COWICHAN VALLEY
School District

Math Screener

Grade Seven

September 2025

COWICHAN VALLEY School District

Grade Seven

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 or use the QR code.

=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 Seven assessment is a written response format. Teachers are encouraged to do follow-up interviews when clarification is needed. To enter scores, teachers will input data into the dashboard. The scoring sheet is attached for ease of entry.

Thank you to all the teachers who were involved in the creation of these screeners. Your tireless service to your colleagues and the children of the district is very appreciated.

September 2025

COWICHAN VALLEY School District

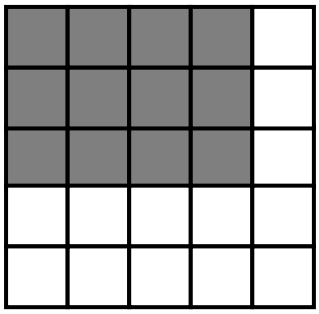
Grade Seven Math Screener

Name: _____ Date: _____

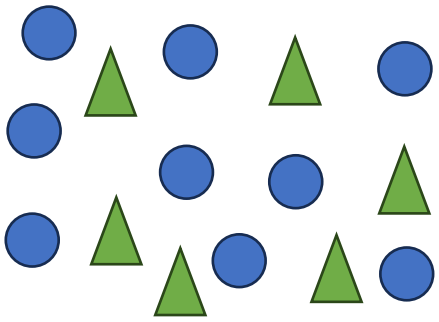
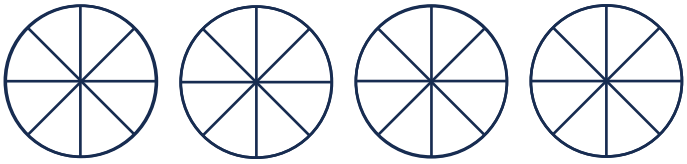
Number Sense

Place Value	
1	Using the number written below, which number represents the place value? 321 479 658.013 _____ _____ _____ _____ Ten millions hundred thousands hundreds hundredths
Factoring	
2	A prime number has only two factors, itself and 1. Write all **eight** the prime numbers between 0 and 20.
3	List all four prime number factors of 24. _____ _____ _____ _____
4	What is the greatest common factor of 24 and 60? _____

COWICHAN VALLEY School District

Multiples	
5	Circle the multiples of 6 3 13 18 32 36 54 120
6	What is the least common multiple of 8 and 10? _____
Percentage	
7	What percentage of the grid is shaded?  _____
8	What is 10% of $80 _____
9	50% can be represented in three ways as $\frac{1}{2}$, 0.5, ◑. Represent 25% in three different ways. _____ _____ _____

COWICHAN VALLEY School District

Ratios	
10	What is the ratio of triangles to circles? What is another equivalent ratio? _____ : _____ _____ : _____ 
Fractions	
11	A circle is divided into 8 pieces. If you have $3\frac{5}{8}$ circles.  How many pieces in total do you have? _____
12	Write the mixed number fraction $3\frac{5}{8}$ as an improper fraction. _____
Patterning	
13	Fill in the missing numbers at the start and end of the pattern. [ ] [16] [32] [64] [ ]

COWICHAN VALLEY School District

Computational Fluency

Multiplication - Decimals	
14	4.71 x 3 =
Division - Decimals	
15	5.64 ÷ 6 =

COWICHAN VALLEY School District

Order of Operations	
16	Solve the following question using BEDMAS. 2 + 3 X 3 – 1 =
17	Solve the following question using BEDMAS. 4 + 5 X 3 – 8 ÷ 2 =
18	Solve the following question using BEDMAS. 18 - 2 X (5 + 3) ÷ 2 =

COWICHAN VALLEY School District

Solve for Unknown	
19	What is the value of x? $3x = 12$ x = _____
20	What is the value of x? $x + 5 = 11$ x = _____
21	What is the value of x? $17 - x = 8$ x = _____

COWICHAN VALLEY School District

Grade 7 Math Screener: Scoring Page for Dashboard Entry

Student Name: _____

Place Value	____/1
Factoring	____/3
Multiples	____/2
Percentage	____/3
Ratios	____/1
Fractions	____/2
Patterning	____/1
Multiplication: Decimals	____/1
Division: Decimals	____/1
Order of Operations	____/3
Solve for Unknown	____/3

COWICHAN VALLEY
School District

September 2025

COWICHAN VALLEY School District

Number Sense – Answer Key – Grade Seven

Question #	Answers
1	2, 4, 6, 1
2	2, 3, 5, 7, 11, 13, 17, 19
3	2, 2, 2, 3
4	12
5	18, 36, 54, 120
6	40
7	48%
8	$8
9	0.25, $\frac{1}{4}$, and a visual (answers can vary, do not accept three of of the same form, like three visuals or three equivalent fractions)
10	6:9, and 2:3 (could also be a larger ratio such as 12:18)
11	29 pieces
12	$\frac{29}{8}$
13	8, 128

COWICHAN VALLEY School District

Computational Fluency – Answer Key – Grade Seven

Question #	Answers
14	14.13
15	0.94
16	10
17	15
18	10
19	$x = 4$
20	$x = 6$
21	$x = 9$