

Math Screener

Grade Six

Draft – February 2024

Grade Six

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 Six assessment is a written response format. Teachers are encouraged to do follow-up interviews when clarification is needed.

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.



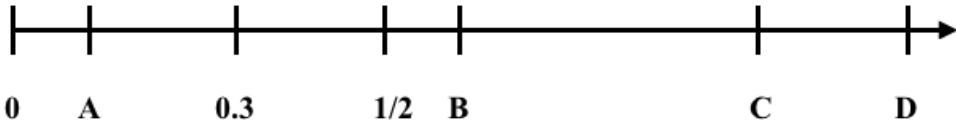
Grade Six Math Screener – Fall

Name: _____ **Date:** _____

Number Sense

#	Question
NS1	Write three hundred forty-seven thousand sixty-two as a numeral.
NS2	Write one million four hundred thirty thousand forty-five as a numeral.
NS3	How is 89501 written in words?
NS4	Write the numeral that is represented by $800\,000 + 40 + 9\,000$
NS5	What is the value of the underlined digit? <u>6</u> 27 384
NS6	Put the following numbers in order from greatest to least . 521 035 506 583 50 795 523 004

NS7	8. What number does X represent? 
NS8	Write the number which is 10 000 more than 881 462
NS9	Which picture shows $\frac{3}{4}$ of the animals are fish? A  B  C  D 
NS10	Put the numbers below in order from least to greatest. 0.371 0.080 0.842 0.36 0.8
NS11	Write a common fraction to represent 0.25

NS12	Write a common fraction to represent 0.37
NS13	Estimate the value represented by each of the letters: A: _____ B: _____ C: _____ D: _____ 
NS14	Put these fractions in order from least to greatest. $\frac{1}{2}$ $\frac{5}{8}$ $\frac{2}{6}$ $\frac{3}{4}$
NS15	Use numbers, pictures and words to show that 0.25 has the same value (equivalent to) as $\frac{2}{8}$.

Computational Fluency

CF1	1. Write 2 multiplication equations that match this array: _____ <table border="1" data-bbox="306 426 1213 810"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																																												
CF2	Write 2 division equations that match this array: _____ <table border="1" data-bbox="321 1035 639 1329"> <tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> <tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr> </table>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
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CF3	Solve the following question. $25\,904 + 37\,358 =$																																																												



CF4	Solve the following question. $97\,052 - 36\,471 =$
CF5	Solve the following question. $16.475 + 5.08 =$
CF6	Solve the following question. $24.07 - 17.346 =$
CF7	Solve the following question. $486 \times 28 =$

CF8	Solve the following question. $363 \div 24 =$
CF9	Write the missing numeral: $17 + 23 = 20 + \square$
CF10	$4.5 + n = 7$ What is the value of n?
CF11	$n = 60\,000 \div 3000$ What is the value of n?

Number Sense Answer Key – Grade Six

Question #	Answers
NS1 Source – INA	347 062
NS2 Source – INA	1 430 045
NS3 Source – INA	Eighty-nine thousand five hundred one
NS4 Source – INA	809 040
NS5 Source – INA	20 000
NS6 Source – INA	50 795, 506 583, 521 035, 523 004
NS7 Source – INA	300 000
NS8 Source – INA	891 462
NS9 Source – INA	a
NS10 Source – INA	0.080, 0.36, 0.371, 0.8, 0.842
NS11 Source – INA	$\frac{1}{4}$, $\frac{2}{8}$, $\frac{25}{100}$
NS12 Source – INA	$\frac{37}{100}$
NS13 Source – INA	A – 0.1, B – 0.6, C – 1, D – 1.25
NS14 Source – INA	$\frac{2}{6}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$
NS15 Source – INA	Answers will vary. Look for: 1. parts of whole 2. parts of sets 3. number line representations 4. concrete examples 5. equivalent fractions

Computational Fluency Answer Key – Grade Six

Question #	Answers
CF1 Source – INA	$12 \times 5 = 60$ $5 \times 12 = 60$ (Also accept: 12×5 and 5×12) Note: Be open to flexible thinking such as $2 \times 6 \times 5 = 60$ $3 \times 4 \times 5 = 60$
CF2 Source – INA	$56 \div 7 = 8$ $56 \div 8 = 7$ (Also accept: $56 \div 7$ and $56 \div 8$, expressions) Note: Be open to flexible thinking such as $56 \div 2 = 28$
CF3	Answer = 63 262
CF4	Answer = 60 581
CF5	Answer = 21.555
CF6	Answer = 6.724
CF7	Answer = 13 608
CF8	Answer = 15r3, 15.125, $15\frac{3}{24}$
CF9 Source – INA	20
CF10	2.5
CF11	20