



# Virginia Essentialized Standards of Learning (VESOL)

Revised: September 2022

# VIRGINIA ESSENTIALIZED STANDARDS OF LEARNING (VESOL)

The Virginia Essentialized Standards of Learning (VESOL) are the revised academic content standards for students with significant cognitive disabilities who are enrolled in grades 3-8 and high school in Virginia. Specifically, the VESOL represent content in reading and mathematics for grades 3-8 and high school and science for grades 5, 8, and high school replacing the previously used Aligned Standards of Learning (ASOL) in these content areas.

In 2020-2021, special educators representing 27 Virginia school divisions were convened by staff from the Virginia Department of Education (VDOE) and Behavioral Research and Teaching (BRT) at the University of Oregon to conduct the development of the VESOL. A process developed by BRT called essentialization was used to reduce the Virginia Standards of Learning (SOL) in depth, breadth, and complexity to make the VESOL relevant, accessible, and appropriate for students with significant cognitive disabilities. The concepts and text of each VESOL were carefully reviewed throughout the essentialization process to ensure the level of cognitive demand was focused on recall and application tasks.

The VESOL are to be used to guide instruction provided by special educators to those students with significant cognitive disabilities who meet the participation criteria for the Virginia Alternate Assessment Program (VAAP). In turn, the tests administered as part of the VAAP are aligned to the VESOL and complete the close connection of academic standards, instruction, and assessment – each working together and reinforcing one another.

Format:

The VESOL presented in this document are divided by content area and grade level. Within each grade level the VESOL are grouped by Reporting Category, or areas of similar knowledge or skills, as shown in the VESOL Summary Matrix that appears at the start of each content area.

As shown in the example below, each VESOL is labeled with a VESOL code which includes a letter (i.e., M - Mathematics, R - Reading, S - Science) and a grade level (i.e., grade 3-8, HS) followed by an assigned number. For reference, the SOL from which each VESOL was essentialized is shown in parentheses below the VESOL code.

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>R-5.4</b> (SOL 5.6C)	<b>The student will:</b> Answer questions about the main idea of a nonfiction text that is read to the student or that the student reads.  <b>Complexity Continuum:</b> The nonfiction text could range from a sentence of six or fewer words to two sentences with five to seven words or a short paragraph.

The text of each VESOL (i.e., “The student will...”) is followed by the Complexity Continuum for that VESOL. The Complexity Continuum is provided to better define the intended scope of student expectations or difficulty range of each VESOL. Generally the Complexity Continuum will range from expectations associated with recall or identification at the low end to those

requiring application of skills or content at the upper end. The Complexity Continuum is intended to acknowledge the wide variation in the skill level of students who participate in VAAP and to provide appropriate access points for the content of the VESOL in both instruction and assessment. Items on the VAAP tests reflect this continuum with test questions at the low end of the complexity continuum appearing at the beginning of the test and increasing in complexity throughout the assessment.

For questions regarding the VESOL or this document, please contact the Office of Student Assessment at [student\\_assessment@doe.virginia.gov](mailto:student_assessment@doe.virginia.gov).

VESOL instructional resources, crosswalks, and sample activities provided are available at [ttaonline.org/vesol](http://ttaonline.org/vesol). These and other special education resources are regularly updated on [TTAC Online](#), VDOE's Training and Technical Assistance Centers (TTAC) website designed to link people and resources to help children and youth with disabilities.

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# READING VIRGINIA ESSENTIALIZED STANDARDS OF LEARNING

## GRADE 3

**Reporting Category: Demonstrate comprehension of fictional texts and use word analysis strategies**

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p><b>R-3.1</b> (SOL 3.3B, 3.4A, 3.4B, 3.4C, 3.4D, 3.4F, 3.4G)</p>	<p>The student will: Understand the meaning of words in passages that are read to the student or that the student reads.</p> <p>Complexity Continuum: The words could be shown with or without a graphic representation or could appear in a sentence.</p>
<p><b>R-3.2</b> (SOL 3.5C, 3.5G, 3.5H, 3.5J, 3.5L)</p>	<p>The student will: Answer questions about a passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage could range from a sentence with five or fewer words through a sentence with seven or more words.</p>
<p><b>R-3.4</b> (SOL 3.5D, 3.5F)</p>	<p>The student will: Identify a character in a story that is read to the student or that the student reads.</p> <p>Complexity Continuum: The story containing a character could range from a sentence of five or fewer words to a sentence of seven to fourteen words.</p>
<p><b>R-3.5</b> (SOL 3.5D)</p>	<p>The student will: Identify a setting of a story that is read to the student or that the student reads.</p> <p>Complexity Continuum: The story with a setting could range from a sentence of five or fewer words to a sentence of seven to fourteen words.</p>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>R-3.7</b> (SOL 3.5D, 3.5E, 3.5I)	<p>The student will: Identify an event, idea, or step in a passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage with an event, idea, or step could range from a sentence of five or fewer words to a sentence of seven to fourteen words.</p>

**Reporting Category: Demonstrate comprehension of nonfiction texts and use word analysis strategies**

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>R-3.1</b> (SOL 3.3B, 3.4A, 3.4B, 3.4C, 3.4D, 3.4F, 3.4G)	<p>The student will: Understand the meaning of words in passages that are read to the student or that the student reads.</p> <p>Complexity Continuum: The words could be shown with or without a graphic representation or could appear in a sentence.</p>
<b>R-3.2</b> (SOL 3.5C, 3.5G, 3.5H, 3.5J, 3.5L)	<p>The student will: Answer questions about a passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage could range from a sentence with five or fewer words through a sentence with seven or more words.</p>
<b>R-3.3</b> (SOL 3.6D, 3.6E)	<p>The student will: Identify an event, idea, or step in a passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage could range from a sentence with five or fewer words through a sentence of seven to fourteen words.</p>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>R-3.6</b> (SOL 3.6A, 3.6G)	<p>The student will:            Answer questions about the main idea of a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text could range from a sentence of five or fewer words to a sentence of seven to fourteen words.</p>
<b>R-3.8</b> (SOL 3.6F, 3.6H)	<p>The student will:            Identify a beginning, middle, or end of a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text could range from a sentence of five or fewer words to a sentence of seven to fourteen words.</p>

## GRADE 4

### Reporting Category: Demonstrate comprehension of fictional texts and use word analysis strategies

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>R-4.1</b> (SOL 4.4A, 4.4B, 4.4C, 4.4D)	<p>The student will: Understand the meaning of words in passages that are read to the student or that the student reads.</p> <p>Complexity Continuum: The words could be shown with or without a graphic representation or could appear in a sentence.</p>
<b>R-4.2</b> (SOL 4.5B, 4.5D, 4.5G, 4.5H, 4.5I, 4.5J)	<p>The student will: Answer questions about a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage may range from a sentence with six or fewer words through a sentence with seven or more words or two short sentences.</p>
<b>R-4.5</b> (SOL 4.5A, 4.5C, 4.5F)	<p>The student will: Identify a character, setting, or event in a story that is read to the student or that the student reads.</p> <p>Complexity Continuum: The story including a character, setting, or event could range from a sentence of six or fewer words to a sentence of seven words or more or two short sentences.</p>
<b>R-4.6</b> (SOL 4.5E)	<p>The student will: Identify the narrator or a character in a story that is read to the student or that the student reads.</p> <p>Complexity Continuum: The story containing a character or narrator could range from a sentence of six or fewer words to a sentence of seven words or more or two short sentences.</p>

**Reporting Category: Demonstrate comprehension of nonfiction texts and use word analysis strategies**

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>R-4.1</b> (SOL 4.4A, 4.4B, 4.4C, 4.4D)	<p>The student will:            Understand the meaning of words in passages that are read to the student or that the student reads.</p> <p>Complexity Continuum:            The words could be shown with or without a graphic representation or could appear in a sentence.</p>
<b>R-4.3</b> (SOL 4.6E, 4.6F, 4.6G)	<p>The student will:            Answer questions about a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text could range from a sentence of six or fewer words to a sentence of seven words or more or two short sentences.</p>
<b>R-4.4</b> (SOL 4.6B, 4.6C)	<p>The student will:            Answer questions about the main idea of a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text could range from a sentence of six or fewer words to a sentence of seven words or more or two short sentences.</p>
<b>R-4.7</b> (SOL 4.6D)	<p>The student will:            Identify meaning (an event, idea, or information) of a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text about an event, idea, or information may contain a graphic representation and range from a sentence of six or fewer words to a sentence of seven words or more or two short sentences.</p>

## GRADE 5

### Reporting Category: Demonstrate comprehension of fictional texts and use word analysis strategies

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>R-5.1</b> (SOL 5.4A, 5.4B, 5.4C, 5.4D, 5.4E)	<p>The student will:            Understand the meaning of words in passages that are read to the student or that the student reads.</p> <p>Complexity Continuum:            The words could be shown with or without a graphic representation or could appear in a sentence.</p>
<b>R-5.2</b> (SOL 5.5D, 5.5F, 5.5G, 5.5I, 5.5J, 5.5K, 5.5L)	<p>The student will:            Answer questions about a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The passage could range from a sentence with six or fewer words to two sentences with five to seven words or a short paragraph.</p>
<b>R-5.5</b> (SOL 5.5A, 5.5B, 5.5C, 5.5E)	<p>The student will:            Identify a character, setting, or event in a story that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The story including a character, setting, or event could range from a sentence with six or fewer words to two sentences with five to seven words or a short paragraph.</p>

**Reporting Category: Demonstrate comprehension of nonfiction texts and use word analysis strategies**

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>R-5.1</b> (SOL 5.4A, 5.4B, 5.4C, 5.4D, 5.4E)	<p>The student will:            Understand the meaning of words in passages that are read to the student or that the student reads.</p> <p>Complexity Continuum:            The words could be shown with or without a graphic representation or could appear in a sentence.</p>
<b>R-5.3</b> (SOL 5.6E, 5.6F, 5.6G, 5.6H, 5.6I, 5.6J)	<p>The student will:            Answer questions about a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text could range from a sentence with six or fewer words to two sentences with five to seven words or a short paragraph.</p>
<b>R-5.4</b> (SOL 5.6C)	<p>The student will:            Answer questions about the main idea of a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text could range from a sentence of six or fewer words to two sentences with five to seven words or a short paragraph.</p>
<b>R-5.6</b> (SOL 5.6B, 5.6D)	<p>The student will:            Identify details (an event, idea, or information) of a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:            The nonfiction text about an event, idea, or information may contain a graphic representation and range from a sentence of seven or fewer words to two sentences of five to seven words or a short paragraph.</p>

# MATHEMATICS VIRGINIA ESSENTIALIZED STANDARDS OF LEARNING

## GRADE 3

### Reporting Category: Number, Number Sense, Computation, and Estimation

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-3.1</b> (SOL 3.1a)	The student will: Match number names to numerals from 0 through 20.  Complexity Continuum: N/A
<b>M-3.2</b> (SOL 3.1b)	The student will: Identify the closest number above or below a given number from 0 through 20.  Complexity Continuum: N/A
<b>M-3.3</b> (SOL 3.1c)	The student will: Compare whole numbers from 0 through 20.  Complexity Continuum: Whole numbers 0 through 20 could be compared with the words “smaller,” “larger,” “same,” or with the symbols $<$ , $=$ , $>$ .
<b>M-3.4</b> (SOL 3.2a)	The student will: Identify and match representations of one half for numbers 2 through 20.  Complexity Continuum: Representations could include simple pictures, diagrams, models, or other representations for even whole numbers from 0 through 20.
<b>M-3.5</b> (SOL 3.3a)	The student will: Add and subtract whole numbers from 0 through 20.  Complexity Continuum: Sums for addition problems will not exceed 20.

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-3.6</b> (SOL 3.3b)	<p>The student will: Solve one-step word problems using addition and subtraction.</p> <p>Complexity Continuum: Given a context, numbers from 0 to 20 could be added, with their sum not to exceed 20. Whole numbers from 0 through 10 could be subtracted.</p>
<b>M-3.7</b> (SOL 3.4c)	<p>The student will: Identify a product of two whole numbers where one number is 5 or less and the other number is 4 or less.</p> <p>Complexity Continuum: N/A</p>

### Reporting Category: Measurement and Geometry

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-3.8</b> (SOL 3.6a)	<p>The student will: Match and count coins through 25 cents.</p> <p>Complexity Continuum: Complexity ranges from matching pennies, nickels, dimes, and quarters to their values to counting the value of a set of coins with a total value of 25 cents or less.</p>
<b>M-3.9</b> (SOL 3.7a)	<p>The student will: Compare length using simple terms: same, shorter, longer.</p> <p>Complexity Continuum: Comparisons could include simple pictures, diagrams, models, or representations that are the same length or 1 to 5 units apart.</p>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-3.10</b> (SOL 3.7b)	<p>The student will:            Compare volume using simple terms: same, more, less, larger, smaller.</p> <p>Complexity Continuum:            Comparisons could include simple pictures, diagrams, models, or representations that are visibly or measurably the same or different volumes.</p>
<b>M-3.11</b> (SOL 3.8a)	<p>The student will:            Determine perimeter of equilateral triangles and squares.</p> <p>Complexity Continuum:            Equilateral triangles or squares with sides that have lengths from 1 to 5 units could be included.</p>
<b>M-3.12</b> (SOL 3.8b)	<p>The student will:            Determine the area of squares and rectangles.</p> <p>Complexity Continuum:            Squares and rectangles with areas of 4 unit squares up to 16 unit squares could be included.</p>
<b>M-3.13</b> (SOL 3.9a)	<p>The student will:            Tell time in whole hour increments using a digital clock, including with context.</p> <p>Complexity Continuum:            Times could be on the hour, in a.m. or p.m., and the terms noon and midnight could be included. Contexts will relate the time to an appropriate activity.</p>
<b>M-3.14</b> (SOL 3.12a)	<p>The student will:            Use attributes of circles, triangles, and squares to identify shapes.</p> <p>Complexity Continuum:            Circles, triangles, and squares could be presented in simple pictures, diagrams, models, or representations.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-3.15</b> (SOL 3.13)	<p>The student will: Identify figures that are the same size and shape.</p> <p>Complexity Continuum: Circles of the same size, squares and triangles with the same size and orientation, and squares and triangles with same size and different orientations could be presented.</p>

**Reporting Category: Probability, Statistics, Patterns, Functions, and Algebra**

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-3.16</b> (SOL 3.15a)	<p>The student will: Compare categories represented in picture graphs using simple terms: same, more, less.</p> <p>Complexity Continuum: Categories could be presented for comparison that range from having the same amounts to having significantly different or slightly different amounts.</p>
<b>M-3.17</b> (SOL 3.16)	<p>The student will: Perform basic counting operations including skip counting by 2s and 5s.</p> <p>Complexity Continuum: Counting could range from 1 through 20 with simple pictures, diagrams, models, or representations. Skip counting could be by 2s or 5s through 20 and could include finding a missing number or extending a pattern.</p>

## GRADE 4

### Reporting Category: Number, Number Sense, Computation, and Estimation

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-4.1</b> (SOL 4.1a)	<p>The student will: Match number names to numerals from 0 through 40.</p> <p>Complexity Continuum: N/A</p>
<b>M-4.2</b> (SOL 4.1b)	<p>The student will: Use place value to identify numbers that are multiples of 10 and understand the difference between ones and tens place.</p> <p>Complexity Continuum: Whole numbers presented as multiples of 10 could range from 0 through 40. Understanding place value could include identifying the digit in the ones or tens place or its value.</p>
<b>M-4.3</b> (SOL 4.1c)	<p>The student will: Identify the closest number above or below a given number from 0 through 40.</p> <p>Complexity Continuum: N/A</p>
<b>M-4.4</b> (SOL 4.2a)	<p>The student will: Compare whole numbers from 0 through 40 or the fractions of <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math>.</p> <p>Complexity Continuum: Whole numbers 0 through 40 and fractions <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math> could be compared with the words “smaller,” “same,” “larger,” or “less than,” “equal,” “greater than,” or with the symbols <math>&lt;</math>, <math>=</math>, <math>&gt;</math>.</p>
<b>M-4.5</b> (SOL 4.2c)	<p>The student will: Identify wholes, halves, or fourths.</p> <p>Complexity Continuum: Representations of wholes, halves, or fourths could be presented in simple pictures, diagrams, models, or other representations.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-4.6</b> (SOL 4.3c)	<p>The student will: Compare whole numbers from 0 through 40 or decimals from 0.0 through 5.5.</p> <p>Complexity Continuum: Whole numbers from 0 through 40 or decimals of 0.5 through 5.5 (0.5, 1.0, 1.5, 2.0, ... ,5.5) could be compared with the words “smaller,” “larger,” “same,” “less than,” “equal,” “greater than,” or with the symbols <math>&lt;</math>, <math>=</math>, <math>&gt;</math>.</p>
<b>M-4.7</b> (SOL 4.3d)	<p>The student will: Identify whole numbers 0 through 40 and match decimals 0.25 and 0.5 with <math>\frac{1}{4}</math> and <math>\frac{1}{2}</math>.</p> <p>Complexity Continuum: Identifying whole numbers from 0 through 40. Matching decimals of 0.25 and 0.5 with <math>\frac{1}{4}</math> and <math>\frac{1}{2}</math> could range from 0.25 through 5.5 (e.g., <math>0.25 = \frac{1}{4}</math>, <math>0.5 = \frac{1}{2}</math>, <math>1.25 = 1 \frac{1}{4}</math>, <math>1.5 = 1 \frac{1}{2}</math>, ... , <math>5.25 = 5 \frac{1}{4}</math>, <math>5.5 = 5 \frac{1}{2}</math>).</p>
<b>M-4.8</b> (SOL 4.4a)	<p>The student will: Multiply whole numbers from 0 through 10; match an array to the correct whole number from 0 through 40.</p> <p>Complexity Continuum: Whole numbers being multiplied could range from 0 through 10 with their product or the array not to exceed 40.</p>
<b>M-4.9</b> (SOL 4.4b)	<p>The student will: Add and subtract whole numbers from 0 through 40.</p> <p>Complexity Continuum: Whole numbers 0 through 40 could be added or subtracted with answers not to exceed 40.</p>
<b>M-4.10</b> (SOL 4.4c)	<p>The student will: Solve division problems using numbers from 1 through 10.</p> <p>Complexity Continuum: Problems could include simple pictures, diagrams, models, or other representations of whole numbers.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-4.11</b> (SOL 4.4d)	<p>The student will: Solve one-step word problems using addition, subtraction, or multiplication.</p> <p>Complexity Continuum: Given a context, numbers from 0 through 40 could be added, subtracted, or multiplied, with the solution not to exceed 40.</p>
<b>M-4.12</b> (SOL 4.5b)	<p>The student will: Add and subtract wholes, halves, and fourths.</p> <p>Complexity Continuum: Using a number line, add and subtract whole numbers, halves, and fourths from 0 through 20.</p>
<b>M-4.13</b> (SOL 4.5c)	<p>The student will: Solve one-step word problems using addition and subtraction of wholes, halves, and fourths.</p> <p>Complexity Continuum: Given a context, add and subtract whole numbers, halves, and fourths from 0 through 20.</p>
<b>M-4.14</b> (SOL 4.6a)	<p>The student will: Use a variety of coins to count the value through 50 cents.</p> <p>Complexity Continuum: Coins could include pennies, nickels, dimes, and quarters. Same or different coins could be counted with a total value of 50 cents or less.</p>

### Reporting Category: Measurement and Geometry

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-4.15</b> (SOL 4.7)	<p>The student will: Use unit squares to determine areas up to 20 square feet.</p> <p>Complexity Continuum: Using simple pictures, diagrams, models, or representations, determine areas from 1 to 20 square feet.</p>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-4.16</b> (SOL 4.8a)	<p>The student will:            Measure length in inches and centimeters.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, models, or representations, measure lengths in whole units of 1 to 12 inches or 1 to 30 centimeters.</p>
<b>M-4.17</b> (SOL 4.8b)	<p>The student will:            Measure weight in pounds.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, models, or representations, measure weight in whole units of 1 to 40 pounds.</p>
<b>M-4.18</b> (SOL 4.9)	<p>The student will:            Tell time in whole hour and half hour increments using a digital clock, including with context.</p> <p>Complexity Continuum:            Times could be on the hour and half hour, a.m. or p.m., and the terms noon and midnight could be included. Contexts will relate the time to an appropriate activity.</p>
<b>M-4.19</b> (SOL 4.10a)	<p>The student will:            Identify points, line segments, and angles.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, models, or representations, identify points, line segments, or angles.</p>
<b>M-4.20</b> (SOL 4.11)	<p>The student will:            Identify circles, triangles, squares, and rectangles.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, models, or representations, identify circles, triangles, squares, and rectangles.</p>

## Reporting Category: Probability, Statistics, Patterns, Functions, and Algebra

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<b>M-4.21</b> (SOL 4.14b)	<p>The student will: Interpret and compare data values represented in a picture or bar graph using simple terms: same, more, less.</p> <p>Complexity Continuum: Picture and bar graphs for interpretation and comparison could have values through 20 that range from having the same amounts to having significantly different or slightly different amounts.</p>
<b>M-4.22</b> (SOL 4.15)	<p>The student will: Recognize and perform skip counting by 2s, 3s, 5s, and 10s.</p> <p>Complexity Continuum: Recognizing skip counting by 2s could include whole numbers 2 through 20. Performing skip counting by 2s, 3s, 5s, and 10s could include whole numbers 2 through 40.</p>

## GRADE 5

### Reporting Category: Number, Number Sense, Computation, and Estimation

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-5.1</b> (SOL 5.1)	<p>The student will: Identify the location of 0.5 decimals between two whole numbers on a number line; round 0.5 decimals up to the nearest whole number.</p> <p>Complexity Continuum: Numbers to identify on a number line or to round to the nearest whole number could range by halves from 0.5 to 9.5.</p>
<b>M-5.2</b> (SOL 5.2a)	<p>The student will: Identify whole numbers 0 through 60 and decimals with 0.5 when given a verbal description.</p> <p>Complexity Continuum: Whole numbers to identify from a verbal description could range from 0 through 60. Decimals to identify could include 0.5, 1.5, 2.5, 3.5, 4.5, and 5.5.</p>
<b>M-5.3</b> (SOL 5.2b)	<p>The student will: Use place value to identify numbers that are multiples of 10, and understand the difference between ones and tens place.</p> <p>Complexity Continuum: Whole numbers presented as multiples of 10 could range from 0 through 60. Understanding place value could include identifying the digit in the ones or tens place or its value.</p>
<b>M-5.4</b> (SOL 5.3a)	<p>The student will: Determine whether a number from 1 through 40 is divisible by 2, 3, 5, or 10.</p> <p>Complexity Continuum: Numbers divisible by 2 could range from 2 through 10. Numbers divisible by 3 could range from 3 through 30, and numbers divisible by 5 or 10 could range from 5 or 10 through 40.</p>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-5.5</b> (SOL 5.3b)	<p>The student will:            Identify even and odd numbers.</p> <p>Complexity Continuum:            Representations of even and odd numbers could include simple pictures, diagrams, models, or other representations for whole numbers 1 through 10.</p>
<b>M-5.6</b> (SOL 5.4)	<p>The student will:            Use currency for problems up to \$1.00.</p> <p>Complexity Continuum:            Problems could include determining whether a set of the same or different coins is sufficient to purchase an item priced up to \$1.00 or making change for \$1.00.</p>
<b>M-5.7</b> (SOL 5.5a)	<p>The student will:            Solve division problems using numbers through 20.</p> <p>Complexity Continuum:            Representations could include simple pictures, diagrams, models, or other representations of whole numbers. Numbers to be divided will not exceed 20.</p>
<b>M-5.8</b> (SOL 5.5b)	<p>The student will:            Solve word problems involving addition and subtraction of whole numbers from 0 through 30 and adding mixed numbers ending in <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math>.</p> <p>Complexity Continuum:            Given a context, numbers from 0 through 30 could be added or subtracted; mixed numbers ending in <math>\frac{1}{2}</math> or <math>\frac{1}{4}</math> could be added.</p>
<b>M-5.9</b> (SOL 5.6a)	<p>The student will:            Solve word problems involving addition and subtraction of whole numbers 0 through 30 and adding decimal numbers ending in 0.5.</p> <p>Complexity Continuum:            Given a context, numbers from 0 to 30 could be added or subtracted including adding decimals ending in 0.5.</p>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-5.10</b> (SOL 5.6b)	<p>The student will: Identify an equation that matches a verbal description involving the product of whole numbers and fractions including <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{3}</math>, and decimals ending in 0.5.</p> <p>Complexity Continuum: Equations using only whole numbers have solutions ranging from 0 through 60. Equations using whole numbers and fractions or decimals have whole number solutions ranging from 0 through 40.</p>
<b>M-5.11</b> (SOL 5.7)	<p>The student will: Simplify expressions that use parentheses given a verbal or visual model.</p> <p>Complexity Continuum: Expressions could include addition and subtraction of whole numbers from 0 through 60 with parentheses.</p>

### Reporting Category: Measurement and Geometry

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-5.12</b> (SOL 5.8a)	<p>The student will: Solve <math>V = B \times h</math> volume problems when provided a model that includes the area measure of the base (B).</p> <p>Complexity Continuum: The calculated volume of the provided models could range from 1 to 30 cubic units.</p>
<b>M-5.13</b> (SOL 5.8b)	<p>The student will: Use addition to solve real world volume problems using unit cubic inches.</p> <p>Complexity Continuum: The sum of the measures of volume could range from 1 to 30 cubic inches.</p>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-5.14</b> (SOL 5.11)	<p>The student will: Tell time and measure elapsed time in whole and half hour increments using a digital clock, including with context.</p> <p>Complexity Continuum: Times could be on the hour or half hour and elapsed time could range from +/- 1 to 3 hours within a.m. or p.m. Contexts will relate the time to an appropriate activity.</p>
<b>M-5.15</b> (SOL 5.14b)	<p>The student will: Identify the geometric shape of a given object (e.g., traffic sign).</p> <p>Complexity Continuum: Objects presented could include circles, triangles, squares, rectangles, pentagons, hexagons, or octagons.</p>

**Reporting Category: Probability, Statistics, Patterns, Functions, and Algebra**

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>M-5.16</b> (SOL 5.16a)	<p>The student will: Use given data to interpret information from a line plot.</p> <p>Complexity Continuum The line plots presented could range from having 3 to 10 data points.</p>
<b>M-5.17</b> (SOL 5.18)	<p>The student will: Identify a missing number in a pattern when given an addition rule.</p> <p>Complexity Continuum: The patterns with a missing number could have a rule of +1, +2, +3, +4, +5, or +10 with numbers ranging from 1 through 60.</p>
<b>M-5.18</b> (SOL 5.19a)	<p>The student will: Identify expressions that match a verbal and/or graphic model.</p> <p>Complexity Continuum: Expressions presented could have one, two, or three terms.</p>

# SCIENCE VIRGINIA ESSENTIALIZED STANDARDS OF LEARNING

## GRADE 5

### Reporting Category: Living Systems and Ecosystem Interactions

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-5.1 (SOL 4.2a-c)	<p>The student will: Recognize that plants need light, air, and water to grow.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"><li>• recognizing plants (e.g., plants, trees, and flowers) need light, air, and water to grow <i>to</i></li><li>• identifying simple parts (e.g., roots, stems, leaves, flower, fruit) of plants that help them get light, air, and water <i>to</i></li><li>• comparing growth of plants when given appropriate or inappropriate amounts of light, air, and water.</li></ul>
S-5.2 (SOL 4.2a-c)	<p>The student will: Recognize that living organisms have unique structures that help them obtain what they need to grow and survive.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"><li>• recognizing animals and plants using common terminology <i>to</i></li><li>• recognizing that animals need food, air, and water and that plants use soil, air, water, and light <i>to</i></li><li>• identifying and connecting unique structures of plants and animals that help them obtain what they need to grow and survive.</li></ul>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p><b>S-5.3</b> (SOL 4.3a-d)</p>	<p>The student will: Recognize ways in which living organisms interact with other living organisms and non-living parts of an ecosystem.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing living and non-living parts of an environment or ecosystem <i>to</i></li> <li>• recognizing interactions between living and non-living parts (e.g., water, habitat, shelter) of an ecosystem <i>to</i></li> <li>• identifying simple interactions between living organisms or among groups of living organisms (e.g., predator-prey, competitive, mutually beneficial).</li> </ul>
<p><b>S-5.8</b> (SOL 4.7a-c)</p>	<p>The student will: Recognize oceans and identify the organisms that live in them.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing oceans as compared to common non-water objects or features (e.g., rocks, mountains, forests) <i>to</i></li> <li>• recognizing oceans as compared to other common water features (e.g., lakes, rivers, streams) <i>to</i></li> <li>• identifying common organisms that live in oceans.</li> </ul>

## Reporting Category: Earth/Space Systems and Earth Resources

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p><b>S-5.4</b> (SOL 4.4a-c)</p>	<p>The student will: Recognize different types of weather conditions and their characteristics.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing simple weather conditions (rainy, cloudy, sunny, foggy, thunder and lightning) <i>to</i></li> <li>• connecting physical conditions to weather conditions (e.g., wet to rain, dry or hot to sunny, lightning to thunderstorm) <i>to</i></li> <li>• identifying more complex storm conditions (e.g., hurricane, tornado, blizzard) and their physical conditions.</li> </ul>
<p><b>S-5.5</b> (SOL 4.5a-c)</p>	<p>The student will: Recognize and compare objects in the solar system and their features.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing the sun and Earth as compared to common unrelated objects on Earth <i>to</i></li> <li>• recognizing the sun and Earth as compared to other objects in the solar system <i>to</i></li> <li>• comparing simple physical characteristics (e.g., size, shape) of objects in the solar system.</li> </ul>
<p><b>S-5.6</b> (SOL 4.6a-d)</p>	<p>The student will: Recognize the relationships between Earth, the moon, and the sun.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing Earth and the moon, including its phases, compared to other common, unrelated objects on Earth <i>to</i></li> <li>• recognizing Earth, the sun, and the moon using their relative sizes and positions <i>to</i></li> <li>• understanding the concept and terminology of orbit and revolution.</li> </ul>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p><b>S-5.7</b> (SOL 4.6a-d)</p>	<p>The student will: Recognize that the sun provides Earth with light and energy.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing the difference between day and night (e.g., daylight and the sun versus darkness, the moon, and stars) <i>to</i></li> <li>• recognizing that the sun provides the vast majority of light and heat energy to Earth (compared to the moon and other objects in the solar system) <i>to</i></li> <li>• understanding that the sun gives light and heat energy to Earth and its organisms and influences the four major seasons.</li> </ul>
<p><b>S-5.9</b> (SOL 4.8a-d)</p>	<p>The student will Recognize natural resources, including those important in Virginia, in connection with their common use and origin.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing living and non-living natural resources used in everyday life as compared to other unrelated items or objects <i>to</i></li> <li>• distinguishing between living and non-living natural resources that are important to Virginia <i>to</i></li> <li>• connecting living and non-living natural resources to their common use and where they come from (e.g., wood is burned for fire; sources of drinking water; paper comes from trees or forests).</li> </ul>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> Complexity Continuum
<b>S-5.17</b> (SOL 5.8a-e)	<p>The student will:            Recognize common features of Earth's systems, simple interactions between those features, and the processes that shape Earth.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing common non-living features of Earth (e.g., lakes, rivers, streams, and oceans; rocks, mountains, volcanoes, and canyons; air and clouds) <i>to</i></li> <li>• recognizing simple interactions among non-living and living features within common systems (e.g., clouds providing water/rain to lakes, rivers, and oceans; lakes, rivers, and oceans providing water to humans, plants, and animals) <i>to</i></li> <li>• identifying processes that lead to erosion, weathering, and deposition linked to non-living features (e.g., mountains, rivers, streams, volcanoes).</li> </ul>
<b>S-5.18</b> (SOL 5.9a-c)	<p>The student will:            Recognize ways in which people and communities protect Earth's environment and conserve natural resources.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing activities that harm Earth <i>to</i></li> <li>• recognizing simple and common choices that help protect the environment or conserve natural resources (e.g., picking up trash, recycling materials, turning off lights) as compared to common unrelated activities (e.g., playing outside, eating a meal) <i>to</i></li> <li>• identifying simple and common choices that help protect the environment or conserve natural resources as compared to common activities that harm or pollute Earth (e.g., pollution from a factory, littering in streams or oceans).</li> </ul>

## Reporting Category: Force, Motion, Energy, and Matter

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p><b>S-5.10</b> (SOL 5.3a-e)</p>	<p>The student will: Recognize objects in motion and changes in motion due to force.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing objects that are at rest or in motion while using common terminology (e.g., sitting, still, moving) <i>to</i></li> <li>• recognizing objects that are at rest or in motion by incorporating the concept of force and common terminology (e.g., push, pull) <i>to</i></li> <li>• identifying objects that are at rest or in motion by incorporating use of the term “force” and changes in motion (e.g., direction, from motion to rest, from rest to motion) through common examples.</li> </ul>
<p><b>S-5.11</b> (SOL 5.4a-e)</p>	<p>The student will: Recognize electricity as a form of energy with everyday uses, applications, and sources.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing objects that require electricity as compared to common unrelated objects that do not without referring to the term “electricity” <i>to</i></li> <li>• recognizing objects that require electricity as compared to common unrelated objects that do not while incorporating the concept and term “electricity” <i>to</i></li> <li>• identifying basic forms of electricity based on common everyday uses or sources and incorporating the term “energy.”</li> </ul>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p><b>S-5.12</b> (SOL 5.5a-d)</p>	<p>The student will: Recognize sound as a form of energy with everyday uses, applications, and sources.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing objects that make noise or sound without referring to the concept or term “sound” <i>to</i></li> <li>• recognizing objects that make or produce sound from those that do not while incorporating and referring to the concept and term “sound” <i>to</i></li> <li>• identifying basic forms of sound based on common everyday uses or sources and incorporating the term “energy.”</li> </ul>
<p><b>S-5.13</b> (SOL 5.6a-d)</p>	<p>The student will: Recognize light as a form of energy with everyday uses, applications, and sources.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing objects that make light without referring to the concept or term “light” <i>to</i></li> <li>• recognizing objects that make or produce light from those that do not while incorporating and referring to the concept and term “light” <i>to</i></li> <li>• identifying basic forms of light based on common everyday uses or sources and incorporating the term “energy.”</li> </ul>

<b>VESOL Code</b> (SOL Code)	<b>VESOL Text</b> <b>Complexity Continuum</b>
<b>S-5.14</b> (SOL 5.7a-c)	<p>The student will:            Recognize that objects, animals, and plants are made of smaller parts and identify various parts visible to the naked eye.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing the smaller parts of large common objects (e.g., cars, trucks, buses - wheels; houses - doors and windows; building blocks - smaller blocks; computers and tablets - screen and keyboard) <i>to</i></li> <li>• recognizing the parts of common living organisms (e.g., dogs, cats, birds - legs, eyes, ears, wings; plants, trees - leaves, flowers, trunk) <i>to</i></li> <li>• identifying more complex parts of common objects, living organisms, and Earth systems (e.g., atmosphere - clouds, fog; solar system - planets, moons, comets) including parts that are very small.</li> </ul>
<b>S-5.15</b> (SOL 5.7a-c)	<p>The student will:            Recognize when substances are mixed.</p> <p>Complexity Continuum:            Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing two solids mixed that do not form a new substance (e.g., rocks and soil, objects in sand, trail mix, marbles in playdough) <i>to</i></li> <li>• recognizing solid and liquid mixtures that do not form a new substance (sand and water) <i>to</i></li> <li>• identifying more complex mixtures that may form a new substance (e.g., one solid and one liquid - salt water, fruit punch; two liquids - paint, lemonade; two gases - air in a balloon, air in the atmosphere; one liquid and one gas - carbonation in soda, air bubbles in water).</li> </ul>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p><b>S-5.16</b> (SOL 5.7a-c)</p>	<p>The student will: Recognize and compare the physical properties of matter in different phases.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> <li>• recognizing physical properties of common objects including size and shape <i>to</i></li> <li>• recognizing additional physical properties including hardness/softness and weight/mass of common objects (e.g., a rock is harder than an egg; a balloon weighs less than a basketball) <i>to</i></li> <li>• recognizing additional physical properties including volume and other representations of matter as a solid, liquid, and a gas/vapor.</li> </ul>