

Math Screener

Grade Two

Draft – December 2023

The Cowichan Valley Mathematics Assessment has been designed as a common formative assessment and universal screener for our district. Each grade level assessment is based on foundational skills from the prior year. The assessment is also designed to allow educators to use prior grade assessments to identify learning needs of students. The screener questions align directly with the identified foundational skills found in instructional resource documents for each grade. Access the documents here:

<https://bit.ly/MathInstructionalResources>



The information gained from this tool will serve as a universal screener for our district's tiered instruction model. The data will inform individual, small group, and class instruction. It will also help identify patterns of instructional needs in a class, school or across the district as we work to ensure students master these foundational skills.

Each fall, classroom teachers and school teams will work together to identify each student's strengths and needs with foundational mathematics skills. Teachers are encouraged to administer the assessment in *small sections* during the first eight weeks of the school year.

The Mathematics Assessment has been designed in partnership with teachers across our district with the following foundational principles:

1. Aligned with curriculum standards from the previous grade
2. First Peoples Principles of Learning
3. Assessment *with* and *for* our learners; not *to* our learners

In addition, teachers are invited to paraphrase directions to align with classroom language, use classroom materials (alternate concrete materials, dry erase boards, flash cards), and administer the assessment in small parts.

Each grade level screener is an inventory of skills and does not represent the full, complex set of skills necessary for proficiency in mathematics. Our district's Numeracy Framework provides more in- depth information, instructional resources, and intervention strategies.

The Grade Two assessment is conducted as a one-on-one interview.

Scoring is yes (shows mastery) or no. Where the student is required to provide more than just a numerical answer, some elaborations may be given in the key to help teachers determine mastery.

At this point scores can be collected manually on the provided sheet or entered in an excel spreadsheet also provided. Entry into the dashboard will be available for the Fall of 2024.

This is in draft and feedback is welcome and encouraged. You can use this qr code to provide this feedback.



Name: _____

Date: _____

<i>Pattern</i>		<i>Notes</i>
"Make an ABC pattern using these 12 items" (use any manipulatives such as unifix cubes, bears etc.)	☐ Yes ☐ No	
If the student can make an ABC pattern, ask "can you make a more complex pattern? (ABBA, ABCC, etc.)"	☐ Yes ☐ No	
<i>Place Value</i>		
"Using the rods and cubes make the number 12."	☐ Yes ☐ No	
Provide whiteboard and marker. On the whiteboard "draw 12 of something (shapes, lines)" .	☐ Yes ☐ No	
"Print the numerals to represent the number 12."	☐ Yes ☐ No	
<i>Matching Numerals to Sets</i>		
Lay the cards out one at a time. "What number is this?" Use numeral identification cards: 5,8,12,17,20	☐ Yes ☐ No	
<i>Counting (Forwards and Backwards)</i>		
"Count by 1s" (start at 0, stop at 20)	☐ Yes ☐ No	
"Count by 5s" (start at 0, stop at 20)	☐ Yes ☐ No	
"Count by 2s" (start at 0, stop at 20) If the student can count by 2s, but not to 20, leave the box blank (or mark an "X" and make notes about where they stopped.	☐ Yes ☐ No	

1:1 Correspondence		
Start with 14 items in a group (eg., unifix cubes, bears etc.) Ask: "How many items are here?"	☐ Yes ☐ No	
Spread out the same items. Ask: "How many items are there now?"	☐ Yes ☐ No	
Ask: "Can you count the objects in another way?" Prompt reasonably and make notes on the students attempts. For example, if they first identified 12 items, and you said "What about these other ones? Try to count again..." indicate that they were able to identify 14 after prompting.	☐ Yes ☐ No	
Decomposition: Adding		
Using 11 counters, make (build) two piles (e.g., 5 & 6). "Write a number sentence that tells us about these two groups." (e.g., $5+6=$) Give an example of a number sentence (visual and oral)	☐ Yes ☐ No	
"Can you rearrange the counters and write a different number sentence?" (eg. $8+3=$)	☐ Yes ☐ No	

Decomposition: Subtracting		
Use 11 counters. Separate 3 counters from the pile. “Write a number sentence that tells about the counters that were moved.” (e.g., $11-3=$) (re-word this instruction as necessary for comprehension)	☐ Yes ☐ No	
Move the counters back. “Can you take away some counters out of the pile to write a different number sentence?” (provide an example: $11-5$)	☐ Yes ☐ No	
Fact Fluency		
(Use materials of choice to show student number equation) Only check the box if the student could complete the equation correctly. Make notes about the attempt if not. $2+3=$	☐ Yes ☐ No	
$9-1=$	☐ Yes ☐ No	
$12+4=$	☐ Yes ☐ No	
$15-0=$	☐ Yes ☐ No	
$17-6=$	☐ Yes ☐ No	

Grade Two Fall Math Screener Print Materials

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17

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