TEAM
Student Growth Portfolio
Rubric
Pre-Kindergarten
Mathematics

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	Pre-Kindergarten Mathematics

Counting and Cardinality (CC)

Cluster: Know number names and the counting sequence.

Standard: PK.CC.A.4 Begin to name numerals 0-10.

0	• Teacher presents student with cards numbered from 0-10 **in order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **none** of the numbers by name. **AND**
	 • Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **none** of the numbers by name.

1	• Teacher presents student with cards numbered from 0-10 **in order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **one** of the numbers by name. **AND**
	 • Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **none** of the numbers by name.

2	• Teacher presents student with cards numbered from 0-10 **in order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **three** of the numbers by name. **AND**
	 • Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **one** of the numbers by name.

3	• Teacher presents student with cards numbered from 0-10 **in order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **five** of the numbers by name. **AND**
	 • Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **three** of the numbers by name.

4	• Teacher presents student with cards numbered from 0-10 **in order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **eight** of the numbers by name. **AND**
	 • Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **five** of the numbers by name.

5	• Teacher presents student with cards numbered from 0-10 **in order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **all** of the numbers by name. **AND**
	 • Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **eight** of the numbers by name.

6*	• Teacher presents student with cards numbered from 0-10 **in order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **all** of the numbers by name. **AND**
	 • Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. Teacher should point to each number **out of order** as they ask the student "What is this number?"
	  o Student accurately identifies **all** of the numbers by name.

7*	• Teacher presents student with cards numbered from 0-10 **scattered and out of order** on the table. • Teacher should ask, "Can you name all of the numbers on the table?" without pointing to any numbers. o Student selects and accurately names **all** numerals in any order.

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	Pre-Kindergarten Mathematics

Counting and Cardinality (CC)

Cluster: Count to tell the number of objects.

Standard: PK.CC.B.4a, 4b, and 4c Understand the relationship between numbers and quantities; connect counting to cardinality.
  a) When counting objects say the number names in the standard order, using one-to-one correspondence.
  b) Understand that the last number name said tells the number of objects counted.
  c) Recognize that one more object added to a group of objects changes the quantity as a whole.

0	**In addition to providing evidence that the student did not meet the expectations of level 2:**
	• Teacher presents student with 3 objects. Teacher verbally asks student to count out 3 objects (i.e. "Please count out three bears and show me how you're counting").
	    ○ Student **does not** accurately count objects. **AND**
	• Teacher adds an additional object to the group the student previously counted. Teacher verbally asks, "How did the group change?"
	    ○ Student **does not** accurately identify that the quantity has changed.

1	**In addition to providing evidence that the student did not meet the expectations of level 2:**
	• Teacher presents student with 3 objects. Teacher verbally asks student to count out 3 objects (i.e. "Please count out three bears and show me how you're counting").
	    ○ Student **accurately says the number names** as they count in standard order **and stops after counting out three** objects.
	    ○ Student demonstrates one-to-one correspondence by **pointing to or moving each object** as they count. **AND**
	• Teacher adds an additional object to the group the student previously counted. Teacher verbally asks, "How did the group change?"
	    ○ Student **does not** accurately identify that the quantity has changed.

2	• Teacher presents student with 4 objects. Teacher verbally asks student to count out 3 objects (i.e. "Please count out three bears and show me how you're counting").
	    ○ Student **accurately says the number names** as they count in standard order **and stops after counting out three** objects.
	    ○ Student demonstrates one-to-one correspondence by **pointing to or moving each object** as they count. **AND**
	• Teacher adds an additional object to the group the student previously counted. Teacher verbally asks, "How did the group change?"
	    ○ Student **does not** accurately identify that the quantity has changed.

3	• Teacher presents student with 4 objects. Teacher verbally asks student to count out 3 objects (i.e. "Please count out three bears and show me how you're counting").
	    ○ Student **accurately says the number names** as they count in standard order **and stops after counting out three** objects.
	    ○ Student demonstrates one-to-one correspondence by **pointing to or moving each object** as they count. **AND**
	• Teacher adds an additional object to the group the student previously counted. Teacher verbally asks, "How did the group change?"
	    ○ Student **accurately identifies that the quantity has changed**.

4	• Teacher presents student with 7 objects. Teacher verbally asks student to count out 6 objects (i.e. "Please count out six bears and show me how you're counting").
	    o Student **accurately says the number names** as they count in standard order and **stops after counting out six** objects.
	    o Student demonstrates one-to-one correspondence by **pointing to or moving each object** as they count. **AND**
	• Teacher clears the objects off the table and presents student with 3 objects and asks, "How many are there?"
	    o Student **accurately identifies the quantity.**
	• Teacher then adds an object to the group and asks, "How did the group change?"
	    o Student **accurately identifies that the group is now larger.** Student may count the group again.

5	• Teacher presents student with 10 objects. Teacher verbally asks student to count out 9 objects (i.e. "Please count out nine bears and show me how you're counting").
	    o Student **accurately says the number names** as they count in standard order and **stops after counting out nine** objects.
	    o Student demonstrates one-to-one correspondence by **pointing to or moving each object** as they count. **AND**
	• Teacher clears the objects off the table and presents student with 4 objects and asks, "How many are there?"
	    o Student **accurately identifies the quantity.**
	• Teacher then adds an object to the group and asks, "How did the group change?"
	    o Student **accurately identifies that the group is now larger.** Student may count the group again.

6*	• Teacher presents student with 17 objects. Teacher verbally asks student to count out 15 objects (i.e. "Please count out 15 bears and show me how you're counting").
	    o Student **accurately says the number names** as they count in standard order **and stops after counting out fifteen** objects and demonstrates one-to-one correspondence by **pointing to or moving each object** as they count. **AND**
	• Teacher clears the objects off the table and presents student with 4 objects and asks, "How many are there?"
	    o Student **accurately identifies the quantity.**
	• Teacher then adds an object to the group and asks, "How did the group change?"
	    o Student **accurately identifies that the group is now larger.** Student may not count the group again.

7*	• Teacher presents student with 25 objects. Teacher verbally asks student to count out 20 objects (i.e. "Please count out 20 bears and show me how you're counting").
	    o Student **accurately says the number names** as they count in standard order **and stops after counting out twenty** objects, and demonstrates one-to-one correspondence by **pointing to or moving each object** as they count. **AND**
	• Teacher clears the objects off the table and presents student with 5 objects and asks, "How many are there?"
	    o Student **accurately identifies the quantity.**
	• Teacher then adds an object to the group and asks, "How did the group change?"
	    o Student **accurately identifies that the group is now larger.** Student may not count the group again.

Scoring Notes: Students are still developing the ability to recognize printed numerals in pre-K. As this is not securely held knowledge, it is important that teachers are not proceeding with collecting evidence for mastery of this standard using printed numerals. It is important that the directions be verbally given to the student, and that the teacher is telling the student how many objects to count out.

Pre-Kindergarten Mathematics		

Counting and Cardinality (CC)

Cluster: Count to tell the number of objects.

Standard: PK.CC.B.5a, 5b, 5c, and 5d Understand that a number represents a corresponding quantity.
a) Subitize quantities up to 5 (i.e., the ability to look at a quantity and say the quantity [1-5] quickly, just
     by looking).
b) Given a number from 1-10, count out that many objects.
c) With guidance and support, count to answer "how many?" questions about as many as 10 things
     arranged in a line, a rectangular array, or a circle.
d) With guidance and support, count to answer "how many?" questions about as many as 5 things in a
     scattered configuration.

0	When presented with all four tasks, student **completes none of the tasks accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student accurately names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ____ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity.
1	When presented with all four tasks, student **completes one task accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student accurately names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ____ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity.
2	When presented with all four tasks, student **completes two or three tasks accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student accurately names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ____ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity.
3	When presented with all four tasks, student **completes all four tasks accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student correctly names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ____ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity.

4	When presented with all five tasks, student **completes all five tasks accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student accurately names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ___ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity. 5) Teacher presents a student with 4 objects and asks the student, "Are there 5 ____s?" Student accurately identifies that there are 4, not 5 objects.
5	When presented with all five tasks, student **completes all five tasks accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student accurately names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ___ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity. 5) Teacher presents a student with 9 objects and asks the student, "Are there 7 ____s?" Student accurately identifies that there are 9, not 7 objects.
6*	When presented with all six tasks, student **completes all six tasks accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student accurately names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ___ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity. 5) Teacher presents a student with 9 objects and asks the student, "Are there 7 ____s?" Student accurately identifies that there are 9, not 7 objects. 6) Teacher presents a student with two groups of objects, 4 of one type and 6 of the other (could be different colors, pictures, etc.) and asks, "How many ___ are there?" (first group) and "How many ___ are there?" (second group). Student accurately identifies the number in each group. Teacher then asks, "How many total objects are there?" Student accurately identifies the total of all objects.
7*	When presented with all six tasks, student **completes all six tasks accurately** with guidance and support.	1) Student is presented with a quantity of 3 objects. Student accurately names the quantity quickly just by looking (subitizes). Teacher presents the student with 4 objects. Student also accurately names that quantity quickly just by looking. 2) Teacher presents a student with 6 objects and verbally asks the student to count the objects. Student accurately counts out the objects. Teacher presents student with 8 objects and student also accurately counts out that many objects. 3) Teacher presents a student with up to 10 objects arranged in a line, rectangular array, or circle and asks "how many ___ are there?" Student counts to accurately identify the quantity. 4) Teacher presents a student with 3 objects in a scattered configuration. Student counts to accurately identify the quantity. Teacher presents the student with 4 objects in a scattered configuration. Student again counts to accurately identify the quantity. 5) Teacher presents a student with 9 objects and asks the student, "Are there 7 ____s?" Student accurately identifies that there are 9, not 7 objects. 6) Teacher presents a student with **three** groups of objects, 3 of one type, 2 of another, and 5 of the third type (could be different colors, pictures, etc.) and asks, "How many ___ are there?" (first group), "How many ___ are there?" (second group), and "How many ___ are there?" (third group). Student accurately identifies the number in each group. Teacher then asks, "How many total objects are there?" Student accurately identifies the total of all objects.

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Counting and Cardinality (CC)

Cluster: Compare numbers.

Standard: PK.CC.C.6 Use comparative language, such as more/less than or equal to, to compare and describe collections of objects.

0	When presented with all three tasks, student **accurately completes none of the tasks.**	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller. 2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 4 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same. 3) Teacher clears objects and presents the student with another two groups, one group with 3 objects and the other group with 5 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
1	When presented with all three tasks, student **accurately completes one of the tasks**.	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller. 2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 4 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same. 3) Teacher clears objects and presents the student with another two groups, one group with 3 objects and the other group with 5 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
2	When presented with all three tasks, student **accurately completes two tasks.**	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller. 2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 4 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same. 3) Teacher clears objects and presents the student with another two groups, one group with 3 objects and the other group with 5 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
3	When presented with all three tasks, student **accurately completes all three tasks.**	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller. 2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 4 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same. 3) Teacher clears objects and presents the student with another two groups, one group with 3 objects and the other group with 5 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
4	When presented with all three tasks, student **accurately completes all three tasks.**	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller. 2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 6 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same. 3) Teacher clears objects and presents the student with another two groups, one group with 7 objects and the other group with 9 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.

5	When presented with all four tasks, student **accurately completes all four tasks.**	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
		2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 6 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same.
		3) Teacher clears objects and presents the student with another two groups, one group with 7 objects and the other group with 9 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
		4) Teacher clears objects and presents the student with a group of 8 objects on the table and asks the student, "Can you make a group that is the same as this group?" Teacher gives student 15 objects they can draw from to create their group. Student accurately creates a group of 8 objects. Teacher says "Tell me how they are the same" and student uses comparative language to describe the relationship.
6*	When presented with all five tasks, student **accurately completes all five tasks.**	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
		2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 6 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same.
		3) Teacher clears objects and presents the student with another two groups, one group with 7 objects and the other group with 9 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
		4) Teacher clears objects and presents the student with a group of 8 objects on the table and asks the student, "Can you make a group that is the same as this group?" Teacher gives student 15 objects they can draw from to create their group. Student accurately creates a group of 8 objects. Teacher says, "Tell me how they are the same" and student uses comparative language to describe the relationship.
		5) Teacher clears objects and presents the student with a group of 6 objects on the table and asks the student, "Can you make a group that is larger than this group?" Teacher gives student 15 objects they can draw from to create their group. Student accurately creates a group that is larger than 6. Teacher says, "Tell me how they are the different" and student uses comparative language to describe the relationship.
7*	When presented with all five tasks, **student accurately completes all six tasks.**	1) Student is presented with two groups of objects, one group with 3 objects and the other group with 4 objects and teacher asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
		2) Teacher clears objects and presents the student with another two groups of objects, both groups containing 6 objects, and asks "Are these groups different or the same?" Student accurately identifies that the groups are the same.
		3) Teacher clears objects and presents the student with another two groups, one group with 7 objects and the other group with 9 objects and asks, "Are these groups different or the same?" Student accurately identifies that one group is larger/smaller.
		4) Teacher clears objects and presents the student with a group of 8 objects on the table and asks the student, "Can you make a group that is the same as this group?" Teacher gives student 15 objects they can draw from to create their group. Student accurately creates a group of 8 objects. Teacher says, "Tell me how they are the same" and student uses comparative language to describe the relationship.
		5) Teacher clears objects and presents the student with a group of 6 objects on the table and asks the student, "Can you make a group that is larger than this group?" Teacher gives student 15 objects they can draw from to create their group. Student accurately creates a group that is larger than 6. Teacher says, "Tell me how they are the different" and student uses comparative language to describe the relationship.
		6) Teacher clears objects and presents the student with a group of 9 objects on the table and asks the student, "Can you make a group that is smaller than this group?" Teacher gives student 15 objects they can draw from to create their group. Student accurately creates a group that is smaller than 9. Teacher says, "Tell me how they are the different" and student uses comparative language to describe the relationship.

Scoring note: Student does not have to use exact vocabulary.

Pre-Kindergarten Mathematics

Operations and Algebraic Thinking (OA)

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

Standard: PK.OA.A.2 With guidance and support, begin to solve addition and subtraction word problems, and add and subtract within 5 (e.g., by using objects or drawings to represent the problem).

0	**In addition to providing evidence that the student did not meet the expectations of level 3:** • Teacher presents student with an "add to" addition contextual problem with **a total of 3.** o Student **does not** accurately represent the answer using concrete objects or drawings to. **AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o Student **does not** accurately represent the answer.
1	**In addition to providing evidence that the student did not meet the expectations of level 3:** • Teacher presents student with an "add to" addition contextual problem with **a total of 3.** o Student **accurately** represents the answer using concrete objects or drawings to **AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o Student **does not** accurately represent the answer.
2	• Teacher presents student with an "add to" addition contextual problem with a **total of 5**. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o Student **does not** accurately represent the answer.
3	• Teacher presents student with an "add to" addition contextual problem with a **total of 5**. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o **Student uses concrete objects or drawings to accurately represent the answer.**
4	• Teacher presents student with an "add to" addition contextual problem with a total of 5. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • When prompted, student explains reasoning and tells why the answer makes sense within the context of the problem for **only one** of the problems.
5	• Teacher presents student with an "add to" addition contextual problem with a total of 5. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • When prompted, student explains reasoning and tells why the answer makes sense within the context of the problem for **both** of the problems.
6*	• Teacher presents student with an "add to" addition contextual problem with a total of 5. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • When prompted, student explains reasoning and tells why the answer makes sense within the context of the problem for **both** of the problems. **AND** • When prompted, explains reasoning for choosing addition or subtraction as the operation used for solving the problem and describes how "adding to" and "taking from" situations are different.
7*	• Teacher presents student with an "add to" addition contextual problem with a total of 5. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • Teacher presents student with a "take from" subtraction contextual problem with a difference of 3. o Student uses concrete objects or drawings to **accurately represent the answer. AND** • When prompted, student explains reasoning and tells why the answer makes sense within the context of the problem for **both** of the problems. **AND** • When prompted, explains reasoning for choosing addition or subtraction as the operation used for solving the problem and describes how "adding to" and "taking from" situations are different. **AND** • Given a set of manipulatives containing 3-5 objects with two unique subsets (e.g., 5 bears with 2 that are yellow and 3 that are green), creates a contextual "add to" problem to represent the situation. The student need not write the contextual problem; it may be presented verbally. **AND** • Given a set of manipulatives containing 3-5 objects with two unique subsets (e.g., 5 bears with 2 that are yellow and 3 that are green), creates a contextual "take from" problem to represent the situation. The student need not write the contextual problem; it may be presented verbally.

Scoring Notes: A contextual problem is defined as a word problem designed primarily to assess a student's ability to solve concrete problems that occur in everyday life. For pre-K students, teachers should be verbally providing all contextual problems to students.

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Pre-Kindergarten Mathematics		
Operations and Algebraic Thinking (OA)		
Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.		
Standard: PK.OA.A.3 Compose and decompose numbers to 5, in more than one way, by using objects or drawings.		
0	When presented with two tasks, student **accurately completes none of the parts of any task.**	1) Teacher presents student with **six** objects, 3 of one type and 3 of another and asks "Can you use some of each to make 4?"Student accurately composes a group of objects to represent 4. When asked, "Can you show me another way to represent 4?" student accurately represents the number in a different way. 2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups. When asked, "Can you show me a different way to make two groups?" student accurately represents the number in a different way.
1	When presented with the two tasks below, student **accurately completes at least one part of only one task** (e.g., one representation of composing and no representations of decomposing, or two representations of composing but no representations of decomposing).	1) Teacher presents student with **six** objects, 3 of one type and 3 of another and asks "Can you use some of each to make 4?" Student accurately composes a group of objects to represent 4. When asked, "Can you show me another way to represent 4?" student accurately represents the number in a different way. 2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups. When asked, "Can you show me a different way to make two groups?" student accurately represents the number in a different way.
2	When presented with the two tasks below, student **accurately completes at least one part of each task** (e.g., one representation of composing and one representation of decomposing, or two representations of composing but only one representation of decomposing).	1) Teacher presents student with **six** objects, 3 of one type and 3 of another and asks "Can you use some of each to make 4?" Student accurately composes a group of objects to represent 4. When asked, "Can you show me another way to represent 4?" student accurately represents the number in a different way. 2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups (e.g., one group of 2 and another group of 3). When asked, "Can you show me a different way to make two groups?" student accurately represents the number in a different way.
3	When presented with the two tasks below, student **accurately completes all parts of both tasks.**	1) Teacher presents student with **six** objects, 3 of one type and 3 of another and asks "Can you use some of each to make 4?" Student accurately composes a group of objects to represent 4 (e.g., given the number 4, builds a collection of 2 cars and 2 trucks to represent 4; or shows that 4 can be 3 cars and 1 truck). When asked, "Can you show me another way to represent 4?" student accurately represents the number in a different way. 2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups (e.g., one group of 2 and another group of 3). When asked, "Can you show me a different way to make two groups?" student accurately represents the number in a different way.

4	When presented with the two tasks below, student **accurately completes all parts of both tasks.**	1) Teacher presents student with **eight** objects, 4 of one type and 4 of another and asks "Can you use some of each to make 5?" Student accurately composes a group of objects to represent 5. When prompted, student accurately composes **two additional** ways to represent 5 making a total of three compositions of 5.
		2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups. When prompted, student accurately decomposes the 5 objects in **two additional** ways making a total of three compositions of 5.
5	When presented with the two tasks below, student **accurately completes all parts of both tasks.**	1) Teacher presents student with **eight** objects, 4 of one type and 4 of another and asks "Can you use some of each to make 5?" Student accurately composes a group of objects to represent 5. When prompted, student accurately composes **all possible** ways to represent 5.
		2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups. When prompted, student accurately decomposes the 5 objects in **all possible** ways.
6*	When presented with all 3 tasks below, student **accurately completes all parts of all tasks.**	1) Teacher presents student with **eight** objects, 4 of one type and 4 of another and asks "Can you use some of each to make 5?" Student accurately composes a group of objects to represent 5. When prompted, student accurately composes **all possible** ways to represent 5.
		2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups. When prompted, student accurately decomposes the 5 objects in **all possible** ways.
		3) Teacher presents student with **four** objects of the same type and prompts student to notice the quantity. Teacher then removes all objects from the table and presents student with only 2 objects and asks, "How many objects are missing from the first group?" Student accurately identifies there are 2 objects missing.
7*	When presented with all 4 tasks below, student **accurately completes all parts of all tasks.**	1) Teacher presents student with **eight** objects, 4 of one type and 4 of another and asks "Can you use some of each to make 5?" Student accurately composes a group of objects to represent 5. When prompted, student accurately composes **all possible** ways to represent 5.
		2) Teacher presents the student with **five** objects of the **same** type and asks, "Can you use these objects to make two groups? Student accurately decomposes the 5 objects into two groups. When prompted, student accurately decomposes the 5 objects in **all possible** ways.
		3) Teacher presents student with **four** objects of the same type and prompts student to notice the quantity. Teacher then removes all objects from the table and presents student with only 2 objects and asks, "How many objects are missing from the first group?" Student accurately identifies that there are 2 objects missing.
		4) Teacher presents student with **five** objects of the same type and prompts student to notice the quantity. Teacher then removes all objects from the table and presents student with only 1 object and asks, "How many objects are missing from the first group?" Student accurately identifies there are 4 objects missing.