus reading materials to each student's reading level, interests, and ELA needs.

SNACK FRACTIONS

Students separate a snack into a fractional portion. 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 of six cheese cracker sandwiches for the 6 pieces of beef jerky.

The 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 Kindergarten in June, but might be considered a (rising) First Grader in the summer, should take the Summer Assessments for Kindergarten. A rising Kindergartener would not be expected to take the pre- or post-tests, as the questions are based on end-of-year mastery to maintain core math skills over the summer.

Next Generation Alignment: These started as the Math Matters pre-tests and post-tests in English and Spanish. These are now modified to align with the *New York State Next Generation Mathematics Learning Standards*. For example, in the Kindergarten Assessments,

- The Math Matters objective to identify four coins (quarter, penny, nickel, and dime) has been modified to ask the student to identify two coins (penny and dime).
- The Math Matters objective to identify fair shares or one-half has been modified to an optional question, as mastery is not expected in Kindergarten.

Administration: The Educator has a script to read questions to the student. The Educator writes notes on the script as to how the student responds, and uses it to score individual students. (In a summer school setting, the Educator might want a separate class list to note how students respond and then score the results.

- Extra supplies needed per student taking the pre-test or post-test at one time:
    - Baggie with 15 lima beans; a baggie with 20 paper clips; linking cubes: 5 blue and 8 yellow; one penny and one dime.
    - A page with numbers cards is attached to each Educator Script. These need to be cut ahead of time.
    - The optional fraction question needs a real sandwich per student and cutting materials, or scissors to cut the paper sandwich attached to the script.

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 Kindergarten?*
- *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 Kindergarten, to teach/ reteach the Summer Math skill for individual students.

Math Matters Note: These lessons were written for a classroom. These are called "TV Lessons" because the lessons 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:

NY-K.CC.5 Count-Read Numbers and* NY-K.MD.4 *Identify Pennies

- Lesson references the story, Deena's Lucky Penny
- Supplies for Students to do Simple Counting
    - Print the "Pockets" board and "Pocket Change" cards
    - Thirty pennies and five nickels so the student has a choice
- Supplies for full lesson, adding the pockets of change together
    - Add the Pocket Change Record Sheet in English or Spanish

NY-K.OA.1-Represent Addition and Subtraction

- Lesson references the story, A Desert Habitat
- Supplies for Students
    - Print the Desert Story Board and the Desert Story Strategies pages
    - Twenty counters

NY-K.CC.6-Compare More of-Less of

- Lesson references the fable, "*The Crow and the Pitcher*," from Aesop's Fables
- Supplies for Students
    - Twenty Base Ten Units, or 20 Unifix/Linking Cubes (2 colors, ten each)
    - You will need to decide which pages will work the best

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		*A* bunnies sat on the grass. *B* more bunnies hopped there. How many bunnies are on the grass now? $A + B = \square$	*A* bunnies were on the grass. Some more bunnies hopped there. Then there were *C* bunnies. How many bunnies hopped over to the first *A* bunnies? $A + \square = C$	Some bunnies were sitting on the grass. *B* more bunnies hopped there. Then there were *C* bunnies. How many bunnies were on the grass before? $\square + B = C$
Take From		*C* apples were on the table. I ate *B* apples. How many apples are on the table now? $C - B = \square$	*C* apples were on the table. I ate some apples. Then there were *A* apples. How many apples did I eat? $C - \square = A$	Some apples were on the table. I ate *B* apples. Then there were *A* apples. How many apples were on the table before? $\square - B = A$
		Total Unknown	**Both Addends Unknown**	**Addend Unknown**
Put Together/ Take Apart		*A* red apples and *B* green apples are on the table. How many apples are on the table? $A + B = \square$	Grandma has *C* flowers. How many can she put in her red vase and how many in her blue vase? $C = \square + \square$	*C* apples are on the table. *A* are red and the rest are green. How many apples are green? $A + \square = C$ $C - A = \square$
		Difference Unknown	**Bigger Unknown**	**Smaller Unknown**
Compare		*"How many more?" version:* Lucy has *A* apples. Julie has *C* apples. How many more apples does Julie have than Lucy?	*Version with "More":* Julie has *B* more apples than Lucy. Lucy has *A* apples. How many apples does Julie have?	*Version with "More":* Julie has *B* more apples than Lucy. Julie has *C* apples. How many apples does Lucy have?
		"How many fewer?" version: Lucy has *A* apples. Julie has *C* apples. How many fewer apples does Lucy have than Julie? $A + \square = C$ $C - A = \square$	*Version with "Fewer":* Lucy has *B* fewer apples than Julie. Lucy has *A* apples. How many apples does Julie have? $A + B = \square$	*Version with "Fewer":* Lucy has *B* fewer apples than Julie. Julie has *C* apples. How many apples does Lucy have? $C - B = \square$ $\square + B = C$

Pre/Post Supplies Needed

Symbol	Details and Materials Needed
	Teacher: Reads the script and records the student's answers.
	Baggies with 15 lima beans; 20 paperclips
	Sets of Circles for Question #2 Precut numbers (1-20) for student to select when asked
	Paper plate; sandwich* (plastic knife if using a real sandwich)
	Linking cubes: 5 blue and 8 yellow
	Money – 1 each: penny, dime

*A paper graphic of a sandwich is attached as an alternative. This would require scissors to cut.

Educator Script: *Read the questions to students. Use this to write notes about student responses and score. Students do not have a separate paper to write answers on.*

NY-K.CC.5a and 5b **Need:** • Baggie of 15 lima beans for each student • Baggie of 20 paper clips for each student • Baggie of numeral cards 0 – 20 for each student • Folders or other screens to place between students ☐ **1** **Award 1 point** if the student shows card number fifteen.	**1** **You have three bags in front of you. Take the *number cards* out of the bag and put them on the table in front of you.** (Give time for all students to respond.) ***Tienen delante tres bolsas. Saquen las tarjetas con números de la bolsa y pónganlas sobre la mesa.*** **Now take the *lima beans* out of the other bag.** **Count them silently.** ***Ahora saquen los frijoles de la otra bolsa. Cuenten los frijoles en silencio*.** **Show me the number card that tells you how many *lima beans* there are on your table.** ***Muéstrenme la tarjeta con el número que indica cuántos frijoles hay sobre la mesa.*** **(In the "Notes" section of the answer sheet, write the number they have shown you.)**
NY-K.CC.5a and 5b **Need:** • Page with circles (1 for teacher) • Numeral cards 0 – 20 ☐ **2** **Award 1 point** if the student shows card number for seven.	**2** (Give each student the paper with the 3 sets of objects.) **This card has 3 sets of objects.** ***Esta tarjeta tiene 3 juegos de objetos.*** (Emphasize the 3 sets by circling them with your finger.) **Show me the number card that tells me how many objects are in this set.** ***Muéstrenme la tarjeta con el número que indica cuántos objetos hay en este juego.*** (Point to the set with 7 objects in it.) (Use this copy to record individual responses. With a group, create a "notes" page to record student responses on.)

NY-K.CC.5a and 5b **Need:** • Baggie of 20 paper clips for each student ☐ **3** **Award 1 point if the student shows you eight paper clips.**	**3** **Put the lima beans back into the bag.** ***Vuelvan a meter los frijoles en la bolsa.*** **(Give students time to respond)** **Take the paper clips out of the other bag.** ***Saquen los clips de la bolsa.*** **(Give students time to respond)** **Show me a set of 8 paper clips.** ***Muéstrenme un juego de 8 clips.*** **(In the "Notes" section of the answer sheets, write the number they have shown you.)**
NY-K.OA.1 **NY-K.OA.2a and 2b** **NY-K.OA.5** **Need:** • Same baggies of 15 lima beans or 20 paperclips on the table • Same baggie of number cards 0 –20 • Folder or other screen CGI – Take From, Result Unknown ☐ 4a **Award 1 Point** for student modeling the number of counters in the story. ☐ 4b **Award 1 point** for student showing the number card for one.	**4** **Use the paper plate as your story board. Listen the first time I read the story for the *math movie*. The second time I read the story, use your counters to show the answer.** ***Usen el platillo de papel como story board. La primera vez que lea el cuento, escuchen y piensen en la película de matemáticas. La segunda vez que lea el cuento, usen los contadores para mostrar la respuesta.*** **Julia counted 8 frogs in a pond. 7 frogs jumped out of the pond. How many frogs are in the pond now?** ***Julia contó 8 ranas en un charco. 7 ranas saltaron fuera del charco. ¿Cuántas ranas quedan ahora en el charco?*** (Read the story again so that students can act it out with the manipulatives. Record their visual answers on the "Notes" section of the student answer sheet, then say,) **"Now show me the *number card* that tells how many frogs were in the pond at the end of the story."** ***Ahora muéstrenme la tarjeta con el número que indica cuántas ranas había en el charco al final del cuento.*** Record their numeral answers in the "Notes" Section.

NY-K.OA.1
NY-K.OA2a and 2b
NY-KOA.5

Need:

- Same baggies of lima beans and paperclips on the table
- Same baggies of number cards 0 – 20
- Folder or other screen

CGI – Put Together/ Take Apart, Total Unknown

☐ **5**

Award 1 point if the student both models the problem correctly to show the numbers in the problem, and shows the number for eleven.

5

Now empty the plate. Listen to another story. Close your eyes and try to see the *math movie* that is taking place. What do you see in the story?
Ahora vacíen el plato. Escuchen otro cuento. Cierren los ojos y traten de imaginarse la película de matemáticas. ¿Qué ven en el cuento?

Marta had 5 yellow flowers and 6 red flowers. How many flowers did Marta have?
Marta tenía 5 flores amarillas y 6 flores rojas. ¿Cuántas flores tenía Marta?

Listen while I read the story again, and this time use your counters and your paper plate to show me how many flowers Marta had. Show the *math movie* in the story.
***Escuchen mientras leo otra vez el cuento, y esta vez usen los contadores en su plato de papel para mostrarme cuántas flores tenía Marta. Muestren la película de matemáticas del cuento*:**
(Read the story again so that students can act it out with the manipulatives. Record their visual answers in the "Notes" section, then say,)

"Now show me the *number card* that tells how many flowers
Marta had."
Ahora muéstrenme la tarjeta con el número que indica cuántas flores tenía Marta.
Record their numeral answers in the "Notes" section.

NY-K.OA.1 **NY-K.OA2a and 2b** **NY-KOA.**5 **Need:** • 1 paper plate per student • Same baggies of lima beans, paper clips on the table • Same baggies of number cards 0 – 20 • Folder or other screen **CGI – Add To, Result Unknown** ☐ **6** **Award 1 point** if the student both models the problem correctly to show the numbers in the problem, and shows the number for ten.	**6** **Listen to the story. Close your eyes and try to see the *math movie* that is taking place. What are the characters doing in the story?** ***Escuchen el cuento que voy a leer. Cierren los ojos y traten de imaginarse la película de matemáticas. ¿Qué están haciendo los personajes del cuento?*** **Juan ate 4 grapes. Then he ate 6 more grapes. How many grapes did Juan eat?** ***Juan comió 4 uvas. Luego comió 6 uvas. ¿Cuántas uvas comió Juan?*** **Listen while I read the story again, and this time use your counters and your paper plate to show me how many grapes Juan ate. Show the *math movie* in the story.** ***Escuchen mientras leo otra vez el cuento, y esta vez usen los contadores en su plato de papel para mostrarme cuántas uvas comió Juan. Muestren la película de matemáticas del cuento:*** (Read the story again so that students can act it out with the manipulatives. Record their visual answers in the "Notes" section, then say,) **"Now show me the *number card* that tells how many grapes Juan ate."** ***Ahora muéstrenme la tarjeta con el número que indica cuántas comió Juan.*** Record their numeral answers in the "Notes" section.
NY-K.MD.4 **Need**: 1 set for teacher of 1 each of penny, dime. (Use real coins.) ☐ **7** **Award 1 point if Student correctly identifies both coins.**	**7** (Place the 2 coins on the table.) **Look at the coins.** ***Mira las monedas.*** **I will show you one coin at a time. Tell me the name of the coin.** ***Te voy a mostrar una moneda a la vez. Dime el nombre de la moneda.**** (Show the penny) (Show the dime)

NY-K.CC.6 **NY-K.MD.2** **Need:** • 5 blue Unifix cubes for teacher • 8 yellow Unifix cubes for teacher ☐ **8** **Award 1 point** if the student shows you the yellow set or train.	**8** **Look at the two sets of cubes.** ***Observen los dos juegos de cubos.*** **Put the blue cubes in a long train.** ***Pon los cubos azules en un tren largo.*** **Put the yellow cubes in a long train.** ***Pon los cubos amarillos en un tren largo.*** **Think about which set has more. When I count to three, hold up the set that has more cubes.** ***Piensen a ver cuál juego tiene más cubos. Cuando cuente hasta tres, muéstrenme el juego que tiene más cubos.*** **ONE – TWO – THREE, SHOW which set has more cubes?** ***UNO – DOS – TRES, MUESTREN ¿cuál juego tiene más cubos?***

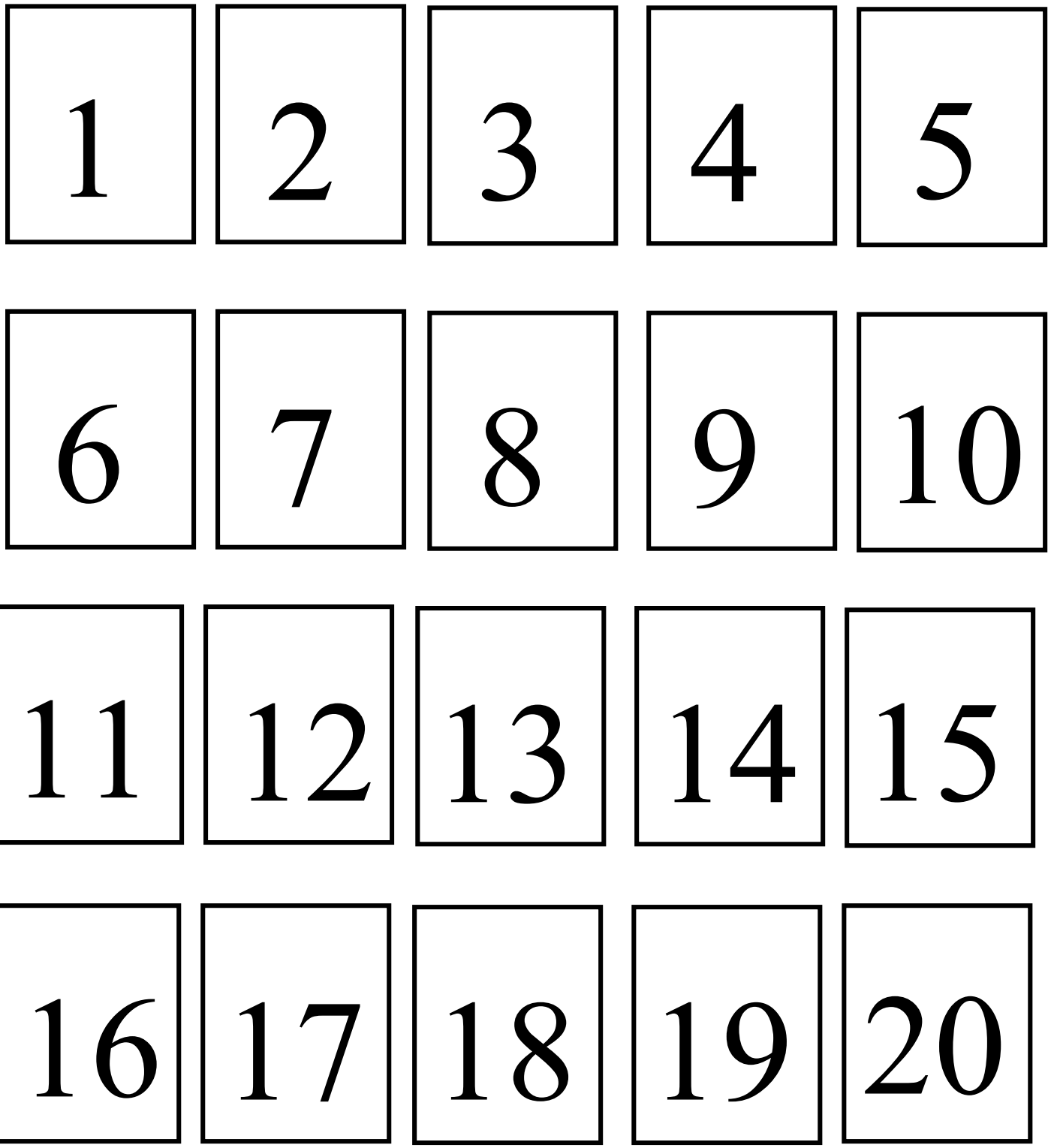
Total points: 9

Score: ____/ 9

# 9 is a 1st Grade Skill. It is left here as an optional, informal assessment only. **No points awarded.** **Need:** • 1 whole sandwich (peanut butter, cheese, your choice) • plastic knife • 2 paper dessert plates A paper, graphic sandwich is attached as an alternative to real sandwich.	**9** **I would like for you to share this sandwich with me in fair shares.** ***Quiero que compartes este sándwich conmigo en partes iguales (fair shares).*** (Wait until finished.) **What do you call these fair shares?** ***¿Qué otro nombre tienen estas partes iguales?*** (Pause**)** **How do you know you have divided the sandwich into halves?** ***¿Cómo saben que el sándwich está en dos mitades?*** (Pause and watch for comparison)

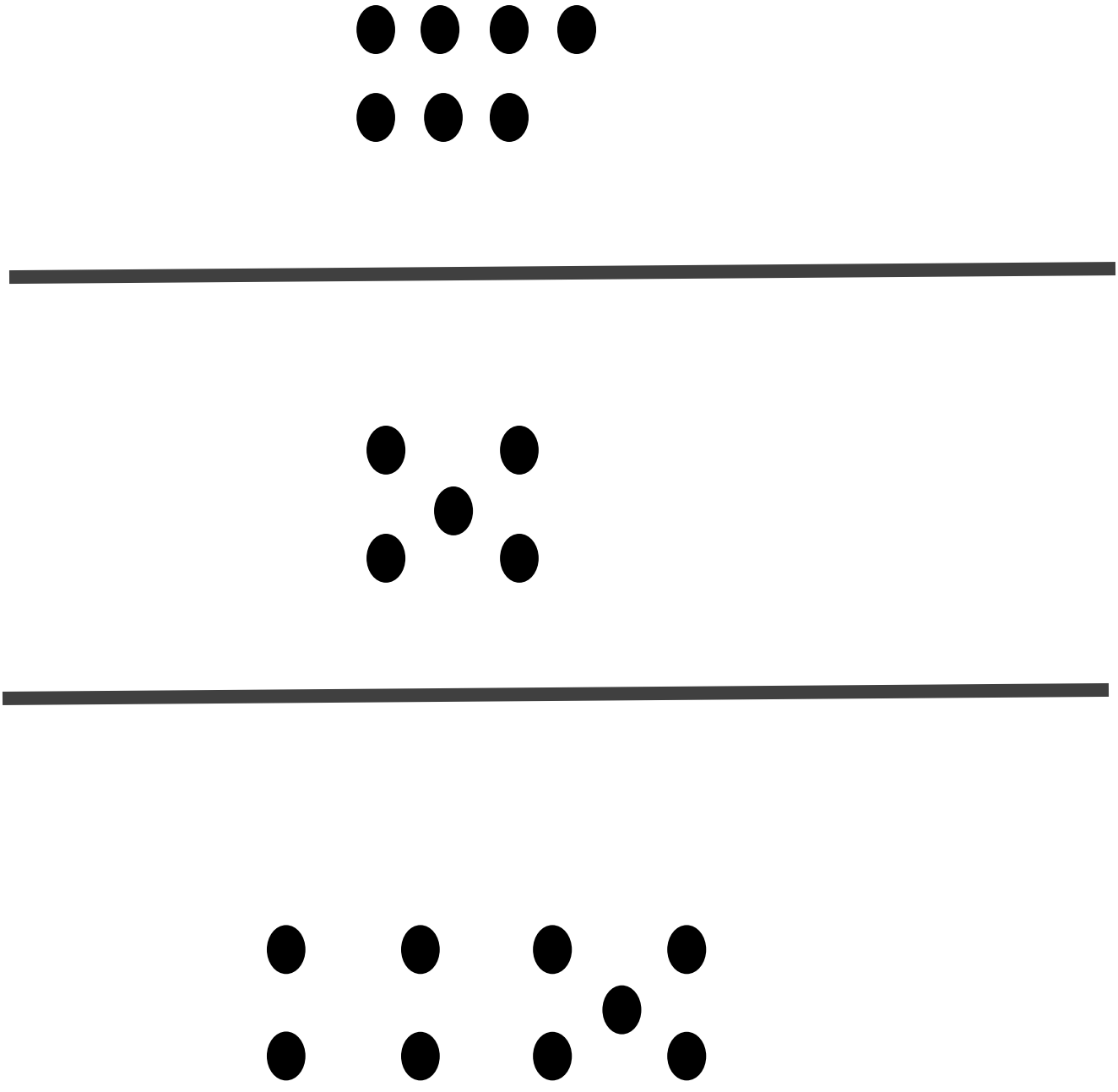
Pre/Post-assessment

Number Cards 0-20/Questions 1-2, 4-6

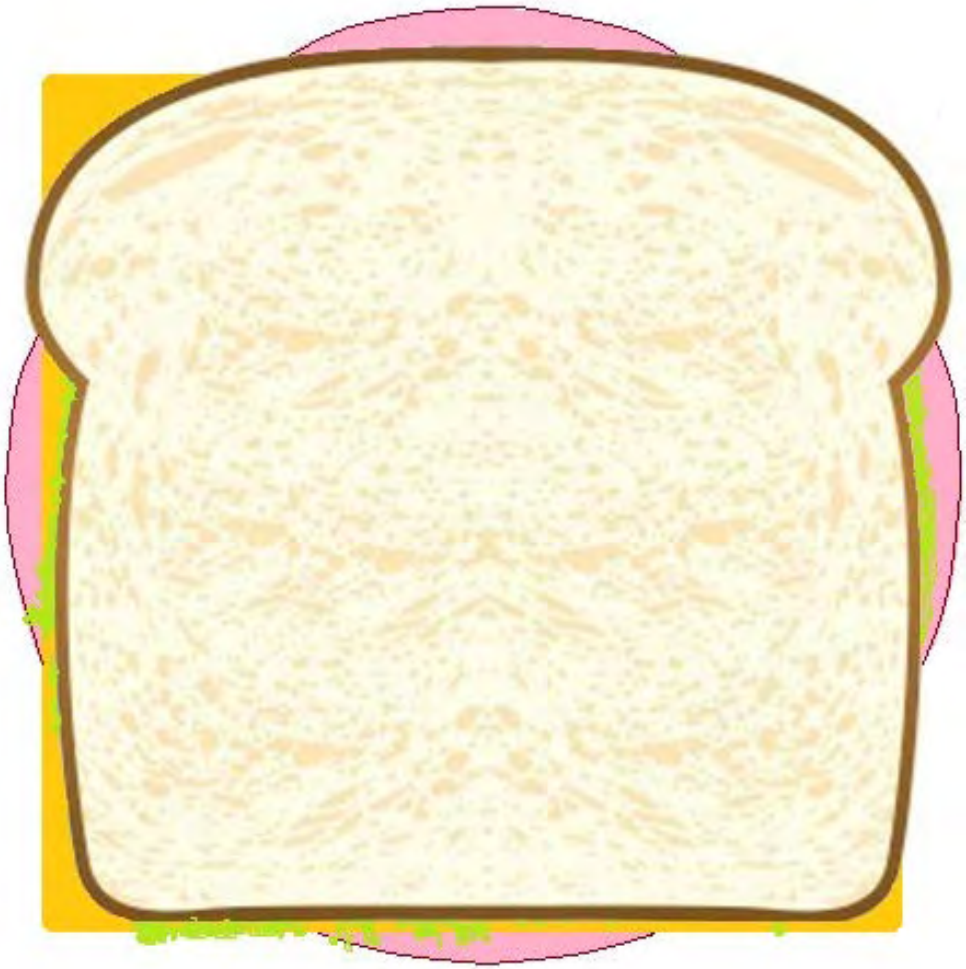


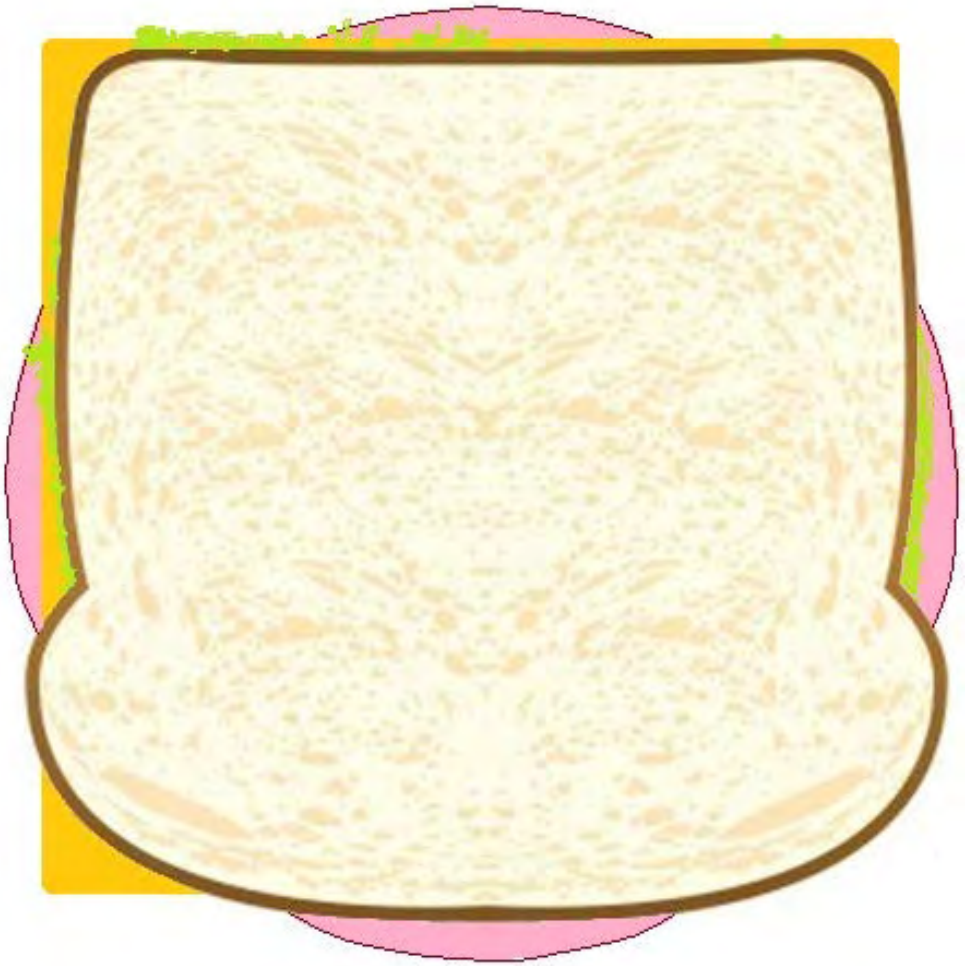
BLM Question #2

Pre/Post Assessment



Kindergarten Assessment #9 Paper Sandwich to cut.

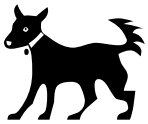




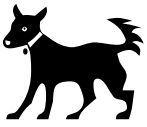
Paper Sandwich to cut. **Kindergarten Assessment #9**

Summer Math

Educator Packet



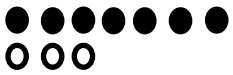
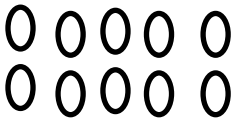
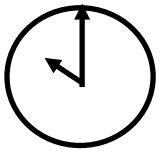
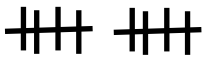
Unit 1



Warm up: Target Number

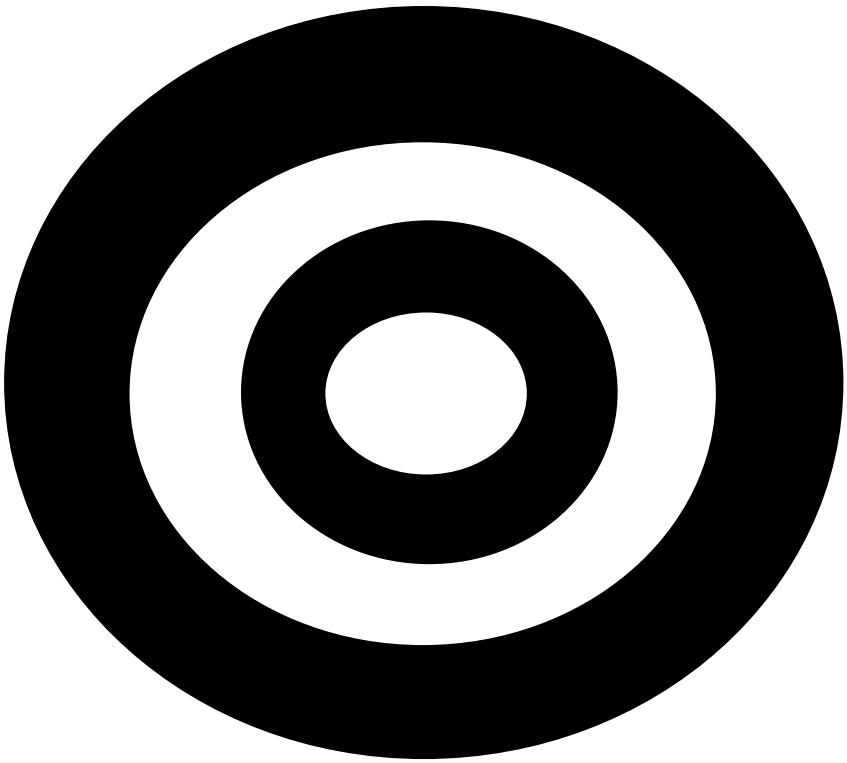
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, 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 x 5	100 / 10	20/2
3 + 7	0 + 10	ten	5 x 2	10/1	10 x 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.
Grade 1	Add and subtract within 10	***Procedural Fluency***: can easily use a process to figure out the answer.
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2);	***Automaticity*** by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 2	Add and subtract within 100	***Procedural Fluency***: can easily use a process to figure out the answer.



Target Number

<u>Suggested Target Numbers</u>: 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	

Other choices 20 or less: 9 18 6 20

FAMILY FUN GAME Directions

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.

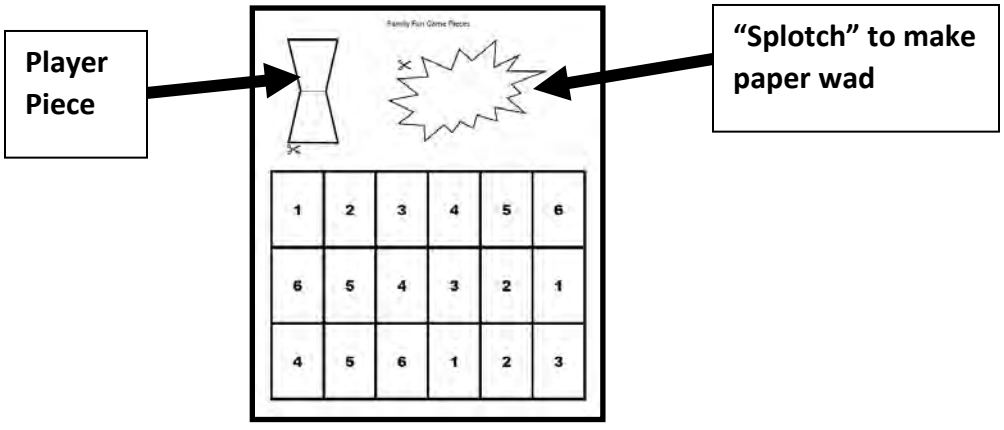
Process:

1. Each Student Packet has its own Family Fun Game Cards, allowing each student to participate together with students who have different skills to practice.
2. Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
    a. Many students will read ahead, solving problems, to find the "easiest" ones while waiting for their next turn.
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.
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.

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 name 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."

Process:

1. Look for the word problem(s) on the chart with a STAR - ★
2. For Dog Icon packets, start with the "ADD TO - (Result Unknown)" and the "TAKE FROM - (Result Unknown)" word problems from the Unit's CGI Chart.
    a. If a student struggles, stick with these for the summer so the student becomes secure. Otherwise, you can proceed to the "PUT TOGETHER/TAKE APART – (Total Unknown)" word problems.
3. Have manipulatives and paper for students to choose either medium for solving the problem.
4. 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).
5. **Read the problem again, and then teach students to take notes.**
    a. Prompt students with questions, and model writing notes. (Kindergarten Students Packets have a mostly blank page called, "Word Problem Work Space," to use for this.)
    b. What did Deena start with? *5 pennies.* How can we write? *D 5 (or draw 5 circles)*
    c. What happens next? *She gets 3 more.* How can we write? *+3 (or draw 3 circles)*
    d. What question do we have to answer? *How many does Deena have now?* How can we write this? *D has ___?*
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?)
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? *("Deena has 8 pennies now.")*

Unit 1 *CGI Problems for Deena's Lucky Penny*

ADD TO	(*Result Unknown*) ★ Deena was lucky. She had ___ pennies. Mrs. Green gave her ___ pennies. How many pennies does Deena have now? (1, 4) (5, 3) (10, 4)	(*Change Unknown*) Deena had ___ pennies. How many more pennies will Deena need to get so that she will have __ pennies to buy her mother a present? (3, 8) (5, 10) (10, 13)	(*Start Unknown*) Deena was lucky. She found some money. Mrs. Green gave her __. Now Deena has __. How much money did Deena have to start with? (3¢, 10¢) (5¢, 15¢) (10¢, 20¢)
TAKE FROM	(*Result Unknown*) ★ Deena had ____ pennies. She spent ___ pennies for a present. How many pennies does she have now? (10, 5) (15, 5) (100, 25)	(*Change Unknown*) Deena had ____¢. She spent some on a present. Now she has ____¢. How much money did she spend? (10, 6) (15, 9) (100, 25)	(*Start Unknown*) Deena had some money. She spent ____¢. Now she has ____¢. How much money did she have to start with? (4, 6) (18, 9) (20, 5)
PUT TOGETHER/ TAKE APART	(*TOTAL Unknown*) ★ Deena had ___ pennies and ___ nickels. How many coins did she have? (5, 20) (10, 30) (50, 50)	(*ADDEND Unknown*) Deena had __ coins. __ were pennies and the rest were nickels. How many nickels did Deena have? (20, 5) (50, 40) (100, 60)	
Compare	(*Difference Unknown*) Deena had _____ pennies. Her brother, Sam, had ____ pennies. How many more pennies did Deena have than Sam? (10, 5) (20, 10) (25, 10)	(*BIGGER Unknown*) Deena had _____ pennies. Her brother, Sam, had ____ more pennies than Deena had. How many pennies did Sam have? (10, 5) (20, 10) (25, 10)	(*SMALLER Unknown*) Deena spent ___ pennies. That's ___ pennies more than Sam spent. How many pennies did Sam spend? (5, 3) (10, 5) (25, 25)

Unit 1 CGI Problems for *Deena's Lucky Penny*

Juntar	(*Resultados desconocidos)* ★ Deena era afortunada. Tenía ___ centavos. La Sra. Green le dio ___ centavos. ¿Cuántos centavos tiene Deena ahora? (1, 4) (5, 3) (10, 4)	(*Cambio desconocido)* Deena tenía ___ centavos. ¿Cuántos centavos de más tiene que buscar si necesita__ centavos para comprarle un regalo a su mamá? (3, 8) (5, 10) (10, 13)	(*Inicio desconocido)* Deena fue afortunada. Encontró algo de dinero. La Sra. Green le dio __. Ahora Deena tiene __. ¿Cuánto dinero tenía Deena al empezar? (3¢, 10¢) (5¢, 15¢) (10¢, 20¢)
Separar	(*Resultados desconocidos)* ★ Deena tenía ___ centavos. Se gastó ___ centavos comprando un regalo. ¿Cuántos centavos le quedan? (10, 5) (15, 5) (100, 25)	(*Cambio desconocido)* Deena tenía ____¢. Se gastó algo de dinero comprando un regalo. Ahora tiene ____¢. ¿Cuánto dinero se gastó? (10, 6) (15, 9) (100, 25)	(*Inicio desconocido)* Deena tiene algo de dinero. Se gastó ____¢. Ahora tiene ____¢. ¿Cuánto dinero tenía al empezar? (4, 6) (18, 9) (20, 5)
Parte-Parte-Entero	(*Todo desconocido)* ★ Deena tenía ___ centavos y___ monedas de cinco centavos. ¿Cuántas monedas tenía? (5, 20) (10, 30) (50, 50)		(*Todo desconocido)* Deena tenía __ monedas. __ fueron centavos y lo demás monedas de cinco centavos. ¿Cuántas monedas de cinco centavos tenía? (20, 5) (50, 40) (100, 60)
Comparar	(*Difference Unknown)* Deena tenía ___ centavos . Su hermano Sam tenía ____ centavos. ¿Cuántos centavos mas tenía Deena que Sam ? (10, 5) (20, 10) (25, 10)	*(Quantity Unknown)* Deena tenía ___ centavos. Su hermano Sam tenía ____ más centavos que Deena. ¿Cuántos centavos tenía Sam ? (10, 5) (20, 10) (25, 10)	(*Referent Unknown)* Deena se gastó ___ centavos. Es ____ centavos más que se gastó. ¿Cuántos centavos se gastó Sam ? (5, 3) (10, 5) (25, 25)

Math Objectives

- Share a snack in half.
- Explain why each portion is half.

Language Objectives

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

Materials:

TEACHER:

Chart paper with question:
How do you know that each portion is half? Put a copy of the record sheet string cheese cut apart at the top of the chart with the question.

TEACHER DEMO

- **BLM** String Cheese Snack Fractions,
- 1 large string cheese
- Pastic knife
- Paper towel
- Paper plate

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
- 2 pair scissors
- 2 rulers and 2 markers
- 2 glue sticks

Unit 1, Lesson 3 — Kinder

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. The snack will be cut into two pieces. 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.

TODAY: Teacher demonstration of halves

"I have a piece of string cheese that I want to share with a friend. How can I do that? (*Wait for answers.*) I want the portions to be fair shares, that is, both of us have the same amount of the string cheese.

Here is how I will cut the string cheese into two pieces so that my friend and I will have fair shares. (*Cut string cheese.)* Does anyone know what we call this fractional part of the string cheese? (Hold *up a half and wait for answers.*) We call this a half. Why is this portion a half? (*Wait for answers.*) It is half because it is **one out of two equal pieces** *(compare the 2 pieces side by side so students see they are equal pieces)*.

Ask the students:

- What fractional part of my snack will my friend receive? *(one-half)*
- How do you know? *(The piece is **one out of two equal pieces**.)*
- What fractional part am I receiving? *(half)*
- How do you know? *(You have **one out of two equal pieces**.)*

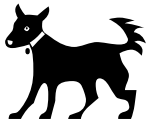
Before dividing the actual snack, give each child the BLM String Cheese Snack Fractions and the String Cheese picture. Have the student draw a line, cut the paper model in half, and then glue to the BLM String Cheese Snack Fractions sheet.

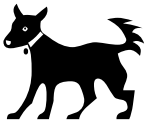
When those sheets are collected, divide the students into partners, giving each pair the set of materials listed. Tell them to share the snack into fair shares, and be able to tell you when you come around if they each have half, and how they know. Circulate and ask as students enjoy their snacks.

Summer Math

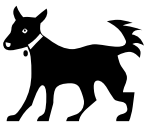
Student Packet/
Paquete de alumno

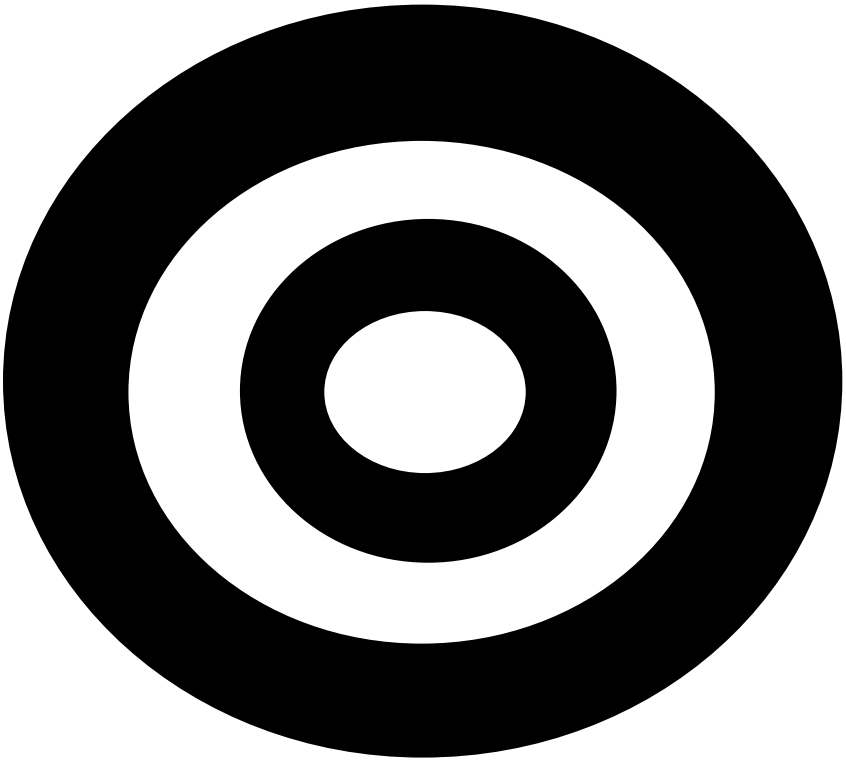
Unit 1/Unidad 1





English/Español





Target Number

BLM Unit 1, TV & Follow-up Lesson 3 **Family Fun Game Cards**

Printed on Pink – one set for the TV Lesson Demo. One set per partners for class; one set per student for home. (There are two pages of these cards.)

A. $2¢ + 3¢ =$	**B**. $2¢ + 4¢ =$	**C**. $2¢ + 5¢ =$
D. $2¢ + 6¢ =$	**E**. $2¢ + 7¢ =$	**F**. $2¢ + 8¢ =$
G. $3¢ + 3¢ =$	**H**. $3¢ + 4¢ =$	**I**. $3¢ + 5¢ =$

BLM Unit 1, TV & Follow-up Lesson 3 **Family Fun Game Cards**

Printed on Pink – one set for the TV Lesson Demo. One set per partners for class; one set per student for home. (There are two pages of these cards.)

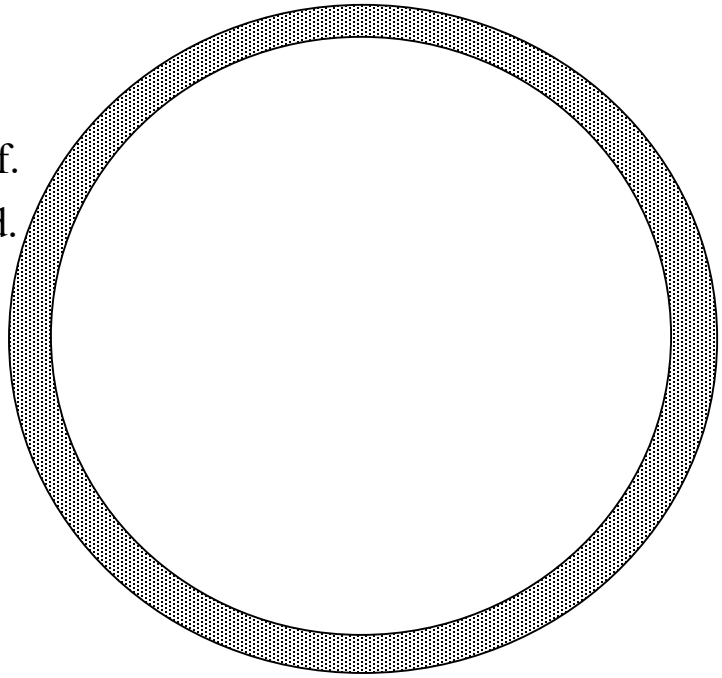
J. **Jose had 5 cents.** **He found 5 more cents.** **How much money did he have then?** ***José tenía 5 centavos.*** ***Encontró 5 centavos más.*** ***¿Cuánto dinero tiene ahora?***	**K.** **Maria had 8 cents.** **She found 5 more cents.** **How much money did she have then?** ***María tenía 8 centavos.*** ***Encontró 5 centavos más.*** ***¿Cuánto dinero tiene ahora?***	**L.** **Martin had 10 cents.** **He found 5 more cents.** **How much money did he have then?** ***Martin tenía 10 centavos.*** ***Encontró 5 centavos más.*** ***¿Cuánto dinero tiene ahora?***
M. **Maria had 3 cents.** **She found 8 more cents.** **How much money did she have then?** ***Marİa tenía 3 centavos.*** ***Encontró 8 centavos más.*** ***¿Cuánto dinero tiene ahora?***	**N.** **Jose had 7 cents.** **He found 5 cents more.** **How much money did he have then?** ***José tenía 7 centavos.*** ***Encontró 5 centavos más.*** ***¿Cuánto dinero tiene ahora?***	**O.** **Maria had 4 cents.** **She found 5 more cents.** **How much money did she have then?** ***María tenía 4 centavos.*** ***Encontró 5 centavos más.*** ***¿Cuánto dinero tiene ahora?***
P. **1 dime** **add** **4 pennies** ***1 moneda de diez centavos*** ***suma*** ***4 centavos***	**Q.** **1 dime** **add** **3 pennies** ***1 moneda de diez centavos*** ***suma*** ***3 centavos***	**R.** **1 dime** **add** **6 pennies** ***1 moneda de diez centavos*** ***suma*** ***6 centavos***

Word Problem Work Space

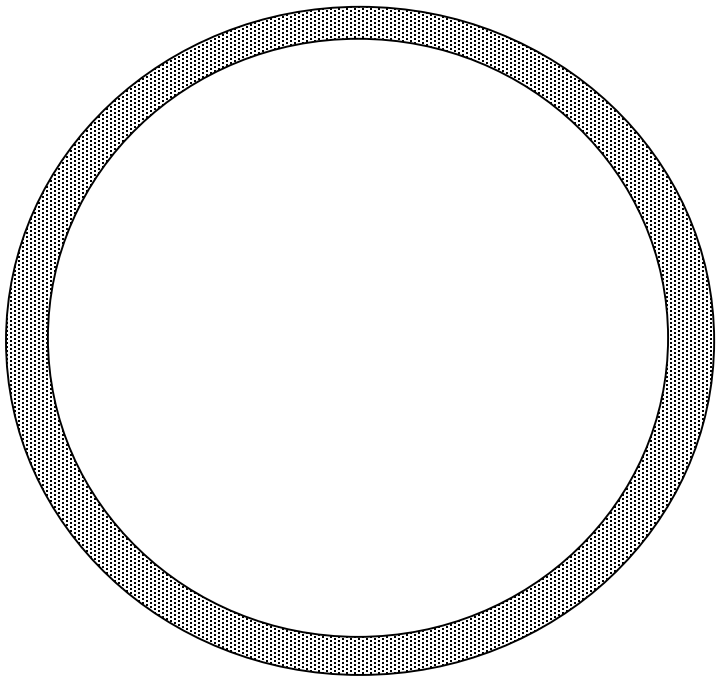
BLM Kinder Unit 1, Follow-Up Lesson 3 **String Cheese Snack Fractions**
(One sheet for teacher demo; one sheet per student)

My name is _____
Mi nombre es

This is my plate and my snack half.
Esta es mi parte. Mi parte es la mitad.



This is my friend's snack half.
Esta es la mitad de mi amigo/a.



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

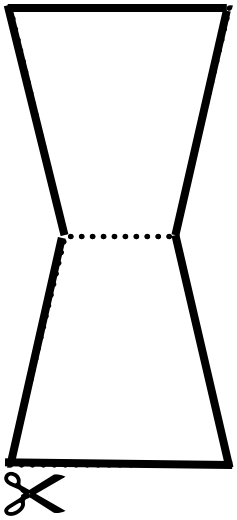
Cómo se juega

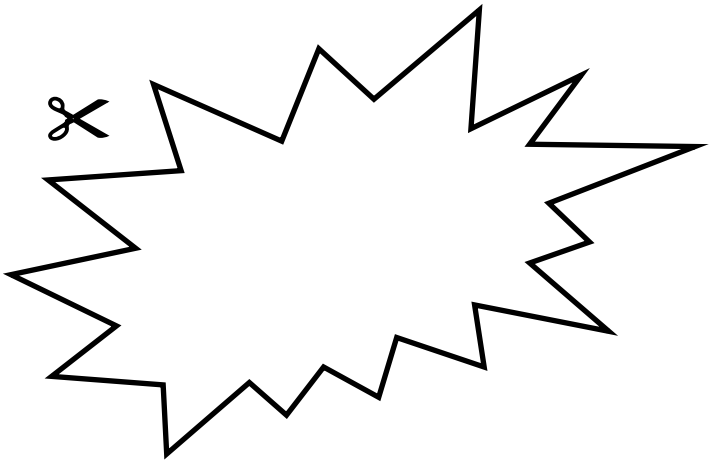
1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira 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

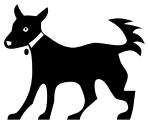




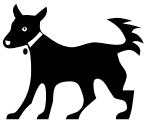
1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet



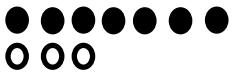
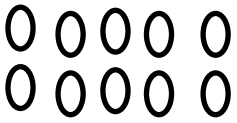
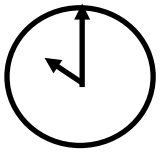
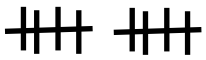
Unit 2



Warm up: Target Number

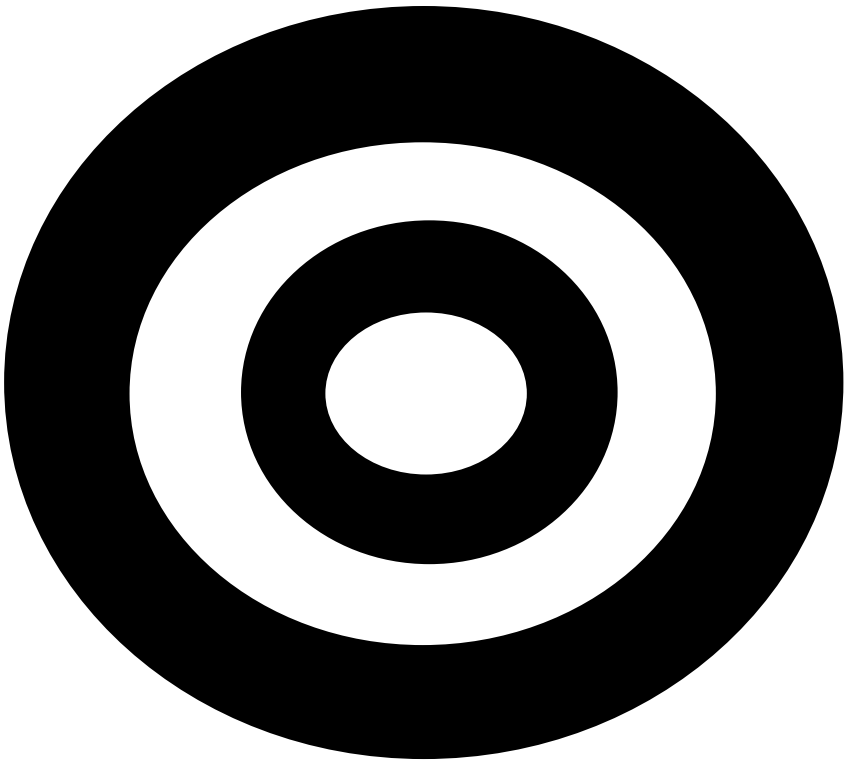
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, 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 x 5	100 / 10	20/2
3 + 7	0 + 10	ten	5 x 2	10/1	10 x 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.
Grade 1	Add and subtract within 10	***Procedural Fluency***: can easily use a process to figure out the answer.
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2);	***Automaticity*** by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 2	Add and subtract within 100	***Procedural Fluency***: can easily use a process to figure out the answer.



Target Number

<u>Suggested Target Numbers</u>: 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

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.

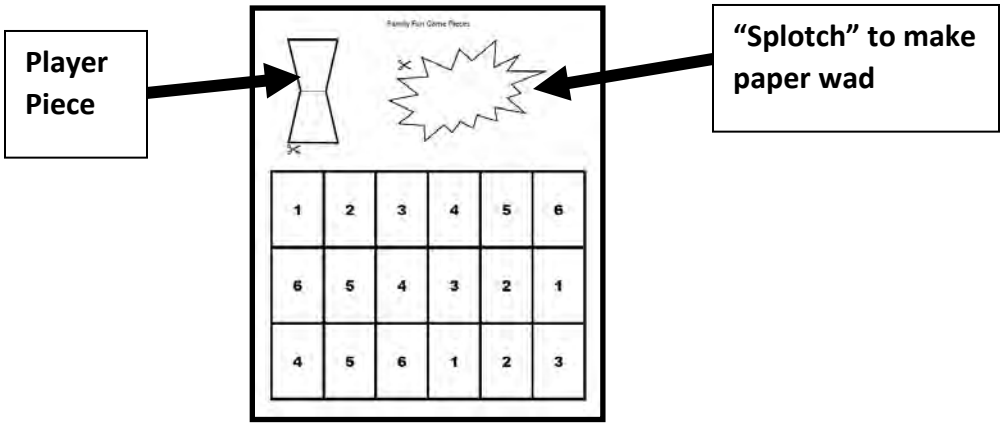
Process:

1. Each Student Packet has its own Family Fun Game Cards, allowing each student to participate together with students who have different skills to practice.
2. Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
    a. Many students will read ahead, solving problems, to find the "easiest" ones while waiting for their next turn.
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.
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.

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 name 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 x 5 = 10 5 x 2 = 10 10 ÷ 2 = 5 10 ÷ 5 = 2	1.25	50% increase
B	10 ¢	$59	5 x 4 = 20; 20 ÷ 4 = 5	1.21	75% increase
C	12 ¢	$45	3 x 6 = 18; 18÷ 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	6/10	42	$7.50
O	5 bugs	10 tadpoles left	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."

Process:

1. Look for the word problem(s) on the chart with a STAR - ★
2. For Dog Icon packets, start with the "ADD TO - (Result Unknown)" and the "TAKE FROM - (Result Unknown)" word problems from the Unit's CGI Chart.
    a. If a student struggles, stick with these for the summer so the student becomes secure. Otherwise, you can proceed to the "PUT TOGETHER/TAKE APART – (Total Unknown)" word problems.
3. Have manipulatives and paper for students to choose either medium for solving the problem.
4. 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).
5. **Read the problem again, and then teach students to take notes.**
    a. Prompt students with questions, and model writing notes. (Kindergarten Students Packets have a mostly blank page called, "Word Problem Work Space," to use for this.)
    b. What did Deena start with? *5 pennies.* How can we write? *D 5 (or draw 5 circles)*
    c. What happens next? *She gets 3 more.* How can we write? *+3 (or draw 3 circles)*
    d. What question do we have to answer? *How many does Deena have now?* How can we write this? *D has ___?*
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?)
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? *("Deena has 8 pennies now.")*

Unit 2 CGI Problems for *A Desert Habitat*

Add to	(*Result Unknown*) ★ The desert rabbit had ____ cactus flowers. The iguana gave him ____ more cactus flowers. How many cactus flowers does the rabbit have now? (1, 9) (5, 8) (10, 9)	(*Change Unknown*) The desert rabbit had ____ cactus flowers. How many more cactus flowers will he need to gather so that he will have ___ cactus flowers in all? (4, 9) (6, 8) (8, 10)	(*Start Unknown*) The desert rabbit was very lucky. He had some cactus flowers. Then he found ____ more cactus flowers. Now he has __ cactus flowers. How many cactus flowers did he have to start? (3, 8) (6, 11) (8, 17)
Tale From	(*Result Unknown*) ★ The burrowing owls collected____ piles of soft grass. They took ____ piles to their underground home. How many piles of soft grass do they have now? (9, 1) (7, 5) (9, 7)	(*Change Unknown*) The burrowing owls had ____ piles of soft grass. They took some of them into their underground home. Now they have __ piles of soft grass. How many piles of soft grass did they take underground? (10, 2) (15, 9) (17, 9)	(*Start Unknown*) The burrowing owls had some piles of soft grass. They took ___ of the piles to their underground home. Now they have ___ piles of soft grass. How many piles of soft grass did they have to start with? (4, 8) (6, 9) (9, 5)
Put together/ Take Apart	(*Whole Unknown*) ★ One day the iguana ate _____ pink cactus flowers and ____ orange cactus flowers. How many flowers did he eat that day? (5, 7) (9, 6) (10, 9)		(*Part Unknown*) The iguana is hungry. He has ___ cactus pads to eat. ___ are big and the rest are small. How many are small? (7, 6) (9, 8) (9, 7)
Compare	(*Difference Unknown*)	(*Quantity Unknown*)	(*Referent Unknown*)

Unit 2 CGI Problems for *A Desert Habitat*

Juntar	(*Resultados desconocidos)* ★ El conejo castellano tenía ____ flores de cacto. La iguana le dio ____ mas flores de cacto. ¿Cuántas flores de cacto tiene ahora? (1, 9) (5, 8) (10, 9)	(*Cambio desconocido)* El conejo castellano tenía ____ flores de cacto. ¿Cuántas flores de cacto de más necesita recoger para tener ____ flores de cacto en total? (4, 9) (6, 8) (8, 10)	(*Inicio desconocido)* El conejo castellano fue muy afortunado. Tenía algunas flores de cacto. Encontró ____ más flores de cacto. Ahora tiene __ flores de cacto. ¿Cuántas flores de cacto tenía al empezar? (3, 8) (6, 11) (8, 17)
Separar	(*Resultados desconocidos)* ★ Las lechuzas llaneras juntaron ____ montones de hierba. Llevaron____ montones a su hogar subterraneo. ¿Cuántos montones de hierba le quedan? (9, 1) (7, 5) (9, 7)	(*Cambio desconocido)* Las lechuzas llaneras tenían ____ montones de hierba. Llevaron algunos de los montones a su hogar bajo la tierra. Ahora tienen __ montones de hierba. ¿Cuántos montones de hierba llevaron al hogar bajo la tierra? (10, 2) (15, 9) (17, 9)	(*Inicio desconocido)* Las lechuzas llaneras tenían algunos montones de hierba. Llevaron ___ de los montones a su hogar bajo la tierra. Ahora ___ montones de hierba. ¿Cuántos montones de hierba tenían al empezar? (4, 8) (6, 9) (9, 5)
Parte- Parte- Entero	(*Whole Unknown)* ★ Un día la iguana comió _____ flores de cacto rosadas y ____ flores de cacto narajnas. ¿Cuántas flores comió este día? (5, 7) (9, 6) (10, 9)		(*Part Unknown)* La iguana tiene hambre. Tiene ___ nopales para comer. ___ son grandes y lo demás pequeños. ¿Cuántos nopales son pequeños? (7, 6) (9, 8) (9, 7)
Comparar	(*Diferencia desconocida)* Había ____ ratas y _____ lagartijas andando en el desierto. ¿Cuántos ratas de más había que lagartijas? (8, 5) (19, 10) (17, 9)	*(Cantidad desconocido)* Había ____ ratas corriendo en la arena del desierto. Había ____ lagartijas más que ratas. ¿Cuántos lagartijas había?	(*Referente desconocido)* Había ___ ratas jugando en el desierto. Había ___ más ratas que lagartijas jugando en el desierto. ¿Cuántos lagartijas

Math Objectives
- Share a snack in half.
- Explain why each portion is half.

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

Vocabulary
- half
- fair shares
- equal pieces
- 1 out of 2 equal pieces

Materials:
TEACHER:
Chart paper with question: How do you know that each portion is half? Put a copy of the record sheet at the top of the chart with the question.

TEACHER DEMO
- **BLM** Trail Mix Fractions
- 2 cups **trail mix/pair** mix equal parts of
  - pecans,
  - semi-chocolate chips**,**
  - granola
  - raisins
- Two 1/2 c measuring cups
- 2 paper plates

STUDENT ACTIVITY (per partner pair):
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.
- 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
- two 12 oz. plastic cups
- 2 napkins
- two ½ cup measuring cups
- one 1 cup measuring cup
- 2 scissors
- 2 rulers and 2 markers
- 2 glue sticks

Unit 2, Lesson 2 — Kinder

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. The snack will be shared in two portions. 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.

TODAY: Teacher demonstration of halves
Tell students that today you are going to share the snack a different way from the sharing in Unit 1. Show the students 1/2 cups of ingredients for their Trail Mix. (You could put each ingredient in an 8 oz. paper cup for simplicity.) Tell the students that the first thing they have to do is to mix their ingredients in the large measuring cup. TODAY students will work with you. Every pair should now mix their ingredients into the 2-cup measuring cup. Ask students to look at the large measuring cup. How much does it hold? (response) It holds two cups. Today two cups equals the whole amount.

Before they share the snack, they should each complete the BLM Trail Mix Fractions. Walk through the steps with them, reading the sheet and asking them rather than telling them the answers.

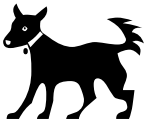
When they have finished the record sheet, they may actually share and enjoy their snacks. Be sure to circulate the room so you are sure students understand the concept.

Writing:
Share-write the student answers to "How do you know that each portion is half?"

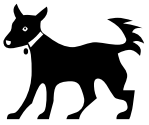
Objectives:
Read the objectives. How did we accomplish these in our snack fraction lesson?

Summer Math

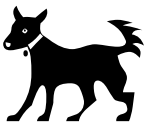
Student Packet/ Paquete de alumno

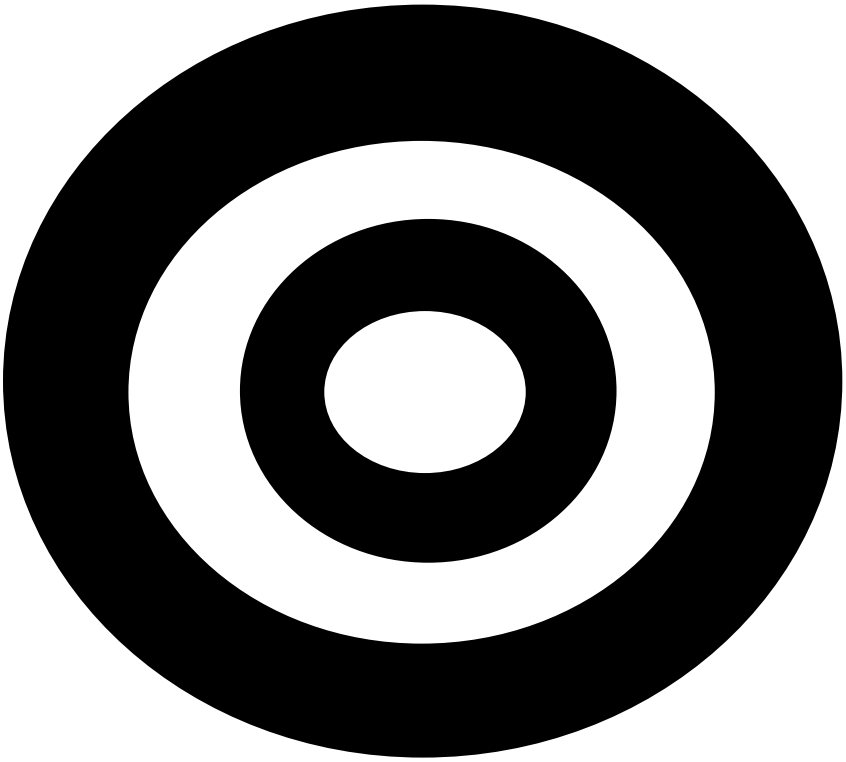


Unit 2/Unidad 2



English/Español





Target Number

BLM Kinder Unit 2, TV & Follow-up Lesson 3 Family Fun Game Cards
Printed in Pink – 1 set for the TV Lesson Demo. 1 set per partners for class; 1 set per student for home.
(There are 2 pages of these cards.)

A.
$5¢ + 5¢ =$

B.
$7¢ + 3¢ =$

C.
$3¢ + 9¢ =$

D.
Jose has 6 cents.
He found 5 more cents.
How much money did he have then?
José tiene 6 centavos.
Encontró 5 centavos más.
¿Cuánto dinero tenía entonces?

E.
Maria had 8 cents.
She found 2 more cents.
How much money did she have then?
María tiene 8 centavos.
Encontró 2 centavos más.
¿Cuánto dinero tenía entonces?

F.
Martin had 7 cents.
He found 5 more cents.
How much money did he have then?
Martín tiene 7 centavos.
Encontró 5 centavos más.
¿Cuánto dinero tenía entonces?

G.
1 dime
add
5 pennies

1 "dime"
suma
5 centavos

H.
1 dime
add
4 pennies

1 "dime"
suma
4 centavos

I.
1 dime
add
8 pennies

1 "dime"
suma
8 centavos

BLM Kinder Unit 2, TV & Follow-up Lesson 3 Family Fun Game Cards
Printed in Pink – 1 set for the TV Lesson Demo. 1 set per partners for class; 1 set per student for home.
(There are 2 pages of these cards)

J.
Which combination makes 10?

6 + 4 or 5 + 4

¿Qué combinación hace 10?

K.
Which combination makes 10?

5+ 6 or 5 + 5

¿Qué combinación hace 10?

L.
Which combination makes 10?

1 + 9 or 2 + 9

¿Qué combinación hace 10?

M.

Count by tens from 10 to 100.

Cuenta por diez de 10 a 100.

N.
The gila monster ate 5 ants. Then he ate 4 more ants. How many ants did the gila monster eat?

El monstruo de gila comió 5 hormigas. Entonces comió 4 hormigas más. ¿Cuántas hormigas comió?

O.
Roadrunner had 10 bugs he had caught. 5 flew away before he could eat them. How many did he have left?

Chaparral tenía 10 bichos que había atrapado. 5 se volaron antes de comerlos. ¿Cuántos le quedaron?

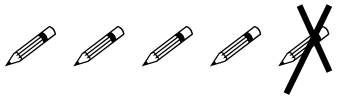
P. (b1)
There were 10 coyotes howling at the moon. 6 ran away. How many were left to howl at the moon?

Había 10 coyotes aullando a la luna. 6 se fueron. ¿Cuántos quedaron aullando a la luna?

Q. (a1)
Jack Rabbit nibbled on 3 sage leaves. Then he nibbled on 4 more. How many sage leaves did he nibble on?

Liebre mordisqueó 3 hojas de salvia. Entonces mordisqueó 4 más. ¿Cuántas hojas de salvia mordisqueó?

R.
Write the number sentence for



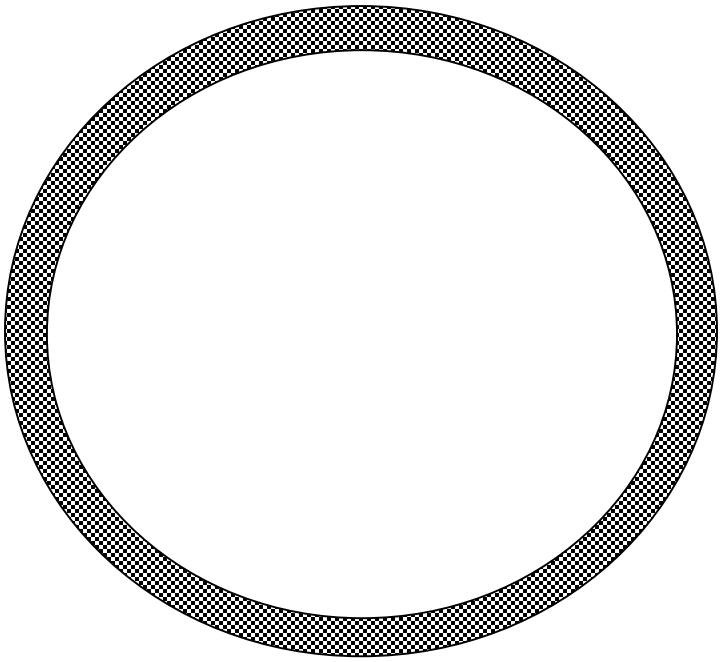
Escribe la oración numérica por

Word Problem Work Space

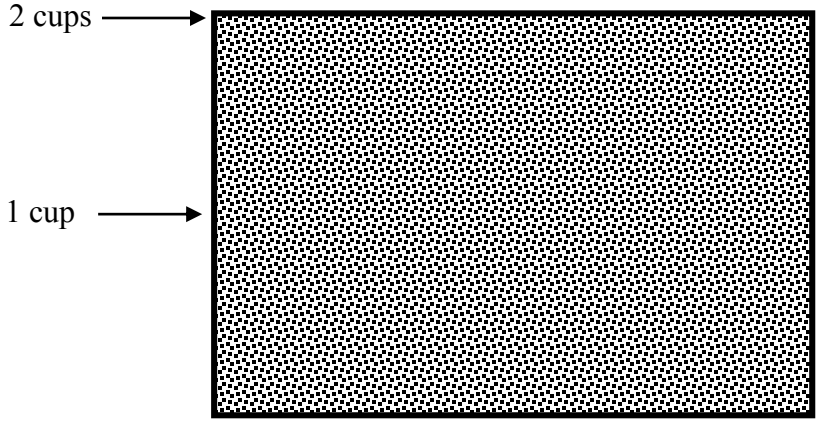
BLM Unit 2, TV Lesson 2 **Trail Mix Fractions**
(One sheet per student)

My name is _____
*Ni nombre es*_____

This is my share of the Trail Mix. My share is _____
Esta es mi porción. Mi porción es _____.



Cut out the rectangle below. Divide it into halves. Glue your half to the snack plate above.
Corta el rectángulo abajo. Divídelo en dos mitades. Pega una mitad el plato 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

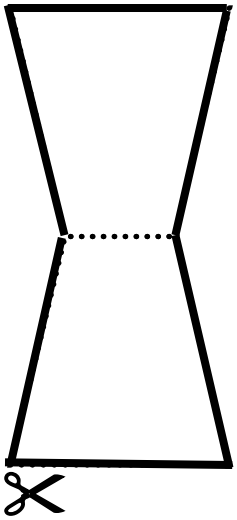
Cómo se juega

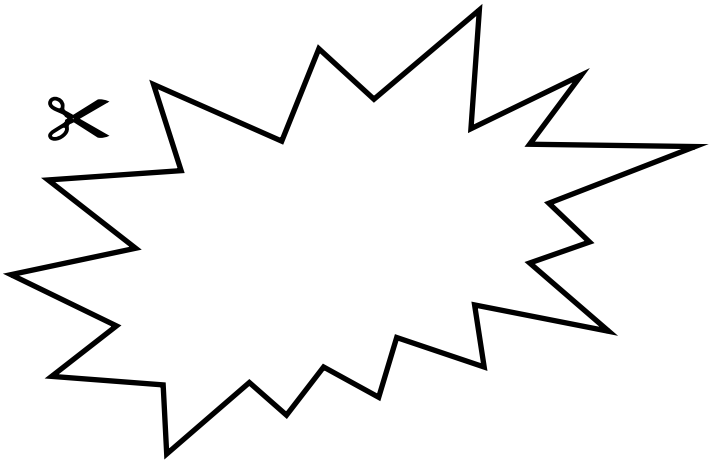
1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira 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

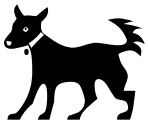




1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet

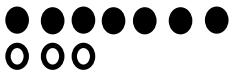
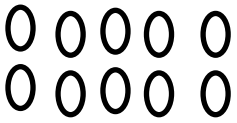
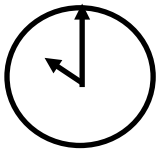
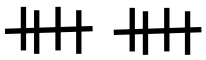


Unit 3

Warm up: Target Number

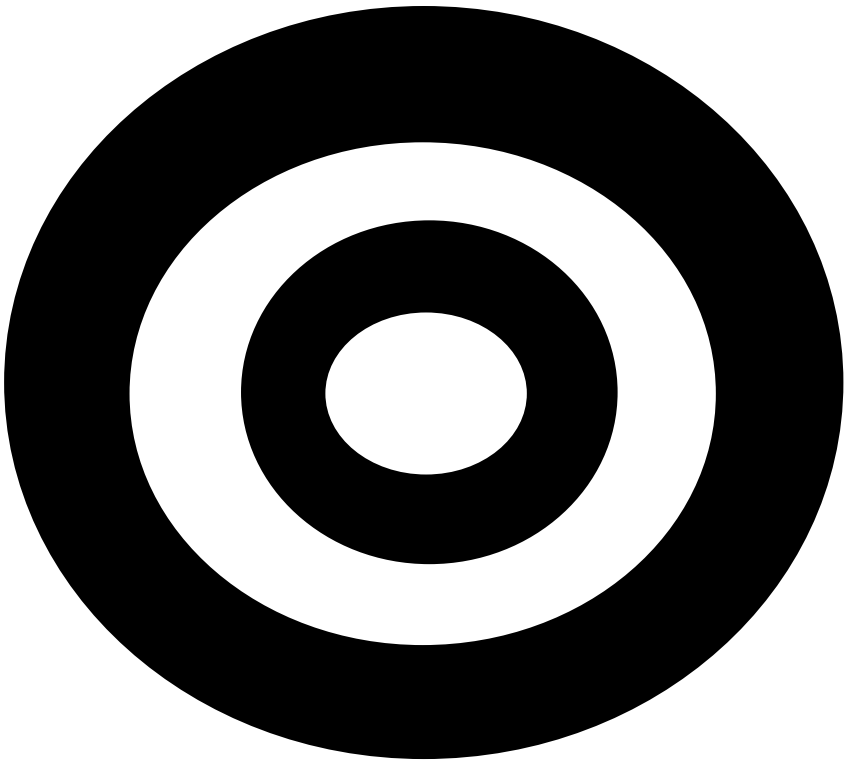
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, 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 x 5	100 / 10	20/2
3 + 7	0 + 10	ten	5 x 2	10/1	10 x 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.
Grade 1	Add and subtract within 10	***Procedural Fluency***: can easily use a process to figure out the answer.
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2);	***Automaticity*** by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 2	Add and subtract within 100	***Procedural Fluency***: can easily use a process to figure out the answer.



Target Number

<u>Suggested Target Numbers</u>: 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 K choices: 9 18 6 20

FAMILY FUN GAME Directions

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.

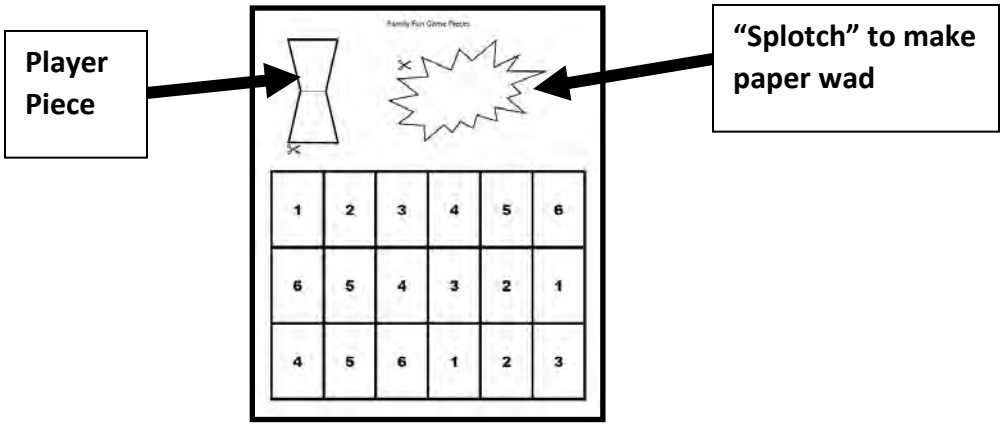
Process:

1. Each Student Packet has its own Family Fun Game Cards, allowing each student to participate together with students who have different skills to practice.
2. Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
    a. Many students will read ahead, solving problems, to find the "easiest" ones while waiting for their next turn.
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.
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.

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 name 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 ½ 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 x 4 = 20 4 x 5 = 20 20 ÷ 5 = 4 20 ÷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."

Process:

1. Look for the word problem(s) on the chart with a STAR - ★
2. For Dog Icon packets, start with the "ADD TO - (Result Unknown)" and the "TAKE FROM - (Result Unknown)" word problems from the Unit's CGI Chart.
    a. If a student struggles, stick with these for the summer so the student becomes secure. Otherwise, you can proceed to the "PUT TOGETHER/TAKE APART – (Total Unknown)" word problems.
3. Have manipulatives and paper for students to choose either medium for solving the problem.
4. 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).
5. **Read the problem again, and then teach students to take notes.**
    a. Prompt students with questions, and model writing notes. (Kindergarten Students Packets have a mostly blank page called, "Word Problem Work Space," to use for this.)
    b. What did Deena start with? *5 pennies.* How can we write? *D 5 (or draw 5 circles)*
    c. What happens next? *She gets 3 more.* How can we write? *+3 (or draw 3 circles)*
    d. What question do we have to answer? *How many does Deena have now?* How can we write this? *D has ___?*
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?)
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? *("Deena has 8 pennies now.")*

Unit 3 CGI Problems for *Daniel's Mystery Egg*

Add To	*(Result Unknown)* ★ If Daniel had __ egg(s) and Alex gave him __ more egg(s), how many eggs would Daniel have then? 1, 2 4, 1 2, 3	*(Change Unknown)* Daniel has __ friend(s). How many more friends does Daniel need so that he will have __ friends? 1, 2 3, 4 3, 5	*(Start Unknown)* Daniel had some eggs in a box. Then he put __ more egg(s) in the box. Now Daniel has __ eggs. How many eggs were in the box to start? 1, 3 2, 4 3, 5
Take From	*(Result Unknown)* ★ Daniel had __ egg(s). __ egg(s) hatched. How many eggs does Daniel have now? 1, 1 5, 2 6, 3	*(Change Unknown)* Daniel had __ egg(s). Some eggs hatched. Now Daniel has __ egg(s). How many eggs hatched? 5, 4 6, 4 4, 1	*(Start Unknown)* Daniel had some eggs. __ egg(s) hatched. Now Daniel has __ egg(s). How many eggs did Daniel have to start? 1, 6 2, 3 3, 1
Put Together/ Take Apart	*(Whole Unknown)* ★ __ of Daniel's friends are boys and __ are girls. How many friends does Daniel have? 1, 2 2, 3 1, 3	*(Part Unknown)* Daniel has __ friends. __ are boys and the rest are girls. How many friends are girls? 3, 1 5, 2 4, 3	
Compare	*(Difference Unknown)* Daniel found __ eggs. Alex found __ eggs. How many more eggs did Alex find than Daniel? 2, 5 5, 6 3, 6	*(Compare Quantity Unknown)* Daniel found __ eggs. Tammy found __ more egg(s) than Daniel. How many eggs did Tammy find? 2, 1 3, 2 4, 3	*(Referent Unknown)* Meg found __ egg(s). That was __ more egg(s) than Daniel found. How many eggs did Daniel find? 2, 1 3, 2 5, 3

Unit 3 *CGI Problems for Daniel's Mystery Egg*

Juntar	(*Resultados desconocidos*) ★ Si Daniel tenía ___ huevo(s) y Alex le dio __ huevo(s) más, ¿cuántos huevos tendrá? 1, 2 4, 1 2, 3	(*Cambio desconocido*) Daniel tiene __ amigo(s). ¿Cuántos amigos más necesita para tener __ amigos? 1, 2 3, 4 3, 5	*(Inicio desconocido)* Daniel tenía algunos huevos en una cajita. Entonces metió __ huevo(s) más en la cajita . Ahora Daniel tiene ___ huevos. ¿Cuántos huevos había en la cajita al empezar? 1, 3 2, 4 3, 5
Separar	(*Resultados desconocidos*) ★ Daniel tenía __ huevo(s). __ huevos dieron polluelos. ¿Cuántos huevos tiene ahora? 1, 1 5, 2 6, 3	*(Cambio desconocido)* Daniel tenía __ huevo(s). Algunos de los huevos dieron polluelos. Ahora Daniel tiene ____ huevo(s). ¿Cuántos huevos dieron polluelos? 5, 4 6, 4 4, 1	*(Inicio desconocido)* Daniel tenía algunos huevo(s). __ huevos dieron polluelos. Ahora Daniel tiene __ huevo(s). ¿Cuántos huevos tenía Daniel al empezar? 1, 6 2, 3 3, 1
Parte-Parte-Entero	*(Entero desconocido)* ★ __ de los amigos de Daniel son muchachos y __ son muchachas. ¿Cuántos amigos tiene Daniel? 1, 2 2, 3 1, 3	*(Parte desconocida)* Daniel tiene ___ amigos. __ son muchachos y lo demás muchachas. ¿Cuántas amigas tiene? 3, 1 5, 2 4, 3	
Comparar	*(Diferencia desconocido)* Daniel encontró ___ huevos. Alex encontró __ huevos. ¿Cuántos huevos de más encontró Alex que Daniel? 2, 5 5, 6 3, 6	*(Comparar total desconocido)* Daniel encontró___ huevos. Tammy encontró __ huevo(s) más que Daniel. ¿Cuántos huevos encontró Tammy? 2, 1 3, 2 4, 3	*(Referente desconocido)* Meg encontró ____ huevo(s). Encontró_ huevos más que Daniel. ¿Cuántos huevos encontró Daniel? 2, 1 3, 2 5, 3

Math Objectives
- Share a snack in half. (parts of a set)
- Explain why each portion is half.

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

Vocabulary
- half
- fair shares
- equal pieces
- 1 out of 2 equal pieces

Materials:
TEACHER:
- Chart paper with question**: How do you know that each portion is half?** Put a copy of the record sheet at the top of the chart with the question.

Teacher Demo
- 6 small beef jerky pieces (no demo – just show pieces)

STUDENT ACTIVITY (per partner pair):
- **BLM** Jerky Fractions
- 6 small beef jerky pieces
- 2 Paper plates
- 2 paper towels

Unit 3, Lesson 2 — Kinder

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. The snack will be shared in two portions. 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.

Show the jerky and ask if anyone knows what the snack is, if they've had it before and if so, where. Explain to the students that this is another snack that can be purchased at ballgames and at fairs, and some forms are sold at some convenience stores. Sometimes people make their own jerky. (*As with any of the snack fractions, feel free to change the food item if you feel it will not be popular with your students.*)

Students are going to share the jerky with a friend. What is different about today's snack from our other snacks? (*They don't have just one piece to cut.*) Talk to your partner about how you could make sure that you each have fair shares, or equal parts of the snack *(pause for discussion)*. Tell me some of your thoughts. (*Listen to their ideas, always asking, "does someone have another way?" Any way to share equally is permissible; however, the easiest is just to divvy out the snacks until both partners have equal amounts.)*

Tell students that today you are not going to demonstrate; they are going to share on their own. Distribute the supplies, and let them share. Circulate the room to make sure they understand what to do since this is fractional parts of a set instead of a whole. Just remind students to share fairly.

QUESTIONS
- How will you share the jerky fairly?
- How many sticks of jerky do each of you have?
- What fractional part do you have?
- How do you know that you each have half of the snack?

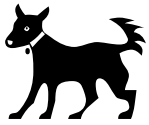
Writing:
Share-write the student answers to "How do you know that each portion is half?"

Objectives: Read and discuss.

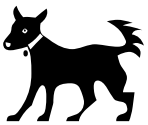
Summer Math

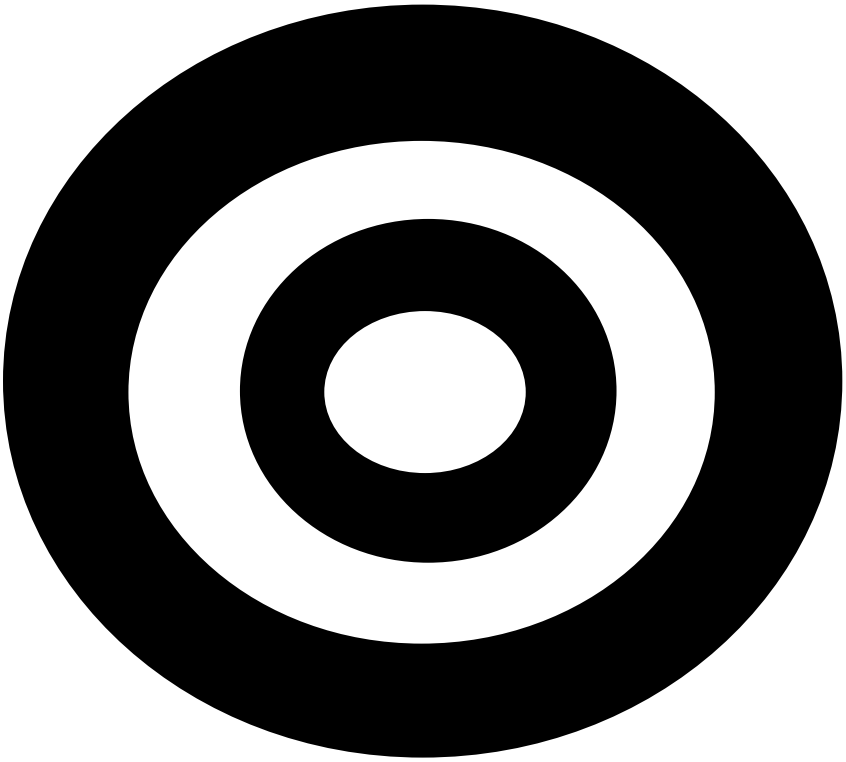
Student Packet/
Paquete de alumno

Unit 3/Unidad 3



English/Español



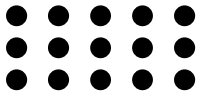


Target Number

BLM Unit 3, TV & Follow-up Lesson 3 Family Fun Game Cards

Printed on Pink – one set for the TV Lesson Demo. One set per partners for class; one set per student for home. (There are two pages of these cards.) They will also need number cards 1 – 20.

A.
Show the number card that tells you how many black dots there are:



Muestra la tarjeta con el número que representa cuántos puntos negros hay.

B.
Show the number card that tells you how many butterflies there are:

Muestra la tarjeta con el número que representa cuántas mariposas hay.

C.
Show the number card that tells you how many stars there are:

Muestra la tarjeta con el número que representa cuántas estrellas hay.

D.
Show me a set of
8
counters.

Muéstrame un grupo de 8 contadores.

E.
Show me a set of
15
counters.

Muéstrame un grupo de 8 contadores.

F.
Show me a set of
10
counters.

Muéstrame un grupo de 8 contadores.

G.
The gila monster ate 5 ants. Then he ate 7 more ants. How many ants did the gila monster eat?

El monstruo de gila comió 5 hormigas. Entonces comió 7 hormigas más. ¿Cuántas hormigas comió?

H.
Jack Rabbit nibbled on 6 sage leaves. Then he nibbled on 4 more. How many sage leaves did he nibble on?
Liebre mordisqueó 6 hojas de salvia. Entonces mordisqueó 4 más. ¿Cuántas hojas de salvia mordisqueó?

I.
Roadrunner had 10 bugs he had caught. 7 flew away before he could eat them. How many bugs did he have left?
Chaparral tenía 10 bichos que había atrapado. 7 se volaron antes de comerlos. ¿Cuántos le quedaron?

BLM Unit 3, TV & Follow-up Lesson 3 Family Fun Game Cards

Printed on Pink – one set for the TV Lesson Demo. One set per partners for class; one set per student for home. (There are two pages of these cards.)

J.
Lizard laid 5 eggs. 3 eggs broke. How many eggs were not broken?
Lagartija puso 5 huevos. 3 huevo se quebraron.¿Cuántos huevos están enteros?

K.
Lizard laid 6 eggs in one hole and 4 eggs in another hole. How many eggs did she lay?
Lagartija puso 6 huevos en un hueco y 4 huevos en otro. ¿Cuántos huevos puso?

L.
Lizard laid 12 eggs. 4 were white. The rest were brown. How many were brown?
Lagartija puso 12 huevos. 4 fueron blancos. Los otros marrones. ¿Cuántos huevos marrones había?

M. (*Show the real coin.)*
Tell me the name of this coin.

Dime cómo se llama esta moneda.

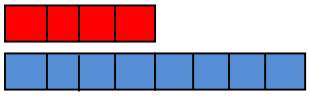
N. (*Show the real coin.)*
Tell me the name of this coin.

Dime cómo se llama esta moneda.

O. (*Show the real coin.)*
Tell me the name of this coin.

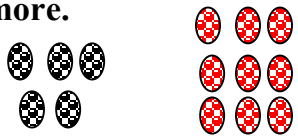
Dime cómo se llama esta moneda.

P. Which set has more? Point to the set that has more.



¿Qué grupo tiene más. Señala con el dedo el juego que tiene más?

Q. Which set has more? Point to the set that has more.



¿Qué grupo tiene más. Señala con el dedo el juego que tiene más?

R. Which set has more? Point to the set that has more.

¿Qué grupo tiene más. Señala con el dedo el juego que tiene más?

BLM Kinder Unit 3, TV & Follow-up Lesson 3 Number Cards 1 - 20

Printed on Pink – one set for the TV Lesson Demo. One set per student for home.

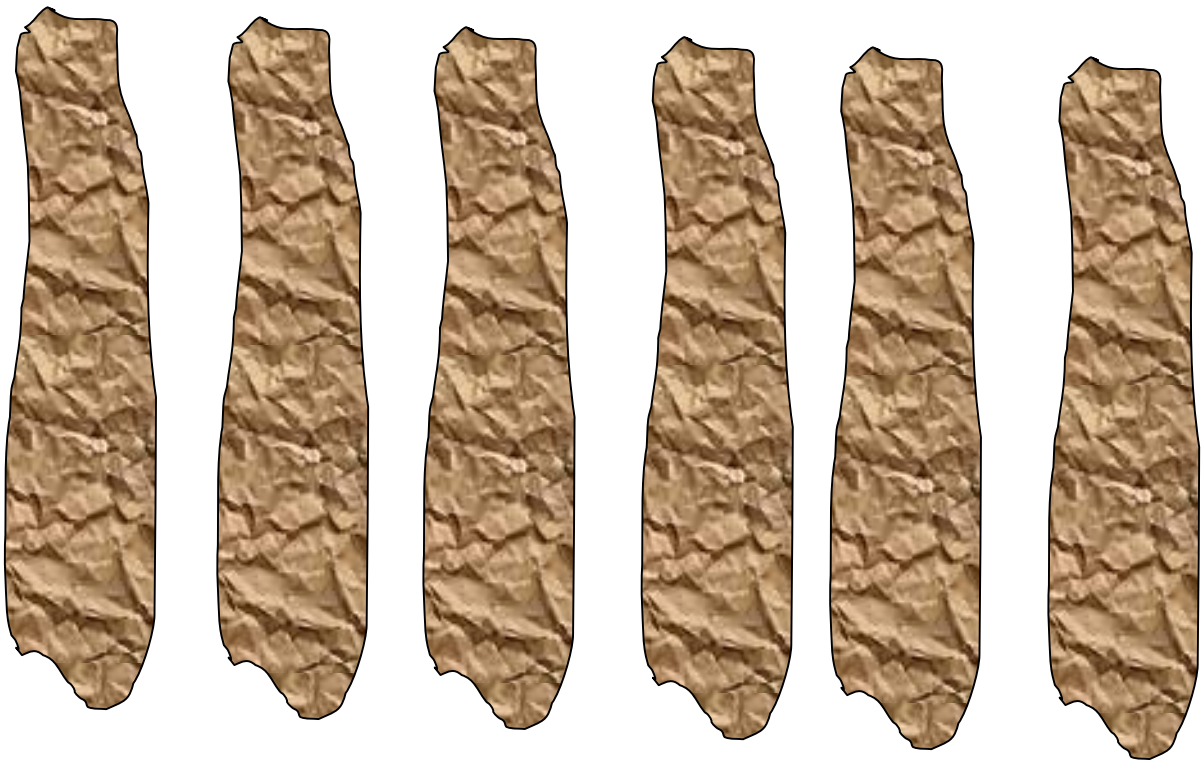
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

Word Problem Work Space

BLM Unit 3, Snack Fractions Lesson 2 **Jerky Fractions**
(One sheet per student)

My name is _____

Draw a line between your half and your partner's half.
Dibuja una línea entre las dos mitades.



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

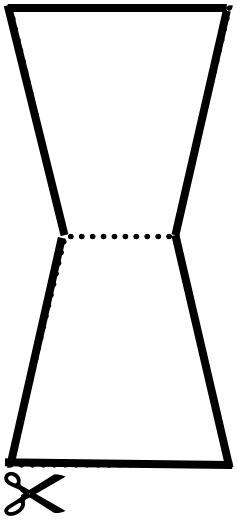
Cómo se juega

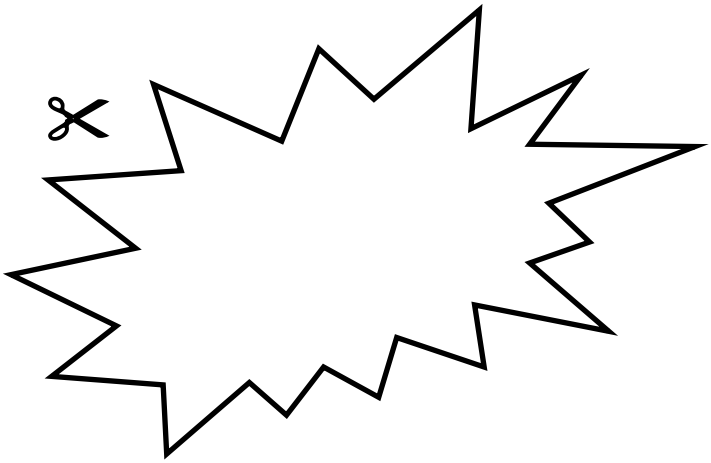
1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira 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

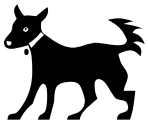




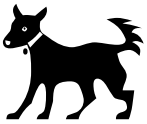
1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet



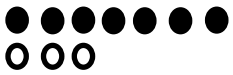
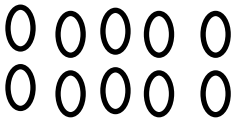
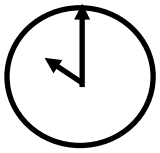
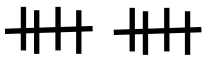
Unit 4



Warm up: Target Number

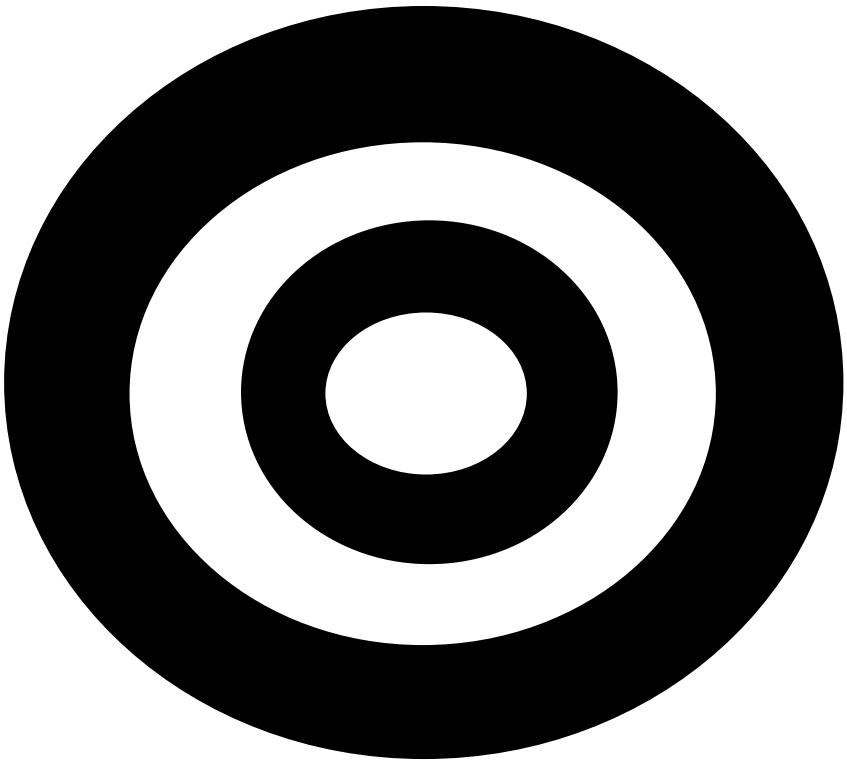
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, 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 x 5	100 / 10	20/2
3 + 7	0 + 10	ten	5 x 2	10/1	10 x 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.
Grade 1	Add and subtract within 10	***Procedural Fluency***: can easily use a process to figure out the answer.
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2);	***Automaticity*** by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 2	Add and subtract within 100	***Procedural Fluency***: can easily use a process to figure out the answer.



Target Number

<u>Suggested Target Numbers</u>: 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 K choices: 9 18 6 20

FAMILY FUN GAME Directions

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.

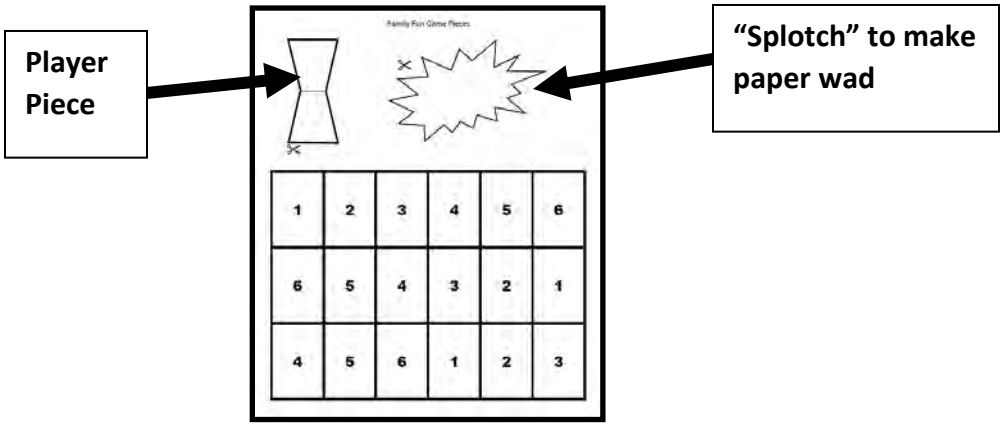
Process:

1. Each Student Packet has its own Family Fun Game Cards, allowing each student to participate together with students who have different skills to practice.
2. Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
    a. Many students will read ahead, solving problems, to find the "easiest" ones while waiting for their next turn.
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.
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.

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 name 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 8x4=32	no. labels flipped	$57 sales price
N	3 thorns	35 fewer	The 4 facts for 6x9=54	yes. scale factor of (x6)	$31.25 sales price
O	10 miles	52 miles	7x8=56 8x7=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 1/3 can be 2/6 or 3/9 or 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 1/2 can be 2/4 or 3/6 or 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 1/4 can be 2/8 or 3/12 or 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."

Process:

1. Look for the word problem(s) on the chart with a STAR - ★
2. For Dog Icon packets, start with the "ADD TO - (Result Unknown)" and the "TAKE FROM - (Result Unknown)" word problems from the Unit's CGI Chart.
    a. If a student struggles, stick with these for the summer so the student becomes secure. Otherwise, you can proceed to the "PUT TOGETHER/TAKE APART – (Total Unknown)" word problems.
3. Have manipulatives and paper for students to choose either medium for solving the problem.
4. 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).
5. **Read the problem again, and then teach students to take notes.**
    a. Prompt students with questions, and model writing notes. (Kindergarten Students Packets have a mostly blank page called, "Word Problem Work Space," to use for this.)
    b. What did Deena start with? *5 pennies.* How can we write? *D 5 (or draw 5 circles)*
    c. What happens next? *She gets 3 more.* How can we write? *+3 (or draw 3 circles)*
    d. What question do we have to answer? *How many does Deena have now?* How can we write this? *D has ___?*
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?)
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? *("Deena has 8 pennies now.")*

Unit 4 CGI Problems for *The Classic Treasury of Aesop's Fables*

Add To	(*Result Unknown*) ★ City Mouse had __ sunflower seeds. Country Mouse gave him __ more sunflower seeds. How many sunflower seeds does City Mouse have now? 3, 1 5, 2 6, 3	(*Change Unknown*) City Mouse had __ sunflower seeds. How many more sunflower seeds will he need to get so that he will have __ seeds? 2, 3 3, 5 4, 7	*(Start Unknown)* 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? 1, 8 2, 5 3, 6
Take From	*(Result Unknown)* ★ Country Mouse had __ sunflower seeds. He gave __ sunflower seeds to City Mouse. How many sunflower seeds does Country Mouse have now? 10, 1 8, 2 9, 3	*(Change Unknown)* City Mouse had __ dandelion greens. He ate some dandelion greens. Now he has __ dandelion greens. How many greens did he eat? 5, 4 8, 6 10, 7	*(Start Unknown)* Country Mouse had some cornbread crumbs. He ate __. Now he has __ cornbread crumbs. How many crumbs did he have to start? 1, 3 2, 4 3, 5
Put Together/ Take Apart	*(Whole Unknown)* ★ Crow dropped __ small pebbles and __ big pebble(s) into the pitcher. How many pebbles did he drop into the pitcher all together? 2, 2 3, 3 5, 5	*(Part Unknown)* Crow dropped __ pebbles into the pitcher. __ were big and the rest were small. How many pebbles were small? 6, 4 8, 5 10, 7	
Compare	*(Difference Unknown)* Country Mouse had __ sunflower seeds. City Mouse had __ sunflower seeds. How many fewer seeds did Country Mouse have than City Mouse? 5, 7 6, 9 5, 10	*(Quantity Unknown)* 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? 4, 1 5, 2 7, 10	*(Referent Unknown)* Country Mouse has __ dandelion greens. He has __ more green(s) than sunflower seeds. How many sunflower seeds does Country Mouse have? 9, 1 7, 2 5, 3

Unit 4 CGI Problems for *The Classic Treasury of Aesop's Fables*

Unir	★ (*Resultado desconocido*) El ratón de la ciudad tenía __ semillas de girasol. El ratón del campo le dio __ semillas de girasol más. ¿Cuántas semillas de girasol tiene el ratón de la ciudad ahora? 3, 1 5, 2 6, 3	(*Cambio desconocido*) El ratón de la ciudad tenía __ semillas de girasol. ¿Cuántas semillas de girasol más necesitará para tener __ semillas? 2, 3 3, 5 4, 7	*(Inicio desconocido)* Había algunas piedras en la jarra. El cuervo puso __ piedras más en la jarra. Ahora hay __ piedras en la jarra. ¿Cuántas piedras había en la jarra al principio? 1, 8 2, 5 3, 6
Separar	*(Resultado desconocido)* ★ El ratón del campo tenía __ semillas de girasol. Él le dio __ semillas de girasol al ratón de la ciudad. ¿Cuántas semillas de girasol tiene el ratón del campo ahora? 10, 1 8, 2 9, 3	*(Cambio desconocido)* El ratón de la ciudad tenía __ dientes de león. Se comió algunos dientes de león. Ahora tiene __ dientes de león. ¿Cuántos dientes de león se comió? 5, 4 8, 6 10, 7	*(Inicio desconocido)* El ratón del campo tiene algunas morusas de pan. Se comió __. Ahora tiene __ morusas de pan. ¿Cuántas morusas de pan tenía al principio? 1, 3 2, 4 3, 5
Parte-Parte-Entero	*(Entero desconocido)* ★ Un cuervo puso __ piedras pequeñas y __ piedras grandes en la jarra. ¿Cuántas piedras puso en la jarra en total? 2, 2 3, 3 5, 5	*(Parte desconocida)* El cuervo puso __ piedras en la jarra. __ eran grandes y el resto pequeñas. ¿Cuántas piedras eran pequeñas? 6, 4 8, 5 10, 7	
Compara	*(Diferencia desconocida)* El ratón del campo tenía __ semillas de girasol. El ratón de la ciudad tenía __ semillas de girasol. ¿Cuántas semillas de girasol menos tenía el ratón del campo que el de la ciudad? 5, 7 6, 9 5, 10	*(Cantidad desconocida)* El cuervo puso __ piedras pequeñas en la jarra. Él puso __ piedras grandes más que piedras pequeñas. ¿Cuántas piedras grandes puso en la jarra? 4, 1 5, 2 7, 10	*(Referente desconocido)* El ratón del campo tiene __ dientes de león. Él tiene __ dientes de león más que semillas de girasol. ¿Cuántas semillas de girasol tiene el ratón del campo? 9, 1 7, 2 5, 3

Math Objectives

- Share a snack in half.
- Explain why each portion is half.

Language Objectives

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

Vocabulary

- half
- fair shares
- equal pieces
- 1 out of 2 equal pieces

Materials:

(per partner pair, per teacher):

- **BLM** Snack Bag Fractions
- 2 bags of 100 calorie snacks (1 bag per student)
- 2 paper plates
- 2 paper towels
- 2 pair scissors
- 2 glue sticks
- 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 halves.

Unit 4, Lesson 2 — Kinder

Snack Fractions

Children MUST 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:

Once again we are going to change the way we look at fractions. Today, each student has a full bag of a snack. They are going to open their own bags and find out if the bags have already divided their snack into halves.

(*Read through the directions with the students first, then walk them through it step by step*.)

- Today you are each going to have your own bag of snack.
- You are going to open your bag of snack, pour it on your paper plate, and count your pieces.
- Now look at your record sheet. "My bag had ---- pieces in it. You are going to write your count on your Snack Bag Fractions record sheet.
- The next statement on your Snack Bag Fractions sheet is "My partner's bag had ___ pieces in it. You will write your partner's count on this line.
- Then you will compare the two numbers. See the comparison words at the bottom of the page? Let's cut those out right now *(do so)*. We will need one of these words to finish our comparison statement.

(*When everyone has the comparison words cut out, begin step-by-step to walk through the activity.)*

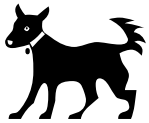
- Distribute the snack bags. *(do so)*
- Empty your snack bags on your paper plate. *(do so)*
- Count the pieces of snacks inside.*(do so)*
- Write the number of pieces on your record sheet. *(do so)*
- Write your partner's number of pieces on your record sheet. *(do so)*
- Now write the number of pieces in the comparison statement, your number first. *(do so)*
- You and your partner must now decide which comparison word to use *(pause and let them decide)*.

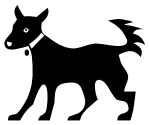
	Unit 4, Lesson 2 **Kinder** **Snack Fractions -** continued • Now you and your partner must decide whether your bags gave each of you half of today's snack. If your bags did give you fair shares, circle ARE in the sentence. If you bags did not give you fair shares, circle ARE NOT in the sentence. *(Pause and give students time to do so.)* • I would like now to hear from each pair. We are going to decide whether our snack bags were fair shares. We are going to write on our chart paper to show each group's records. **Writing:** • Share-write the student answers to: **Did your snack bags divide your snack into fair shares? Why or why not?** Talk to each pair and record their numbers and their comparison statement on the chart paper. Decide as a class if that comparison offers halves. Why and why not. What comparison word would they have had to use to show fair shares, or halves? *(equal)* **Objectives:** Read the objectives. How did we accomplish these in our snack fraction lesson?

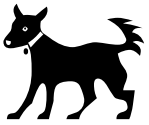
Summer Math

Student Packet/ Paquete de alumno

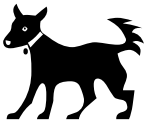
Unit 4/Unidad 4

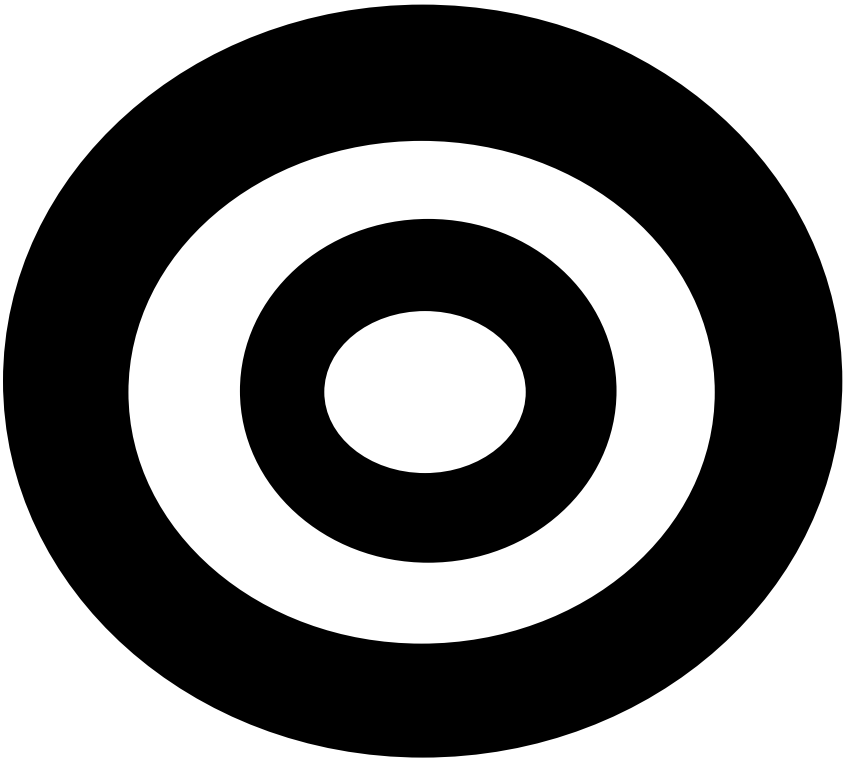






English/Español





Target Number

BLM Kinder Unit 4, TV & Follow-up Lesson 3 Family Fun Game Cards

Printed on Pink – One set per partners for Follow-up; one set per student for home.
(There are two pages of these cards.)

A. **The Gila monster ate 9 ants. Then he ate 5 more ants. How many ants did the Gila monster eat?** ***El monstruo de Gila se comió 9 hormigas. Después se comió 5 más. ¿Cuántas hormigas se comió el monstruo de Gila?***	**B**. **Lizard laid 7 eggs. 3 eggs broke. How many eggs were not broken?** ***La lagartija puso 7 huevos. 3 huevos se rompieron. ¿Cuántos huevos no se rompieron?***	**C**. **Lizard laid 11 eggs. 4 were white. The rest were brown. How many were brown?** ***La lagartija puso 11 huevos. 4 eran blancos. El resto, color café. ¿Cuántos huevos eran color café?***
D. **Show me a set of 10 counters**. **Now show me the number card for 10 counters.** ***Muéstrame un grupo de 10 contadores.*** ***Ahora, muéstrame la tarjeta con el número para los 10 contadores***	**E**. **Show me a set of 15 counters.** **Now show me the number card for 15 counters.** ***Muéstrame un grupo de 15 contadores.*** ***Ahora, muéstrame la tarjeta con el número para los 15 contadores***	**F**. **Show me a set of 12 counters** **Now show me the number card for 12 counters.** ***Muéstrame un grupo de 12 contadores.*** ***Ahora, muéstrame la tarjeta con el número para los 12 contadores***
G. **Tell me the name of this coin.** **(**Show a real penny**)** ***Dime el nombre de esta moneda.***	**H**. **Tell me the name of this coin.** **(**Show a real penny**)** ***Dime el nombre de esta moneda.***	**I**. **Tell me the name of this coin.** **(**Show a real dime**)** ***Dime el nombre de esta moneda.***

BLM Kinder Unit 4, Follow-up Lesson 3 Family Fun Game Cards

Printed on Pink – One set per partners for Follow-up; one set per student for home.
(There are two pages of these cards.)

J.
Tell me how you know you have a half of a snack.

Explica cómo sabes que tiene la mitad de un bocadillo.

K.
(Give student a 3 x 5 card)
Share this card in fair shares for 2 people.

Comparte esta tarjeta en partes iguales para 2 personas.

L.
What do you call fair shares when you share between 2 people?

¿Cómo llamas a las partes iguales cuando compartes entre 2 personas?

M.
Crow drank 7 drops of water, then he drank 6 drops of water. How many drops of water did crow drink?
Cuervo bebio 7 gotas de agua y luego comio 6 gotas de agua. Cuantas gotas de agua bebio cuevo?

N.
Lion had 10 thorns in his paw. 7 of them fell out. How many thorns were left in his paw?
Leon tenia una espina en su pata. 7 de ellas se quitaron. Cuantas espinas se quedaron en su pata?

O.
Rabbit ran 5 miles. He rested, then he ran another 5 miles. How many miles did rabbit run?
Liebre corrio 5 millas. Descanso y luego corrio otras 5 millas. Cuantas millas corrio Liebre?

P.
Lion had 5 brothers.
Mouse had 8 brothers.
Show me the 2 sets.
Who had more?

León tenía 5 hermanos.
Raton tenía 8 hermanos.
Muéstrame los 2 grupos.
¿Quién tenía más?

Q.
Lion saw 12 butterflies.
Mouse saw 11 butterflies.
Show me the 2 sets.
Who saw more?

León vio 12 mariposas.
Ratón vio 11 mariposas.
Muéstrame los 2 grupos.
¿Quién vio más?

R.
Lion saw 12 pebbles.
Mouse saw 13 pebbles.
Show me the 2 sets.
Who saw more?

León vio 12 piedras.
Ratón vio 13 piedras.
Muéstrame los 2 grupos.
¿Quién vio más?

BLM Kinder Unit 3, TV & Follow-up Lesson 3 Number Cards 1 - 20

Printed on Pink – one set for the TV Lesson Demo. One set per student for home.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

Word Problem Work Space

BLM Unit 4, TV Lesson 2 **Snack Bag Fractions**
(One sheet per student)

My name is _____

My bag had _____ pieces in it.

My partner's bag had _____ pieces in it.

_____ pieces are [ ] _____ pieces.

Our snack bags (are / are not) halves of our snack.

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	**less than**
equal to	

BLM Unit 4, TV Lesson 2 **Snack Bag Fractions**
(One sheet per student)

Mi nombre es _____

Mi bolso tenía _____ piezas.

El bolso de mi compañero tenía _____ piezas en él.

_____ piezas son [ ] _____ piezas.

Nuestros bolsos de merienda (son / no son) mitades de nuestro bocadillo.

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

más que	**menos que**
igual a	

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

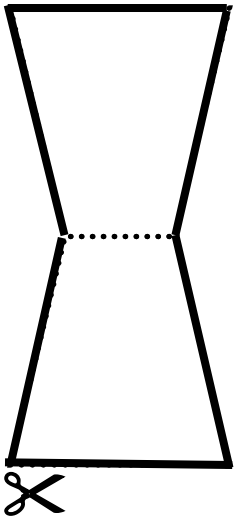
Cómo se juega

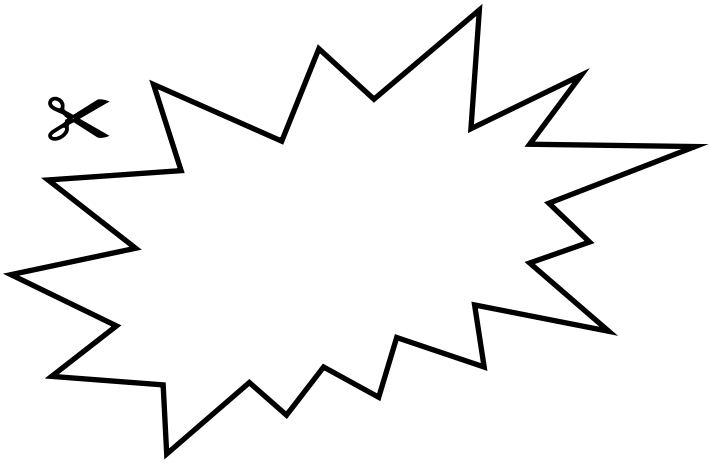
1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira 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

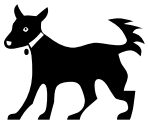




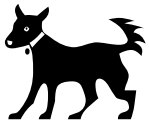
1	2	3	4	5	6
6	5	4	3	2	1
4	5	6	1	2	3

Summer Math

Educator Packet



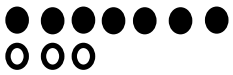
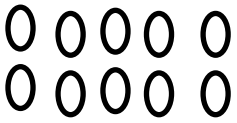
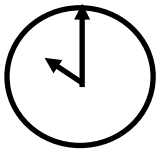
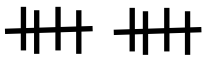
Unit 5



Warm up: Target Number

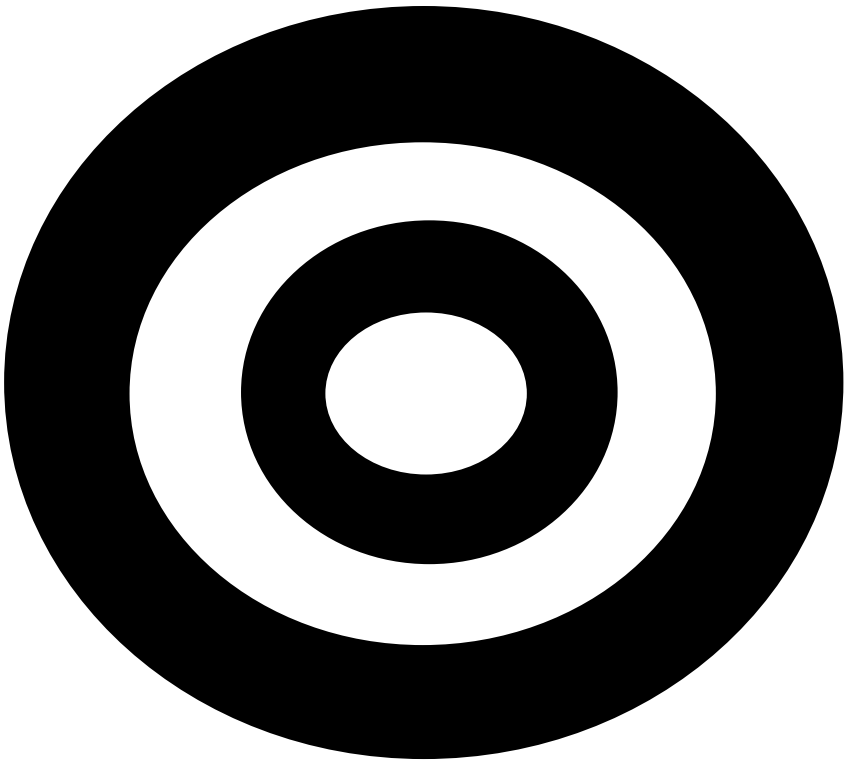
- The task is to represent the target number in different ways in one minute. Do a couple samples with students before starting the timer.
- Set the timer for one minute.
- Educators play along, and write examples to share related to the students' required math fluencies:
- At the end of the minute, 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 x 5	100 / 10	20/2
3 + 7	0 + 10	ten	5 x 2	10/1	10 x 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.
Grade 1	Add and subtract within 10	***Procedural Fluency***: can easily use a process to figure out the answer.
Grade 2	Single digit sums and differences (automaticity by the end of Grade 2);	***Automaticity*** by the end of Grade 2: Knows the answer without stopping to use a process to figure out the answers.
Grade 2	Add and subtract within 100	***Procedural Fluency***: can easily use a process to figure out the answer.



Target Number

<u>Suggested Target Numbers</u>: 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 K choices: 9 18 6 20

FAMILY FUN GAME Directions

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.

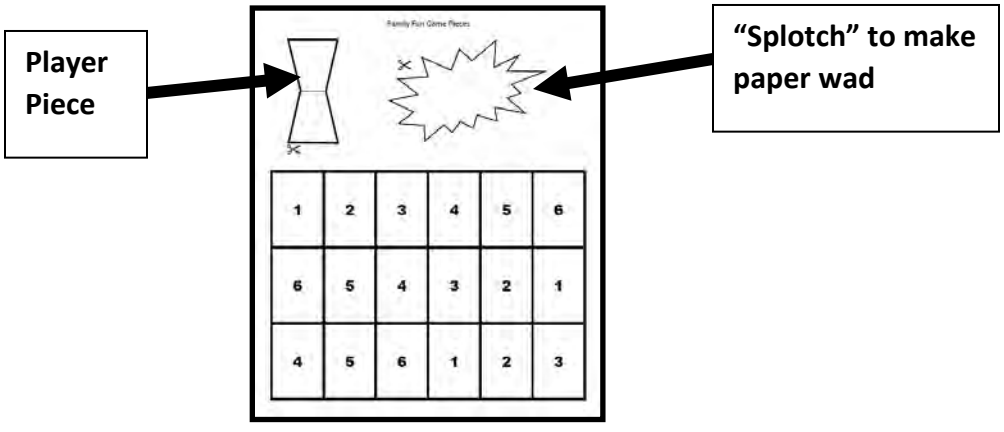
Process:

1. Each Student Packet has its own Family Fun Game Cards, allowing each student to participate together with students who have different skills to practice.
2. Do not cut the cards apart! Starting with Lesson 2, the three cards in each row will practice the same skill.
    a. Many students will read ahead, solving problems, to find the "easiest" ones while waiting for their next turn.
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.
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.

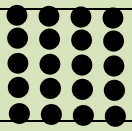
Do It Yourself (DIY) Game Pieces

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 name 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	1and 2/3, 1 and 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 ½ 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	$0.40 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.	1/4 = 0.4	False. Scale factor not consistent	$428
N	Halves, or 1 out of 2 equal pieces	7	0.07	True. Scale factor = (÷4) or($\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	200
R	0 frogs	85		$\frac{7}{2}$ $\frac{}{15}$	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."

Process:

1. Look for the word problem(s) on the chart with a STAR - ★
2. For Dog Icon packets, start with the "ADD TO - (Result Unknown)" and the "TAKE FROM - (Result Unknown)" word problems from the Unit's CGI Chart.
    a. If a student struggles, stick with these for the summer so the student becomes secure. Otherwise, you can proceed to the "PUT TOGETHER/TAKE APART – (Total Unknown)" word problems.
3. Have manipulatives and paper for students to choose either medium for solving the problem.
4. 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).
5. **Read the problem again, and then teach students to take notes.**
    a. Prompt students with questions, and model writing notes. (Kindergarten Students Packets have a mostly blank page called, "Word Problem Work Space," to use for this.)
    b. What did Deena start with? *5 pennies.* How can we write? *D 5 (or draw 5 circles)*
    c. What happens next? *She gets 3 more.* How can we write? *+3 (or draw 3 circles)*
    d. What question do we have to answer? *How many does Deena have now?* How can we write this? *D has ___?*
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?)
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? *("Deena has 8 pennies now.")*

Unit 5 *CGI Problems for iMuu, Moo!*

Add To	*(Result Unknown)* ★ Juana the Ant had __ leaves. Celestina the Cicada gave her __ more leaves. How many leaves does Juana have now? 1, 9 2, 5 3, 7	*(Change Unknown)* Juana gathered __ crumbs. How many more crumbs will Juana need to gather to have __ crumbs for the winter? 9, 10 8, 10 7, 10	*(Start Unknown)* Celestina had some leaves. Juana gave her __ more leaves. Now Celestina has __ leaves. How many leaves did Celestina have to start? 1, 8 2, 9 3, 10
Take From	*(Result Unknown)* ★ There were __ meadow toads sitting on a rock by the pond. __ toad(s) hopped away. How many toads are there now? 10, 1 9, 2 8, 3	*(Change Unknown)* Little Brown Duck had __ brown ducklings. Some ducklings swam away. Now he has __ brown ducklings. How many ducklings swam away? 5, 4 7, 5 9, 6	*(Start Unknown)* Some little brown ducklings were swimming in a line. __ ducklings stopped to eat. Now there are __ ducklings swimming in a line. How many ducklings were swimming to start? 2, 2 3, 4 7, 4
Put Together/ Take Apart	*(Whole Unknown)* ★ __ baby toads and __ grown-up toads sing at the pond. How many toads all together? 2, 3 3, 4 0, 6	*(Part Unknown)* __ meadow toads were singing at the pond. __ were babies and the rest were grown-ups. How many toads were grown-ups? 5, 4 7, 5 10, 7	
Compare	*(Difference Unknown)* Celestina had __ leaves. Juana had __ leaves. How many more leaves did Celestina have than Juana? 8, 7 5, 3 7, 4	*(Quantity Unknown)* Celestina had __ crumbs. Juana had __ more crumb(s) than Celestina. How many crumbs did Juana have? 6, 1 7, 2 3, 4	*(Referent Unknown)* There were __ blue buttons on the floor. There were __ more blue than red buttons. How many red buttons were there? 6, 2 9, 3 12, 2

Unit 5 CGI Problems for *¡Muu, Moo!*

Unir	(*Resultado desconocido*) ★ Juana la hormiga tenía __ hojas. Celestina la cigarra le dio __ hojas más. ¿Cuántas hojas tiene Juana ahora? 1, 9 2, 5 3, 7	(*Cambio desconocido*) Juana reunió __ migas. ¿Cuántas migas más necesitará Juana reunir para tener __ migass para el invierno? 9, 10 8, 10 7, 10	*(Inicio desconocido)* Celestina tenía algunas hojas. Juana le dio __ hojas más. Ahora Celestina tiene __ hojas. ¿Cuántas hojas tenia Celestina al principio? 1, 8 2, 9 3, 10
Separar	*(Resultado desconocido)* ★ Había __ sapos sentados en una roca en el estanque. __ sapos saltaron. ¿Cuántos sapos quedaron en la piedra? 10, 1 9, 2 8, 3	*(Cambio desconocido)* El pequeño pato café tenía __ patitos color café. Algunos patitos se fueron nadando. Ahora él tiene __ patitos color café. ¿Cuántos patitos se fueron nadando? 5, 4 7, 5 9, 6	*(Inicio desconocido)* Algunos pequeños patitos color café estaban nadando en línea. __ patitos se detuvieron a comer. Ahora hay __ patitos nadando en línea. ¿Cuántos patitos estaban nadando al principio? 2, 2 3, 4 7, 4
Parte-Parte -Entero	*(Entero desconocido)* ★ __ sapos bebés y __ sapos adultos cantan en el estanque. ¿Cuántos sapos hay en total? 2, 3 3, 4 0, 6	*(Parte desconocida)* __ sapos estaban cantando en el estanque. __ eran bebés y el resto adultos. ¿Cuántos sapos adultos había? 5, 4 7, 5 10, 7	
Comparar	*(Diferencia desconocida)* Celestina tenía __ hojas. Juana tenía __ hojas. ¿Cuántas hojas más tenía Celestina que Juana? 8, 7 5, 3 7, 4	*(Cantidad desconocida)* Celestina tenía __ migas. Juana tenía __ migas más que Celestina. ¿Cuántas migas tenía Juana? 6, 1 7, 2 3, 4	*(Referente desconocido)* Había __ botones azules en el piso. Había __ botones azules más en el piso. Había __ botones azules más que botones rojos. ¿Cuántos botones rojos había? 6, 2 9, 3 12, 2

Math Objectives
- Share a snack in half.
- Explain why each portion is half.

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

Vocabulary
- half
- fair shares
- equal pieces
- 1 of 2 equal pieces

Materials:
TEACHER
Chart paper with question**: How do you know you each have half of the snack?**

- **BLM** Crackers and Nutella Fractions Class Sheet – 1 for teacher only
- 4" x 4" piece of paper for each student

Per partners:
- 4 graham crackers (full sheets)
- 2 T Nutella (1 T in each of 2 portion cups)
- 2 paper plates
- 2 paper towels
- 2 plastic knives
- Chart paper with question**: How do you know you each have half of the snack?**

Unit 5, Lesson 2 — Kinder

Snack Fractions

Children MUST 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's snack fraction is a little different. We are going to share our snack. Then as you are enjoying your snack, I will come around to each of you and ask you to share a pretend snack with me.

Let's look at the snack we have today. (*Show crackers.*)
How many crackers are there? *(4)*
What shape are the crackers? (*rectangles*)
Here is another part of our snack. (*Show the Nutella in two containers of 1 T each.*)

I would like for you and your partner to talk and make a plan about how you can divide the four crackers and two containers of Nutella so that you each have fair shares. Do NOT divide the snack until we have all talked about the plans in the room. OK, start your planning.

(*As the students plan, you will need to draw on the board or chart paper as many sets of four rectangles and two circles as you have partners in the room. When all partners are ready, share their plans as follows.)*

Alright, let's talk about your plans. I have drawn some shapes on the board to represent your snacks. What do you think the rectangles represent? How do you know? *(shape and number)* What do you think the circles represent? How do you know? *(shape and number)* As you describe your plan, I will divide the pictures so we can verify whether you have planned to divide the snack into fair shares. (*Or let the student pairs come up and draw as they explain – your choice.)*

As each group describes, divide the snack exactly as they describe. This one shouldn't be difficult for them. The class should verify whether the crackers and Nutella are divided into halves by telling you in their own words either: Yes, they are halves because each partner will receive the same amount of the snack; OR No, they are not halves because one partner will have more than the other. If that is the case, tell the student partners to come up with another plan. Once all partners have shared and the class is confident that all plans will yield halves, let the students share their snack.

Snack Fractions – Part 2 – Unit 5

After student(s) eat their snack, ask them to use the Snack Fraction page in their packet to make fair shares.

I would like you to share this paper with me in fair shares.

- Students draws, folds or cuts equally or very close to it

What else do you call these fair shares?

- Half, on- half, halves, one of two equal pieces

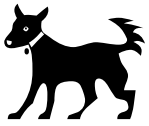
How do you know that you divided the paper into halves?

- Two equal pieces, fair, fair shares, same, etc.
- *Tried to* be equal, fair, etc.

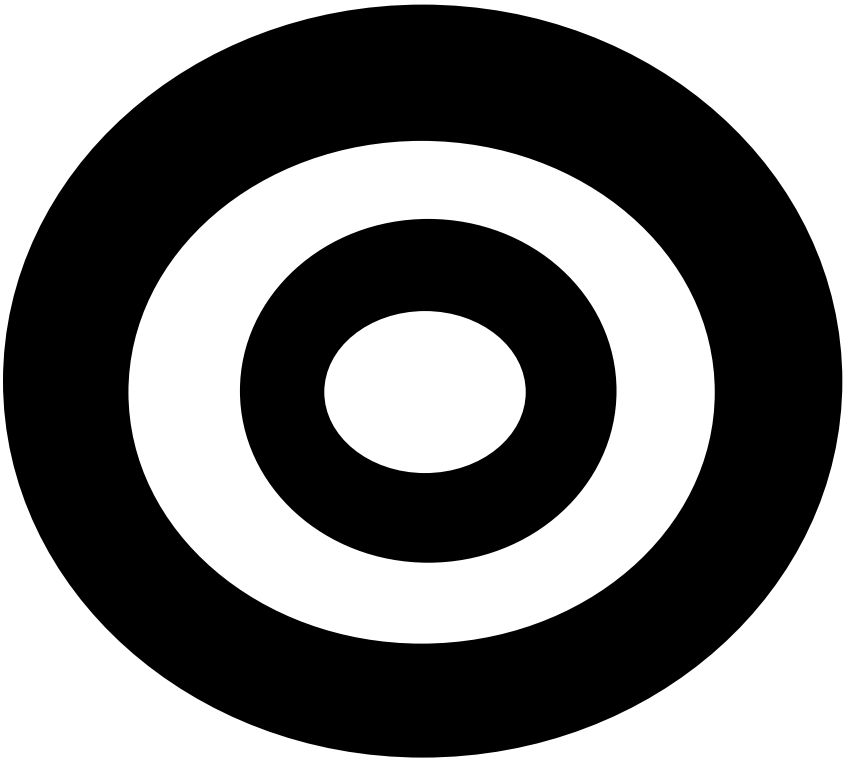
Summer Math

Student Packet/ Paquete de alumno

Unit 5/Unidad 5



English/Español



Target Number

BLM Kinder Unit 5, Follow-Up Lesson 3 **Family Fun Game Cards**

Printed on Pink –One set per partners for Follow-up; one set per student for home.
(There are two pages of these cards.)

A. (*Show player 15 beans, then say:)*
Count the beans.
Show me the number card that tells how many there are.

Cuenta los frijoles.
Muéstrame la tarjeta de número que muestra cuántos hay.

B. (*Put 15 counters on the table, then say:)*
Show me a set of 9 counters.
Now show me the number card that tells how many there are.

Muéstrame un grupo de 9 fichas.
Ahora, muéstrame la tarjeta de número que muestra cuåantos hay.

C. (*Put 20 counters on the table, then say:)*
Show me a set of 10 counters.
Now show me the number card that tells how many there are.

Muéstrame un grupo de 10 fichas.
Ahora, muéstrame la tarjeta de número que muestra cuántos hay.

D.
There were 10 cicadas in a tree. 8 of them were singing. How many cicadas were not singing?

Había 10 cicadas en un árbol. 8 de ellas cantaban. ¿Cuántas cicadas no cantaban?

BLM Kinder Unit 5, Follow-Up Lesson 3 **Family Fun Game Cards**

Printed on Pink –One set per partners for Follow-up; one set per student for home.
(There are two pages of these cards.)

E.
5 mice were playing in the kitchen. 3 mice were playing in the den. How many mice were playing?

5 ratones jugaban en la cocina. 3 ratones jugaban en la sala. ¿Cuántos ratones jugaban?

F.
An ant carried 6 leaves to the ant hill. Then he carried 3 leaves to the ant hill. How many leaves did the ant carry to the ant hill?

Una hormiga llevó 6 hojas al hormiguero. Despues llevó 3 hojas al hormiguero. ¿Cuántas hojas llevó la hormiga al hormiguero?

G
Show player a penny, then say:
Tell me the name of this coin.

Dime el nombre de esta moneda.

H.
Show player a nickel, then say:
Tell me the name of this coin.

Dime el nombre de esta moneda.

I.
Show player a penny, then say:

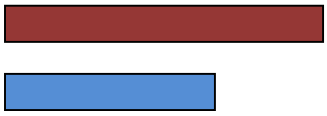
Tell me the name of this coin.

Dime el nombre de esta moneda.

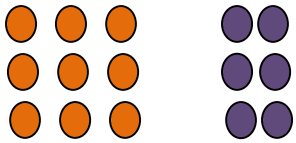
BLM Kinder Unit 5, Follow-Up Lesson 3 **Family Fun Game Cards**

Printed on Pink –One set per partners for Follow-up; one set per student for home.
(There are two pages of these cards.)

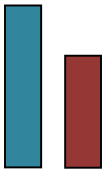
J.
Which set has more?
¿Qué grupo tiene más?



K.
Which set has more?
¿Qué grupo tiene más?



L.
Which set has more?
¿Qué grupo tiene más?



M.
(*Give the player a 3 x 5 card, then say:)*
Share this card with me in fair shares.

Comparte esta tarjeta conmigo en partes iguales.

BLM Kinder Unit 5, Follow-Up Lesson 3 **Family Fun Game Cards**

Printed on Pink –One set per partners for Follow-up; one set per student for home.
(There are two pages of these cards.)

N.
Show the player a 3 x 5 card, divided into halves, then say:
What do we call these fair shares?

¿Cómo llamamos a estas partes iguales?

O.
Show the player a 3 x 5 card, divided into halves, then say:
How do you know this card has been divided into halves?

¿Cómo sabes que esta tarjeta está dividida en mitades?

P.
Mary had 5 flowers.
Carla had 2 flowers.
How many flowers did they have together?

María tenia 5 flores.
Carla tenía 2 flores.
¿Cuántas flores tenían juntas?

Q.
There were 10 flowers on a bush. Cathy picked 6 of them. How many flowers were still on the bush?

Había 10 flores en un arbusto. Cathy recogió 6 de ellas. ¿Cuántas flores quedaban en el arbusto?

R

David counted 9 frogs on a log. 9 of them jumped off the log into the water. How many frogs were still on the log?

David contó 9 ranas en un tronco. 9 de ellas saltaron al agua. ¿Cuántas ranas quedaban en el tronco?

BLM Kinder Unit 5 Follow-up Lesson 3 Number Cards 0 - 20

Duplicate on cardstock. Give one set to each student.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
0				

Word Problem Work Space

Snack Fraction

Use to draw plan about how to share the snack and then use this piece of paper to fold into fair shares.

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

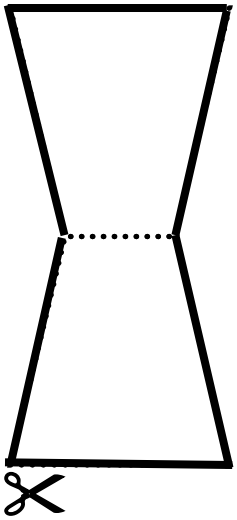
Cómo se juega

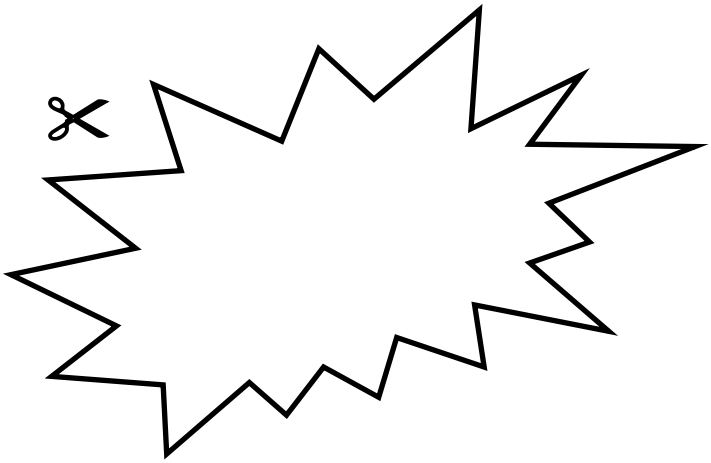
1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, tira 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

- Luck, lucky
- Found, find
- Rhyme
- Problem
- Money
- Present (as in gift)
- Twice

Math Vocabulary

- Coins
- Penny
- Nickel
- Dime
- Quarter
- Dollar
- Cents ¢
- Equals =
- Add +

Materials

*(**BLM** denotes Blackline Masters)*

- Student Money Kits with 30 pennies – 1 kit per student
- **BLM** Math Word Cards – TV Teacher only
- **BLM** Pocket Change Board
- **BLM** Pocket Change Cards – 1 per student
- **BLM** Pocket Change Record Sheet - 1 per student

Classroom Teachers

Students should have their money kits of 30 pennies, a pencil, and BLM Pocket Change Record Sheet in front of them for the lesson.

Time Clue

BB = Building Background
CI = Comprehensible Input
AC = Azulito's Corner

BB = 5 minutes
CI = 20 minutes (ideally finish the game)
AC = 3 minutes (Give Azulito time to explain MAS Space and give a sampling of his bio.)

Unit 1, Lesson 1 — Kinder

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:

- Identify US coins by name.
- Use numbers to describe how many objects are in a set using verbal and symbolic descriptions.
- Use the mathematical sign denoting "cents," the word "cents," and the name of the coins: pennies.

Language Objectives:

- Complete sentence stems using money amounts.
- Use the math vocabulary during the activity.

Building Background, Math

TEACHER: Hello boys and girls, My name is _____, and I am going to be your TV Teacher this summer. We're going to be learning and experiencing lots of fun math this summer! Let's look at our math objectives. (*Read them one by one and demonstrate what each means.)*

And we'll be practicing more language skills. You were learning many words that deal with money today! We'll do lots of money activities together!

And we have a special friend who is going to be helping me this year. If you were with us last year, you know Azulito. Azulito, where are you?

AZULITO: Oh, I am here! Hello boys and girls. It is good to be back with you again, back with all my friends from last year, and here to meet all the boys and girls who are with us for the first time this year. You are my new friends! What are we going to do today in math?

TEACHER: We have lots of fun things to do today, Azulito! Let's start with the math words that we read in our story today. (*Show the math words. Perhaps Azulito could use in a sentence, or show an example of the given coin*.)

We're going to be using these words a lot today. We're going to learn a game called Pocket Change. That's a funny name for a game, isn't it! But I remember where Deena's Dad pulled that nickel from.

ELPS (*English Language Proficiency Standard*)
2C,2E,3B,3D,4C,4F

CCRS (*College and Career Readiness Standards)*
Cross-disciplinary
I.C.3
Math
VIII.A.1, VIII.A.2., VIII.A.3

Unit 1, Lesson 1 — Kinder

TV Lesson - continued

Boys and Girls, do you remember where he had the nickel that he gave Deena? *(pause)* Yes, in his pocket! He pulled the change, the nickel, from his pocket – Pocket Change!

Azulito and I will need the Pocket Change board and the Pocket Change cards. You won't have to worry about those right now. Your Teacher has made you sets, but you'll use yours during the Follow-up Lesson after Azulito and I are gone.

Boys and Girls, you will need to have your Students' Money Kits, and the Pocket Change Record Sheet (show yours) as we play the game, plus a pencil.

Comprehensible Input, Math

OK, here is how we set up our board. First of all, how many pockets does our board have? Help me count them. (*Begin by pointing to pocket in upper left hand corner, then touch and count the top three, then continue counting with the bottom 3 starting in the left and counting to the right.*) Six pockets!

Our Pocket Change board has little slits at the top of each pocket. We are going to put secret Pocket Change cards into these little slits. Here are our Pocket Change cards. Let's see how many of those we have. Please help me count them, Boys and Girls. (*Count them by "dealing" them out in front of you*.) There are 15 cards.

Let's see what each card says. (*Show each card and give students a quick pause to have them read it, then you read it.)* Could you read most of the Pocket Change cards? I hope so! Do you see this little dashed line close to the middle of the card? This shows us how far to put the card into the pocket.

Now, Azulito is going to set up the Pocket Change board. He is going to choose six secret Pocket Change cards to slip inside each of the pockets. (*Put the finished game board in front of you.)*

You and I are going to play a game together. We are going to use our Pocket Change Record Sheet. Do you have yours in front of you and a pencil? *(pause)* Great!

Let's look at the Pocket Change Record Sheet. At the very top, there is a sentence stem that says, "I found a _____." Please read that with me, "I found a _____." For today, we'll pretend that just like Deena, we each found a penny. I am going to write the word

TV Lesson - continued

penny on my line. Write the word ***penny***, or you may just put one of your coins in that line.

The next sentence stem is "I have _____." I have to write what a penny is worth. What is a penny worth? *(pause)* 1¢ Write 1¢ on the line and let's read the sentence *(do so).*
Here is what we'll do. First, I want to put a penny out to the side of my Pocket Change Record Sheet. That is what I have now. You do the same.

Now I will draw one of the cards (*do so*) and read what it says. What does this card say, Boys and Girls? (*pause)*. *(Be sure to talk about the different ways to show the cents.*) I want to get that many more pennies. I'm going to count out the numbers. You count out your pennies, too. These pennies are what I just found! Now I'll start filling out my record sheet.

I have another sentence stem. It says, "I'm lucky, I found _____ more."
This is where I put the amount I just found in the pocket. These pennies (*point to the line of pennies representing the first card drawn).* We can write in *(whatever you drew)* in this sentence stem. (*Do so and ask them to do so, too.*)

Let's read our sentence stem now. "I'm lucky, I found (*whatever you drew in the way it was stated on the card*)."

And we have one more sentence stem. "I have _____." What do you suppose we need to do? Tell your teacher what you think we have to do now to find out how much we have now? (*Pause, then let Azulito tell you that you have to add what you had to what you found, just like Deena did*.) Let's count how many pennies we have altogether now! *(do so)*

Now we have *(amount)* cents. We write that at the beginning of our new round and we continue to add to our total. Our new round starts with the sentence stem, "I found _____." How much do we have now, boys and girls? *(pause)* Yes, we have *(total)*. Let's write that as a number with the cent sign. *(do so)*

And let's see what we can find now! (*Continue playing until you have completed the entire record sheet.)*

	Unit 1, Lesson 1 **Kinder** **TV Lesson** - continued We have one more sentence stem to complete, boys and girls. What does the very last sentence stem say? *(pause)* "I am lucky. Now I have _____." What do we have now, boys and girls? *(pause)* Yes, let's fill that in, and read our sentence stem *(do so)*! **AZULITO:** That was fun! And I have something to share that is fun, too! I want to tell you about Azulito's Corner! *(Talk about MAS Space. If you have time, get online and show your Lesson 1 entry for MAS Space. If not, tell the students just enough of what they will find out about you to make them want to go online and know more. Get them excited about telling about their class.)* **TEACHER:** Thank you, Azulito! I'm sure everyone will go online so we'll all know one another. We can meet classes from all over the United States. Let's see how many different States we can meet! **Objectives:** And now before we go, let's review what we have learned today! *(do so)*

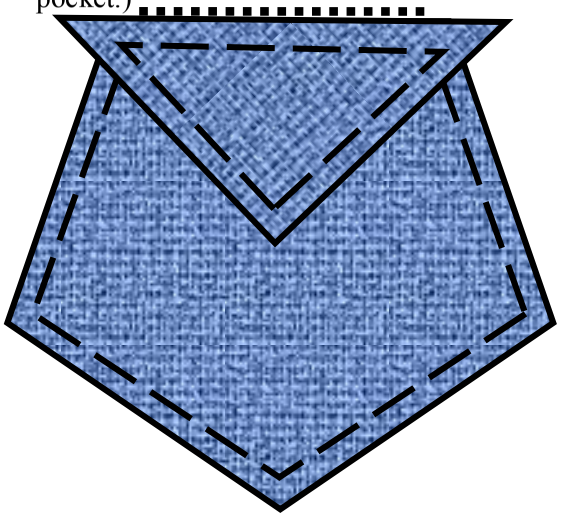
BLM Unit 1, TV / Follow-up Lesson 1 **Pocket Change Cards – Pennies**

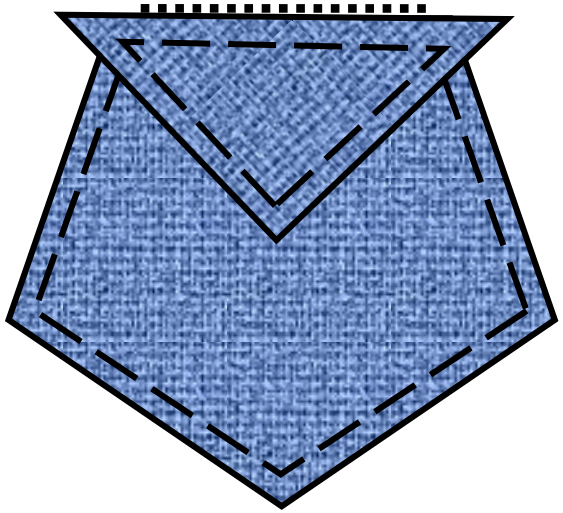
(TV Lesson, only TV Teacher needs a set. Follow-up Lesson, one set of cards per student)
Run cards on cardstock and cut out for a game set.

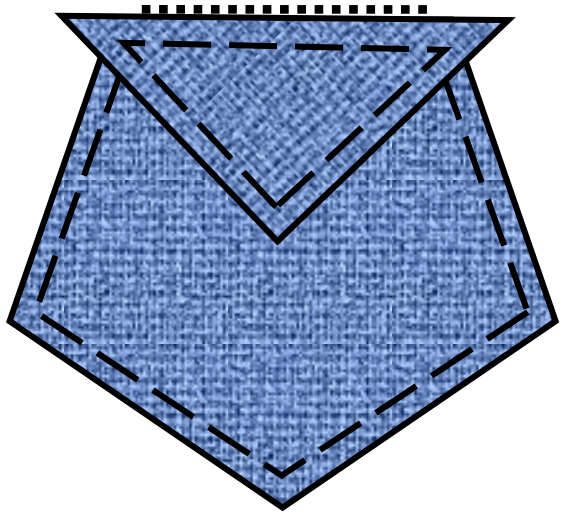
Pocket Change	Pocket Change	Pocket Change	Pocket Change	Pocket Change
1¢	1 cent	1 penny	3¢	4¢
Pocket Change	**Pocket Change**	**Pocket Change**	**Pocket Change**	**Pocket Change**
2¢	2 cents	2 pennies	3 cents	4 cents
Pocket Change	**Pocket Change**	**Pocket Change**	**Pocket Change**	**Pocket Change**
5¢	5 cents	5 pennies	3 pennies	4 pennies

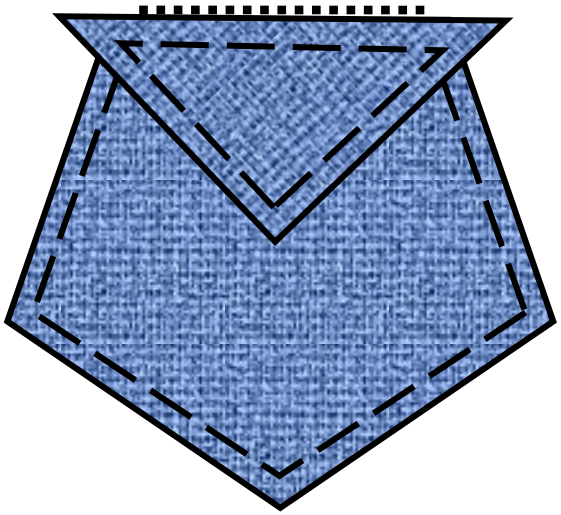
BLM Unit 1, TV Lesson and Follow-up Lesson 1 **Pocket Change Board**

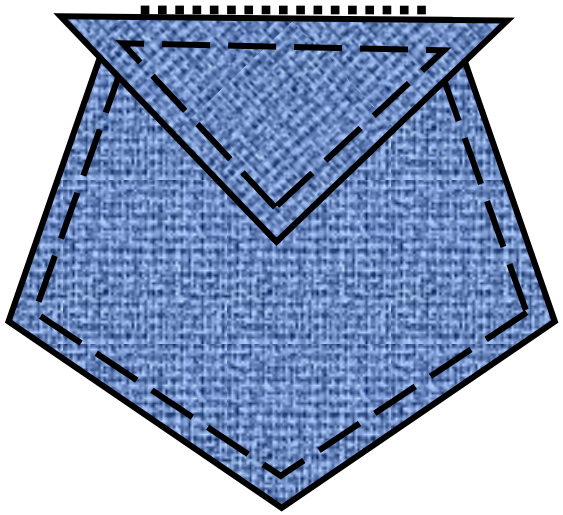
(TV Lesson, only TV Teacher needs a set. Follow-up Lesson, 1 board per student) Run board on cardstock and cut out for a game slit above each pocket.)

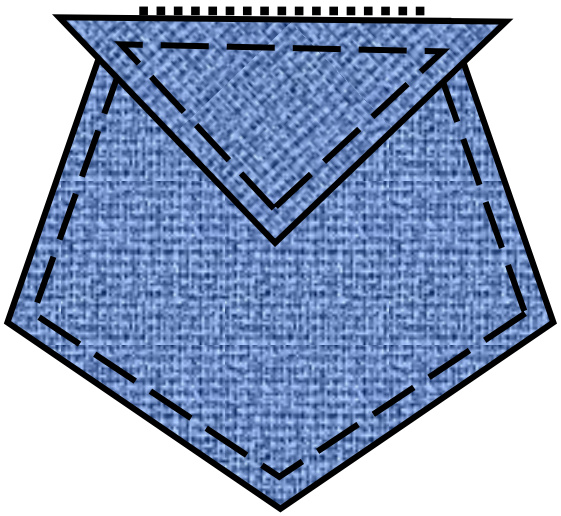












BLM Unit 1, Lesson 1, TV Lesson and Follow-up **Pocket Change Record Sheet**

(TV Lesson and Follow-up Lessons – each student needs one sheet for each lesson.)

My name is _____.

I found a_____.	I have _____.
I'm lucky. I found _____ more.	I have _____.
I found _____.	I have _____.
I'm lucky. I found _____ more.	I have _____.
I found _____.	I have _____.
I'm lucky. I found _____ more.	I have _____.
I found _____.	I have _____.
I'm lucky. I found _____ more.	I have _____.
I found _____.	I have _____.
I'm lucky. I found _____ more.	I have _____.
I found _____.	I have _____.
I'm lucky. I found _____ more.	I have _____.

I am lucky. Now I have _____.

BLM Unit 1, Lesson 1, TV Lesson and Follow-up **Pocket Change Record Sheet**
(TV Lesson and Follow-up Lessons – each student needs one sheet for each lesson.)

Mi nombre es _____.

Encontré una moneda de_____. Tengo _____.

Soy afortunado/a. Encontré _____ más. Tengo _____.

Encontré una moneda de _____. Tengo _____.

Soy afortunado/a. Encontré _____ más. Tengo _____.

Encontré una moneda de _____. Tengo _____.

Soy afortunado/a. Encontré _____ más. Tengo _____.

Encontré una moneda de _____. Tengo _____.

Soy afortunado/a. Encontré _____ más. Tengo _____.

Encontré una moneda de _____. Tengo _____.

Soy afortunado/a Encontré _____ más. Tengo _____.

Encontré una moneda de _____. Tengo _____.

Soy afortunado/a. Encontré _____ más. Tengo _____.

Soy afortunado/a. Ahora tengo _____.

Math Vocabulary
- compare
- comparison
- more than
- less than
- fewer than

Materials
Needed per student
- 20 base ten units per student
- Number cards 1-12 – 1 set per student
- Comparison Word Cards (4 each of more than and less than)
- Crayon – 1 per student
- **BLM** Comparing in Word Problems

Time Clue
BB = 1 minute
CI = 26 minutes
AC = 1 minute

ELPS (*English Language Proficiency Standards)*
2B,2C,2I,3G,3J

CCRS
Math
IB.1, IC.1, VIIIA.1,2,3,4,5
VIIIB.1,2 VIIIC.1 IX.A,1,2,3
IX.B.1,2 IX.C.1,2,3
Cross-Disciplinary
I.A.1.2 I.B.1,2,3 I.C.1,2,3 I.E.1

Smart Board
Representations

Classroom Teachers
Circulate the room to make sure students are modeling the problem, and verbalizing the comparisons.

TEACHERS:
"…to represent the number of" may seem difficult language for Kinders – it truly is not. Please use this mathematical language over and over again – that is how children learn.

Unit 4, Lesson 1 Kinder

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:

- **Compare sets of base ten units and use comparison phrases**
  Compare sets of objects up to at least 20 in each set using comparative language.
- **Use comparison phrases more than or less than to describe two numbers.**
  Use comparative language to describe two numbers (up to 20) represented as written numerals.

Language Objectives:

- Listen: Listen to TV Teacher's directions.
- Speak: Answer TV Teacher's questions.
- Read: Read the comparison statements.
- Write: Write the comparison phrases in the sentence stems by placing the comparison phrase cards on the correct line.

Building Background, Math

TEACHER:

Before we start our lesson, let's all stand up and count by 10s to 100. (*count by 10 to 100 twice*) Well done! I think you are really learning how to count by tens!

You worked with comparing today both in your Measurement Lab and your Classroom math lesson. We're going to continue comparing in our lesson together. Let's read through our vocabulary words *(do so).*

We have two comparison phrases that we can use today. Let's read them again. (*Show "more than" and read it. Show "less than" and read it*.)

You should have your number cards 1 – 12, your base 10 units, a crayon, the **BLM** Comparison Word Cards and the 2 **BLM** Comparing in Word Problems for this lesson.

AZULITO: I have all of those materials, and I am ready to learn!

First of all, tell your Classroom Teacher what a pebble is. (*a small rock*) In Aesop's Fable, *The Crow and the Pitcher*, the crow used pebbles to drop into the pitcher so he could reach the water with his beak. Pebbles can be very important!

TV Lesson - continued

Comprehensible Input, Math

TEACHER: Let's see how pebbles are being compared today. Look at problem number one. Please read the problem with me.

Anna had 4 pebbles.

Now, use your base ten units to represent the number of pebbles Anna has. *(pause)*

AZULITO: I've counted out my base ten units. 1 pebble, 2 pebbles, 3 pebbles, 4 pebbles.

Very good! Do you have four pebbles, too, boys and girls? Now look at your record sheet. What do you suppose you will do with the squares that are next to our sentence, Anna had four pebbles? Tell your teacher what you should do. *(pause)*

AZULITO: I think we should color in what Anna has. She has four pebbles, so we should color in four of the squares.

TEACHER: Yes indeed, Azulito. Everyone please do that.

Now, let's read the next sentence in this problem box.

Matt had 9 pebbles.

Use your base ten units to represent the number of pebbles Matt had. *(pause)*

AZULITO: I have nine base ten units. One pebble . . . nine pebbles. And I know what to do next. Do you know what to do now, boys and girls? *(pause)* Sure, color in what Matt has on the record sheet squares *(do so, counting).*

TEACHER: We have a comparison statement at the bottom of the box. Let's read that comparison statement. Four is *(blank)* nine.

We are going to decide which one of our comparison phrases *(show each and read each)* we should use to compare the numbers four and nine. We can use our model to help us. Let's see how many partners there are in the two lines of squares.

(*Draw a vertical line connecting the blocks in one-to-one correspondence. Obviously you only have four to correspond.)*

Unit 4, Lesson 1 — Kinder

TV Lesson - continued

TEACHER: (*After a pause, Azulito should answer.)*

- Who has more pebbles, boys and girls? (*Matt)*
- How do you know? *(more pebbles left over after we compared the line of pebbles)*
- Who has fewer pebbles, or less pebbles? (*Anna*)
- How do you know? (*Anna's line of pebbles stops before Matt's line of pebbles*.)
- What does that tell you about the comparison of 4 and 9? (*Nine is more than four; four is less than nine.)*
- Let's complete our sentence stem for this problem.
- Four is *(slight pause)* LESS THAN nine. *(Place the "less than" on the lines, and then have everyone read with you.)*

(Repeat this process for the other three problems.)

TEACHER: You did a wonderful job today of comparing, boys and girls. Your Classroom Teacher is going to teach you a comparison game during the follow-up lesson.

AZULITO: Oh, that will be fun! And I have more fun for you that we can all enjoy together! (*Explain the Azulito Corner Task.)*

Teacher: Thank you, Azulito! It will be interesting to see how those egg weights compared!

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

Process

- Read the first part of the comparison with students.
- Model with base 10.
- Color in the squares on the record sheet.
- Repeat with the second number.
- Read the 2 comparison phrases and decide which one fits by showing one-to-one correspondence with the squares on the record sheet.
- Place the comparison phrase in place and read the comparison.

Azulito's Corner
Lesson 1
What have you learned in math so far that you would like to share with Azulito? He would like to hear what you are learning!

BLM Unit 4, TV Lesson 1 **Comparing in Word Problems (1 of 2 pages)**

One of each of two pages per student

My Name is _____

Anna had 4 pebbles.

Matt had 9 pebbles.

4 is _____ 9.

Tod had 12 pebbles.

Carl had 9 pebbles.

12 is _____ 9.

BLM Unit 4, TV Lesson 1 **Comparing in Word Problems (1 of 2 pages)**

One of each of two pages per student

Mi nombre es _____

Anna tenía 4 piedras.

Matt tenía 9 piedras.

4 son _____ 9.

Tod tenía 12 piedras.

Carl tenía 9 piedras.

12 son_____ 9.

BLM Unit 4, TV Lesson 1 **Comparing in Word Problems (2 of 2 pages)**

One of each of two pages per student

My Name is _____

Bob had 7 pebbles.

Sue had 8 pebbles.

7 is _____ 8 pebbles.

Ron had 10 pebbles.

Kit had 9 pebbles.

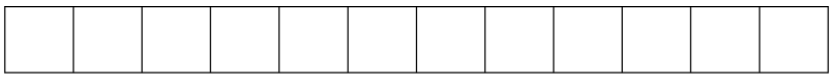
10 is _____ 9 pebbles.

BLM Unit 4, TV Lesson 1 Comparing in Word Problems (2 of 2 pages)

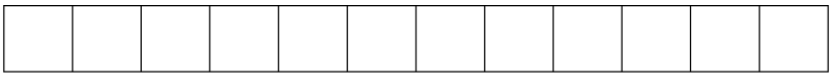
One of each of two pages per student

Mi nombre es _____

Bob tenía 7 piedras.



Sue tenía 8 piedras.



7 son _____ 8 piedras.

Ron tenía 10 piedras.

Kit tenía 9 piedras.

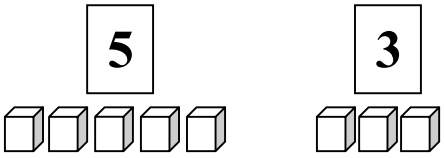
10 son _____ 9 piedras.

BLM Unit 4, Follow-Up Lesson 1 **Comparison Game Direction Sheet**

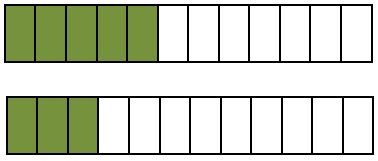
One per student (*Students should not be expected to read these directions, but to follow the pictures once the teacher has carefully directed students through the process. To find the winner, count the number of stars each student has. You could teach the game by playing the other three rounds on this direction sheet.*)

My Name is _____

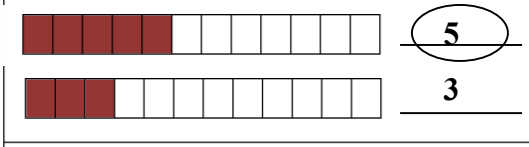
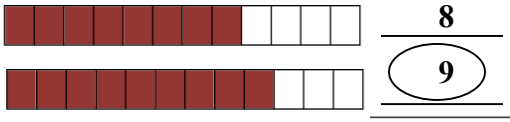
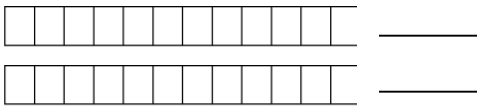
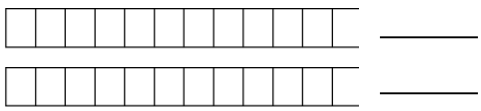
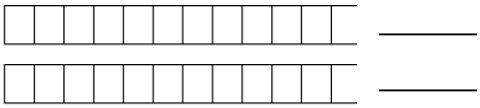
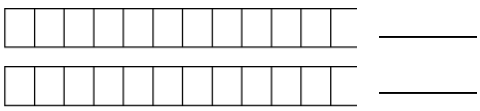
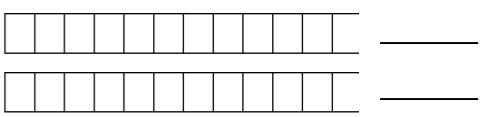
1. Draw 2 number cards.
2. Model each number with base ten units.



3. Color the squares.



4. Write the number that is more than in the box. This is your score.
5. You partner does the same.
6. You write your partner's score, too.
7. Compare your *more than* number to your partner's *more than* number.
8. Put a star on the biggest score.

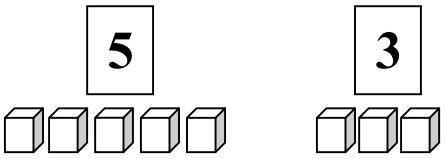
My Name:		Partner's Name:	
 5 / 3	5	 8 / 9	9
 _____ _____		_____ _____	
 _____ _____		 _____ _____	
 _____ _____		 _____ _____	

BLM Unit 4, Follow-Up Lesson 1 **Comparison Game Direction Sheet**

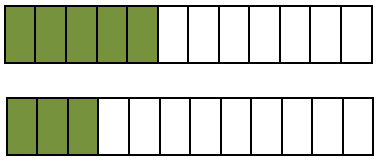
One per student (*Students should not be expected to read these directions, but to follow the pictures once the teacher has carefully directed students through the process. To find the winner, count the number of stars each student has. You could teach the game by playing the other three rounds on this direction sheet.*)

Mi nombre es _____

1. Escoje 2 tarjetas de números.
2. Haz un modelo de cada número con las unidades..



3. Colorea los cuadros.



4. Escribe el número que es más en el cuadro. Esto es tu tanto.
5. Tu compañero/a hace lo mismo.
6. Escribe el tanto de tu compañero/a también.
7. Compara tu número más grande con el número más grande de tu compañero/a.
8. Indica el tanto más grande con una estrella.

My Name:		Partner's Name:	
5 3	5	8 9	9

Literature Vocabulary
- habitat
- desert
- animals
- energy
- food
- home
- plants
- sleep
- water

Math Vocabulary
- add
- join
- addition
- subtract
- separate
- subtraction
- strategy

Materials
- Bug counters – 10 per student
- **BLM** Desert Storyboard
- **BLM** Desert Story Strategies

Time Clue
BB = 2 minutes
CI = 24 minutes
AC = 1 minute

ELPS (*English Language Proficiency Standard*)
2C,2B,2D,2I,3G,3H,4C,4G,4J

CCRS
Math
IB.1, IC.1, VIIIA.1,2,3,4,5
VIIIB.1,2 VIIIC.1 IX.A,1,2,3
IX.B.1,2 IX.C.1,2,3
Cross-Disciplinary
I.A.1.2 I.B.1,2,3 I.C.1,2,3
I.E.1,2

Unit 2, Lesson 1 Kinder

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:
- Add and subtract to solve a word problem.
- Explain your strategy for solving the word problem.

Language Objectives:
- Listen to the word problems.
- Speak: Tell your Classroom Teacher the math movie you see.
- Read the vocabulary words we will use.

Building Background, Math

TEACHER: What fun, boys and girls, you are learning about the **desert**! The desert is a very special **habitat**, with very special **plants** and **animals** that can live there. It's hot, it's cold, and there isn't much **water** -- it's very, very dry!

AZULITO: Oh, I have seen some very beautiful pictures of the desert. I'll bet all of those animals would have some very good stories to tell us if they could speak human language!

TEACHER: Yes, Azulito, I'll bet they would! Stories – that is just what we are going to tell today, Azulito. Stories! The boys and girls have a storyboard, and they have bug counters. We are going to make math stories today about their bugs in the desert.

We will be looking at some very important ACTIONS today, boys and girls. These actions will tell us whether we JOIN our bugs together, or whether we SEPARATE them apart. Each of you will use your own STRATEGY to solve the problem.

AZULITO: What is a strategy?

TEACHER: A strategy is the way that we use to solve a problem. We listen to the problem; we see a math movie in our mind to see the action in the movie, and then we make a plan and use a STRATEGY to solve the problem.

TV Lesson - continued

And we are going to use our storyboard to help us create our story problems. Let's look at the storyboard together.

SMART Board
Display the Storyboard and impose the words as things are identified.

You looked at the storyboard during your classroom lesson. Let's name some of the things we see so we can use those words in our stories. What do you see, Azulito? (*Show the Storyboard on the SMART board if possible – impose the names of things as you talk about them. You can highlight those areas when you use them in the story problems*.)

AZULITO: Oh, the first thing I see is that big prickly pear cactus right at the front of the picture. It has thorns that stick you if you get too close!

TEACHER: Yes, it does. Boys and girls, did you recognize the prickly pear cactus? We have a lot of that in South Texas!

And this bush that is on the right just above the cactus is a sage – it's called a bursage (pronounced "**burr**–sage.")

AZULITO: I can see the gritty dirt between the cactus and the bursage. It looks like a little path that goes into the brush behind the bursage.

TEACHER: Yes, I see that, too. We can call that our path! On the side of this bushy hill you can see lots of saguaro (pronounced sa-**huar**-o) cactus. They only grow in the Sonoran Desert.

AZULITO: And I see mountains in the background, and I see a beautiful blue sky.

TEACHER: Yes, this picture must have been taken in the mountains of the desert. That is why you see so many bushy plants close together. They get more rain up there than on the lower part of the desert.

Comprehensible Input, Math

Alright, we have lots of places now that we have identified for our different stories. Are you ready, boys and girls, to solve story problems?

Have your counters ready. Listen the first time I tell you the story. Look for the math movie in your mind. What are the bugs doing in our story? Do you have to join them or separate them? Let's get started.

TV Lesson - continued

Classroom Teachers
Circulate the room to make sure students are modeling the problem.

TV Teachers SMART Board
Be sure you are modeling on the smart board or with the storyboard and counters.

Listen to the story for the math movie:

There were four bugs climbing on the prickly pear cactus eating food. Three more bugs crawled up the cactus to eat food. How many bugs were on the cactus to eat food?

Get your bug counters ready. Where is this story on the story board? (*pause*) **On the prickly pear cactus. Now listen to the story again, and model the math movie with your bug counters.**

There were four bugs climbing on the prickly pear cactus eating food. Three more bugs crawled up the cactus to eat food. How many bugs were on the cactus to eat food? (*Pause for students to solve the problem*.)

I have three strategies for solving that problem. These are not the only strategies. You might have another one. *(Model each step.)*

There were four bugs climbing on the prickly pear cactus eating food. That means I need to have bugs on the cactus.
Three more bugs crawled up the cactus to eat food. Now # more bugs join them.
How many bugs were on the cactus to eat food?

- First I'm going to model the math move. The action in the story told me that we are joining two sets of bugs. I can count them all: 1, 2, 3, 4, 5, 6, 7. There are seven bugs on the cactus to eat food.
- I can also draw a picture of what I did. I'll let little dots be my bugs. Four bugs would be four dots, and three bugs would be three dots. The math movie showed me that the bugs are joining together on the cactus. Again, I can count: 1, 2, 3, 4, 5, 6, 7.
- Finally, I can use a number sentence as my strategy: 4 + 3 = 7. *(Write the numbers under the appropriate part of your picture, i.e., the four under the four dots, then a + sign, then the three under the three dots and an equals sign seven.)*

Was your strategy different than my strategies? *(pause)* Show your teacher your strategy for solving this problem. *(longer pause)*

OK, we're going to work a few more. Then I have a record sheet for you so that you can also draw a picture and use a number sentence. But for right now, you can model. Be careful, though, because I can be tricky with my math movies!

TV Lesson - continued

Use the same process for all of the problems.

- Read the story for students to see the math movie in their minds.
- Read a second time for modeling.
- Debrief by showing:
  a. Modeling
  b. Pictures with dots
  c. Number sentence that matches the picture drawn.

Let's move over to our path. Here is our path. This will be where our next story takes place.

(*Follow the same format for this problem.)*

Eight bugs were crawling in a row down the path. Five of the bugs skittered into the bursage. How many bugs were still on the path?

(*Debrief in the same fashion.)*

Let's climb up one of the mountains this time. You may choose any of these mountain peaks for your bugs to climb.

Nine bugs were walking up the mountain. Four more bugs flew in to walk up the mountain with them. How many bugs walked up the mountain?

Now let's go into the sky. Do you have insects that fly? If not, just find some and pretend.

Twelve bugs were flying in the blue sky. Nine of the bugs landed on the top of one of the mountains. How many bugs were still flying in the blue sky?

OK, now it is time for your teacher to hand you the second **BLM Desert Story Strategies**. We will first model with our bug counters on the story board. Then we will draw a picture in the problem box. Beneath the picture we will write a number sentence to match our picture.

Here is our first problem. We will use the top rectangle for two of our strategies. Remember, though, first reading you listen so you can see the math movie in your mind.

1. Nine bugs were at home and sleeping on the prickly pear cactus. Three bugs came to visit and sleep on the cactus. How many bugs were sleeping on the prickly pear cactus? (*Read a second time, then give students time to solve in the three ways; then debrief.)*

2. Ten bugs were climbing the mountain. Eight bugs got tired of climbing and flew into the blue sky. How many bugs were left climbing the mountain? (*same format)*

	Unit 2, Lesson 1 **Kinder** **TV Lesson** - continued
Classroom Teachers: Please finish this assignment if the TV Teacher does not have time to do so.	3. Eleven bugs marched in a straight line up to the top of the saguaro cactus. Three bugs fell off. How many bugs were left marching up the saguaro cactus? 4. Thirteen bugs were getting energy by eating the bursage. Nine of them felt they had lots of energy and flew away. How many bugs were still eating to get energy?
Azulito's Corner Tell us all the different strategies used today to solve your CGI problem. Share your class posters if you can.	**AZULITO:** Oh, that was fun! And you know, the students did something like this during their Daily Routines – they solved CGI problems. (*Explain the Azulito Corner Task.)* **TEACHER:** Thank you, Azulito! It will be a lot of fun to see so many posters online! We'll be looking for your class to send in several copies! During your Follow-up Lesson you are going to be creating word problems for the story board. We have practiced problems here, and you've seen how the problems can sound. You are going to make a book of your problems that you create during this unit. We'd love to see some of your problems online, too! **Objectives:** And now before we go, let's review what we have learned today! *(do so)*

BLM Unit 2, TV Lesson 1 **Desert Storyboard**

BLM Unit 2, TV Lesson 1 **Desert Story Strategies**

Distribute AFTER TV lesson has begun – TV Teacher will direct you to do so (one per student.)

My name is _____

1

2

3

4

Pre/Post Supplies Needed

Symbol	Details and Materials Needed
	Teacher: Reads the script and records the student's answers.
	Baggies with 15 lima beans; 20 paperclips
	Sets of Circles for Question #2 Precut numbers (1-20) for student to select when asked
	Paper plate; sandwich* (plastic knife if using a real sandwich)
	Linking cubes: 5 blue and 8 yellow
	Money – 1 each: penny, dime

*A paper graphic of a sandwich is attached as an alternative. This would require scissors to cut.

Educator Script: *Read the questions to students. Use this to write notes about student responses and score. Students do not have a separate paper to write answers on.*

NY-K.CC.5a and 5b **Need:** • Baggie of 15 lima beans for each student. • Baggie of 20 paper clips for each student • Baggie of numeral cards 0 – 20 for each student • Folders or other screens to place between students ☐ 1 **Award 1 point** if the student shows the number card for fifteen.	**1** **You have three bags in front of you. Take the *number cards* out of the bag and put them on the table in front of you.** ***Tienen delante tres bolsas. Saquen las tarjetas con números de la bolsa y pónganlas sobre la mesa.*** (Give time for all students to respond.) **Now take the *lima beans* out of the other bag.** **Count them silently.** ***Ahora saquen los frijoles de la otra bolsa.*** ***Cuenten los frijoles en silencio.*** **Show me the number card that tells you how many *lima beans* there are on your table.** ***Muéstrenme la tarjeta con el número que indica cuántos frijoles hay sobre la mesa.*** (Use this copy to record individual responses. With a group, create a "notes" page to record student responses on.)
NY-K.CC.5a and 5b **Need:** • Page with circles, 1 per teacher • Baggie of numeral cards 0 – 20 ☐ **2** **Award 1 point** if the student shows the number card for nine.	**2** (Give each student the paper with the 3 sets of objects.) **This card has 3 sets of objects.** ***Esta tarjeta tiene 3 juegos de objetos.*** (Emphasize the 3 sets by circling them with your finger.) **Show me the number card that tells me how many objects are in this set.** ***Muéstrenme la tarjeta con el número que indica cuántos objetos hay en este juego:*** (Point to the set with 9 objects in it.)

NY-K.CC.5a and 5b **Need:** • Baggie of 20 paper clips for each student • Numeral cards 0 – 20 ☐ **3** **Award 1 point** if the student shows you ten paper clips.	**3** **Put the lima beans back into the bag.** ***Vuelvan a meter los frijoles en la bolsa.*** (Give students time to respond) **Take the paper clips out of the bag.** ***Saquen los clips de la bolsa.*** (Give students time to respond) **Show me a set of 10 paper clips.** ***Muéstrenme un juego de 10 clips.*** (Write the number they have shown you in the "Notes" section.)
NY-K.OA.1 **NY-K.OA.2a and 2b** **NY-K.OA.5** **Need:** • 1 paper plate per student • Same baggie of 15 lima beans or 20 paper clips. • Numeral cards 0 – 20 • Folder or other screen CGI – Take From, Result Unknown ☐ 4a **Award 1 Point** for student modeling the number of counters in the story. ☐ 4b **Award 1 point** for student showing the number card for two.	**4** **Use the plate as your story board. Again, listen the first time I read the story for the *math movie*. The second time I read the story, use your counters to show the answer.** ***Usen el platillo como ayudar con el cuento. La primera vez que lea el cuento, escuchen y piensen en la película de matemáticas. La segunda vez que lea el cuento, usen los contadores para mostrar la respuesta.*** **Julia counted 8 frogs in a pond. 6 frogs jumped out of the pond. How many frogs are in the pond now?** ***Julia contó 8 ranas en un charco. 6 ranas saltaron fuera del charco. ¿Cuántas ranas quedan ahora en el charco?*** (Read the story again so that students can act it out with the manipulatives. Record their visual answers in the "Notes" section, then say,) **"Now show me the *number card* that tells how many frogs were in the pond at the end of the story."** ***Ahora muéstrenme la tarjeta con el número que indica cuántas ranas había en el charco al final del cuento.*** Record their numeral answers in the "Notes" section.

NY-K.OA.1
NY-K.OA2a and 2b
NY-KOA.5

Need:

- Same baggies of 15 lima beans or 20 paperclips on the table
- Same baggie of number cards 0 –20
- Folder or other screen

CGI – Put Together/ Take Apart, Total Unknown

☐ **5**

Award 1 point if the student both models the problem correctly to show the numbers in the problem, and shows the number for thirteen.

5

Now empty the plate. Listen to another story. Close your eyes and try to see the *math movie* that is taking place. What do you see in the story?
Ahora vacíen el plato. Escuchen otro cuento. Cierren los ojos y traten de imaginarse la película de matemáticas. ¿Qué ven en el cuento?

Marta had 7 yellow flowers and 6 red flowers. How many flowers did Marta have?
Marta tenía 5 flores amarillas y 6 flores rojas. ¿Cuántas flores tenía Marta?

Listen while I read the story again, and this time use your counters and your paper plate to show me how many flowers Marta had. Show the *math movie* in the story.
Escuchen mientras leo otra vez el cuento, y esta vez usen los contadores en su plato de papel para mostrarme cuántas flores tenía Marta. Muestren la película de matemáticas del cuento:
(Read the story again so that students can act it out with the manipulatives. Record their visual answers in the "Notes" section, then say,)

"Now show me the *number card* that tells how many flowers
Marta had."
Ahora muéstrenme la tarjeta con el número que indica cuántas flores tenía Marta.
Record their numeral answers in the "Notes" section.

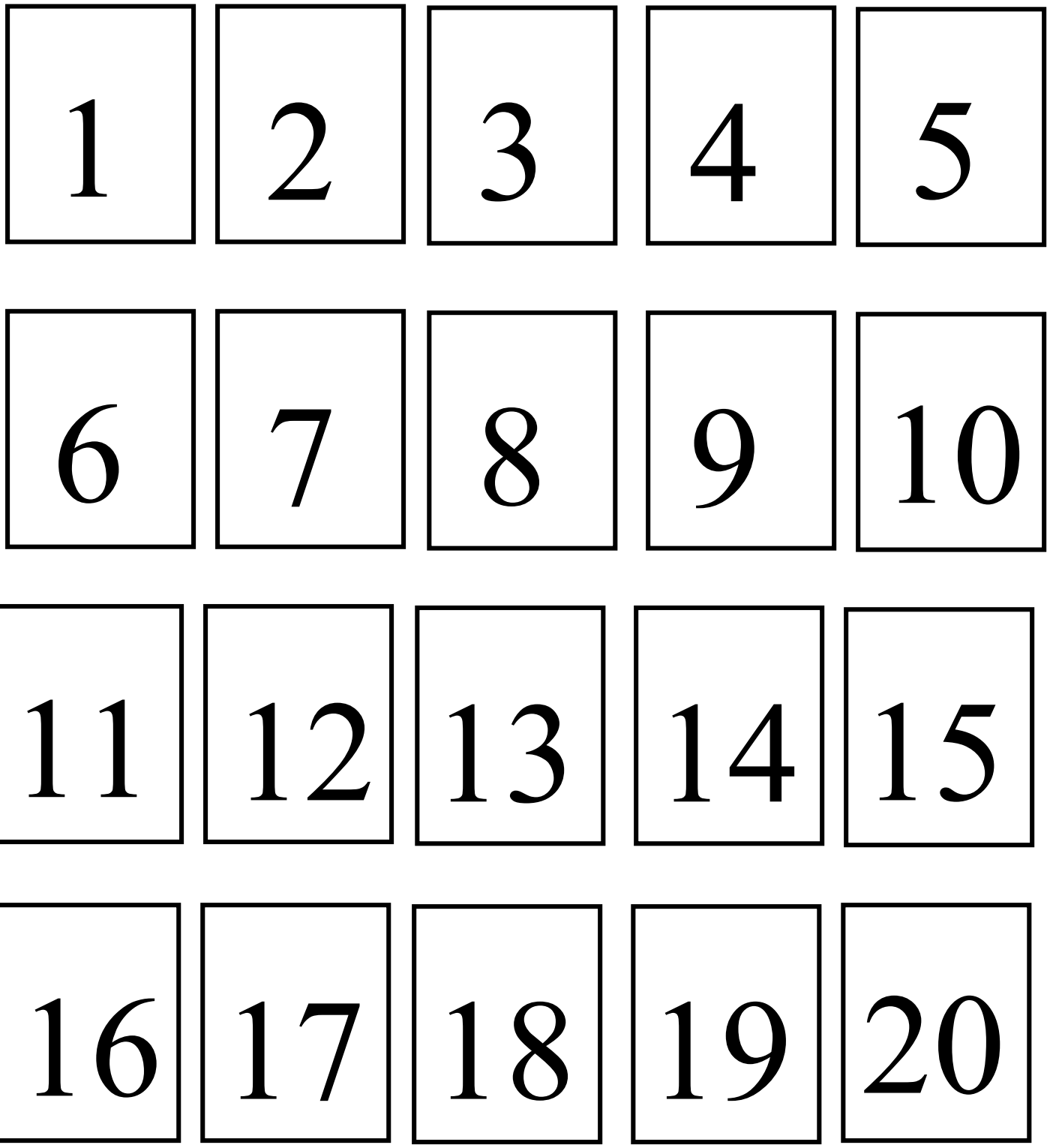
NY-K.OA.1 **NY-K.OA2a and 2b** **NY-KOA.**5 **Need:** • 1 paper plate per student • Same baggies of 15 lima beans or 20 paper clips on the table • Same baggie of number cards 0 – 20 • Folder or other screen CGI – Add To, Result Unknown ☐ **6** **Award 1 point** if the student both models the problem correctly to show the numbers in the problem, and shows the number for eight.	**6** **Listen to my story this time. Close your eyes and try to see the *math movie* that is taking place. What are the characters doing in the story?** ***Escuchen el cuento que voy a leer. Cierren los ojos y traten de imaginarse la película de matemáticas. ¿Qué están haciendo los personajes del cuento?*** **Juan ate 2 strawberries. Then he ate 6 more strawberries. How many strawberries did Juan eat?** ***Juan comió 2 fresas. Luego comió 6 fresas más. ¿Cuántas fresas comió Juan?*** **Listen while I read the story again, and this time use your counters and your paper plate to show me how many strawberries Juan ate. Show the *math movie* in the story.** ***Escuchen mientras leo otra vez el cuento, y esta vez usen los contadores en su plato de papel para mostrarme cuántas fresas comió Juan. Muestren la película de matemáticas del cuento:*** (Read the story again so that students can act it out with the manipulatives. Record their visual answers in the "Notes" section. **"Now show me the *number card* that tells how many strawberries Juan ate."** ***Ahora muéstrenme la tarjeta con el número que indica cuántas fresas comió Juan.*** Record their numeral answers in the "Notes" section.

NY-K.MD.4 **Need**: 1 set for teacher of 1 each of penny, dime. (Use real coins.) *If the student is answering in Spanish, accept all answers that demonstrate recognition/identification (for example, "penny"). ☐ **7** **Award 1 point if Student correctly identifies both coins.**	**7** (Place the 2 coins on the table.) **Look at the coins.** ***Mira las monedas.*** **I will show you one coin at a time. Tell me the name of the coin.** ***Te voy a mostrar una moneda a la vez. Dime el nombre de la moneda.**** (Show the penny) (Show the dime)
NY-K.CC.6 **NY-K.MD.2** **Need:** • 5 blue Unifix cubes for teacher • 3 yellow Unifix cubes for teacher ☐ **8** **Award 1 point** if the student holds up the blue set or train.	**8** **Look at the two sets of cubes.** ***Observen los dos juegos de cubos.*** **Put the blue cubes in a long train.** **Put the yellow cubes in a long train.** ***Pon los cubos azules en un tren largo.*** ***Pon los cubos amarillos en un tren largo.*** **Think about which set has more. When I count to three, hold up the set that has more cubes.** ***Piensen a ver cuál juego tiene más cubos. Cuando cuente hasta tres, muéstrenme el juego que tiene más cubos.*** **ONE – TWO – THREE, SHOW which set has more cubes?** ***UNO – DOS – TRES, MUESTREN ¿cuál juego tiene más cubos?***
Total points: 9 Score: ____/ 9	

# 9 is a 1st Grade Skill. It is left here as an optional, informal assessment only. **No points awarded.** **Need:** • 1 whole sandwich. (peanut butter, cheese, your choice) • plastic knife • 2 paper dessert plates A paper, graphic sandwich is attached as an alternative to real sandwich.	**9** **I would like for you to share this sandwich with me in fair shares.** ***Quiero que compartes este sándwich conmigo en partes iguales (fair shares).*** (Wait until finished.) **What do you call these fair shares?** ***¿Qué otro nombre tienen estas partes iguales?*** (Pause) **How do you know you have divided the sandwich into halves?** ***¿Cómo saben que el sándwich está en dos mitades?*** (Pause and watch for comparison)

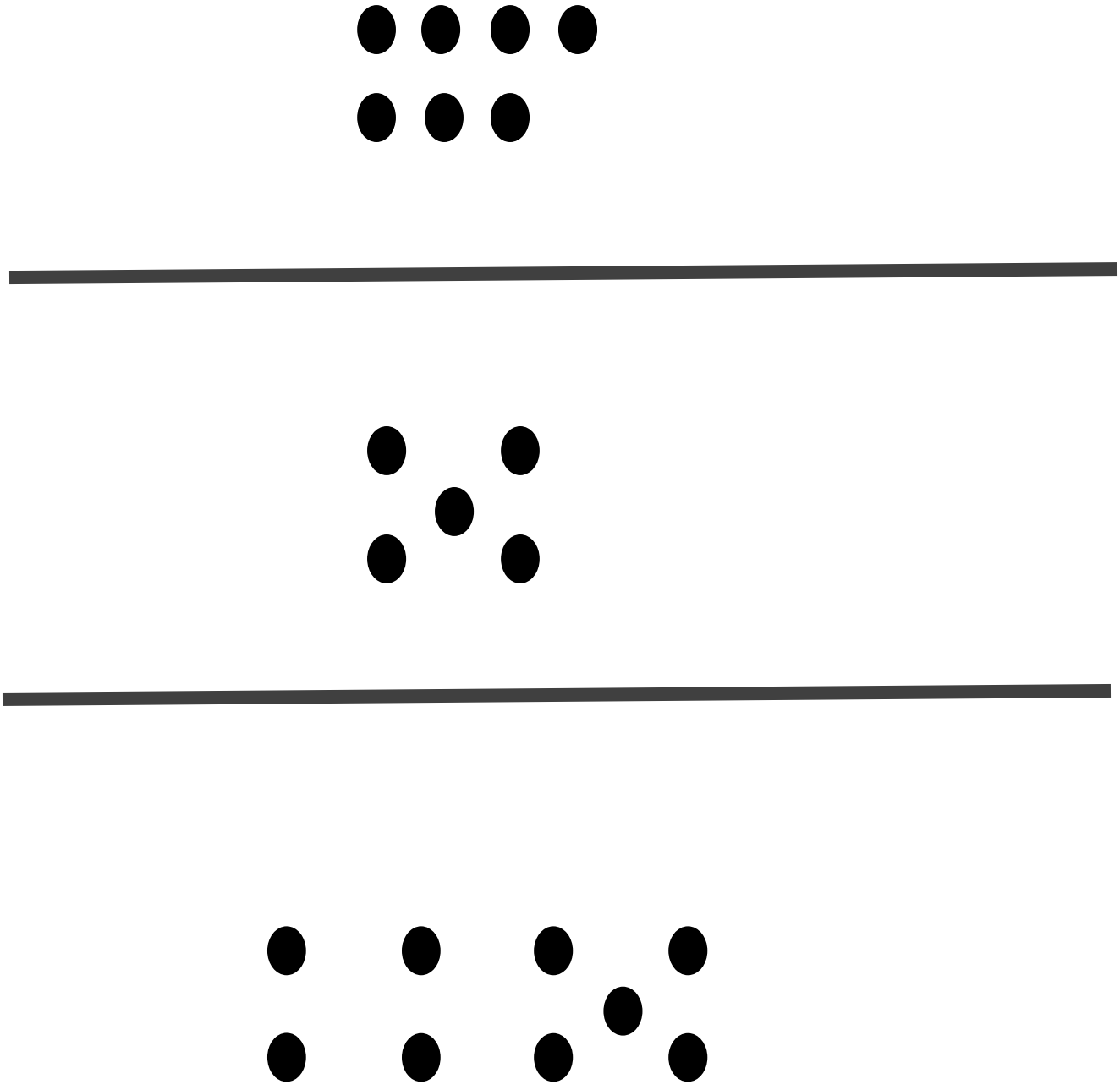
Pre/Post-assessment

Number Cards 0-20/Questions 1-2, 4-6

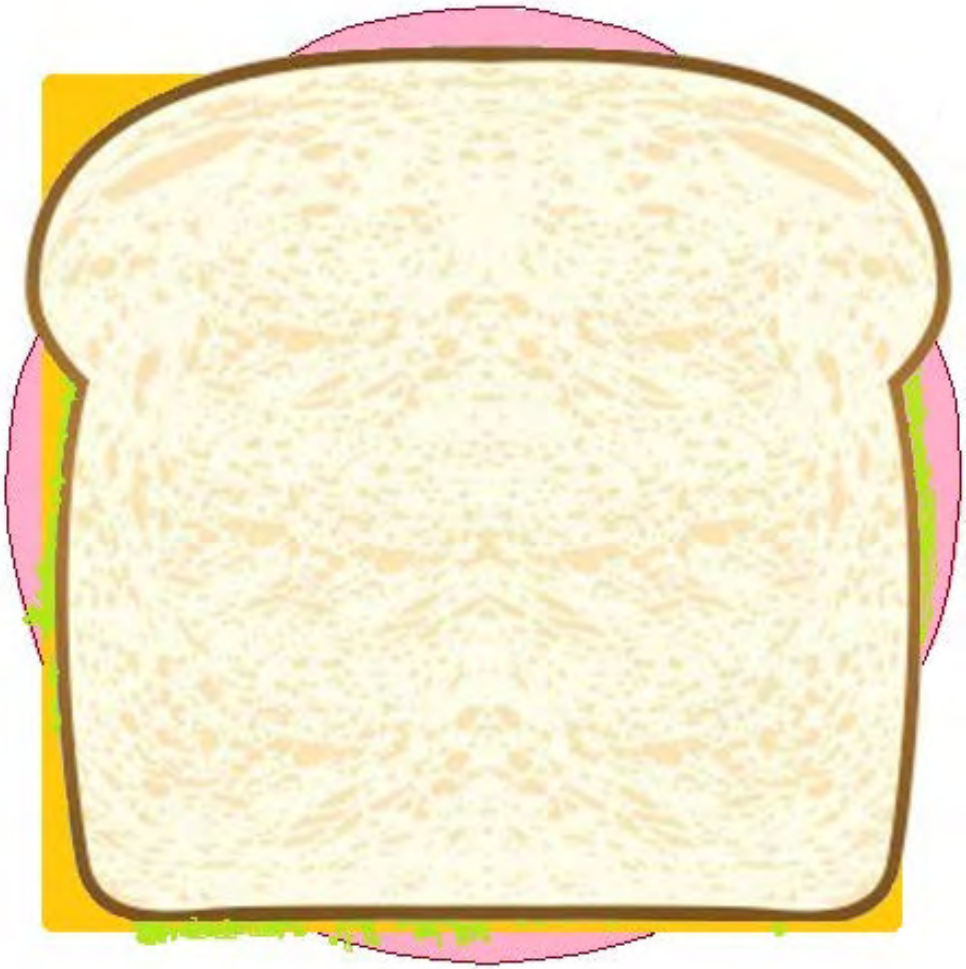


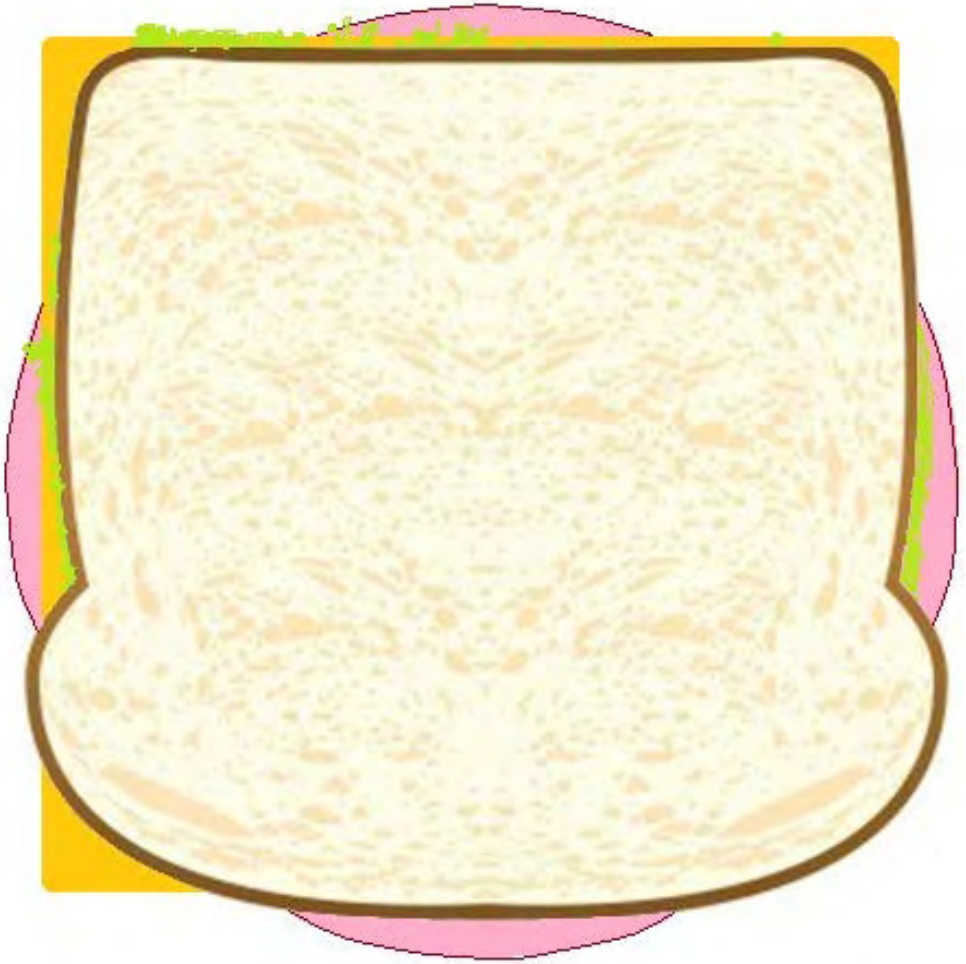
BLM Question #2

Pre/Post Assessment



Kindergarten Assessment #9 Paper Sandwich option.





Sandwich Graphic Created by Mid-Hudson METS

Paper Sandwich option. **Kindergarten Assessment #9**