On the Playground

Beginning Questions?
(You and the students point and count together.)
- What do you see in this picture?
  (children, grown ups, dog, birds, swings, monkey bars)
- What are the children doing?
  (playing, swinging, hanging, throwing, waiting)
- Let’s count the number of children on the swings, pointing as we count. (1, 2, 3, 4)
- Let’s count the number of children at the monkey bars. (1, 2, 3, 4, 5)
- Point to the child who is finished crossing the monkey bars.
- Point to the child who is first in line to go on the monkey bars, second in line, and last.

Intermediate Questions ??
(Students will need to point and touch while counting.)
- How many grown-ups are at the playground? (1, 2)
- How many children are at the playground? (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13)
- How many children are on the swings? (1, 2, 3, 4)

Advanced Questions ???
- How many children are on the monkey bars? (2)
- How many are waiting for a turn on the monkey bars? (3)
- Altogether how many children are at the monkey bars? (5)
Advanced Questions ????

- How many apples are on each tree? (5)
- How many apples are on all of the trees together? Let’s count by fives. (5, 10, 15, 20, 25; five groups of 5 is 25)
- How many trees have two children next to them? (3)
- How many trees have one child next to them? (2)
- How many trees have no child next to them? (0)
- The little girl on the step stool just picked an apple. How many apples were on the tree before she picked that apple? (6: 5 + 1 = 6)
- How many children are standing? (7)
- How many children are not standing? (2)
- How many children are there altogether? (9: 7 + 2 = 9)
- Tell me a number story about this picture.

Challenging Questions ????

- If three more of the children sit down for a rest, how many will be standing? (4)
- How many will now be sitting? (5)
- How many groups of five apples do you see? (9)
- How many total apples are there in those nine groups? (45; encourage students to count by fives and explain that they are not to count the stray apples)
- If five more children come to the apple orchard with one more grown-up, how many children will there be? (14: 9 + 5 = 14)
- How many grown-ups will there be? (4: 3 + 1 = 4)
- If three children leave, how many children will be left picking apples? (6: 9 – 3 = 6)
- Can you make up your own math story about this illustration?
My Word Problem Story Mat
In the Ocean

My Quick Draw
Using the Word Problem Story Mats:
Select a story mat. Determine which operation will be your focus and choose a word problem from the samples provided or create your own. Sample problems for each story mat are organized into categories:

• 1-3: Part/Whole Addition Problems
• 4-5 Subtraction Problems
• 6-7 Missing Addend Problems
• 8-10 Challenge Problems (deeper thinking)

Read the problem three times out loud to your student before they begin to solve it.
✓ Encourage students to repeat each part of the problem after you have read it.
✓ Personalize the problem by adding in familiar names (teachers, friends, etc.).
✓ Adjust the quantity of numbers in the problem based on the student’s ability.

Applying CPA
• As you read the problem aloud, let students use manipulatives (unifix cubes, beans, beads, counters, etc.) to represent the word problem concretely. Allow your student to explore the problem and act it out using the manipulative without leading prompts, correction or intervention.
• When students are comfortable with the problem, encourage your student to draw a pictorial representation using a Quick Draw, which uses simple shapes (“x”, circles, tallies, etc.) without much detail to represent the quantities they used while acting out the problem with manipulatives.
• Finally, students can write a number sentence or number bond to demonstrate their abstract understanding of the problem.

Watch the video tutorials to see examples and get more tips and ideas:
sis4teachers.org/early-word-problems/
My Word Problem Story Mat

In the Pool

My Quick Draw
In the Pool Word Problems

Sample Word Problems:

1. There were 5 boys and 4 girls in the pool. How many kids were in the pool?

2. There were 4 red beach balls and 3 green beach balls in the pool. How many beach balls were in the pool in all?

3. One dog jumped in the pool and then 2 more dogs jumped in. How many dogs are in the pool?

4. There were 9 kids in the pool. 3 kids had to go home. How many kids are left in the pool?

5. When we got in the pool there 6 dry towels on the bench. Our friends used 3 of the towels to dry off. How many dry towels are left?

6. There are kids 7 kids in the pool. 4 of the kids have on a blue bathing suit and rest have on a red bathing suit. How many kids are wearing red bathing suits?

7. There were 5 rafts in the pool. 2 of the rafts had kids on it and the rest didn’t. How many rafts didn’t have kids on it?

8. The boy saw 3 people swimming in the pool. How many arms did he see?

9. There are 5 pairs of googles by the pool but there are 8 kids needing googles. How many kids will not get a pair of googles?

10. Two dogs jumped in the pool with the boy. How many legs are in the pool?
In the Barn Word Problems

Sample Word Problems:

1. There were 2 cows in the barn and 3 cows out of the barn. How many cows are there in all?

2. We saw 3 sheep and 2 pigs in the barn. How many animals are in the barn?

3. There were 6 goats in the barn, 2 more goats joined. How many goats are in the barn now?

4. There were 8 crows on the barn. 6 of them flew away. How many crows are left on the barn?

5. The farmer had 9 barrels of hay in the barn. The horses ate 2 barrels of the hay. How many barrels of hay does he have left?

6. There are 8 horses in the barn. 5 of them are brown and the rest are black. How many black horses are in the barn?

7. We saw 6 mice in the barn. 3 of the mice scurried away. How many mice are still in the barn?

8. There were 2 piglets by the barn. How many legs were there in all?

9. We saw 3 chicken in the barn. How many chicken feet did we see?

10. We spotted 8 eggs in the barn. If there were 4 chickens and they each laid the same amount of eggs how many eggs did they each lay?
Sample Word Problems:

1. We found 3 blue shovels and 4 yellow shovels in the sandbox. How many shovels did we find?

2. There are 2 pink buckets and 5 green buckets in the sandbox. How many buckets are there in all?

3. There were 6 ants crawling up the sandbox. 2 more ants came up from the grass into the sandbox. How many ants are there in the sandbox?

4. We saw 5 sandcastles in the sandbox in the morning. In the afternoon two of the sandcastles had fallen. How many sandcastles are left?

5. There were 8 kids playing in the sandbox. 3 of the kids had to leave. How many kids are left in the sandbox?

6. There were 7 kids in the sandbox. 4 of them were girls and the rest were boys. How many boys were in the sandbox?

7. The girl hid 8 pennies in the sandbox. She found 5. How many more pennies does she need to find?

8. There were 4 kids in the sandbox. How legs are there?

9. There were 3 kids in the sandbox. Each kid hid two treasures in the sandbox. How many treasures are hidden in all?

10. The boy has 2 play cars in the sandbox. Each car has 4 wheels. How many wheels are there?
Trash Can Subtraction

Materials:
- 1 die
- 10 counters
- cards 7, 8, 9 and 10 (cut out cards below)

Directions:
1. Place the cards in a pile face down. Flip over the top card.
2. Build the number shown on the card on the ten frame.
3. Roll the die and take away the number shown on the die from the ten frame and put them in the trash can.
5. Repeat steps 1-4
Trash Can Subtraction Recording Sheet

Name: ________________________________

______   -  ______ = _____

______   -  ______ = _____

______   -  ______ = _____

______   -  ______ = _____

______   -  ______ = _____

______   -  ______ = _____
Trash Can Subtraction Recording Sheet

Name: ________________________________

______   -  ______ = _____

______   -  ______ = _____

______   -  ______ = _____

______   -  ______ = _____
Name: ________________________________

Trash Can Subtraction Recording Sheet

_____ - _____ = _____

_____ - _____ = _____

_____ - _____ = _____

_____ - _____ = _____
4 🏒 and 2 🏈

How many balls altogether?

4 + 2 = 6
2 and 4

How many balls in all?

2 + 4 = 6
Four balls pop. How many are left?

6 - 4 = 2
6 and 2

How many more than 6 – 2 = 4?

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Match the Expression

Directions:
1. Read each story problem.
2. Figure out which expression represents the story problem.
3. Draw a line to the correct expression.

Charlie has 2 books in his backpack. Charlie puts 4 more books in his backpack. How many books are in Charlie's backpack now?

- 3 + 3
- 6 + 2
- 2 + 4

Sandy decorates 8 cupcakes. Her sister decorates 2 cupcakes. How many more cupcakes did Sandy decorate than her sister?

- 8 - 2
- 6 - 2
- 8 + 2

Logan has 5 stickers in his sticker book. He received 3 new stickers for his birthday. How many stickers does Logan now have all together?

- 5 - 3
- 5 + 3
- 8 - 5
Match 'em Up!

Materials:
- expression cards (cut out)
- drawing cards (cut out)

Directions:
1. Work with a partner. Place the drawing cards and the expression cards facedown in two separate piles.
2. Player 1: Turn over one drawing card and one expression card. If the two cards match keep them. If the cards do not match turn them facedown again.
4. Keep taking turns until all pairs of cards have been found.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>4 + 3</td>
<td>8 - 4</td>
<td>5 + 2</td>
</tr>
<tr>
<td>7 - 2</td>
<td>3 + 3</td>
<td>7 + 2</td>
</tr>
</tbody>
</table>
6 - 0
3 - 1
8 + 1

5 + 5
2 + 5
9 - 6
5 Frame Shake!

Shake a cup with 5 two-sided counters and dump it out. Record how many of each color you have and record it in the number sentence and number bond. Keep going until you have all 6 combinations for 5.

______  +  ______ = 5

______  +  ______ = 5

______  +  ______ = 5

Name: ________________________________
My 5 Frame Mat
Shake Those Discs

Materials: 2 cups, 9 counters that have 2 different sides (they can be 2-sided discs or even pennies)

Directions:
1. Give each player a cup and 9 counters.
2. Put 9 counters into the cup and Shake Those Discs! Pour the discs out onto the table.
3. How many discs do you have of each color (or how many landed on heads and how many tails)? What expression can you write to represent the different parts?
4. Record your expression on the sheet below. Do this 4 more times.
5. Now repeat steps 2-4 but using 8 counters each.
6. Using 7 counters, repeat steps 2-4.

<table>
<thead>
<tr>
<th>Player 1</th>
<th>Player 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shake</td>
<td>Expression</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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<td>3</td>
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<td>14</td>
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<td>15</td>
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</tbody>
</table>
**Snap the Cubes with D.C.**

**Directions:**
1. Each tower has 7 cubes. Player 1 breaks down the tower into 2 parts and colors each part a different color.
2. Player 1 tells Player 2 what happened to the tower. (Ex: “I broke my tower into a group of 3 and a group of 4.”)
3. Player 1 records the expression on the line below the tower.
4. Player 2 repeats steps 1-3 trying to break down the tower in a different way.
5. Continue until all towers have been broken down.

<table>
<thead>
<tr>
<th>Player 1</th>
<th>Player 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Tower 1" /></td>
<td><img src="image2" alt="Tower 2" /></td>
</tr>
<tr>
<td>expression: ____________________</td>
<td>expression: ____________________</td>
</tr>
<tr>
<td><img src="image3" alt="Tower 3" /></td>
<td><img src="image4" alt="Tower 4" /></td>
</tr>
<tr>
<td>expression: ____________________</td>
<td>expression: ____________________</td>
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<tr>
<td><img src="image5" alt="Tower 5" /></td>
<td><img src="image6" alt="Tower 6" /></td>
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<tr>
<td>expression: ____________________</td>
<td>expression: ____________________</td>
</tr>
<tr>
<td><img src="image7" alt="Tower 7" /></td>
<td><img src="image8" alt="Tower 8" /></td>
</tr>
<tr>
<td>expression: ____________________</td>
<td>expression: ____________________</td>
</tr>
</tbody>
</table>
**Make or Break Numbers**

**Materials:** number cards (4–9) cut out

**Directions:**
1. Flip over the number cards and put them in a pile facedown. Turn over then top card.
2. Look on the Dots Page to find two groups of dots that can be put together to make the number that you rolled.
3. Write an expression below to represent the 2 parts that make the number.

<table>
<thead>
<tr>
<th></th>
<th>example: $4 + 3 = 7$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
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<td>3</td>
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<td>10</td>
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</tbody>
</table>
**Match the Drawing**

**Directions:** Draw a line to match the labeled drawing to the word problems.

1. **Hamburgers and Hotdogs**
   - Karl has 5 toy trucks. For his birthday he got 2 toy cars. How many toys does Karl now have all together?

2. **Trucks and Cars**
   - Cindy made cupcakes for the school bake sale. She made 5 chocolate cupcakes and 5 vanilla cupcakes. How many cupcakes did Cindy make in all?

3. **Chocolate and Vanilla**
   - Reagan made her friend a bracelet. She put 4 yellow beads and 3 blue beads on the bracelet. How many beads are on the bracelet?

4. **Yellow and Blue**
   - Jamal had some friends over for a barbecue. 2 friends ate hot dogs. 3 friends ate hamburgers. How many hot dogs and hamburgers were eaten altogether?
Find the Parts

Directions: Each problem gives you the total. You have to find as many different solutions to each problem. Fill in the parts to create the total.

Charlie has 8 toys in his toy box. Some of the toys are race cars and some of the toys are helicopters. How many race cars does Charlie have in his toy box? How many helicopters does he have in his toy box?

_____ helicopters + _____ race cars
_____ helicopters + _____ race cars
_____ helicopters + _____ race cars
_____ helicopters + _____ race cars
_____ helicopters + _____ race cars
_____ helicopters + _____ race cars

Jessica built a castle with red and blue blocks. She used 7 blocks all together to build the castle. How many blocks are red? How many blocks are blue?

_____ red blocks + _____ blue blocks
_____ red blocks + _____ blue blocks
_____ red blocks + _____ blue blocks
_____ red blocks + _____ blue blocks
_____ red blocks + _____ blue blocks
_____ red blocks + _____ blue blocks
Directions: Using the pictures below tell a story. Use objects or drawings to show what happens in the story. Then tell a different story.

Write or draw your story.
Directions: Using two different colors fill in the Counting Buddy Senior to represent the equation.

Example: 10 = 6 + 4

10 = 5 + 5

10 = 7 + 3

10 = 1 + 9

10 = 8 + 2
10 Frame Shake!

Shake a cup with 10 two-sided counters and dump it out. Record how many of each color you have and record it in the number sentence and number bond. Keep going until you have all 9 combinations for 10.

______   +  ______ = 10
______   +  ______ = 10
______   +  ______ = 10

Name: ________________________________
Name: ________________________________

___ + ___ = 10

___ + ___ = 10

___ + ___ = 10