Assessment of Grade 1 Numeracy

The assessment of Grade 1 Numeracy is organized on the basis of a **C**oncepts, **A**lgorithms, **S**kills **H**ierarchy of development (a CASH map). This map lays out a sequence for assessing as well as teaching.
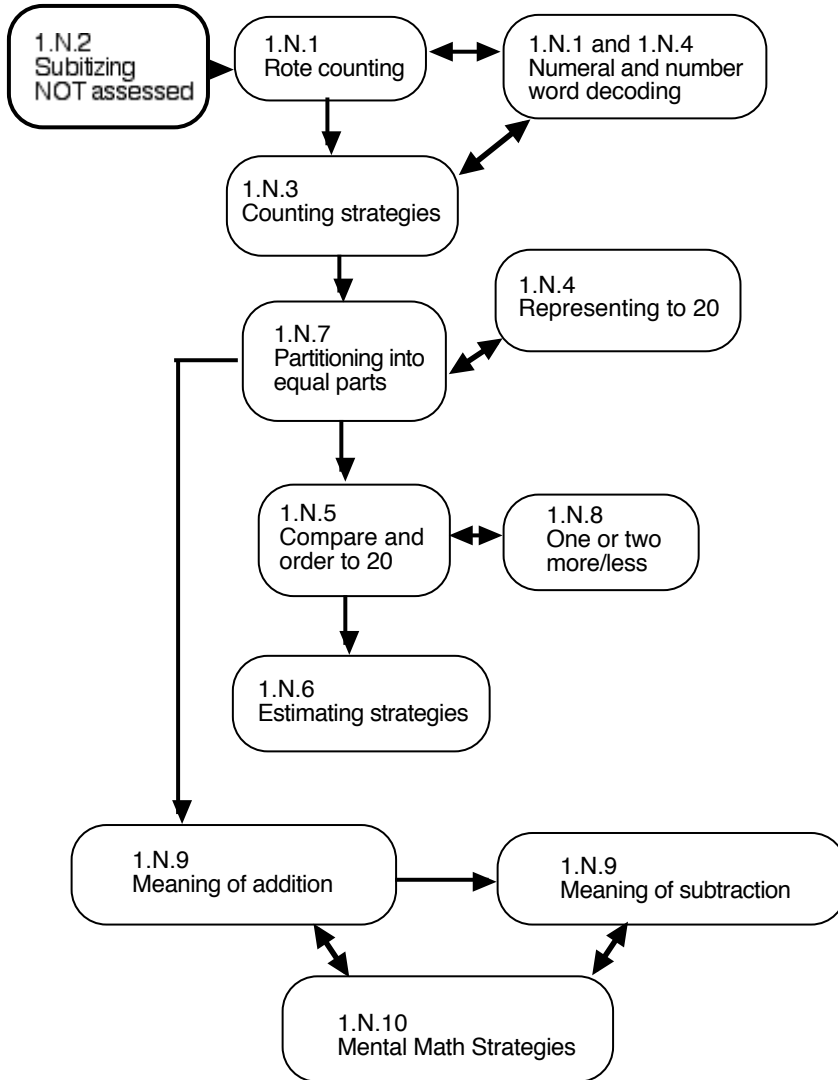
Note that outcome 1.N.2 (concerns subitizing) is not assessed for two reasons: (1) not a conceptual matter and (2) not sufficiently critical to numeracy beyond Grade 1. However, the outcome is included in the CASH map for purposes of teaching.

1.N.1 Say the number sequence by · 1s forward and backward between any two given numbers (0 to 100) · 2s to 20, forward starting at 0 · 5s and 10s to 100, forward starting at 0	**1.N.2. (NOT ASSESSED)** Subitize and name familiar arrangements of 1 to 10 objects or dots.
1.N.3. Demonstrate an understanding of counting by · using the counting on strategy · using parts or equal groups to count sets	**1.N.4.** Represent and describe numbers to 20 in two parts concretely, pictorially, and symbolically.
1.N.5. Compare and order sets containing up to 20 elements to solve problems using · referents · one-to-one correspondence	**1.N.6.** Estimate quantities to 20 by using referents.
1.N.7. Demonstrate, concretely and pictorially, how a given number can be represented by a variety of equal groups with and without singles.	**1.N.8.** Identify the number, up to 20, that is one more, two more, one less, and two less than a given number.
1.N.9. Demonstrate an understanding of addition of numbers with answers to 20 and their corresponding subtraction facts, concretely, pictorially, and symbolically by · using familiar and mathematical language to describe additive and subtractive actions from their experience · creating and solving problems in context that involve addition and subtraction · modelling addition and subtraction using a variety of concrete and visual representations, and recording the process symbolically	**1.N.10.** Describe and use mental mathematics strategies (memorization not intended), such as · counting on and counting back · making 10 · doubles · using addition to subtract to determine the basic addition facts to 18 and related subtraction facts.

Grade 1 CASH map

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1.N.2                    1.N.1                    1.N.1 and 1.N.4
Subitizing        →      Rote counting     ↔     Numeral and number
NOT assessed                                     word decoding
                            ↓                            ↕
                         1.N.3
                         Counting strategies
                            ↓
                                                 1.N.4
                         1.N.7             ↔     Representing to 20
                         Partitioning into
                         equal parts
                            ↓
                         1.N.5                   1.N.8
                         Compare and       ↔     One or two
                         order to 20             more/less
                            ↓
                         1.N.6
                         Estimating strategies


1.N.9                    1.N.9
Meaning of addition  →   Meaning of subtraction
         ↕                        ↕
            1.N.10
            Mental Math Strategies
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Summary of results

1.N.1 (rote counting)
_____ Emergent knowledge (total score of 5 or less)
_____ Low level developed knowledge (total score between 6 and 9 inclusive)
_____ Mid level developed knowledge (total score between 10 and 14 inclusive)
_____ High level developed knowledge (total score of 15 or more)

1.N.1 and part of 1.N.4 (numeral and number word decoding)
_____ Emergent knowledge (total score of 4 or less)
_____ Low level developed knowledge (total score between 4 and 9 inclusive)
_____ Mid level developed knowledge (total score between 10 and 13 inclusive)
_____ High level developed knowledge (total score of 14 or more)

1.N.3 (counting strategies)
_____ Emergent knowledge (total score of 7 or less)
_____ Low level developed knowledge (total score between 8 and 14 inclusive)
_____ Mid level developed knowledge (total score between 15 and 23 inclusive)
_____ High level developed knowledge (total score of 24 or more)

1.N.4 (representing to 20)
_____ Emergent knowledge (total score of 3 or less)
_____ Low level developed knowledge (total score between 4 and 6 inclusive)
_____ Mid level developed knowledge (total score between 7 and 10 inclusive)
_____ High level developed knowledge (total score of 11 or more)

1.N.5 (compare and order to 20)
_____ Emergent knowledge (total score of 2 or less)
_____ Low level developed knowledge (total score between 3 and 4 inclusive)
_____ Mid level developed knowledge (total score between 5 and 7 inclusive)
_____ High level developed knowledge (total score of 8 or more)

1.N.6 (estimating strategies)
_____ Emergent knowledge (total score of 1 or less)
_____ Low level developed knowledge (total score of 2)
_____ Mid level developed knowledge (total score between 3 and 4 inclusive)
_____ High level developed knowledge (total score of 5 or more)

1.N.7 (partitioning into equal parts)
_____ Emergent knowledge (total score of 3 or less)
_____ Low level developed knowledge (total score between 4 and 6 inclusive)
_____ Mid level developed knowledge (total score between 7 and 10 inclusive)
_____ High level developed knowledge (total score of 11 or more)

1.N.8 (one or two more/less)
    ____ Emergent knowledge (total score of 3 or less)
    ____ Low level developed knowledge (total score between 4 and 6 inclusive)
    ____ Mid level developed knowledge (total score between 7 and 10 inclusive)
    ____ High level developed knowledge (total score of 10 or more)

1.N.9 (meaning of addition)
    ____ Emergent knowledge (total score of 4 or less)
    ____ Low level developed knowledge (total score between 5 and 8 inclusive)
    ____ Mid level developed knowledge (total score between 9 and 13 inclusive)
    ____ High level developed knowledge (total score of 14 or more)

1.N.9 (meaning of subtraction)
    ____ Emergent knowledge (total score of 4 or less)
    ____ Low level developed knowledge (total score between 5 and 8 inclusive)
    ____ Mid level developed knowledge (total score between 9 and 13 inclusive)
    ____ High level developed knowledge (total score of 14 or more)

1.N.10 (mental math strategies)
    ____ Emergent knowledge (total score of 5 or less)
    ____ Low level developed knowledge (total score between 6 and 10 inclusive)
    ____ Mid level developed knowledge (total score between 11 and 15 inclusive)
    ____ High level developed knowledge (total score of 16 or more)

Instructions.

- Do as indicated for each task. The order of listing of the assessment items DOES NOT indicate the order of assessing or teaching. Refer to the CASH map for direction on sequencing.

- Ensure that the student understands what you are expecting him/her to do but DO NOT help the student by giving hints or answers to a task.

- For scoring a student response (see example below), write a 0, 1, 2, or 3 (sometimes more than 3) in the appropriate response slot.
  - _____ 0: Has errors in saying number words from 5 to 10.
  - _____ 1: Says number words without error from 5 to 10.
  - _____ 2: Says number words without error from 5 to 20.
  - _____ 3: Says number words without error from 5 to 30.

- For observations (see below), deduct .25 or .5 if the student is hesitant in responding to a task. Add .25 or .5 if the student responds with confidence. If the student self-corrects, no point is deducted or added. Use your judgment on deciding this for each task. The matter has to do with what the student does MOSTLY on a particular task.
  - ___ Hesitant
  - ___ Self-corrects
  - ___ Confident

- If there is an additional question indicated for a task, ask it and record the student's answer. Follow the scoring instructions attached to the additional question.

- Record any other observations you deem noteworthy.

- Calculate the total score for assessing a particular outcome by adding the student response values for the tasks and adding/deducting any observation scores. Write the total score in the indicated place at the end of the tasks.

- Use the total score to determine which level (emergent, low level developed, . . .) the student is in for the outcome. Place a check mark in the appropriate slot in the summary page (see example below).
  - _____ Emergent knowledge (total score of 2 or less)
  - _____ Low level developed knowledge (total score between 3 and 4 inclusive)
  - _____ Mid level developed knowledge (total score between 5 and 7 inclusive)
  - _____ High level developed knowledge (total score of 8 or 9)

- When determining which level the student is at for an outcome also include any relevant information obtained from 'Other observations' to help determine the level.

Assessment for 1.N.1 (rote counting)

ITEM 1:	
• Ask the student to say the counting words starting with 35 and stopping with 41. • Ask the student to say the counting words starting with 62 and stopping with 73. • Ask the student to say the counting words starting with 89 and stopping with 100.	
_____ 0: Has error(s) in each task. _____ 1: Has error(s) in two of the three tasks. _____ 2: Has error(s) in one of the three tasks. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 2:	
• Ask the student to say the counting words starting with 44 and stopping with 38. • Ask the student to say the counting words starting with 77 and stopping with 69. • Ask the student to say the counting words starting with 93 and stopping with 85.	
_____ 0: Has error(s) in each task. _____ 1: Has error(s) in two of the three tasks. _____ 2: Has error(s) in one of the three tasks. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 3:	
Ask the student to skip count by 2s from 0 to 20.	
_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 4:	
Ask the student to skip count by 5s from 0 to 100.	
_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 5:	
Ask the student to skip count by 10s from 0 to 100.	
_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 6:	
• Show student a card having 12, 15, 14, 16 on it. Say the number words for the numerals with the student. Repeat as needed. Tell the student there is one mistake in the order of the counting words on the card. Ask the student to find and to correct the error. • Show student a card having 38, 39, 43, 41 on it. Say the number words for the numerals with the student. Repeat as needed. Tell the student there is one mistake in the order of the counting words on the card. Ask the student to find and to correct the error. • Show student a card having 76, 80, 77, 79 on it. Say the number words for the numerals with the student. Repeat as needed. Tell the student there is one mistake in the order of the counting words on the card. Ask the student to find and to correct the error.	
_____ 0: Incorrectly finds/incorrectly corrects 3 times. _____ 1: Finds and corrects one error. _____ 2: Finds and corrects two errors. _____ 3: Finds and corrects the three errors.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

TOTAL SCORE _____

Assessment for 1.N.1 & part of 1.N.4 (numeral and number word decoding)

ITEM 1:
Show student a card having the numerals 37, 41, 34 on it. Ask student to say the counting word for each numeral on the card.

_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 2:
Show student a card having the numerals 72, 63, 68 on it. Ask student to say the counting word for each numeral on the card.

_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 3:
Show student a card having the numerals 96, 94, 88 on it. Ask student to say the counting word for each numeral on the card.

_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 4:

Show student a card having the words; 'four, one, seven' on it. Ask student to read each number word on the card.

_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 5:

Show student a card having the words; 'nine, twelve, ten' on it. Ask student to read each number word on the card.

_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 6:

Show student a card having the words; 'twenty, eighteen, fifteen' on it. Ask student to read each number word on the card.

_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

TOTAL SCORE _____

Assessment for 1.N.3 (counting strategies)

ITEM 1:

Place 8 counters on the table. Count out 3 counters for the student and push them to the side a bit. Ask the student to tell you how many counters are on the table.

_____ 0: Starts counting from 1.	
_____ 1: Starts counting from 3 and makes no error (or error) in counting.	___ Hesitant
_____ 2: Starts counting from 4 and makes error in counting.	___ Self-corrects
_____ 3: Starts counting from 4 and makes no error in counting.	___ Confident

Other observations

ITEM 2:

Place 14 counters on the table. Count out 8 counters for the student and push them to the side a bit. Ask the student to tell you how many counters are on the table.

_____ 0: Starts counting from 1.	
_____ 1: Starts counting from 8 and makes no error (or error) in counting.	___ Hesitant
_____ 2: Starts counting from 9 and makes error in counting.	___ Self-corrects
_____ 3: Starts counting from 9 and makes no error in counting.	___ Confident

Other observations

ITEM 3:

Place 18 counters on the table. Count out 12 counters for the student and push them to the side a bit. Ask the student to tell you how many counters are on the table.

_____ 0: Starts counting from 1.	
_____ 1: Starts counting from 12 and makes no error (or error) in counting.	___ Hesitant
_____ 2: Starts counting from 13 and makes error in counting.	___ Self-corrects
_____ 3: Starts counting from 13 and makes no error in counting.	___ Confident

Other observations

ITEM 4:
- Place 10 counters on the table. Ask student to tell you how many counters on the table by counting by 2s'.
- Place 24 counters on the table. Ask student to tell you how many counters on the table by counting by 2s'.
- Place 36 counters on the table. Ask student to tell you how many counters on the table by counting by 2s'.

_____ 0: Has error(s) in each task.	
_____ 1: Has error(s) in two of the three tasks.	___ Hesitant
_____ 2: Has error(s) in one of the three tasks.	___ Self-corrects
_____ 3: Has no errors.	___ Confident

Other observations

ITEM 5:
- Place 15 counters on the table. Ask student to tell you how many counters on the table by counting by 5s'.
- Place 25 counters on the table. Ask student to tell you how many counters on the table by counting by 5s'.
- Place 40 counters on the table. Ask student to tell you how many counters on the table by counting by 5s'.

_____ 0: Has error(s) in each task.	
_____ 1: Has error(s) in two of the three tasks.	___ Hesitant
_____ 2: Has error(s) in one of the three tasks.	___ Self-corrects
_____ 3: Has no errors.	___ Confident

Other observations

ITEM 6:
- Place 20 counters on the table. Ask student to tell you how many counters on the table by counting by 10s'.
- Place 40 counters on the table. Ask student to tell you how many counters on the table by counting by 10s'.
- Place 60 counters on the table. Ask student to tell you how many counters on the table by counting by 10s'.

_____ 0: Has error(s) in each task.	
_____ 1: Has error(s) in two of the three tasks.	___ Hesitant
_____ 2: Has error(s) in one of the three tasks.	___ Self-corrects
_____ 3: Has no errors.	___ Confident

Other observations

ITEM 7:
Place 30 counters on the table. Count out 16 counters for the student by counting by 2s, and push them to the side a bit. Ask the student to tell you how many counters are on the table.

_____ 0: Starts counting from 0 or 1 by 1's. _____ 1: Starts counting from 0 or 2 by 2s. _____ 2: Counts from 16 by 2s and makes no error (or error) in counting. _____ 3: Counts from 18 by 2s and makes error in counting. _____ 4: Counts from 18 by 2s and makes no error in counting.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 8:
Place 40 counters on the table. Count out 15 counters for the student by counting by 5s, and push them to the side a bit. Ask the student to tell you how many counters are on the table.

_____ 0: Starts counting from 0 or 1 by 1's. _____ 1: Starts counting from 0 or 5 by 5s. _____ 2: Counts from 15 by 5s and makes no error (or error) in counting. _____ 3: Counts from 20 by 5s and makes error in counting. _____ 4: Counts from 20 by 5s and makes no error in counting.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 9:
Place 60 counters on the table. Count out 30 counters for the student by counting by 10s, and push them to the side a bit. Ask the student to tell you how many counters are on the table.

_____ 0: Starts counting from 0 or 1 by 1's. _____ 1: Starts counting from 0 or 10 by 10s. _____ 2: Counts from 30 by 10s and makes no error (or error) in counting. _____ 3: Counts from 40 by 10s and makes error in counting. _____ 4: Counts from 40 by 10s and makes no error in counting.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

TOTAL SCORE _____

**Assessment for 1.N.4 (represent to 20)**

ITEM 1:
- Provide student with 13 counters. Ask student to use some of the counters to make two piles and to tell how many counters in each pile.
- Provide student with 17 counters. Ask student to use some of the counters to make two piles and to tell how many counters in each pile.
- Provide student with 20 counters. Ask student to use ALL of the counters to make two piles and to tell how many counters in each pile.

_____ 0: Has 3 errors. _____ 1: Has 2 errors. _____ 2: Has 1 error. _____ 3: Has no errors.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 2:
- Provide student with three base-10 ten-sticks and 10 units. Ask student to build/show 9.
- Provide student with three base-10 ten-sticks and 10 units. Ask student to build/show 16.
- Provide student with three base-10 ten-sticks and 10 units. Ask student to build/show 20.

_____ 0: Cannot do any of the tasks correctly. _____ 1: Does one task correctly. _____ 2: Does two tasks correctly. _____ 3: Does all three tasks correctly.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 3:
- Provide student with three empty ten-frames. Ask student to build/show 8.
- Provide student with three empty ten-frames. Ask student to build/show 5.
- Provide student with three empty ten-frames. Ask student to build/show 20.

_____ 0: Cannot do any of the tasks correctly. _____ 1: Does one task correctly. _____ 2: Does two tasks correctly. _____ 3: Does all three tasks correctly.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 4:

Provide student with number line having benchmarks 0, 5, 10, and 20 on it.

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 |———————|———————|——————————————————|
 0       5       10                 20
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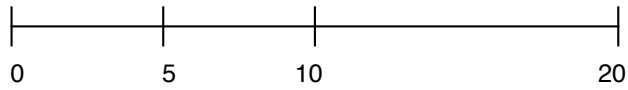
- Show student a card having numeral 3 on it. Ask student to point to place on number line where the 3 belongs.
- Show student a card having numeral 8 on it. Ask student to point to place on number line where the 8 belongs.
- Show student a card having numeral 14 on it. Ask student to point to place on number line where the 14 belongs.

_____ 0: Cannot do any of the tasks correctly. _____ 1: Does one task correctly. _____ 2: Does two tasks correctly. _____ 3: Does all three tasks correctly.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

TOTAL SCORE _____

Assessment for 1.N.5 (compare and order to 20)

ITEM 1:
- Show student a pile of 8 counters and a pile of 9 counters. DO NOT tell him/her how many counters are in the piles. Ask student to tell which pile has more/fewer counters or if the piles have the same number of counters by matching counters.
- Show student a pile of 11 counters and a pile of 13 counters. DO NOT tell him/her how many counters are in the piles. Ask student to tell which pile has more/fewer counters or if the piles have the same number of counters by matching counters.
- Show student a pile of 15 counters and a pile of 15 counters. DO NOT tell him/her how many counters are in the piles. Ask student to tell which pile has more/fewer counters or if the piles have the same number of counters by matching counters.

_____ 0: Cannot do any of the tasks correctly.	
_____ 1: Does one task correctly.	___ Hesitant
_____ 2: Does two tasks correctly.	___ Self-corrects
_____ 3: Does all three tasks correctly.	___ Confident

Other observations

ITEM 2:
Show student a pile of 13 counters. Do not tell student how many counters in the pile. Provide student with 20 counters.
- Ask student to make a pile that has more counters than the one you made.
- Ask student to make a pile that has fewer counters than the one you made.
- Ask student to make a pile that has as many counters as the one you made.

_____ 0: Cannot do any of the tasks correctly.	
_____ 1: Does one task correctly.	___ Hesitant
_____ 2: Does two tasks correctly.	___ Self-corrects
_____ 3: Does all three tasks correctly.	___ Confident

Other observations

ITEM 3:

Tell student the following story.

Mary came home from the store with 13 candies. Her brother Gary came home with 15 candies. Who came home with more candies?

- Ask student to draw a picture for Mary's and for Gary's candies.
- Ask student to tell who has more candies.
- Ask student to explain his/he answer.

_____ 0: Does not attempt any of the tasks or only draws a picture for Mary or Gary (but not both) _____ 1: Draws a picture showing correct/incorrect amounts for Mary and Gary. _____ 2: Draws a correct picture and provides correct answer (Gary has more) _____ 3: Explains correct answer on basis of 1-to-1 matching or on basis that 15 comes after 13.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

TOTAL SCORE _____

Assessment for 1.N.6 (Estimating strategies)

<table>
<tr><td colspan="2">ITEM 1:
Provide student with counters. Ask student to count out 2 and place the pile of 2 to one side. YOU place 13 counters in a pile by the student (DO NOT tell student how many in the pile and make it difficult to count how many by placing counters on top of each other). Ask student to estimate how many in the pile by thinking about the pile of 2 the student made. [Student is NOT allowed to touch the pile you made.] Ask student to explain his/her thinking.</td></tr>
<tr><td>_____ 0: Does not attempt to estimate.
_____ 1: Makes estimate that is less than 9 or more than 17.
_____ 2: Makes estimate between 10 and 16.
_____ 3: Makes estimate between 10 and 16 and explains on basis of using groups of 2.</td><td>___ Hesitant
___ Self-corrects
___ Confident</td></tr>
<tr><td colspan="2">Other observations</td></tr>
</table>

<table>
<tr><td colspan="2">ITEM 2:
Provide student with counters. Ask student to count out 11 and place the pile of 11 to one side. YOU place 40 counters in a pile by the student (DO NOT tell student how many in the pile and make it difficult to count how many by placing counters on top of each other). Ask student to estimate how many in the pile. [Student is NOT allowed to touch the pile you made.] Ask student to explain his/her thinking.</td></tr>
<tr><td>_____ 0: Does not attempt to estimate.
_____ 1: Makes estimate that is less than 30 or more than 50.
_____ 2: Makes estimate between 30 and 50.
_____ 3: Makes estimate between 30 and 50 and explains on basis of using groups of 11.</td><td>___ Hesitant
___ Self-corrects
___ Confident</td></tr>
<tr><td colspan="2">Other observations</td></tr>
</table>

TOTAL SCORE _____

Assessment for 1.N.7 (partitioning into equal parts)

ITEM 1:
    • Provide student with 6 counters. Ask student to make equal piles and tell you how many counters in each pile.
    • Provide student with 9 counters. Ask student to make equal piles and tell you how many counters in each pile.
    • Provide student with 15 counters. Ask student to make equal piles and tell you how many counters in each pile.	

_____ 0: Cannot do any of the tasks correctly. _____ 1: Does one task correctly. _____ 2: Does two tasks correctly. _____ 3: Does all three tasks correctly.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	
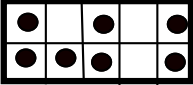
ITEM 2: Put 10 counters on the table but do not tell student how many counters on table. YOU make two piles with 5 counters in each pile. Draw a dot diagram of the result (2 piles of 5). Show student the dot diagram. Push the counters back together again. Now YOU make five piles with 2 counters in each pile. Draw a dot diagram of the result (5 piles of 2). Show student the dot diagram. • Ask student if the diagrams have the same number of dots showing.	
_____ 0: Student counts the dots in each diagram and says 'no'. _____ 1: Student counts the dots in each diagram and says 'yes'. _____ 2: Student says 'yes' without counting the dots in each diagram.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 3:

Provide student with 8 counters.
- Ask student to make equal piles and tell you how many counters in each pile.
- Ask student to make equal piles in a different way and tell you how many counters in each pile.

Provide student with 16 counters.
- Ask student to make equal piles and tell you how many counters in each pile.
- Ask student to make equal piles in a different way and tell you how many counters in each pile.

_____ 0: Cannot do any of the tasks correctly. _____ 1: Does one task correctly. _____ 2: Does two tasks correctly. _____ 3: Does three tasks correctly. _____ 4: Does all four tasks correctly.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 4:

Provide students with 7 counters.
- Ask students to make equal piles so that there is one counter left over.

Provide students with 11 counters.
- Ask students to make equal piles so that there is one counter left over.

Provide students with 11 counters.
- Ask students to make equal piles so that there are two counters left over.

_____ 0: Cannot do any of the tasks correctly. _____ 1: Does one task correctly. _____ 2: Does two tasks correctly. _____ 3: Does all three tasks correctly..	___ Hesitant ___ Self-corrects ___ Confident

Other observations

TOTAL SCORE _____

Assessment for 1.N.8 (one or two more/less)

ITEM 1:
- Show student a ten frame representing 7 (see diagram). Ask student to show one more on the ten frame.
- Show student a ten frame representing 9. Ask student to show one less on the ten frame.
- Show student a ten frame representing 17. Ask student to show one more on the ten frame.
- Show student a ten frame representing 15. Ask student to show one less on the ten frame.

_____ 0: Cannot do any of the tasks correctly.	
_____ 1: Does one task correctly.	___ Hesitant
_____ 2: Does two tasks correctly.	___ Self-corrects
_____ 3: Does three tasks correctly.	___ Confident
_____ 4: Does all four tasks correctly.	

Other observations

ITEM 2:
- Show student a ten frame representing 6. Ask student to show two more on the ten frame.
- Show student a ten frame representing 10. Ask student to show two less on the ten frame.
- Show student a ten frame representing 14. Ask student to show two more on the ten frame.
- Show student a ten frame representing 19. Ask student to show two less on the ten frame.

_____ 0: Cannot do any of the tasks correctly.	
_____ 1: Does one task correctly.	___ Hesitant
_____ 2: Does two tasks correctly.	___ Self-corrects
_____ 3: Does three tasks correctly.	___ Confident
_____ 4: Does all four tasks correctly.	

Other observations

ITEM 3:
- Ask student to say number that is two more than 13.
- Ask student to say number that is one less than 18.
- Ask student to say number that is two more than 18.
- Ask student to say number that is one less than 14.

_____ 0: Cannot do any of the tasks correctly.	
_____ 1: Does one task correctly.	___ Hesitant
_____ 2: Does two tasks correctly.	___ Self-corrects
_____ 3: Does three tasks correctly.	___ Confident
_____ 4: Does all four tasks correctly.	
DEDUCT .5 if student counts from one to determine the answer.	

Other observations

TOTAL SCORE _____

Assessment for 1.N.9 (meaning of addition)

ITEM 1:

Have 4 counters under a red card and 3 counters under a blue card on the table. Tell student 4 counters are hiding under the red card and 3 counters are hiding under the blue card.

Ask student how many counters are hiding altogether.

_____ 0: Does not attempt to answer.	
_____ 1: Must count all the counters to obtain answer.	___ Hesitant
_____ 2: Obtains answer by using fingers.	___ Self-corrects
_____ 3: Obtains answer without using concrete materials.	___ Confident

Other observations

ITEM 2:

Have 2 counters under a red card and 7 counters under a blue card on the table. Tell student 2 counters are hiding under the red card and 7 counters are hiding under the blue card.

Ask student how many counters are hiding altogether.

_____ 0: Does not attempt to answer.	
_____ 1: Must count all the counters to obtain answer.	___ Hesitant
_____ 2: Obtains answer by using fingers.	___ Self-corrects
_____ 3: Obtains answer without using concrete materials.	___ Confident

Other observations

ITEM 3:

Tell student the following story problem.

> *Teddy likes gumdrops. He has 5 gumdrops in his pocket. His favourite person gives Teddy 3 more gumdrops. How many gumdrops does Teddy have now?*

Ask student to say/write number sentence that tells about the story problem.

[5 + 3 = 8]

_____ 0: Does not attempt to answer.	
_____ 1: Provides subtraction number sentence.	___ Hesitant
_____ 2: Provides incorrect addition number sentence.	___ Self-corrects
_____ 3: Provides correct addition number sentence.	___ Confident

Other observations

ITEM 4:
Show student the addition number sentence: 2 + 6 = 8.
Ask student to make up a story problem for the number sentence.

_____ 0: Does not attempt to answer.	
_____ 1: Provides non-addition story problem.	___ Hesitant
_____ 2: Provides incorrect addition story problem.	___ Self-corrects
_____ 3: Provides correct addition story problem.	___ Confident

Other observations

ITEM 5:
Provide student with 10 counters.
- Ask student to make up an adding story problem.
- Ask student to write the number sentence for his/her story problem.
- Ask student to use the counters to show the story problem.

_____ 0: Does not attempt to answer.	
_____ 1: Does one task correctly.	___ Hesitant
_____ 2: Does two tasks correctly.	___ Self-corrects
_____ 3: Does all three tasks correctly.	___ Confident

Other observations

TOTAL SCORE _____

Assessment for 1.N.9 (meaning of subtraction)

ITEM 1:
Have 5 counters under a red card. Tell student 5 counters are hiding under the red card. ~Remove 2 counters (show student).
Ask student how many counters are still hiding under the red card.

_____ 0: Does not attempt to answer.	
_____ 1: Must count all the counters to obtain answer.	___ Hesitant
_____ 2: Obtains answer by using fingers.	___ Self-corrects
_____ 3: Obtains answer without using concrete materials.	___ Confident

Other observations

ITEM 2:
Have 10 counters under a red card. Tell student 10 counters are hiding under the red card.
Remove 6 counters (show student).
Ask student how many counters are still hiding under the red card.

_____ 0: Does not attempt to answer.	
_____ 1: Must count all the counters to obtain answer.	___ Hesitant
_____ 2: Obtains answer by using fingers.	___ Self-corrects
_____ 3: Obtains answer without using concrete materials.	___ Confident

Other observations

ITEM 3:
Tell student the following story problem.
> *Teddy likes gumdrops. He has 9 gumdrops in his pocket. Teddy eats 4 of his gumdrops gumdrops. How many gumdrops does Teddy have now in his pocket?*

Ask student to say/write number sentence that tells about the story problem.

[9 - 4 = 5]

_____ 0: Does not attempt to answer.	
_____ 1: Provides addition number sentence.	___ Hesitant
_____ 2: Provides incorrect subtraction number sentence.	___ Self-corrects
_____ 3: Provides correct subtraction number sentence.	___ Confident

Other observations

ITEM 4:
Show student the subtraction number sentence: 8 - 5 = 3.
Ask student to make up a story problem for the number sentence.

_____ 0: Does not attempt to answer.	
_____ 1: Provides non-subtraction story problem.	___ Hesitant
_____ 2: Provides incorrect subtraction story problem.	___ Self-corrects
_____ 3: Provides correct subtraction story problem.	___ Confident

Other observations

ITEM 5:
Provide student with 10 counters.
- Ask student to make up a subtraction story problem.
- Ask student to write the number sentence for his/her story problem.
- Ask student to use the counters to show the story problem.

_____ 0: Does not attempt to answer.	
_____ 1: Does one task correctly.	___ Hesitant
_____ 2: Does two tasks correctly.	___ Self-corrects
_____ 3: Does all three tasks correctly.	___ Confident

Other observations

TOTAL SCORE _____

Assessment for 1.N.10 (mental math strategies)

ITEM 1:	
Ask student to give answer to 3 + 4. DO NOT provide counters unless student requests them.	
_____ 0: Does not attempt to answer or uses counters/fingers but DOES NOT put together when using them. _____ 1: Uses counters by putting together, obtains incorrect answer. _____ 2 Uses counters by putting together, obtains correct answer. _____ 3: Uses mental strategy (counting on from 3 or 4, making 10, doubles). NO FINGERS.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 2:	
Ask student to give answer to 2 + 6. DO NOT provide counters unless student requests them.	
_____ 0: Does not attempt to answer or uses counters/fingers but DOES NOT put together when using them. _____ 1: Uses counters by putting together, obtains incorrect answer. _____ 2 Uses counters by putting together, obtains correct answer. _____ 3: Uses mental strategy (counting on from 2, . . .).	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 3:	
Ask student to give answer to 5 - 3. DO NOT provide counters unless student requests them.	
_____ 0: Does not attempt to answer or uses counters/fingers but DOES NOT take way when using them. _____ 1: Uses counters by taking away, obtains incorrect answer. _____ 2 Uses counters by taking away, obtains correct answer. _____ 3: Uses mental strategy.	___ Hesitant ___ Self-corrects ___ Confident
Other observations	

ITEM 4:

Ask student to give answer to 9 - 6. DO NOT provide counters unless student requests them.

_____ 0: Does not attempt to answer or uses counters/fingers but DOES NOT take way when using them. _____ 1: Uses counters by taking away, obtains incorrect answer. _____ 2 Uses counters by taking away, obtains correct answer. _____ 3: Uses mental strategy.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 5:

Show student addition number sentence: 3 + 5 = 8.
Ask student to write/tell subtraction number sentence for the addition number sentence.

[8 – 5 = 3 OR 8 – 3 = 5]

_____ 0: Does not attempt to answer OR provides a different addition number sentence. _____ 1: Provides a subtraction number sentence that has little or no connection to the addition one. _____ 2: Provides an incorrect subtraction number sentence where two of the three numbers are correct. _____ 3: Provides a correct subtraction number sentence.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

ITEM 6:

Show student subtraction number sentence: 9 - 2 = 7.
Ask student to write/tell addition number sentence for the subtraction number sentence.

[2 + 7 = 9 OR 7 + 2 = 9]

_____ 0: Does not attempt to answer OR provides a different subtraction number sentence. _____ 1: Provides an addition number sentence that has little or no connection to the subtraction one. _____ 2: Provides an incorrect addition number sentence where two of the three numbers are correct. _____ 3: Provides a correct addition number sentence.	___ Hesitant ___ Self-corrects ___ Confident

Other observations

TOTAL SCORE _____