

KCM Fluency Readiness Assessment within 1000: Addition and Subtraction (FRA1000)

Position the student so that you can easily see the student's face & hands (to observe for finger use). Make sure no supports are in the student's line-of-sight, such as a number line, number posters, or a place value chart

FRA 1000: Part I - Skills

Test 1

1	KY.2.NBT.2	Say " Start counting from 187 and I'll tell you when to stop. " Stop the student at 215. If needed, the assessor may clarify by saying something such as "Count forward starting at ___" or "Count by ones."	0 - makes an error 1 - correct but there are concerns such as needing to start at an easier number, having more than one self-correct, or long pauses 2 - correct, at a steady pace, with at most one self-correct and at most one teacher clarification	
2	KY.2.NBT.2	Say " What number comes after 323? " Continue by asking " What number comes after 579? " If needed, the assessor may clarify by saying something such as "What is 1 more than ___?"	0 - either or both answers are incorrect 1 - correct but there are concerns such as long pauses or counting from an easier number 2 - correct, quick, and required at most one clarification from the teacher	
3	KY.2.NBT.2	Say " Start counting from 64 and count by hundreds and I'll tell you when to stop. " Stop the student at 564. If needed, the assessor may clarify by saying something such as " What is 100 more than ___? " or " Start at ___ and add 100 each time. "	0 - makes an error 1 - correct but there are concerns such as having more than one self-correct, or long pauses 2 - correct, at a steady pace, with at most one self-correct and at most one teacher clarification	
4	KY.2.NBT.2	Say " This is different. I want you to count backward by ones. Start at 307 and count backward and I'll tell you when to stop. " Stop the student at 294. If student initially counts forward or by something other than ones, stop student and clarify the task.	0 - makes an error 1 - correct but there are concerns such as needing to start at an easier number, having more than one self-correct, or long pauses 2 - correct, at a steady pace, with at most one self-correct and at most one teacher clarification	
5	KY.2.NBT.2	Say " Now I'd like you to count backward by tens. Start at 623 and count backward by tens. " Stop the student at 573. If needed, the assessor may clarify by saying something such as "Start at ___ and subtract 10." or "What is ___ minus 10?"	0 - makes an error 1 - correct but there are concerns such as needing to start at an easier number, having more than one self-correct, or long pauses 2 - correct, at a steady pace, with at most one self-correct and at most one teacher clarification	
6	KY.2.NBT.8	Say " What is 253 minus 100? " After student answers, ask " What 709 minus 100? "	0 - either or both answers are incorrect 1 - correct but there are concerns such as long pauses, finger use, or a self-correct 2 - correct and quick	
7	KY.2.NBT.3	Give the student a whiteboard and marker and say "Write the number 736." If student writes the number correctly, say "Now I'd like you to write it in expanded form."	0 - either or both answers are incorrect. This includes writing digits in an incorrect order 1 - correct but there are concerns such multiple self-corrects or pauses or needs clarification of what expanded form means 2 - correct and quick. Student may write individual digits in reversed form, though this should be noted and addressed if this is a consistent issue.	

Student Name: _____

Date: _____

FRA 1000: Part I - Skills Continued

Test 1

8	KY.2.NBT.3	Show the numeral 304 and say " Read this. " Repeat with the numeral 135.	0 - either or both answers are incorrect 1 - correct but there are concerns (e.g. student needed to be prompted more than once or counts to generate the number words) 2 - correct and quick	
9	KY.2.NBT.4	Display the two numerals from the previous question side by side then gesture to the comparison symbols and say, " Use one of these symbols to compare these numbers. " Then ask the student to read the comparison. If using cards, the student can move cards to create the comparison. If using binder pages, the student need only point to the appropriate symbol. Ask " How do you know? "	0 - incorrect 1 - correct but the student is inefficient or cannot justify comparison 2 - correct and student can give a justification that indicates students is reasoning about the size of hundreds, tens, and ones	

Part I Cumulative Score (18 pts. possible)

If the student's cumulative score is 0-7, it is recommended that the teacher stop here and progress monitor with Part I only.
If the student's score is 12-18, it is recommended that the assessor continue with Part II. If the student's score is within 8-11, the assessor may choose to either stop or continue to Part II.

Notes:

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FRA 1000: Part II - Conceptual Understandings

Test 1

Starting with question 10, if students need them, provide a whiteboard, dry-erase marker, and a container with sticks or straws containing least 20 loose sticks, 12 bundles of 10 sticks, and 3 "super-bundles" created by bundling 10 groups of 10 sticks. Encourage students to try the task without materials first.

10	KY.2.NBT.5	Show card 36+45. Ask the student to read the card aloud then solve. If the student struggles, indicate to the student that they may use the available manipulatives or whiteboard.	<p>0 - incorrect or works completely by ones (e.g. draws individual dots to represent the number or counts by ones to add or subtract amounts larger than 10)</p> <p>1 - correct but not fluent (e.g. long pauses, multiple self-corrects, uses drawings or manipulatives to solve, counts are limited to only counts of 10 or 1)</p> <p>2 - correct and solves mentally/verbally using an appropriate and efficient strategy (*See clarifications for examples of efficient strategies for addition & subtraction.)</p>	
11	KY.2.NBT.5	<p>Show card 89-24. Ask the student to read the card aloud then solve.</p> <p>If the student struggles, indicate to the student that they may use the available manipulatives or whiteboard.</p> <p>If student scored a 0 in Questions 10 and 11, consider stopping assessment here and using the FRA 100.</p>	<p>0 - incorrect, or works completely by ones (e.g. draws individual dots to represent the number or counts by ones to add or subtract amounts larger than 10)</p> <p>1 - correct but not fluent (e.g. long pauses, multiple self-corrects, uses drawings or manipulatives to solve, counts are limited to only counts of 10 or 1)</p> <p>2 - correct and solves mentally/verbally using an appropriate and efficient strategy (*See clarifications for examples of efficient strategies for addition & subtraction.)</p>	
12a	KY.2.NBT.5	Show card 75-56. Ask the student to read the card aloud then solve. If the student struggles, indicate to the student that they may use the available manipulatives or whiteboard.	<p>0 - incorrect, or works completely by ones (e.g. draws individual dots to represent the number or counts by ones to add or subtract amounts larger than 10)</p> <p>1 - correct but not fluent (e.g. long pauses, multiple self-corrects, uses drawings or manipulatives to solve, counts are limited to only counts of 10 or 1)</p> <p>2 - correct and solves mentally/verbally using an appropriate and efficient strategy (*See clarifications for examples of efficient strategies for addition & subtraction.)</p>	
12b	KY.2.NBT.9	Referring to the previous problem ask " How did you solve that? " and " Why does that work? " If needed, ask more questions that encourage the student to explain their strategy and why it works. Additional questions might include "Would that always work?" Or "Why did you use that strategy for this problem?"	<p>0 - was not able to explain strategy</p> <p>1 - student described the steps but was unable to justify why the strategy works or did not explain in terms of place value</p> <p>2 - student explained an appropriate strategy and justified why strategy work (*see clarifications of KY.2.NBT.5 for examples of strategies)</p>	

FRA1000: Part II - Conceptual Understandings Continued

Test 1

13	KY.2.NBT.4	Show student the number line task card and ask " Which of these numbers could the star be? " Ask " How do you know? " If student is correct, refer to the incorrect answer in D and ask " How did you know ___ was incorrect? "	0 - student is incorrect 1 - student chooses the correct number but is either unable to explain why or cannot explain why choice D is incorrect 2 - student is correct and can justify both the correct answer and why choice D is incorrect. Explanations should indicate the student is thinking about the location of and comparing to appropriate benchmark numbers on the number line. For example, explaining that 700 would be a little less than mid-way between 500 and 1000.
14	KY.2.NBT.1	Place tub of sticks, bundles, and super-bundles in easy reach of student and introduce the manipulative (see note at end of assessment). Place out a piece of paper. Say " Please put 251 sticks on this paper. "	0 - student is incorrect 1 - student is correct but there are concerns such as long pauses, multiple self-corrects, counting sticks within individual bundles 2 - student builds number efficiently using the appropriate numbers of hundreds (super-bundles), tens, and ones. Sticks DO NOT need to be placed in a particular arrangement.
15	KY.2.NBT.8	Gesture to pile of sticks created by student in the previous task. Ask " How could you change this to be 151 sticks? " Then prompt student to make the change.	0 - student is incorrect or builds number from scratch 1 - student is correct but there are concerns such as unbundling and removing by tens, recounts the collection, multiple self-corrects 2 - student removes a super-bundle (100)
16	KY.2.NBT.1	As student watches, pick up up one bundle of 10 from the pile, unbundle it, and return the loose set of 10 sticks to the pile. Gesture to the pile of sticks and ask student " How many sticks are here in all? "	0 - student is incorrect 1 - student is correct but counts to re-establish the quantity 2 - student demonstrates their understanding that the quantity established in the previous question is unchanged
17	KY.2.NBT.7	Show card $68+120$. Ask the student to read the card aloud then solve. Make available the bundles & sticks and the whiteboard & marker, if the student struggles or requests either. Ask questions such as "How do you know?" and "Why does that work?". If student uses a written method (such as the standard algorithm) and cannot explain the strategy, consider asking "Can you show me what's happening with the sticks?"	0 - incorrect or begins to work completely by ones 1 - correct but there are concerns (e.g. long pauses, multiple self-corrects, cannot explain why method works) 2 - correct and student's strategy and/or explanation shows understanding of place value. Student may use materials or the whiteboard.

Student Name: _____

Date: _____

FRA1000 Part II - Conceptual Understandings Continued

Test 1

18	KY.2.NBT.7	Show card 236-8. Ask student to read the card aloud and then solve. If the student struggles, indicate to the student that they may use the available manipulatives or whiteboard.	0 - incorrect 1 - correct but there are concerns (e.g. long pauses, multiple self-corrects, cannot explain why method works) 2 - correct and student's strategy and/or explanation shows understanding of place value. Student may count back by ones. Student may use materials or the whiteboard.	
19	KY.2.NBT.7	This question may be omitted if student missed the previous subtraction task. Show card 284-150. Ask the student to read the card aloud then solve. If the student struggles, indicate to the student that they may use the available manipulatives or whiteboard. If student begins working by only ones, ask "Is there another way to solve this problem?"	0 - scored 0 in question 18, is incorrect, or begins to work completely by ones 1 - correct but there are concerns (e.g. long pauses, multiple self-corrects, cannot explain why method works) 2 - correct and student's strategy and/or explanation shows understanding of place value. Student may use materials or the whiteboard.	

Part II Score (Questions 10-19)
22 points possible

Part I Score (Questions 1-9)
18 points possible

Part I and Part II combined Score
40 points possible

*Note: For students who are not familiar with sticks, bundles, and super-bundles, introduce them in the following way: Place the tub of sticks, bundles, and super-bundles in front of the student. Give student one bundle and ask "How many sticks are in the bundle?" Allow student to count (there should be 10) unbundling if needed to determine there are 10 sticks. Inform student that every bundle like that one will always have 10 sticks. Then give student a super-bundle. Ask "How many sticks are in this?" Allow student to count the bundles, unbundling the super-bundle to make the 10 bundles visible. If the student is counting individual sticks, prompt once "These are bundles just like the ones I showed before. There are 10 in each bundle. Can you use that to figure out how many sticks there are?" When the student determines there are 100 sticks, say "Every super-bundle will have 100 sticks, just like this one."

Notes: