

TEAM Student Growth Portfolio Rubric

Kindergarten Mathematics

| | Kindergarten Mathematics | | | | | | | |
|---|--|---|--|--|--|--|--|--|
| Co | Counting and Cardinality (CC) | | | | | | | |
| Cl | Cluster: A. Know number names and the counting sequence. | | | | | | | |
| Standard: K.CC.A.1 Count to 100 by ones, fives, and tens. Count backward from 10. | | | | | | | | |
| 0 | When presented with all four | h all four 1) Student counts to 100 by ones. | | | | | | |
| | tasks, student completes none of | 2) Student counts to 100 by fives. | | | | | | |
| | the tasks with 100% accuracy. | 3) Student counts to 100 by tens. | | | | | | |
| | | 4) Student counts backward from 10. | | | | | | |
| 1 | When presented with all four | 1) Student counts to 100 by ones. | | | | | | |
| • | tasks, student completes one | 2) Student counts to 100 by fives. | | | | | | |
| | task with 100% accuracy. | 3) Student counts to 100 by tens. | | | | | | |
| | | 4) Student counts backward from 10. | | | | | | |
| 2 | When presented with all four | 1) Student counts to 100 by ones. | | | | | | |
| | tasks, student completes two or | 2) Student counts to 100 by fives. | | | | | | |
| | three tasks with 100% accuracy. | 3) Student counts to 100 by tens. | | | | | | |
| | | 4) Student counts backward from 10. | | | | | | |
| 3 | When presented with all four | 1) Student counts to 100 by ones. | | | | | | |
| | tasks, student completes all four | 2) Student counts to 100 by fives. | | | | | | |
| | tasks with 100% accuracy. | 3) Student counts to 100 by tens. | | | | | | |
| | - | 4) Student counts backward from 10. | | | | | | |
| 4 | When presented with all five tasks, | 1) Student counts to 100 by ones. | | | | | | |
| | student completes all five tasks | 2) Student counts to 100 by fives. | | | | | | |
| | with 100% accuracy. | 3) Student counts to 100 by tens. | | | | | | |
| | | 4) Student counts backward from 10. | | | | | | |
| | | 5) Student is presented with a counting sequence by ones (starting at 1) with | | | | | | |
| | | three consecutive missing numbers that are larger than 10 (could be given orally, with missing numbers on a hundreds chart, etc.). Student | | | | | | |
| | | accurately identifies all three missing numbers. | | | | | | |
| | | accuracity facilities an affect missing frambers. | | | | | | |
| 5 | When presented with all eight | 1) Student counts to 100 by ones. | | | | | | |
| | tasks, student completes all eight | 2) Student counts to 100 by twos. | | | | | | |
| | tasks with 100% accuracy. | 3) Student counts to 100 by fives. | | | | | | |
| | - | 4) Student counts to 100 by tens. | | | | | | |
| | | 5) Student counts backward from 10 by ones. | | | | | | |
| | | 6) Student counts backward from 10 by fives . | | | | | | |
| | | 7) Student is presented with a counting sequence by ones (starting at 1) with | | | | | | |
| | | three <u>non-consecutive</u> missing numbers larger than 10 (could be given orally, with missing numbers on a hundreds chart, etc.). Student accurately | | | | | | |
| | | identifies all three missing numbers. | | | | | | |
| | | 8) Student is presented with a counting sequence by tens (starting at 10) with | | | | | | |
| | | three consecutive missing numbers (could be given orally, with missing | | | | | | |
| | | numbers on a hundreds chart, etc.). Student accurately identifies all three | | | | | | |
| | | missing numbers. | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| 6* | When presented with all nine | 1) | Student counts to 100 by ones. | | | |
|---------------------------|--|----------|--|--|--|--|
| 0 | tasks, student completes all nine | 2) | Student counts to 100 by twos. | | | |
| | - | 3) | Student counts to 100 by fives. | | | |
| tasks with 100% accuracy. | | 4) | · | | | |
| | | - | 5) Student counts backward from 10 by ones. | | | |
| | | 6) | | | | |
| | | 7) | Student is presented with a counting sequence by ones (starting at 1) with | | | |
| | | , | <u>four</u> non-consecutive missing numbers larger than 10 (could be given | | | |
| | | | orally, with missing numbers on a hundreds chart, etc.). Student correctly | | | |
| | | | identifies all four missing numbers. | | | |
| | | 8) | Student is presented with a counting sequence by tens (starting at 10) with | | | |
| | | | three <u>non-consecutive</u> missing numbers (could be given orally, with | | | |
| | | | missing numbers on a hundreds chart, etc.). Student correctly identifies all | | | |
| | | | three missing numbers. | | | |
| | | 9) | Student is presented with a counting sequence by fives (starting at 5) with | | | |
| | | | three consecutive missing numbers (could be given orally, with missing | | | |
| | | | numbers on a hundreds chart, etc.). Student correctly identifies all three | | | |
| | | | missing numbers. | | | |
| | | | | | | |
| 7* | When presented with all ten | 1) | Student counts to 100 by ones. | | | |
| | tasks, student completes all ten | 2) | Student counts to 100 by twos. | | | |
| | tasks with 100% accuracy. | 3) | Student counts to 100 by fives. | | | |
| | | 4) | Student counts to 100 by tens. | | | |
| | | 5) | Student counts backward from 10 by ones. | | | |
| | | 6) 7) | Student counts backward from 10 by fives. | | | |
| | | 7) | Student is presented with a counting sequence by ones (starting at 1) with five non-consecutive missing numbers larger than 10 (could be given | | | |
| | | | orally, with missing numbers on a hundreds chart, etc.). Student correctly | | | |
| | | | identifies all five missing numbers. | | | |
| | | 8) | Student is presented with a counting sequence by tens (starting at 10) with | | | |
| | | 0) | four non-consecutive missing numbers (could be given orally, with | | | |
| | | | missing numbers on a hundreds chart, etc.). Student correctly identifies all | | | |
| | | | four missing numbers. | | | |
| | | 9) | Student is presented with a counting sequence by fives (starting at 5) with | | | |
| | | ŕ | three <u>non-consecutive</u> missing numbers (could be given orally, with | | | |
| | | | missing numbers on a hundreds chart, etc.). Student correctly identifies all | | | |
| | | | three missing numbers. | | | |
| | | 10) | Student is presented with a counting sequence by twos (starting at 2) with | | | |
| | | | three consecutive missing numbers (could be given orally, with missing | | | |
| | | | numbers on a hundreds chart, etc.). Student correctly identifies all three | | | |
| | | | missing numbers. | | | |

Note: To accommodate the developmental stage of the student, the student may self-correct one number, but no more than one number. If a student is disrupted while counting to 100, the teacher may prompt the student to revisit the nearest ten and begin at that point. For example, if a teacher is collecting evidence during center time and another student approaches and interrupts the sequence just after the student says "78", the teacher may prompt the student to begin again at 70. This does not apply to counting by fives, tens, or counting backward from 10 because the length of time it takes for a student to complete these tasks is significantly less than counting to 100.

Kindergarten Mathematics Counting and Cardinality (CC) Cluster: A. Know number names and the counting sequence. Standard: K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0 to 20. Teacher presents student with writing all numbers from 0 to 20. Student accurately writes **none** of the numbers. **AND** Teacher presents student with 4 groups of objects (one containing 0-5 objects, the second containing 6-10 objects, the third containing 11-15 objects, and the fourth containing 16-20 objects). Student accurately uses a written numeral to represent the quantity for **none** of the groups of objects. *Printed reversal of a digit is acceptable. Digits must be in the correct place value order (e.g., 21 may not be accepted for 12). Teacher presents student with writing all numbers from 0 to 20. 1 Student accurately writes at least one but less than ten of the numbers. AND Teacher presents student with 4 groups of objects (one containing 0-5 objects, the second containing 6-10 objects, the third containing 11-15 objects, and the fourth containing 16-20 objects). Student accurately uses a written numeral to represent the quantity for **one** group of objects. *Printed reversal of a digit is acceptable. Digits must be in the correct place value order (e.g., 21 may not be accepted for 12). Teacher presents student with writing all numbers from 0 to 20. 2 Student accurately writes at least ten but less than twenty of the numbers. AND Teacher presents student with 4 groups of objects (one containing 0-5 objects, the second containing 6-10 objects, the third containing 11-15 objects, and the fourth containing 16-20 objects). o Student accurately uses a written numeral to represent the quantity for two or three groups of objects. *Printed reversal of a digit is acceptable. Digits must be in the correct place value order (e.g., 21 may not be accepted for 12). Teacher presents student with writing all numbers from 0 to 20. 3 Student accurately writes all of the numbers. AND Teacher presents student with 4 groups of objects (one containing 0-5 objects, the second containing 6-10 objects, the third containing 11-15 objects, and the fourth containing 16-20 objects). Student accurately uses a written numeral to represent the quantity for <u>all four</u> groups of objects. *Printed reversal of a digit is acceptable. Digits must be in the correct place value order (e.g., 21 may not be accepted for 12). In addition to providing evidence that the student met the expectations for level 3: 4 Teacher presents student with two different printed numbers (not said orally to the student) one between 10 and 15 and the other between 15 and 20. Student accurately identifies both numbers and represents both numbers with objects (could be physical objects or drawings). *Printed reversal of a digit is acceptable. Digits must be in the correct place value order (e.g., 21 may not be accepted for 12). In addition to providing evidence that the student met the expectations for level 3 and 4: 5 Teacher presents student with the written numeral 13. Student accurately identifies the numeral. Teacher then presents student with a group of 11 objects and asks the student, "Can you add more objects to this group to make it match the number I showed you (13)?" Teacher gives student 5 more objects to draw from when adding to the group. Student accurately adds two objects to the group to make 13. AND Teacher presents student with the written numeral 18. Student accurately identifies the numeral. Teacher then presents student with a group of 14 objects and asks the student, "Can you add more objects to this group to make it match the number I showed you (18)?" Teacher gives student 5 more objects to draw from when adding to the group. Student accurately adds four objects to the group to make 18. In addition to providing evidence that the student met the expectations for level 3, 4, and 5: 6* Teacher presents student with the written numeral 16. Student accurately identifies the numeral. Teacher presents student with a group of 19 objects and asks the student, "Can you take some objects away from this group to make it match the number I showed you (16)?" Student accurately removes 3 objects from the group to make 16. In addition to providing evidence that the student met the expectations for level 3, 4, 5, and 6: 7* Teacher presents student with the written numeral 19. Student accurately identifies the numeral. Teacher presents student with a group of 26 objects and asks the student, "Can you take some objects away from this group to make it match the number I showed you (19)?" o Student accurately removes 7 objects from the group to make 19.

Counting and Cardinality (CC)

Cluster: B. Count to tell the number of objects.

Standard: K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, a circle, or as many as 10 things in a scattered configuration. Given a number from 1-20, count out that many objects.

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- Teacher presents student with
 - 1) 1-10 objects in a line,
 - 2) 1-10 objects in a rectangular array, and
 - 3) 1-10 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 1-3 objects, one with 4-6 objects, and one with 7-10 objects.

Student <u>does not</u> accurately count <u>any</u> of the configurations.

AND

- Teacher presents student with
 - 1) 11-20 objects in a line.
 - 2) 11-20 objects in a rectangular array, and
 - 3) 11-20 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 11-13 objects, one with 14-16 objects, and one with 17-20 objects.

- Student <u>does not</u> accurately count <u>any</u> configurations. AND
- Teacher presents student with two unique scattered configurations of objects, one with 3-6 objects and the other with 7-10 objects, and asks, "How many objects are there?"
 - o Student <u>does not</u> accurately count <u>either</u> scattered configuration.

AND

- Teacher presents student with
 - 1) a number between 1 and 5,
 - 2) a number between 6 and 10,
 - 3) a number between 11 and 15, and
 - 4) a number between 16 and 20
 - and asks the student to count out objects to represent the given numbers.
 - o Student <u>does not</u> accurately count for <u>any</u> of the numbers.

• Teacher presents student with

- 1) 1-10 objects in a line,
- 2) 1-10 objects in a rectangular array, and
- 3) 1-10 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 1-3 objects, one with 4-6 objects, and one with 7-10 objects.

o Student accurately counts **1** of the configurations.

AND

- Teacher presents student with
 - 1) 11-20 objects in a line,
 - 2) 11-20 objects in a rectangular array, and
 - 3) 11-20 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 11-13 objects, one with 14-16 objects, and one with 17-20 objects.

Student <u>does not</u> accurately counts <u>any</u> configurations.

AND

- Teacher presents student with two unique scattered configurations of objects, one with 3-6 objects and the other with 7-10 objects, and asks, "How many objects are there?"
 - Student <u>does not</u> accurately count <u>either</u> scattered configuration.

AND

- Teacher presents student with
 - 1) a number between 1 and 5,
 - 2) a number between 6 and 10,
 - 3) a number between 11 and 15, and
 - 4) a number between 16 and 20

and asks the student to count out objects to represent the given numbers.

Student accurately counts for <u>1</u> of the numbers.

- Teacher presents student with
 - 1) 1-10 objects in a line,
 - 2) 1-10 objects in a rectangular array, and
 - 3) 1-10 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 1-3 objects, one with 4-6 objects, and one with 7-10 objects.

Student accurately counts **2** of the configurations.

AND

- Teacher presents student with
 - 1) 11-20 objects in a line,
 - 2) 11-20 objects in a rectangular array, and
 - 3) 11-20 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 11-13 objects, one with 14-16 objects, and one with 17-20 objects.

o Student accurately counts **1 or 2** configurations.

AND

- Teacher presents student with two unique scattered configurations of objects, one with 3-6 objects and the other with 7-10 objects, and asks, "How many objects are there?"
 - o Student accurately counts **1** scattered configuration.

AND

- Teacher presents student with
 - 1) a number between 1 and 5,
 - 2) a number between 6 and 10,
 - 3) a number between 11 and 15, and
 - 4) a number between 16 and 20

and asks the student to count out objects to represent the given numbers.

Student accurately counts for <u>2 or 3</u> of the numbers.

- Teacher presents student with
 - 1) 1-10 objects in a line,
 - 2) 1-10 objects in a rectangular array, and
 - 3) 1-10 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 1-3 objects, one with 4-6 objects, and one with 7-10 objects.

Student accurately counts <u>all 3</u> configurations.

AND

3

- Teacher presents student with
 - 1) 11-20 objects in a line,
 - 2) 11-20 objects in a rectangular array, and
 - 3) 11-20 objects in a circle

and asks, "How many objects are there?" Each configuration should have a different number of objects, one with 11-13 objects, one with 14-16 objects, and one with 17-20 objects.

Student accurately counts all <u>3</u> configurations.

AND

- Teacher presents student with two unique scattered configurations of objects, one with 3-6 objects and the other with 7-10 objects, and asks, "How many objects are there?"
 - $\circ \hspace{0.5cm} \textbf{Student accurately counts for } \underline{\textbf{both}} \text{ scattered configurations.}$

AND

- Teacher presents student with
 - 1) a number between 1 and 5,
 - 2) a number between 6 and 10,
 - 3) a number between 11 and 15, and
 - 4) a number between 16 and 20

and asks the student to count out objects to represent the given numbers.

Student accurately counts for <u>all 4</u> numbers.

In addition to providing evidence that the student met the expectations for level 3:

- Teacher presents the student with 10-20 objects and an incorrect count of the objects (greater or less than the actual amount of objects).
 - Student accurately identifies the correct amount of objects.

5 In addition to providing evidence that the student met the expectations for level 3 and 4:

- Teacher presents student with 10-20 objects and a count of the objects that is less than the actual amount.
 - Student accurately identifies the correct amount of objects.

AND

- Teacher asks, "Can you make this group match the number I gave you (repeat the number)?"
 - o Student accurately removes objects to make the group match the given number. (e.g., the student is given a collection of 18 counters and told there are 16 counters; correctly identifies the count of 18 and can state that if two counters are removed there will be 16 counters and/or removes two counters to make 16.

6 In addition to providing evidence the student met the expectations for level 3, 4, and 5:

- Teacher presents student with 10-20 objects and a count of the objects that is more than the actual amount.
 - o Student accurately identifies the correct amount of objects.

AND

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- Teacher asks, "Can you make this group match the number I gave you (repeat the number)?"
 - o Student accurately adds objects to make the group match the given number. (e.g., the student is given a collection of 16 counters and told there are 18 counters; correctly identifies the count of 16 and can state that if two counters are added there will be 18 counters and/or adds two counters to make 18..)

In addition to providing evidence the student met the expectations for level 3, 4, 5, and 6:

- Teacher presents student with a group of 18 objects and asks the student to identify the quantity.
 - o Student accurately supplies the number of the quantity.
- Teacher asks the student to say a number that is more than 10, but less than the correct amount of objects.
 - o Student accurately says a number between 10 and 18.

Based on the number the student provides, teacher removes objects from the group so that the group does not match the number the student provided (e.g., student said 14 so the teacher removes only 3 objects from the group and leaves 15).

Student accurately identifies that the objects do not match the number they provided and explains how to make the group match their number.

Counting and Cardinality (CC) Cluster: C. Compare numbers. Standard: K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. Teacher presents student with six (6) separate opportunities to compare Student accurately identifies the group that is greater or two groups of 6-10 objects. For two of these opportunities, teacher less none of the times they are presented with groups of presents the student with two equal groups of objects (e.g. 7 in both different amounts. groups, or 8 in both groups). For the other four opportunities, teacher AND Student accurately identifies the groups are equal none of presents student with two groups with different amounts (e.g., one group of 6 and one group of 8, or one group of 9 and one group of 7). **the times** they are presented with equal groups. Teacher presents student with six (6) separate opportunities to compare Student accurately identifies the group that is greater or 1 two groups of 6-10 objects. For two of these opportunities, teacher less one of the times they are presented with groups of presents the student with two equal groups of objects (e.g. 7 in both different amounts. groups, or 8 in both groups). For the other four opportunities, teacher AND presents student with two groups with different amounts (e.g., one group Student accurately identifies the groups are equal 1 or of 6 and one group of 8, or one group of 9 and one group of 7). none of the times they are presented with equal groups. Teacher presents student with six (6) separate opportunities to compare Student accurately identifies the group that is greater or 2 less 2 or 3 of the times they are presented with groups of two groups of 6-10 objects. For two of these opportunities, teacher presents the student with two equal groups of objects (e.g. 7 in both different amounts. groups, or 8 in both groups). For the other four opportunities, teacher AND presents student with two groups with different amounts (e.g., one group Student accurately identifies the groups are equal one of 6 and one group of 8, or one group of 9 and one group of 7). time they are presented with equal groups. Teacher presents student with six (6) separate opportunities to compare Student accurately identifies the group that is greater or 3 two groups of 6-10 objects. For two of these opportunities, teacher less all 4 times they are presented with groups of presents the student with two equal groups of objects (e.g. 7 in both different amounts. groups, or 8 in both groups). For the other four opportunities, teacher AND presents student with two groups with different amounts (e.g., one group Student accurately identifies the groups are equal **both** of 6 and one group of 8, or one group of 9 and one group of 7). times they are presented with equal groups. In addition to providing evidence that the student met the Student accurately identifies the group that is greater or 4 expectations of level 3: less all 4 times they are presented with groups of Teacher presents student with six (6) separate opportunities to compare different amounts. two groups of 11-20 objects. For two of these opportunities, teacher AND presents the student with two equal groups of objects (e.g. 13 in both Student accurately identifies the groups are equal **both** groups, or 17 in both groups). For the other four opportunities, teacher times they are presented with equal groups. presents student with two groups with different amounts (e.g., one group of 12 and one group of 16, or one group of 18 and one group of 15). In addition to providing evidence that the student met the Student accurately creates two groups (one greater and expectations of levels 3 and 4: one less than the given group), identifies the number of Teacher presents student with a group of 11-20 objects. objects in each group, and uses comparative language to describe the relationships. In addition to providing evidence that the student met the Student accurately creates two groups (one greater and 6* expectations of levels 3, 4, and 5: one less than the given group), identifies the number of Teacher presents student with a group of 11-20 objects, using a different objects in each group, and uses comparative language to amount than used for level 5. describe the relationships. Student then accurately places the three groups in order either from least to greatest or greatest to least. In addition to providing evidence that the student met the Student accurately creates four groups (two greater and expectations of levels 3, 4, 5, and 6: two less than the given group), identifies the number of Teacher presents student with a group of 11-20 objects, using a different objects in each group, and uses comparative language to amount than used for levels 4 and 5. describe the relationships. Student then accurately places the four groups they created in order either from least to greatest or greatest to least.

Kindergarten Mathematics

Operations and Algebraic Thinking (OA)

Cluster: A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard: K.OA.A.2 Add and subtract within 10 to solve contextual problems using objects or drawings to represent the problem.

| | problem. | specis or drawings to represent |
|-------------|--|--|
| 0 | Teacher presents student with a one-step addition or subtraction contextual problem | Student accurately identifies |
| U | within 10 for 3 of the 4 following situations: | none of the solutions. |
| | 1) add to-result unknown, | none of the solutions. |
| | 2) take from-result unknown, | |
| | · | |
| | 3) put together/take apart-total unknown, and | |
| _ | 4) together/take apart-addend unknown. | Challest and a state of the stiffers A of |
| 1 | Teacher presents student with a one-step addition or subtraction contextual problem | Student accurately identifies 1 of |
| | within 10 for 3 of the 4 following situations: | the 3 solutions and uses |
| | 1) add to-result unknown, | concrete objects or mathematical |
| | 2) take from-result unknown, | drawings to represent the |
| | 3) put together/take apart-total unknown, and | problems. |
| | 4) together/take apart-addend unknown. | |
| 2 | Teacher presents student with a one-step addition or subtraction contextual problem | Student accurately identifies 2 of |
| | within 10 for 3 of the 4 following situations: | the 3 solutions and uses |
| | 1) add to-result unknown, | concrete objects or mathematical |
| | 2) take from-result unknown, | drawings to represent the |
| | 3) put together/take apart-total unknown, and | problems. |
| | 4) together/take apart-addend unknown. | |
| 3 | Teacher presents student with a one-step addition or subtraction contextual problem | Student accurately identifies all 3 |
| | within 10 for 3 of the 4 following situations: | solutions and uses concrete |
| | 1) add to-result unknown, | objects or mathematical |
| | 2) take from-result unknown, | drawings to represent the |
| | 3) put together/take apart-total unknown, and | problems. |
| | 4) together/take apart-addend unknown. | F |
| 4 | Teacher presents student with a one-step addition or subtraction contextual problem | Student accurately identifies all 4 |
| - | within 10 for all 4 of the following situations: | solutions and uses concrete |
| | 1) add to-result unknown, | objects or mathematical |
| | 2) take from-result unknown, | drawings to represent the |
| | 3) put together/take apart-total unknown, and | problems. |
| | 4) together/take apart-addend unknown. | |
| 5 | Teacher presents student with a one-step addition or subtraction contextual problem | Student accurately identifies all 5 |
| | within 10 for all 5 of the following situations: | solutions and uses concrete |
| | 1) add to-result unknown, | objects or mathematical |
| | 2) take from-result unknown, | drawings to represent the |
| | 3) put together/take apart-total unknown, | problems. |
| | 4) together/take apart-addend unknown, and | problems. |
| | 5) both addends unknown. | |
| 6* | In addition to providing evidence that the student met the expectations of level 5: | Student accurately identifies both |
| 0 | Teacher presents student with 1 two-step contextual addition problem and 1 two-step | solutions and uses concrete |
| | contextual subtraction problem. | objects or mathematical |
| | contextual subtraction problem. | |
| | | drawings to represent the |
| - ,. | In addition to moved the additional department of the second seco | problems. |
| 7* | In addition to providing evidence that the student met the expectations of level 5 | Student accurately creates a |
| | and 6: | contextual problem using the |
| | Teacher presents student with two equations that follow from one another involving | provided equations. |
| | both addition and subtraction. | |
| | Student creates a contextual problem that could be solved using the provided equations | |
| | (e.g., given 3 + 4 = 7 and 7-2=5, the student creates a contextual problem that could be | |
| | solved using these two equations). | |

Kindergarten Mathematics Operations and Algebraic Thinking (OA) Cluster: A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. Standard: K.OA.A.3 Decompose numbers less than or equal to 10 into addend pairs in more than one way (e.g., 5 = 2 + 3 and 5 = 4 + 1) by using objects or drawings. Record each decomposition using a drawing or writing an equation. Teacher presents a student with a number between 5 and 10 and asks the student to decompose the number into as many addend pairs as they can. Student **does not** accurately decompose the given number into addend pairs. Teacher presents student with a number between 5 and 10 and asks the student to decompose the number 1 into as many addend pairs as they can. Student accurately decomposes the given number into addend pairs in at least one way by using objects, drawings, or writing an equation. *The commutative property may be used to represent an additional addend pair. 2 Teacher presents student with a number between 5 and 10 and asks the student to decompose the number into as many addend pairs as they can. Student accurately decomposes the given number into addend pairs in at least two ways by using objects, drawings, or writing an equation. *The commutative property may be used to represent an additional addend pair. 3 into as many addend pairs as they can.

Teacher presents student with a number between 5 and 10 and asks the student to decompose the number

Student accurately decomposes the given number into addend pairs in <u>at least five ways</u> (e.g., 5 = 2 + 3, 5 = 3 + 2, 5 = 4 + 1, 5 = 1 + 4, 5 = 0 + 5, or 5 = 5 + 0) by using objects, drawings, or writing an equation.

*The commutative property may be used to represent an additional addend pair.

4 Teacher presents student with a number between 6 and 10 and asks the student to decompose the number into as many addend pairs as they can.

Student accurately decomposes the given number into addend pairs in at least seven ways by using objects or drawings, or writing an equation.

*The commutative property may be used to represent an additional addend pair.

Teacher presents student with a number between 7 and 10 and asks the student to decompose the number 5 into as many addend pairs as they can.

Student accurately decomposes the given number into addend pairs in all possible ways by using objects, drawings, or writing an equation.

*The commutative property may be used to represent an additional addend pair.

6* Teacher presents student with a number between 7 and 10 and asks the student to decompose the number into as many addend pairs as they can.

Student accurately decomposes the given number into addend pairs in all possible ways by using objects, drawings, or writing an equation.

*The commutative property may be used to represent an additional addend pair. AND

Student explains/justifies (verbally or in writing) that all whole number addend pairs have been found.

7* Teacher presents student with a number between 7 and 10 and asks the student to decompose the number into as many addend pairs as they can.

Student accurately decomposes the given number into addend pairs in **all possible ways** by using objects, drawings, or writing an equation. The commutative property may be used to represent an additional addend pair. AND

Student explains/justifies (verbally or in writing) that all whole number addend pairs have been found. **AND**

Student explains how to systematically list all of the different ways to break down a number between 6 and 10 into addend pairs to guarantee that all possible ways have been generated and provide an explanation as to why the system works.

Operations and Algebraic Thinking (OA)

Cluster: A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Standard: K.OA.A.4 Find the number that makes 10, when added to any given number, from 1 to 9 using objects or drawings. Record the answer using a drawing or writing an equation.

- Teacher presents student with two different numbers from 1-4.
 - Student <u>does not</u> accurately represent the number that makes 10 when added to the given numbers using concrete objects, drawings, or writing and equation or expression. AND
 - Teacher presents student with two different numbers from 6-9.
 - Student <u>does not</u> accurately represent the number that makes 10 when added to the given numbers using concrete objects, drawings, or writing and equation or expression.
- Teacher presents student with two different numbers from 1-4.
 - Student accurately represents the number that makes 10 when added to the given number <u>for one of the</u> <u>numbers</u> using concrete objects, drawings, or writing an equation or expression. AND
 - Teacher presents student with two different numbers from 6-9.
 - o Student accurately represents the number that makes 10 when added to the given numbers **for one or none of the numbers** using concrete objects, drawings, or writing an equation or expression.
- Teacher presents student with two different numbers from 1-4.
 - Student accurately represents the number that makes 10 when added to the given number <u>for both numbers</u> using concrete objects, drawings, or writing an equation or expression. **AND**
 - Teacher presents student with two different numbers from 6-9.
 - Student accurately represents the number that makes 10 when added to the given number <u>for one of the</u> <u>numbers</u> using concrete objects, drawings, or writing an equation or expression.
- Teacher presents student with two different numbers from 1-4.
 - Student accurately represents the number that makes 10 when added to the given number <u>for both numbers</u> using concrete objects, drawings, or writing an equation or expression. AND
 - Teacher presents student with two different numbers from 6-9.
 - Student accurately represents the number that makes 10 when added to the given number <u>for both numbers</u> using concrete objects, drawings, or writing an equation or expression.
- Teacher presents student with two different numbers from 1-4.
 - Student accurately represents the number that makes 10 when added to the given number <u>for both numbers</u> using concrete objects or drawings, and writing an equation. AND
 - Teacher presents student with two different numbers from 6-9.
 - o Student accurately represents the number that makes 10 when added to the given number **for both numbers** using concrete objects or drawings, **and** writing an equation or expression.
- 5 In addition to providing evidence that the student met the expectations of level 4:
 - Teacher presents student with two contextual problems that represent missing addend equations that equal 10.
 - Student accurately represents both situations using concrete objects or drawings, writes equations to represent the situations, and identifies the missing addend for both contextual problems.
- **6*** In addition to providing evidence that the student met the expectations of level 4 and 5:
 - Teacher presents student with two missing addend equations that equal 10.
 - o Student accurately creates contextual problems that represent the equations and provides the solution to the problem for both equations.
- 7* In addition to providing evidence that the student met the expectations of level 4, 5, and 6:
 - Teacher presents student with series of missing addend equations that equal 10.
 - Student accurately identifies all missing addends. Given a series of missing addend equations that equal 10, explains at least one pattern seen, and explains how the pattern is related to addition (e.g., given 2+? =10, 3 +? = 10, 4 +? = 10, and 5 +? = 10, identifies the missing addends as 8, 7, 6, and 5 and explains that as one addend increases by 1 the other decreases by 1 allowing the answer sum to remain 10).

Number and Operations in Base Ten (NBT)

Cluster: A. Work with numbers 11-19 to gain foundations for place value

Standard: K.NBT.A.1

Compose and decompose numbers from 11 to 19 into ten ones and some more ones by using objects or drawings. Record the composition or decomposition using a drawing or by writing an equation.

- Teacher presents student with 3 different numbers between 11 and 19 and provides the student with 20 objects or drawn items representing ones to use for composing (student will need to group together ones to make a 10).
 - Student accurately composes none of the numbers with a ten and some ones using objects or drawings.

AND

- Teacher presents student with 3 different numbers between 11 and 19, and represents each number as one whole group of objects.
 - Student accurately decomposes <u>none</u> of the numbers into a ten and some ones using objects or drawings.
- 1 Teacher presents student with 3 different numbers between 11 and 19 and provides the student with 20 objects or drawn items representing ones to use for composing (student will need to group together ones to make a 10).
 - Student accurately composes 1 of the numbers with a ten and some ones using objects or drawings.

AND

- Teacher presents student with 3 different numbers between 11 and 19, and represents each number as one whole group of objects or one whole group of drawn items.
 - Student accurately decomposes 1 or none of the numbers into a ten and some ones using objects or drawings.
- 2 Teacher presents student with 3 different numbers between 11 and 19 and provides the student with 20 objects or drawn items representing ones to use for composing (student will need to group together ones to make a 10).
 - Student accurately composes 2 of the numbers with a ten and some ones using objects or drawings.

AND

- Teacher presents student with 3 different numbers between 11 and 19, and represents each number as one whole group of objects or one whole group of drawn items.
 - o Student accurately decomposes **1 or 2** of the numbers into a ten and some ones using objects or drawings.
- Teacher presents student with 3 different numbers between 11 and 19 and provides the student with 20 objects or drawn items representing ones to use for composing (student will need to group together ones to make a ten).
 - Student accurately composes all 3 numbers with a ten and some ones using objects or drawings.

AND

- Teacher presents student with 3 different numbers between 11 and 19, and represents each number as one whole group of objects or one whole group of drawn items.
 - Student accurately decomposes <u>all 3</u> numbers into a ten and some ones using objects or drawings.
- Teacher presents student with 3 different numbers between 11 and 19 and provides the student with 20 objects or drawn items representing ones to use for composing (student will need to group together ones to make a 10).
 - o Student accurately composes all 3 numbers with a ten and some ones using objects or drawings.
 - Student also accurately records each composition with an equation.

AND

- Teacher presents student with 3 different numbers between 11 and 19, and represents each number as one whole group of objects or one whole group of drawn items.
 - Student accurately decomposes <u>all 3</u> numbers into a ten and some ones using objects or drawings.
 Student also accurately <u>records each decomposition with an equation</u>.
- 5 In addition to providing evidence that the student met the expectations for level 4:
 - Teacher presents student with a representation of a number from 11 to 19 as a ten and some more ones.
 - Student accurately identifies the number and expresses the number with an equation.
 (Example: given a representation of 18 using a stack of ten cubes and 8 additional cubes, student correctly identifies the quantity as 18 and shows that 18 can be represented as 18 = 10 + 8.)
- 6 In addition to providing evidence that the student met the expectations for level 4 and 5:
 - Teacher presents student with a number between 11 and 19.
 - Student represents the number in <u>4 different ways</u> (one of which is an equation) that demonstrates a student's understanding of composing and decomposing the number into a ten and some ones. (Students could use base 10 blocks, 10 frames, Rekenreks, linking cubes, number bonds, etc.)
- 7 In addition to providing evidence that the student met the expectations for level 4 and 5:
 - Teacher presents student with a number between 11 and 19.
 - o Student represents the number in <u>5 different ways</u> (one of which is an equation) that demonstrates a student's understanding of composing and decomposing the number into a ten and some ones. (Students could use base 10 blocks, 10 frames, Rekenreks, linking cubes, number bonds, etc.)