

# Math Screener

## Grade Five

Draft – February 2024

# Grade Five

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 Five 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.



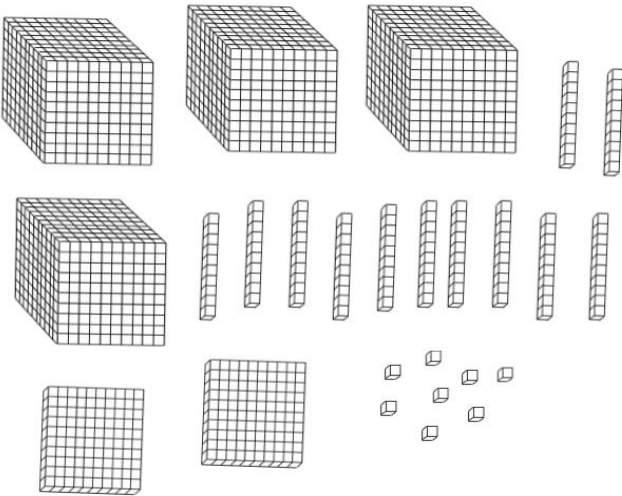


## Grade Five Math Screener - Fall

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

### Number Sense

#	Question
NS1	<p>Write the number your teacher says.</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p>
NS2	<p>What is the value of the underlined digit? 3 <u>3</u> 3 3</p>
NS3	<p>What is the numeral for nine thousand six hundred two?</p>
NS4	<p>Write the number that describes how many blocks are shown below.</p>  <p>The image shows base ten blocks arranged to represent a number. There are 3 large cubes (thousands), 10 flats (hundreds), 2 rods (tens), and 10 small cubes (ones). This represents the number 3,120.</p>

School District

NS5

2764, 7829, 2746, 3028

\_\_\_\_\_

NS6

5000

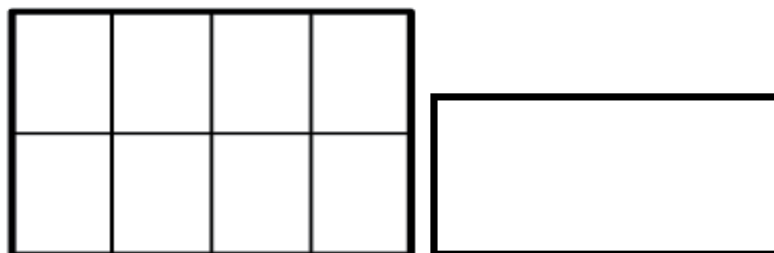
9000

7500

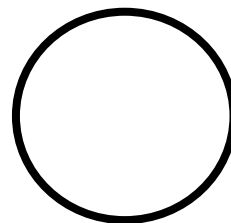
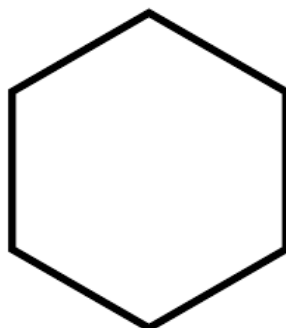
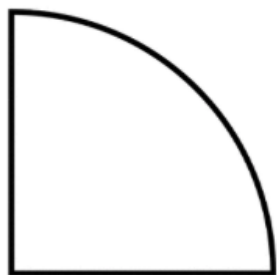
2500



NS7

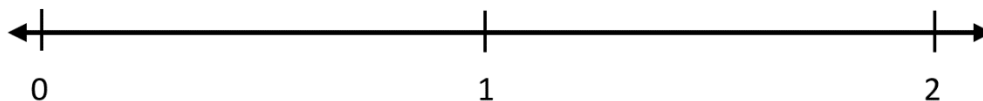


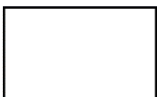
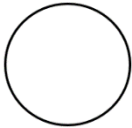
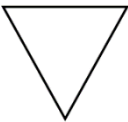
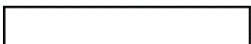
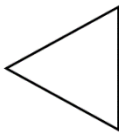

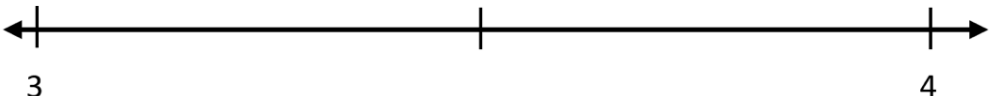
NS8 Shade  $\frac{1}{3}$  of each shape.



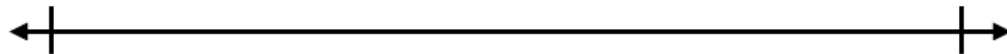
NS9 Place each common fraction on the number line:

$\frac{1}{2}$     $\frac{1}{4}$     $\frac{2}{4}$     $\frac{3}{4}$



NS10	<p>Shade <math>\frac{2}{5}</math> of <b>this set</b>.</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;">      </div>
NS11	<p>What fraction of the diagram is shaded?</p> <div style="text-align: center; margin-top: 20px;">  </div>
NS12	<p>11. Place each decimal number on the number line:</p> <p>3.5</p> <p>3.12</p> <p>3.4</p> <p>3.75</p> <div style="text-align: center; margin-top: 40px;">  </div>



NS13	Is 0.44 closer to 0.5 or 0.4?
NS14	<p>A fraction and a decimal are quite close together on a number line. What might the two numbers be? Record your choice of one decimal and one fraction on the number line.</p> <div data-bbox="311 606 1312 821"> <p style="text-align: center;"><b>Decimals</b></p> <p style="text-align: center;">0 <span style="float: right;">1.00</span></p>  <p style="text-align: center;"><b>Fractions</b></p> </div>

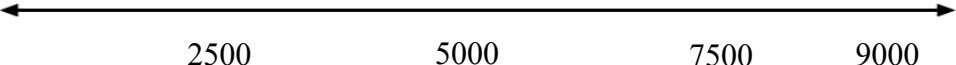
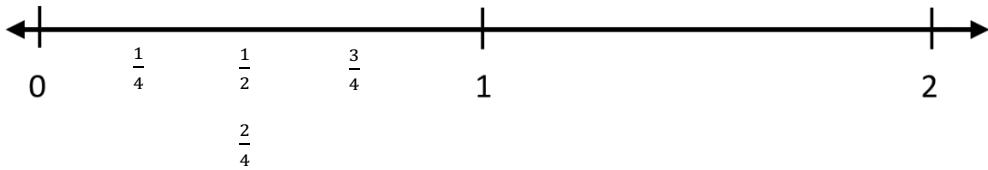
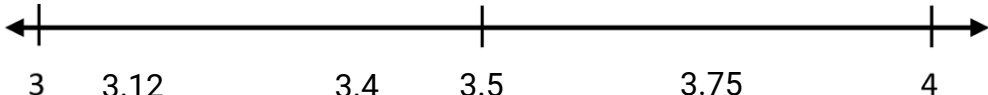
## Computational Fluency

CF1	Solve the following question  $4854 + 3237 =$
CF2	Solve the following question.  $7843 - 3485 =$
CF3	Solve the following question.  $5.6 + 2.8 =$
CF4	Solve the following question.  $8.1 - 3.4 =$
CF5	Solve the following question.  $6 \times 37 =$



CF6	<p>Solve the following question.</p> $4 \times 647 =$
CF7	<p>Solve the following question.</p> $59 \div 4 =$
CF8	<p>Solve the following question.</p> $486 \div 3 =$
CF9	$3.5 + n = 6$ <p>What is the value of n?</p>
CF10	$n - 250 = 50$ <p>What is the value of n?</p>

## Number Sense – Answer Key – Grade Five

Question #	Answers
NS1 Source – INA	Ninety-eight, three hundred twenty-seven, one thousand six, twelve thousand twenty (98, 327, 1006, 12 020)
NS2 Source - INA	Three hundred
NS3 Source - INA	9602
NS4 Source - INA	4328
NS5 Source - INA	2746, 2764, 3028, 7829
NS6 Source - INA	
NS7 Source - INA	Various answers. Consider accuracy and how the student partitions evenly.
NS8 Source – INA	Various answers. Consider accuracy and how the student partitions evenly.
NS9 Source – INA	
NS10 Source – INA	Various answers
NS11 Source – INA	One-half or five-tenths
NS12 Source – INA	

<p><b>NS13</b> Source – INA</p>	<p><b>0.4</b></p> <p>Students may use a number line, or hundred grid, base ten blocks.</p> <p>Students may share what they know about rounding.</p>
<p><b>NS14</b> Source – INA</p>	<p>Possible answers:</p> <p>1/2 and 0.6, 7/8 and 0.8, 1/4 and 0.2</p> <p>Note <i>if</i> and <i>how</i> students use benchmarks to communicate their reasoning.</p> <p>Decimals and fractions are labels on this double number line as scaffolding.</p>

## Computational Fluency – Answer Key – Grade Five

Question #	Answers
CF1	Answer = 8091
CF2	Answer = 4358
CF3	Answer = 8.4
CF4	Answer = 4.7
CF5	Answer = 222
CF6	Answer = 2588
CF7	Answer = 14r3, 14.75, 14-3/4
CF8	Answer = 162
CF9	2.5
CF10	300