

Formative Assessment1 - Student

Student Name _____

Concept 2: Changing Numbers to 10

CC Standard: KCC6 - *Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.*

Materials: 20 counters, number cards: 6, 10, 7, 9, 2, 5, 4, 13, 11, 15 (BLM 2:3)

Goal: The student shows if a number is larger or smaller than another number and can change one quantity into another.

Procedure: The student makes a pile of 6 counters. Then when shown a series of number cards, adjusts the quantity to match the numbers. (You may tell the student the number if necessary. Make note of numbers the student knows and doesn't know in the spaces provided.)

ASSESSMENT RESULTS			
<i>Directions: Record results by writing the date in the appropriate column. The column depends on how many counters the student was given for the assessment.</i>			
Tells if More or Less is Needed	To 5	To 10	To 15
I + Tells (knows) ahead of time how many to add/take away			
I Tells if more or less is needed			
N Doesn't say or is incorrect			
Changes the Number	To 5	To 10	To 15
I Adds on or removes a group; tells how many added/removed			
W Figures out number to add on/remove			
N Unable to add on to/remove from original pile			

Prompts		
(Show the number 6 card .)	Record student responses:	
1. ASK: "Can you tell me what this number is?" (If student doesn't know, tell them the number and make a note of it.)		
2. ASK: "Can you make a pile of 6?"		
Changing 6 to 10		
(Show the number 10 card . Point to it.)	Record student responses:	Changes the Number
3. ASK: "What is this number?" (If student doesn't know, tell them the number and make a note of it.)		I Adds on a group; then tells how many added
4. ASK: "Can you change this pile so there are 10?" (When the student is finished, ask the following questions and record responses.)		W+ Adds on a group; then checks
5. ASK: "What did you have to do?"		W Counts by ones
"Did you have to get some more or take some away?"		W - Counts original pile and then adds on counters by ones
"How many did you have to add/take away?"		N Makes new pile
		N- Adds on to the original pile or guesses an amount to add
Changing 10 to 7		

<p>(Show the number 7 card. Point to it.)</p> <p>6. <u>ASK</u>: “What is this number?” (If student doesn’t know, tell them the number and make a note of it.)</p> <p>7. <u>ASK</u>: “If you change this pile so there are 7, do you think you need to get some more or take some away?”</p> <p>“Do you know how many you need to add/take away?”</p>	Record student responses:	Tells If More Or Less Is Needed		
<p>8. <u>SAY</u>: “Go ahead and change it.” (When the student is finished, ask the following questions and record responses.)</p> <p>9. <u>ASK</u>: “What did you have to do?”</p> <p>“How many did you have to add/take away?”</p>		Changes The Number		
Changing 7 to 9				
<p>(Show the number 9 card. Point to it.)</p> <p>10. <u>ASK</u>: “What is this number?” (If student doesn’t know, tell them the number and make a note of it.)</p> <p>11. <u>ASK</u>: “If you change this pile so there are 9, do you think you need to get some more or take some away?”</p> <p>“Do you know how many you need to add/take away?”</p>	Record student responses:	Tells If More Or Less Is Needed		
<p>12. <u>SAY</u>: “Go ahead and change it.” (When the student is finished, ask the following questions and record responses.)</p> <p>13. <u>ASK</u>: “What did you have to do?”</p> <p>“How many did you have to add/take away?”</p>		Changes The Number		
Going Back – Numbers to 5: If the student tried to change one number to go to another but had difficulty, continue with the following numbers. Use indicators as described above.				

Show me 2	Change 2 to 5	Change 5 to 4
Going On – Numbers to 15: If the student was able to change the number with ease, continue with the following. Use indicators as described above.		
Change 9 to 13	Change 13 to 11	Change 11 to 15

Indicators		
Prompts 3, 4, 5, 12, 13		
I	Adds on a group; then tells how many added	<i>Student adds on a group and tells how many they added. Knows specific relationship between the numbers.</i>
W+	Adds on a group; then checks	<i>Student has some idea about how many to add, but has to check to make sure.</i>
W	Counts by ones	<i>Student can add on and is able to start with the number in the pile and count on.</i>
W -	Counts original pile and then adds on counters by ones	<i>Student counts the whole pile in order to add on to it.</i>
N	Makes new pile	<i>Student has some awareness that adding on to the original pile will not work and makes a separate pile.</i>
N-	Adds on to the original pile or guesses an amount to add	<i>Student guesses what needs to be added, and adds a number or counters without counting to see how many they added.</i>
Prompts 6, 7, 10, 11		
I +	Tells (knows) ahead of time how many to add/take away	<i>Student tells exactly how many they need to add or take away. Is accurate and precise.</i>
I	Tells if more or less is needed	<i>Student tells what they are going to do to make the number, but is unable to tell exactly how many they need to add or take away.</i>
N	Doesn't say or is incorrect	<i>Student is unable to tell if more or less is needed. They do not see how they are related to each other.</i>
Prompts 8, 9		
I	Takes away a group; tells how many removed	<i>Student takes away the extras and knows how many were taken.</i>
W	Takes away a group; then checks	<i>Student has some idea of the quantity that needs to be removed, so he/she takes that amount away but checks to make sure.</i>
W -	Counts from 1 and removes the extras	<i>Student counts the pile asked for and simply removes the extras, usually not paying attention to the particular quantity removed.</i>
N	Makes new pile	<i>Student doesn't see that one number is contained within another, so he/she makes new pile.</i>