## Continuum-Based Math Phase 1 Task: Counting

PURPOSE:
Counting columns 1 to 9
MATERIALS:
INSTRUCTIONS:

General purpose counters e.g. two-coloured counters, pattern blocks, blocks etc.
This is a one-on-one teacher/student interview. It should be completed in some privacy, away from other students. It is important that the script be followed in a precise manner, with little or no teacher help. Teachers may provide some clarification, but should not deviate from the overall goal of each task. Students should demonstrate a 'mastery' of each task. Partially correct answers should not be marked as correct.

## Teacher Instructions \& General Question for Student

Put out 7 to 11 counters on the table before the student arrives (do not use 10 and do not have additional counters in sight)

1. ASK: "Can you tell me how many are here?" (be sure not to say 'count')
2. ASK: "So how many are here?" (after the count is complete)
Re-arrange the counters into a straight line
Move one of the middle counters slightly out of line
3. ASK: "Can you count again, starting from this counter? (pointing to the counter out-of-line)"
4. ASK: "So how many are here?" (after the count is complete)
With the counters still in a straight line, pull the first counter slightly out of line
5. ASK: "How much is this counter?"

Put the counter back in line, now pull out one of the middle counters slightly out of line.
2. ASK: "How much is this counter?"

Put that counter back in line and pull the 'last' counter slightly out of line.
3. ASK: "How much is this counter?"

Re-arrange the counters randomly again.

1. ASK: "Can you tell me how many are here?"

Teacher 'Look Fors'
Students should demonstrate complete understanding
Does the student actually attempt to count to find the total (as opposed to just guessing)?

Does the student count each object only once?
Does the student say the correct amount when asked?

Does the student count all the counters?
Does the student get the same result as previous?

Does the student say that each counter is 'one', as opposed to the 'one', 'five', 'nine' etc?

Column
If correct check column 1

If correct check
column 2

If correct check
column 3

If correct check
column 4

Does the student give the answer to the question immediately, without counting again?

If correct check

| 2. Re-arrange and ask same question again (have <br> student move the counters) <br> 3. ASK: "How do you know there is that many?" | Is the student able to explain that there is the same amount because: <br> t they already counted the objects or <br> - that none were added or taken away or <br> e that mixing (moving) the objects doesn't change the count |  |
| :--- | :--- | :--- |
| ASK: "Start at 7 (or 8 or 9) and count out loud and <br> keep going until I say stop." | Is the student able to count the sequence of '11-19' correctly? | If correct check <br> column 6 |
|  | Is the student able to count up to 31 in sequence with no errors? | If correct check <br> column 7 |
| Refer to sheets A, B and C. <br> ASK: "Can you point to the numeral that shows how <br> many are in each picture?" | Is the student able to choose the correct answer on their first choice? | If correct check <br> column 8 |
| Refer to sheets D, E and F. <br> ASK: "Can you point to the numeral that shows how <br> many dots are in each picture?" | Is the student able to choose the correct answer on their first choice? | If correct check <br> column 9 |
| This task is from Phase 2. Only ask this to students <br> who have completed Phase 1. <br> ASK: "Start at 31 and count backwards and keep going <br> until I say stop." | Is the student able to count backward to zero with no errors? In particular <br> look out for students who miss out thirty or twenty, or who have trouble <br> with the teens. | If correct check <br> column 10 |

Teacher Notes:

One of these numbers goes along well with this picture. Point to the number that matches how many cats


One of these numbers goes along well with this picture. Point to the number that matches how many dinosaurs


Counting Diagnostic Sheet B

One of these numbers goes along well with this picture. Point to the number that matches how many soccer balls



One of these numbers goes along well with the number of dots. Point to the number that matches how many dots

Counting Diagnostic Sheet D


One of these numbers goes along well with the number of dots. Point to the number that matches how many dots

Counting Diagnostic Sheet E


One of these numbers goes along well with the number of dots. Point to the number that matches how many dots

