Name ________________________________ Date ______________

1. There were 5 boys at Jake’s party. Some more came after basketball practice. Then, there were 9. How many boys came to Jake’s party after basketball practice?
   a. Draw a picture to help you solve the problem.
   
   b. Draw a complete number bond that goes with this story.
   
   c. Write an addition sentence to match this story.

   ____________________________________
2. Write the numbers that go in the blanks.
   a. Color all of the partners to 10 blue.
   b. Color all of the +1 facts yellow.
   c. Color all of the +2 facts red.

   \[
   \begin{align*}
   3 + 7 &= \underline{10} & \underline{4} &= 1 + 4 & 3 + 2 &= \underline{5} \\
   \underline{2} &= 7 + 2 & 5 + 1 &= \underline{6} & \underline{1} &= 8 + 1 \\
   9 + 1 &= \underline{10} & \underline{6} &= 2 + 6 & 6 + 4 &= \underline{10}
   \end{align*}
   \]

3. Look at the party picture!
   a. Write at least two different addition sentences using 3, 6, and 9 that describe the party picture.
      \[ \underline{6 + 3} = \underline{9}, \quad \underline{3 + 6} = \underline{9} \]
   b. How are these number sentences the same? Explain using pictures and numbers.
4. Monica says that when the unknown is 4, it makes this number sentence true: \(5 + 3 = \_\_\_ + 4\). Terry says she is wrong. He says 8 makes the number sentence true.
   a. Who is correct? Explain your thinking using pictures, words, or numbers.

b. Monica says that 3 and 5 is equal to 5 and 3. Terry says she is wrong again. Explain who is correct, using pictures, numbers, or words.

c. Next, Monica tells Terry \(5 = 8\). Terry says she is wrong one more time. Explain who is correct, using pictures, numbers, or words.

d. Terry decided to give 8 carrot sticks to his friend Monica. Monica put 5 carrot sticks on her plate and some more in her lunch box. How many carrot sticks did Monica put in her lunch box?
Represent and solve problems involving addition and subtraction.

1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (See Glossary, Table 1.)

Understand and apply properties of operations and the relationship between addition and subtraction.

1.OA.3 Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)

Add and subtract within 20.

1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

Work with addition and subtraction equations.

1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.

1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = □ – 3, 6 + 6 = □.

Evaluating Student Learning Outcomes

A Progression Toward Mastery is provided to describe steps that illuminate the gradually increasing understandings that students develop on their way to proficiency. In this chart, this progress is presented from left (Step 1) to right (Step 4). The learning goal for students is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what the students CAN do now and what they need to work on next.
## A Progression Toward Mastery

<table>
<thead>
<tr>
<th>Assessment Task Item</th>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Little evidence of reasoning without a correct answer. (1 Point)</td>
<td>Evidence of some reasoning without a correct answer. (2 Points)</td>
<td>Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer. (3 Points)</td>
<td>Evidence of solid reasoning with a correct answer. (4 Points)</td>
</tr>
<tr>
<td>1.OA.1</td>
<td>The student is unable to represent the problem with pictures or is disorganized with the symbols, digits, and structure and writes an inaccurate number bond and number sentence.</td>
<td>The student draws an incorrect picture with an equation and number bond that may or may not match the incorrect picture.</td>
<td>The student draws and solves the add to with change unknown problem correctly (4 more boys came to the party) but is unable to write an addition equation or number bond to match the problem. OR The student writes an equation and number bond (using 9, 5, and 4) but cannot explain his thinking using pictures to solve the add to with change unknown problem.</td>
<td>The student correctly ▪ Draws a picture to solve the add to with change unknown problem and determines that 4 more boys came to the party. ▪ Makes a number bond with 9, 5, and 4. ▪ Writes an addition equation (9 = 5 + __, 5 + __ = 9, etc.).</td>
</tr>
<tr>
<td>1.OA.5</td>
<td>The student is unable to add as evidenced by unanswered problems. The student colors boxes at random with little understanding of partners to 10, +1, and +2.</td>
<td>The student makes several calculation or category coloring errors. The student makes no accommodation for 9 + 1.</td>
<td>The student answers most addition problems correctly and makes some category coloring errors (up to two calculation or color errors combined.) The student makes no accommodation for 9 + 1 or makes an accommodation for 9 + 1 with calculation or category coloring errors.</td>
<td>The student correctly ▪ Answers all addition problems. ▪ Colors all equations in accordance to the problem type categories. ▪ Makes an accommodation for 9 + 1 as it fits two categories.</td>
</tr>
<tr>
<td>1.OA.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## A Progression Toward Mastery

<table>
<thead>
<tr>
<th>3</th>
<th>1.OA.3</th>
<th>The student writes two incorrect number sentences. OR The student is disorganized with the symbols, digits, and structure, and writes an inaccurate equation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.OA.6</td>
<td>The student writes one correct number sentence and thus cannot explain the similarities between two equations. OR The student writes two number sentences that are exactly the same as one another and explains thinking that does not reflect an understanding of the commutative property.</td>
<td>The student writes two correct and unique addition equations using 3, 6, and 9, but is unable to cite the commutative property in her own words to explain how the equations are same.</td>
</tr>
<tr>
<td>4</td>
<td>1.OA.1</td>
<td>The student cannot explain any of the three scenarios clearly using equations, pictures, or words. The student cannot solve the take apart with addend unknown problem correctly.</td>
</tr>
<tr>
<td>1.OA.3</td>
<td>The student explains one of the three scenarios clearly and thoroughly using equations, pictures, or words. The student solves the take apart with addend unknown problem incorrectly (something other than 3 carrots were in her lunch box).</td>
<td>The student explains two of the three scenarios clearly and thoroughly using equations, pictures, and/or words. The student solves the take apart with addend unknown problem correctly and determines that 3 carrots were in her lunch box.</td>
</tr>
<tr>
<td>1.OA.5</td>
<td>The student clearly</td>
<td>The student clearly and thoroughly</td>
</tr>
<tr>
<td>1.OA.6</td>
<td>Explains all three scenarios using equations, pictures, and/or words.</td>
<td>Solves the take apart with addend unknown problem correctly and determines that 3 carrots were in her lunch box.</td>
</tr>
<tr>
<td>1.OA.7</td>
<td>The student clearly and thoroughly</td>
<td>Takes apart with addend unknown problem correctly and determines that 3 carrots were in her lunch box.</td>
</tr>
<tr>
<td>1.OA.8</td>
<td>The student clearly and thoroughly</td>
<td>Takes apart with addend unknown problem correctly and determines that 3 carrots were in her lunch box.</td>
</tr>
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1. There were 5 boys at Jake’s party. Some more came after basketball practice. Then, there were 9. How many boys came to Jake’s party after basketball practice?
   a. Draw a picture to help you solve the problem.
      ![Picture of boys]
   b. Draw a complete number bond that goes with this story.
      ![Number bond]
   c. Write an addition sentence to match this story.
      \[5 + 4 = 9\]
2. Write the numbers that go in the blanks.
   a. Color all of the partners to 10 blue.
   b. Color all of the +1 facts yellow.
   c. Color all of the +2 facts red.

   \[
   \begin{align*}
   3 + 7 &= 10 \\
   5 + 1 &= 6 \\
   9 + 1 &= 10 \\
   9 - 7 + 2 &= 4 \\
   5 + 1 &= 6 \\
   9 &= 8 + 1 \\
   8 - 2 + 6 &= 10 \\
   6 + 4 &= 10
   \end{align*}
   \]

3. Look at the party picture!

   a. Write at least two different addition sentences using 3, 6, and 9 that describe the party picture.

   \[
   3 + 6 = 9 \\
   6 + 3 = 9
   \]

   b. How are these number sentences the same? Explain using pictures and numbers.

   \[
   \begin{align*}
   3 + 6 &= 9 \\
   0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \\
   6 + 3 &= 9 \\
   0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0
   \end{align*}
   \]
4. Monica says when the unknown is 4, it makes this number sentence true:
\[ 5 + 3 = \_ + 4. \] Terry says she is wrong. He says 8 makes the number sentence true.

a. Who is correct? Explain your thinking using pictures, words, or numbers.

\[
\begin{align*}
\text{Monica} & \quad \vdots \quad = \quad \vdots \\
5 + 3 & \quad \Leftrightarrow \quad 4 + 4
\end{align*}
\]

They are the same so she is right.

b. Monica says that 3 and 5 is equal to 5 and 3. Terry says she is wrong again. Explain who is correct, using pictures, numbers, or words.

\[
\begin{align*}
3 + 5 & = 5 + 3 \\
\begin{array}{c}
\text{3} \\
\text{5}
\end{array} & \quad \Leftrightarrow \quad \begin{array}{c}
\text{5} \\
\text{3}
\end{array}
\end{align*}
\]

It’s true!

c. Next, Monica tells Terry 8 = 8. Terry says she is wrong one more time. Explain who is correct, using pictures, numbers, or words.

\[
\begin{align*}
8 & = 8 \\
\text{8} & \quad \Leftrightarrow \quad \text{8}
\end{align*}
\]

d. Terry decided to share 8 carrot sticks with his friend Monica. Monica put 5 carrot sticks on her plate and some more in her lunch box. How many carrot sticks did Monica put in her lunch box?

\[
\begin{align*}
5 + 3 & = 8 \\
\begin{array}{c}
\text{5} \\
\text{3}
\end{array} & = 8
\end{align*}
\]

3 carrot sticks