



Virginia Essentialized Standards of Learning (VESOL)

Revised: September 2022

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Virginia Department of Education
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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.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-5.4 (SOL 5.6C)	The student will: Answer questions about the main idea of a nonfiction text that is read to the student or that the student reads. 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.

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.

VESOL instructional resources, crosswalks, and sample activities provided are available at 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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VESOL CHANGE LOG

The table below details changes made to the VESOL since their initial publication date.

#	Date	Description
	08/16/2021	Initial publication
1	09/30/2022	Revised all VESOL codes to change a space to a "." (e.g., R-3 1 is now R-3.1)
2	09/30/2022	R-3.3 Removed from the Fiction reporting category.
3	09/30/2022	M-4.4 Moved "or" to before "with the symbols <, =, >."
4	09/30/2022	M-4.6 Added "less than," "equal," "greater than,".
5	09/30/2022	M-4.13 Added the text "and subtract" to the Complexity Continuum.
6	09/30/2022	M-7.14 Revised the Complexity Continuum from a bulleted list to the text, "Inequalities could include using solutions from 0 through 20 using "more" or "less," "greater than" or "less than," or the symbols, > or <."
7	09/30/2022	M-HS.8 Deleted "line" from the phrase "line graph" and inserted "on a number line" following the word "graph" in the VESOL and the Complexity Continuum.

READING VESOL SUMMARY MATRIX

Teachers may use the *Reading VESOL Summary Matrix* during the development of the student’s instruction and assessment plan, for tracking the learning progression of the student throughout the year, and when planning units and lessons.

Reading VESOL Summary Matrix

Reporting Category	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	High School
Demonstrate comprehension of fictional texts and use word analysis strategies	R-3.1 R-3.2 R-3.4 R-3.5 R-3.7	R-4.1 R-4.2 R-4.5 R-4.6	R-5.1 R-5.2 R-5.5	R-6.1 R-6.2 R-6.5 R-6.7	R-7.1 R-7.2 R-7.5 R-7.7	R-8.1 R-8.2 R-8.5 R-8.6 R-8.7	R-HS.1 R-HS.2 R-HS.4 R-HS.5 R-HS.7
Demonstrate comprehension of nonfiction texts and use word analysis strategies	R-3.1 R-3.2 R-3.3 R-3.6 R-3.8	R-4.1 R-4.3 R-4.4 R-4.7	R-5.1 R-5.3 R-5.4 R-5.6	R-6.1 R-6.3 R-6.4 R-6.6	R-7.1 R-7.3 R-7.4 R-7.6	R-8.1 R-8.3 R-8.4 R-8.8	R-HS.1 R-HS.3 R-HS.6 R-HS.8

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>R-3.1 (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>R-3.2 (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>R-3.4 (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>R-3.5 (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>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-3.7 (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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-3.1 (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>
R-3.2 (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>
R-3.3 (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>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-3.6 (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>
R-3.8 (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
R-4.1 (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>
R-4.2 (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>
R-4.5 (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>
R-4.6 (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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-4.1 (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>
R-4.3 (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>
R-4.4 (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>
R-4.7 (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
R-5.1 (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>
R-5.2 (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>
R-5.5 (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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-5.1 (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>
R-5.3 (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>
R-5.4 (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>
R-5.6 (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>

GRADE 6

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-6.1 (SOL 6.4A, 6.4B, 6.4C, 6.4D, 6.4E)	<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>
R-6.2 (SOL 6.4A, 6.4B, 6.4C, 6.4D, 6.4E)	<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 two short sentences with six or fewer words to two medium sentences with five to seven words to a paragraph with up to five sentences.</p>
R-6.5 (SOL 6.5H)	<p>The student will: Identify the one word meaning of figurative language in a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage containing figurative language could range from two short sentences with six or fewer words to two medium sentences with five to seven words to a paragraph with up to five sentences.</p>
R-6.7 (SOL 6.5A, 6.5B, 6.5C, 6.5I)	<p>The student will: Identify an individual, event, or idea in a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage including an individual, event, or idea could range from two short sentences of six or fewer words to two medium sentences with five to seven words to a paragraph with up to five sentences.</p>

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-6.1 (SOL 6.4A, 6.4B, 6.4C, 6.4D, 6.4E)	<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>
R-6.3 (SOL 6.6E, 6.6F, 6.6G)	<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 two short sentences with six or fewer words to two medium sentences with five to seven words up to a paragraph with up to five sentences.</p>
R-6.4 (SOL 6.6B)	<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 with a main idea could range from two short sentences of six or fewer words to two medium sentences with five to seven words to a paragraph with up to five sentences.</p>
R-6.6 (SOL 6.6C, 6.6D, 6.6H, 6.6I, 6.6J)	<p>The student will: Identify an event, idea, or information in a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum: The nonfiction text including an individual, event, or information could range from two short sentences of six or fewer words to two medium sentences with five to seven words to a paragraph with up to five sentences.</p>

GRADE 7

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-7.1 (SOL 7.4A, 7.4B, 7.4C, 7.4D, 7.4E, 7.4F)	<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>
R-7.2 (SOL 7.5B, 7.5D, 7.5E, 7.5F, 7.5G, 7.5I)	<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 two medium sentences with five to seven words to a paragraph with up to five sentences.</p>
R-7.5 (SOL 7.5A, 7.5C)	<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 two medium sentences with five to seven words to a paragraph with up to five sentences.</p>
R-7.7 (SOL 7.5H)	<p>The student will: Identify information or an idea in a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage containing information or an idea could range from two medium sentences with five to seven words to a paragraph with up to five sentences.</p>

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-7.1 (SOL 7.4A, 7.4B, 7.4C, 7.4D, 7.4E, 7.4F)	<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>
R-7.3 (SOL 7.6B, 7.6C, 7.6E, 7.6F)	<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 two medium sentences with five to seven words to a paragraph with up to five sentences.</p>
R-7.4 (SOL 7.6G)	<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 with a main idea could range from two medium sentences with five to seven words to a paragraph with up to five sentences.</p>
R-7.6 (SOL 7.6D, 7.6H, 7.6I, 7.6J, 7.6K, 7.6L)	<p>The student will: Identify an individual, event, or idea in nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum: The nonfiction text including an individual, event, or information could range from two medium sentences with five to seven words to a paragraph with up to five sentences.</p>

GRADE 8

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-8.1 (SOL 8.4A, 8.4B, 8.4C, 8.4E, 8.4F)	<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>
R-8.2 (SOL 8.5B, 8.5C, 8.5E, 8.5F, 8.5H, 8.5I)	<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 three medium sentences with five to seven words to a paragraph with five to seven sentences.</p>
R-8.5 (SOL 8.5D)	<p>The student will: Identify the meaning of figurative language in a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage containing figurative language could range from three medium sentences with five to seven words to a paragraph with five to seven sentences.</p>
R-8.6 (SOL 8.5A)	<p>The student will: Identify an individual, event, or idea in a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage including an individual, event, or idea could range from three medium sentences with five to seven words to a paragraph with five to seven sentences.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-8.7 (SOL 8.5G)	<p>The student will: Identify information or an idea in a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage with information or an idea could range from three medium sentences with five to seven words to a paragraph with five to seven sentences.</p>

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-8.1 (SOL 8.4A, 8.4B, 8.4C, 8.4E, 8.4F)	<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>
R-8.3 (SOL 8.6A, 8.6D, 8.6E, 8.6F)	<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 three medium sentences with five to seven words to a paragraph with five to seven sentences.</p>
R-8.4 (SOL 8.6H)	<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 with a main idea could range from three medium sentences with five to seven words to a paragraph with five to seven sentences.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-8.8 (SOL 8.6C, 8.6G, 8.6I, 8.6J, 8.6K, 8.6L)	<p>The student will:</p> <p style="padding-left: 40px;">Identify information or an idea in a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:</p> <p style="padding-left: 40px;">The nonfiction text with information or an idea could range from three medium sentences with five to seven words to a paragraph with five to seven sentences.</p>

HIGH SCHOOL

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-HS.1 (SOL 9.3A, 10.3A, 11.3A, 9.3B, 9.3C, 9.3D, 9.3E)	<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>
R-HS.2 (SOL 9.4A, 9.4D, 9.4F, 9.4G, 9.4H, 9.4I, 9.4J, 10.4A, 10.4H, 10.4I, 10.4K, 11.4C, 11.4E, 11.4G, 11.4H, 11.4I)	<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 four medium sentences with five to seven words up to two paragraphs with five to seven sentences each.</p>
R-HS.4 (SOL 9.4B, 10.4F, 11.4F)	<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 four medium sentences with five to seven words up to two paragraphs with five to seven sentences each.</p>
R-HS.5 (SOL 9.4C, 10.4D, 10.4G)	<p>The student will: Identify a theme or topic in a story that is read to the student or that the student reads.</p> <p>Complexity Continuum: The story including a theme or topic could range from four medium sentences with five to seven words up to two paragraphs with five to seven sentences each.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-HS.7 (SOL 9.4K, 10.4J, 11.4K)	<p>The student will: Identify information or ideas in a fiction passage that is read to the student or that the student reads.</p> <p>Complexity Continuum: The passage including information or ideas could range from four medium sentences with five to seven words up to two paragraphs with five to seven sentences each.</p>

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-HS.1 (SOL 9.3A, 10.3A, 11.3A, 9.3B, 9.3C, 9.3D, 9.3E)	<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>
R-HS.3 (SOL 9.5B, 9.5F, 10.5A, 10.5C, 10.5D, 10.5E, 10.5F, 11.5A, 11.5B, 11.5C, 11.5E)	<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 four medium sentences with five to seven words up to two paragraphs with five to seven sentences each.</p>
R-HS.6 (SOL 9.5D, 10.5B)	<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 including a main idea could range from four medium sentences with five to seven words up to two paragraphs with five to seven sentences each.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
R-HS.8 (SOL 9.5C, 9.5E, 9.5G, 9.5H, 9.5I, 9.5J, 9.5K, 10.5G, 10.5H, 10.5I, 11.5F, 11.5G, 11.5H)	<p>The student will:</p> <p style="padding-left: 40px;">Identify information or ideas in a nonfiction text that is read to the student or that the student reads.</p> <p>Complexity Continuum:</p> <p style="padding-left: 40px;">The nonfiction text including information or ideas could range from four medium sentences with five to seven words up to two paragraphs with five to seven sentences each.</p>

MATHEMATICS VESOL SUMMARY MATRICES

Teachers may use the *Mathematics* VESOL Summary Matrices during the development of the student’s instruction and assessment plan, for tracking the learning progression of the student throughout the year, and when planning units and lessons.

Grades 3-8 Mathematics VESOL Summary Matrix

Reporting Category	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Number, Number Sense, Computation, and Estimation	M-3.1 M-3.2 M-3.3 M-3.4 M-3.5 M-3.6 M-3.7	M-4.1 M-4.8 M-4.2 M-4.9 M-4.3 M-4.10 M-4.4 M-4.11 M-4.5 M-4.12 M-4.6 M-4.13 M-4.7 M-4.14	M-5.1 M-5.7 M-5.2 M-5.8 M-5.3 M-5.9 M-5.4 M-5.10 M-5.5 M-5.11 M-5.6	M-6.1 M-6.2 M-6.3 M-6.4 M-6.5 M-6.6 M-6.7	M-7.1 M-7.2 M-7.3 M-7.4	M-8.1 M-8.2
Measurement and Geometry	M-3.8 M-3.9 M-3.10 M-3.11 M-3.12 M-3.13 M-3.14 M-3.15	M-4.15 M-4.16 M-4.17 M-4.18 M-4.19 M-4.20	M-5.12 M-5.13 M-5.14 M-5.15	M-6.8 M-6.9 M-6.10 M-6.11	M-7.5 M-7.6 M-7.7 M-7.8 M-7.9	M-8.3 M-8.4 M-8.5
Probability, Statistics, Patterns, Functions, and Algebra	M-3.16 M-3.17	M-4.21 M-4.22	M-5.16 M-5.17 M-5.18	M-6.12 M-6.13 M-6.14 M-6.15 M-6.16	M-7.10 M-7.11 M-7.12 M-7.13 M-7.14	M-8.6 M-8.11 M-8.7 M-8.12 M-8.8 M-8.13 M-8.9 M-8.14 M-8.10

High School Mathematics VESOL Summary Matrix

Reporting Category	High School
Algebra - Expressions and Operations	M-HS.1 M-HS.4 M-HS.2 M-HS.5 M-HS.3
Algebra - Equations and Inequalities	M-HS.6 M-HS.7 M-HS.8
Algebra - Functions	M-HS.9 M-HS.10

MATHEMATICS VIRGINIA ESSENTIALIZED STANDARDS OF LEARNING

GRADE 3

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-3.1 (SOL 3.1a)	The student will: Match number names to numerals from 0 through 20. Complexity Continuum: N/A
M-3.2 (SOL 3.1b)	The student will: Identify the closest number above or below a given number from 0 through 20. Complexity Continuum: N/A
M-3.3 (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 $<$, $=$, $>$.
M-3.4 (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.
M-3.5 (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.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-3.6 (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>
M-3.7 (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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-3.8 (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>
M-3.9 (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>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-3.10 (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>
M-3.11 (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>
M-3.12 (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>
M-3.13 (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>
M-3.14 (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
M-3.15 (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
M-3.16 (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>
M-3.17 (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
M-4.1 (SOL 4.1a)	<p>The student will: Match number names to numerals from 0 through 40.</p> <p>Complexity Continuum: N/A</p>
M-4.2 (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>
M-4.3 (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>
M-4.4 (SOL 4.2a)	<p>The student will: Compare whole numbers from 0 through 40 or the fractions of $\frac{1}{2}$ and $\frac{1}{4}$.</p> <p>Complexity Continuum: Whole numbers 0 through 40 and fractions $\frac{1}{2}$ and $\frac{1}{4}$ could be compared with the words “smaller,” “same,” “larger,” or “less than,” “equal,” “greater than,” or with the symbols $<$, $=$, $>$.</p>
M-4.5 (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
M-4.6 (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 $<$, $=$, $>$.</p>
M-4.7 (SOL 4.3d)	<p>The student will: Identify whole numbers 0 through 40 and match decimals 0.25 and 0.5 with $\frac{1}{4}$ and $\frac{1}{2}$.</p> <p>Complexity Continuum: Identifying whole numbers from 0 through 40. Matching decimals of 0.25 and 0.5 with $\frac{1}{4}$ and $\frac{1}{2}$ could range from 0.25 through 5.5 (e.g., $0.25 = \frac{1}{4}$, $0.5 = \frac{1}{2}$, $1.25 = 1 \frac{1}{4}$, $1.5 = 1 \frac{1}{2}$, ... , $5.25 = 5 \frac{1}{4}$, $5.5 = 5 \frac{1}{2}$).</p>
M-4.8 (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>
M-4.9 (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>
M-4.10 (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
M-4.11 (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>
M-4.12 (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>
M-4.13 (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>
M-4.14 (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
M-4.15 (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>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-4.16 (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>
M-4.17 (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>
M-4.18 (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>
M-4.19 (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>
M-4.20 (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
M-4.21 (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>
M-4.22 (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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-5.1 (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>
M-5.2 (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>
M-5.3 (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>
M-5.4 (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>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-5.5 (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>
M-5.6 (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>
M-5.7 (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>
M-5.8 (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 $\frac{1}{2}$ and $\frac{1}{4}$.</p> <p>Complexity Continuum: Given a context, numbers from 0 through 30 could be added or subtracted; mixed numbers ending in $\frac{1}{2}$ or $\frac{1}{4}$ could be added.</p>
M-5.9 (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>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-5.10 (SOL 5.6b)	<p>The student will: Identify an equation that matches a verbal description involving the product of whole numbers and fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, 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>
M-5.11 (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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-5.12 (SOL 5.8a)	<p>The student will: Solve $V = B \times h$ 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>
M-5.13 (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>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-5.14 (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>
M-5.15 (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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-5.16 (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>
M-5.17 (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>
M-5.18 (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>

GRADE 6

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-6.1 (SOL 6.2a)	<p>The student will: Identify the location of a point representing a fraction or decimal between two whole numbers on a number line.</p> <p>Complexity Continuum: The fraction or decimal could be $\frac{1}{2}$ or 0.5, $\frac{1}{4}$ or 0.25, $\frac{1}{3}$, or $\frac{1}{8}$ between two whole numbers from 0 through 40.</p>
M-6.2 (SOL 6.3a)	<p>The student will: Identify the distance of positive and negative numbers from zero on a number line.</p> <p>Complexity Continuum: The distance of the positive or negative number from zero on the number line could range from 1 through 10.</p>
M-6.3 (SOL 6.3b)	<p>The student will: Compare whole numbers 0 through 80 on a number line.</p> <p>Complexity Continuum: Whole numbers 0 through 80 could be compared with the words “smaller,” “larger,” “same,” or with the symbols $<$, $=$, $>$.</p>
M-6.4 (SOL 6.5a)	<p>The student will: Solve word problems involving addition and subtraction of whole numbers and fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, or $\frac{1}{8}$.</p> <p>Complexity Continuum: Problems use simple pictures, diagrams, models, or other representations and could include adding and subtracting whole numbers 0 through 40, adding or subtracting the fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, or $\frac{1}{8}$ always with like denominators, or adding or subtracting the fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, or $\frac{1}{8}$ to or from 1.</p>
M-6.5 (SOL 6.5c)	<p>The student will: Use currency for problems involving \$10.00 or less, including with context.</p> <p>Complexity Continuum: N/A</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-6.6 (SOL 6.6a)	<p>The student will: Add, subtract, and multiply positive integers using a number line including with context.</p> <p>Complexity Continuum: Addition problems could have solutions from 0 through 50, and subtraction problems could have solutions -10 through 50. Multiplication problems could have solutions from 0 through 60.</p>
M-6.7 (SOL 6.6b)	<p>The student will: Solve practical problems involving multiplication and division of positive integers.</p> <p>Complexity Continuum: Given a context, multiply two numbers to solve a problem with solutions from 0 through 60. Divide two numbers with solutions from 0 through 20.</p>

Reporting Category: Measurement and Geometry

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-6.8 (N/A)	<p>The student will: Tell time and measure elapsed time to the half and quarter hour using analog and digital clocks, including with context.</p> <p>Complexity Continuum: Times could be on the half hour or quarter hour in a.m. or p.m. and could include up to +/- 24 hours of elapsed time. Contexts will relate the time to an appropriate activity.</p>
M-6.9 (SOL 6.7c)	<p>The student will: Calculate the perimeter of triangles, squares, rectangles, and pentagons.</p> <p>Complexity Continuum: Problems could include:</p> <ul style="list-style-type: none"> • triangles with given sides of 1 through 5 units in length, • squares and rectangles with given sides of 1 through 10 units in length, or • pentagons with given sides of 1 through 10 units in length.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-6.10 (SOL 6.8a)	<p>The student will: Identify points graphed in the first quadrant of the coordinate plane.</p> <p>Complexity Continuum: Points to be identified could be from a given point, X, with directions to find point, Y, or identified from an ordered pair.</p>
M-6.11 (SOL 6.9)	<p>The student will: Identify congruent shapes.</p> <p>Complexity Continuum: Identification of congruent shapes could include triangles, circles, squares, rectangles, and/or pentagons.</p>

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-6.12 (SOL 6.10a)	<p>The student will: Interpret data in picture and bar graphs and line plots to identify values.</p> <p>Complexity Continuum: Picture graphs could include up to 3 categories with values from 0 through 10. Bar graphs and line plots could have from 3 to 8 categories with values from 1 through 40.</p>
M-6.13 (SOL 6.11a)	<p>The student will: Calculate whole number averages from a data set.</p> <p>Complexity Continuum: Data sets to be averaged could include 2 numbers from 0 through 5 or 3 to 4 numbers from 0 through 10.</p>
M-6.14 (SOL 6.12a)	<p>The student will: Identify a missing value in input and output tables that have a proportional relationship between x and y.</p> <p>Complexity Continuum: Proportional relationships presented could have unit rates ranging from 1 to 10.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-6.15 (SOL 6.13)	<p>The student will: Identify equivalent expressions and equations with one variable.</p> <p>Complexity Continuum: Simplifications could require combining like terms through addition or subtraction of whole numbers 1 through 40.</p>
M-6.16 (SOL 6.14a)	<p>The student will: Match practical situations to inequalities.</p> <p>Complexity Continuum: Matching could occur by using “more,” “less,” “greater than,” “less than,” or symbols $>$ or $<$.</p>

GRADE 7

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-7.1 (SOL 7.1b)	<p>The student will: Compare whole numbers from 0 through 50, including in real world applications.</p> <p>Complexity Continuum: Whole numbers from 0 through 50 are compared with symbols $<$, $=$, $>$.</p>
M-7.2 (SOL 7.1c)	<p>The student will: Match fractions and corresponding decimals.</p> <p>Complexity Continuum: Fractions and corresponding decimals could include:</p> <ul style="list-style-type: none"> • 0.5 with $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{6}$, and $\frac{4}{8}$; • 0.25 with $\frac{1}{4}$, $\frac{2}{8}$, $\frac{3}{12}$, and $\frac{4}{16}$; or • 0.75 with $\frac{3}{4}$, $\frac{6}{8}$, $\frac{9}{12}$, and $\frac{12}{16}$.
M-7.3 (SOL 7.2)	<p>The student will: Perform math operations with rational numbers in real world applications.</p> <p>Complexity Continuum: Math operations related to real world applications could include:</p> <ul style="list-style-type: none"> • addition and subtraction with 0.5 or $\frac{1}{2}$, • addition and subtraction with 0.25, 0.75, $\frac{1}{4}$, or $\frac{3}{4}$, or • addition and subtraction with 0.1 to 0.5 or $\frac{1}{10}$ to $\frac{5}{10}$.
M-7.4 (SOL 7.2)	<p>The student will: Use currency for problems involving \$20.00 or less.</p> <p>Complexity Continuum: N/A</p>

Reporting Category: Measurement and Geometry

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-7.5 (N/A)	<p>The student will: Tell time and measure elapsed time to the quarter hour and five minutes using analog and digital clocks, including with context.</p> <p>Complexity Continuum: Times could be on the quarter hour or five minutes in a.m. or p.m. and could include up to +/- 24 hours of elapsed time. Contexts will relate the time to an appropriate activity.</p>
M-7.6 (SOL 7.4a)	<p>The student will: Find the volume of a figure given a formula $V = l \times w \times h$ or $V = B \times h$.</p> <p>Complexity Continuum: Problems could range from a total volume of 1 through 40 cubic units.</p>
M-7.7 (SOL 7.5)	<p>The student will: Identify similar triangles.</p> <p>Complexity Continuum: N/A</p>
M-7.8 (SOL 7.6a)	<p>The student will: Identify two dimensional shapes based on their characteristics.</p> <p>Complexity Continuum: Two dimensional shapes could include triangles, squares, rectangles, and circles. Characteristics given could include verbal descriptions and graphic depictions of angles, sides, and/or points.</p>
M-7.9 (SOL 7.7)	<p>The student will: Identify points graphed in the first and second quadrants of the coordinate plane.</p> <p>Complexity Continuum: Points to be identified in the first and second quadrants could be from a given point, X, with directions to find a second point, Y, or from an ordered pair.</p>

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-7.10 (SOL 7.8a)	<p>The student will: Determine probabilities in real world applications.</p> <p>Complexity Continuum: Probabilities to be determined could be 50% probability, 25% probability, or 75% probability.</p>
M-7.11 (SOL 7.9a)	<p>The student will: Interpret data in picture and bar graphs and line graphs to identify values.</p> <p>Complexity Continuum: Picture graphs could have up to 3 categories with values from 0 through 10. Bar graphs could have from 3 to 8 categories with values from 0 through 40. Line graphs could have values from 30 through 100.</p>
M-7.12 (SOL 7.11)	<p>The student will: Evaluate expressions with one variable in real world applications, including with money.</p> <p>Complexity Continuum: Expressions could include addition or subtraction of whole numbers 0 through 50.</p>
M-7.13 (SOL 7.12)	<p>The student will: Solve one-step word problems using integers in real world applications.</p> <p>Complexity Continuum: For addition and subtraction problems, operands could range from 0 through 50 or -1 through -10. For multiplication and division problems, solutions could be from 0 through 40 or -1 through -5.</p>
M-7.14 (SOL 7.13)	<p>The student will: Determine possible solutions to inequalities with one variable in real world applications.</p> <p>Complexity Continuum: Inequalities could include using solutions from 0 through 20 using “more” or “less,” “greater than” or “less than,” or the symbols, > or <.</p>

GRADE 8

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-8.1 (SOL 8.1)	The student will: Compare positive and negative integers using a number line. Complexity Continuum: Integers being compared could include -20 through 20.
M-8.2 (SOL 8.4)	The student will: Use currency for problems involving \$50.00 or less. Complexity Continuum: N/A

Reporting Category: Measurement and Geometry

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-8.3 (N/A)	The student will: Tell time and measure elapsed time in minutes using analog and digital clocks including with context. Complexity Continuum: Times could be in one minute increments in a.m. or p.m. and could include up to +/- 24 hours of elapsed time. Contexts will relate the time to an appropriate activity.
M-8.4 (SOL 8.7a)	The student will: Identify the coordinates of a missing point for given geometric figures. Complexity Continuum: The missing point to be identified could be in a triangle in the first quadrant, a square or rectangle in the first or second quadrant, or a pentagon in any quadrant.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-8.5 (SOL 8.10)	<p>The student will: Add the areas of squares and rectangles to determine the total area of a figure in square units.</p> <p>Complexity Continuum: The figure could consist of squares and rectangles, and the total area could range from 1 through 40 square units.</p>

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

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-8.6 (SOL 8.11a)	<p>The student will: Compare the relative probability of two different objects being selected for an event.</p> <p>Complexity Continuum: The relative probability being compared could involve a group of 10 objects to a group of 40 objects (e.g., Compare the probability of selecting a blue marble to the probability of selecting a white marble from a group of 10 marbles. Which color marble would likely be selected?).</p>
M-8.7 (SOL 8.13a)	<p>The student will: Identify the line of best fit for a scatter plot of two variables with a linear relationship.</p> <p>Complexity Continuum: The two variables in the scatter plot could have a positive or negative linear relationship.</p>
M-8.8 (SOL 8.14a)	<p>The student will: Evaluate expressions with one variable in real world applications including using money.</p> <p>Complexity Continuum: Evaluating the expression could include addition, subtraction, multiplication, or division of whole numbers from 0 through 50.</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-8.9 (SOL 8.15a)	<p>The student will: Identify a missing value in input and output tables based on a given function.</p> <p>Complexity Continuum: The missing value could range from multiples of 1 through 20.</p>
M-8.10 (SOL 8.16a)	<p>The student will: Identify slope of a line as positive, negative, zero, or undefined when given a description and a graphic.</p> <p>Complexity Continuum: N/A.</p>
M-8.11 (SOL 8.16b)	<p>The student will: Interpret linear graphs to determine the slope of a line.</p> <p>Complexity Continuum: The linear graph could range from representing a positive slope from 1 through 10 or a negative slope from -1 to -5.</p>
M-8.12 (SOL 8.16e)	<p>The student will: Identify the graph that matches an input and output table.</p> <p>Complexity Continuum: The output table could match a line with a slope from 1 through 10 or -1 to -5.</p>
M-8.13 (SOL 8.17)	<p>The student will: Solve one- and two-step linear equations with one variable and solutions from 0 through 20.</p> <p>Complexity Continuum: Equations could range from having one step of addition, subtraction, multiplication, or division to having two steps with two different operations.</p>
M-8.14 (SOL 8.18)	<p>The student will: Identify a solution that would make an inequality true using symbols $<$, $>$, \leq, or \geq.</p> <p>Complexity Continuum: The inequality could have a solution ranging from 1 through 20.</p>

HIGH SCHOOL

Reporting Category: Algebra - Expressions and Operations

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-HS.1 (SOL A.1a)	<p>The student will: Identify an equation when provided a verbal description in real world applications.</p> <p>Complexity Continuum: The description and equation could include addition and subtraction from 0 through 50 or multiplication or division from 0 through 40.</p>
M-HS.2 (N/A)	<p>The student will: Tell time and measure elapsed time to the minute using analog and digital clocks, including with context.</p> <p>Complexity Continuum: Times could be in one minute increments in a.m. or p.m. and could include up to +/- 24 hours or multiple days of elapsed time. Contexts will relate the time to an appropriate activity.</p>
M-HS.3 (SOL A.1b)	<p>The student will: Evaluate expressions with one variable in real world applications, including using money.</p> <p>Complexity Continuum: Expressions could include addition, subtraction, multiplication, or division with solutions 1 through 100.</p>
M-HS.4 (SOL A.1b)	<p>The student will: Use currency for problems involving \$100.00 or less.</p> <p>Complexity Continuum: N/A</p>

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-HS.5 (SOL A.2a)	<p>The student will: Identify equivalent expressions and evaluate expressions using powers 1-3.</p> <p>Complexity Continuum: Expressions:</p> <ul style="list-style-type: none"> • to the first power could result in a number from 1 through 20, • to the second power could result in a number from 1 through 25 (squaring 1 through 5), and • to the third power could result in a number from 1 through 125 (cubing 1 through 5).

Reporting Category: Algebra - Equations and Inequalities

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-HS.6 (SOL A.4a)	<p>The student will: Solve one- and two-step linear equations with one variable and solutions from 0 through 40.</p> <p>Complexity Continuum: Equations could range from having one step of addition, subtraction, multiplication, or division to having two steps with two different operations.</p>
M-HS.7 (SOL A.4e)	<p>The student will: Find the amount of sales tax and total cost for a purchase.</p> <p>Complexity Continuum: Problems could include finding the total cost for a purchase when given the cost(s) of 1 to 3 items and the total sales tax or finding the amount of sales tax when given the cost(s) of 1 to 3 items and the total cost of the purchase.</p>
M-HS.8 (SOL A.5a)	<p>The student will: Match the graph on a number line with the correct inequality.</p> <p>Complexity Continuum: The graph on a number line could represent an inequality with descriptive words or the symbols $<$, $>$, \leq, or \geq.</p>

Reporting Category: Algebra - Functions

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
M-HS.9 (SOL A.7a)	The student will: Identify a missing value in input and output tables based on a given function. Complexity Continuum: The missing value could range from multiples of 1 through 30.
M-HS.10 (SOL A.9)	The student will: Interpret trends in data, including in real world applications. Complexity Continuum: Trends could include positive slopes of 1 through 10, negative slopes of -1 through -10, and slopes of 0.

SCIENCE VESOL SUMMARY MATRICES

Teachers may use the *Science* VESOL Summary Matrices during the development of the student’s instruction and assessment plan, for tracking the learning progression of the student throughout the year, and when planning units and lessons.

Grade 5 Science VESOL Summary Matrix

Reporting Category	Grade 5
Living Systems and Ecosystem Interactions	S-5.1 S-5.2 S-5.3 S-5.8
Earth/Space Systems and Earth Resources	S-5.4 S-5.5 S-5.6 S-5.7 S-5.9 S-5.17 S-5.18
Force, Motion, Energy, and Matter	S-5.10 S-5.11 S-5.12 S-5.13 S-5.14 S-5.15 S-5.16

Grade 8 Science VESOL Summary Matrix

Reporting Category	Grade 8
Life Systems and Ecosystems	S-8.7 S-8.14 S-8.10 S-8.15 S-8.11 S-8.16 S-8.12 S-8.17 S-8.13
Earth and Space Systems	S-8.1 S-8.2 S-8.3 S-8.6 S-8.8 S-8.9
Force, Motion, Energy, and Matter	S-8.4 S-8.5 S-8.18 S-8.19 S-8.20 S-8.21 S-8.22

High School Science VESOL Summary Matrix

Reporting Category	High School
Life at the Molecular/Cellular and Systems/Organisms Levels	S-HS.1 S-HS.2 S-HS.3 S-HS.4 S-HS.5
Interactions of Life Forms and Ecosystem Dynamics	S-HS.6 S-HS.7 S-HS.8 S-HS.9

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">• recognizing plants (e.g., plants, trees, and flowers) need light, air, and water to grow <i>to</i>• identifying simple parts (e.g., roots, stems, leaves, flower, fruit) of plants that help them get light, air, and water <i>to</i>• comparing growth of plants when given appropriate or inappropriate amounts of light, air, and water.
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">• recognizing animals and plants using common terminology <i>to</i>• recognizing that animals need food, air, and water and that plants use soil, air, water, and light <i>to</i>• identifying and connecting unique structures of plants and animals that help them obtain what they need to grow and survive.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-5.3 (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"> • recognizing living and non-living parts of an environment or ecosystem <i>to</i> • recognizing interactions between living and non-living parts (e.g., water, habitat, shelter) of an ecosystem <i>to</i> • identifying simple interactions between living organisms or among groups of living organisms (e.g., predator-prey, competitive, mutually beneficial).
<p>S-5.8 (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"> • recognizing oceans as compared to common non-water objects or features (e.g., rocks, mountains, forests) <i>to</i> • recognizing oceans as compared to other common water features (e.g., lakes, rivers, streams) <i>to</i> • identifying common organisms that live in oceans.

Reporting Category: Earth/Space Systems and Earth Resources

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-5.4 (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"> • recognizing simple weather conditions (rainy, cloudy, sunny, foggy, thunder and lightning) <i>to</i> • connecting physical conditions to weather conditions (e.g., wet to rain, dry or hot to sunny, lightning to thunderstorm) <i>to</i> • identifying more complex storm conditions (e.g., hurricane, tornado, blizzard) and their physical conditions.
<p>S-5.5 (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"> • recognizing the sun and Earth as compared to common unrelated objects on Earth <i>to</i> • recognizing the sun and Earth as compared to other objects in the solar system <i>to</i> • comparing simple physical characteristics (e.g., size, shape) of objects in the solar system.
<p>S-5.6 (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"> • recognizing Earth and the moon, including its phases, compared to other common, unrelated objects on Earth <i>to</i> • recognizing Earth, the sun, and the moon using their relative sizes and positions <i>to</i> • understanding the concept and terminology of orbit and revolution.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-5.7 (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"> • recognizing the difference between day and night (e.g., daylight and the sun versus darkness, the moon, and stars) <i>to</i> • 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> • understanding that the sun gives light and heat energy to Earth and its organisms and influences the four major seasons.
<p>S-5.9 (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"> • recognizing living and non-living natural resources used in everyday life as compared to other unrelated items or objects <i>to</i> • distinguishing between living and non-living natural resources that are important to Virginia <i>to</i> • 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).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-5.17 (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"> • 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> • 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> • identifying processes that lead to erosion, weathering, and deposition linked to non-living features (e.g., mountains, rivers, streams, volcanoes).
S-5.18 (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"> • recognizing activities that harm Earth <i>to</i> • 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> • 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).

Reporting Category: Force, Motion, Energy, and Matter

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-5.10 (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"> • recognizing objects that are at rest or in motion while using common terminology (e.g., sitting, still, moving) <i>to</i> • 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> • 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.
<p>S-5.11 (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"> • recognizing objects that require electricity as compared to common unrelated objects that do not without referring to the term “electricity” <i>to</i> • recognizing objects that require electricity as compared to common unrelated objects that do not while incorporating the concept and term “electricity” <i>to</i> • identifying basic forms of electricity based on common everyday uses or sources and incorporating the term “energy.”

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-5.12 (SOL 5.5a-d)	<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"> • recognizing objects that make noise or sound without referring to the concept or term “sound” <i>to</i> • 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> • identifying basic forms of sound based on common everyday uses or sources and incorporating the term “energy.”
S-5.13 (SOL 5.6a-d)	<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"> • recognizing objects that make light without referring to the concept or term “light” <i>to</i> • 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> • identifying basic forms of light based on common everyday uses or sources and incorporating the term “energy.”

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-5.14 (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"> • 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> • recognizing the parts of common living organisms (e.g., dogs, cats, birds - legs, eyes, ears, wings; plants, trees - leaves, flowers, trunk) <i>to</i> • 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.
S-5.15 (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"> • 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> • recognizing solid and liquid mixtures that do not form a new substance (sand and water) <i>to</i> • 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).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-5.16 (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"> • recognizing physical properties of common objects including size and shape <i>to</i> • 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> • recognizing additional physical properties including volume and other representations of matter as a solid, liquid, and a gas/vapor.

GRADE 8

Reporting Category: Life Systems and Ecosystems

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-8.7 (SOL 6.8a-d)	<p>The student will: Recognize common features of watersheds and why they are important in Virginia.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none">• recognizing common features found in watersheds (e.g., rivers, streams, lakes, reservoirs) <i>to</i>• connecting common features of watersheds to their function (e.g., that watersheds have inputs and outputs, that water flows from smaller into larger bodies of water) <i>to</i>• identifying simple steps that can be taken to improve the health of watersheds and why it is important to keep our water clean.
S-8.10 (SOL LS.3a-c)	<p>The student will: Recognize that animals and plants have characteristics related to different functions which can be used to tell these organisms apart.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none">• recognizing animals and plants from other common unrelated objects <i>to</i>• identifying different animal and plant behaviors and parts (e.g., the flower on a plant, the ear on an animal) <i>to</i>• identifying the function of animal and plant parts (e.g., legs that help an animal run fast, eyes that help an animal see prey).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-8.11 (SOL LS.4a-b)</p>	<p>The student will: Recognize that plants need light, air, and water to grow through a process called photosynthesis.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing that plants need light, air, and water to survive and grow <i>to</i> • recognizing materials or conditions that would not help them grow (e.g., complete darkness, no water, salt) <i>to</i> • recognizing the term and role of photosynthesis and characterizing or comparing the growth of a plant, tree, or flower when different amounts of light, air, or water are provided.
<p>S-8.12 (SOL LS.4a-b)</p>	<p>The student will: Recognize that living organisms need food to obtain energy and grow.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing that living things need food <i>to</i> • recognizing food is used for “energy” by living things to grow and survive <i>to</i> • recognizing the amount of energy or expected growth varies with the amount or type/quality of food.
<p>S-8.13 (SOL LS.6a-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"> • recognizing living and non-living parts of an environment or ecosystem <i>to</i> • identifying interactions between living and non-living parts (e.g., habitat, shelter, water) of an ecosystem <i>to</i> • identifying and understanding more complex interactions between living organisms or among groups of living organisms (e.g., predator-prey, competitive, mutually beneficial) including through simple food chains/webs.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-8.14 (SOL LS.7a-b)	<p>The student will: Recognize traits that help living organisms adapt and survive.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing simple traits of living organisms that help them survive (e.g., a rabbit’s ears help it hear predators) <i>to</i> • recognizing traits that help one animal survive as compared to unrelated traits of other animals <i>to</i> • identifying the function of traits that helps individual animals or groups of the same animal adapt or survive (e.g., a giraffe’s long neck helps it reach food from the tops of trees, a tiger’s stripes help it hide in tall grass).
S-8.15 (SOL LS.8a-c)	<p>The student will: Recognize living organisms in an ecosystem, the resources available in that ecosystem, and how changes in resources (i.e., food, water, shelter, habitat) affect the growth of their population.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing individual living organisms and groups of living organisms <i>to</i> • recognizing various resources that living organisms need to grow and sustain their population <i>to</i> • recognizing that simple changes in resources, including those due to human activity, might affect an individual living organism or groups of living organisms or their population.
S-8.16 (SOL LS.10a-c)	<p>The student will: Recognize that reproduction produces offspring with similar though varied traits.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing that the offspring of a living organism (plants, animals, humans) are the same species of living organism <i>to</i> • recognizing the offspring of a living organism (plants, animals, humans) may not be identical and may have similar traits with variations.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-8.17 (SOL LS.10a-c)	<p>The student will: Recognize anatomically similar organisms.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing highly similar animals based on their physical characteristics (e.g., dogs with other dogs, birds with other birds) <i>to</i> • recognizing similar animals based on broader physical characteristics (e.g., wolf with dog, lion with cat) <i>to</i> • recognizing fossils of common extinct organisms are similar to organisms living today (e.g., fern fossil similar to today's plants, dinosaur fossil similar to today's lizards)

Reporting Category: Earth and Space Systems

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-8.1 (SOL 6.2a-d)	<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"> • recognizing the sun, Earth, and moon as compared to everyday objects on Earth <i>to</i> • recognizing the sun, Earth, and moon as compared to other related objects in the solar system <i>to</i> • comparing characteristics (e.g., size, shape, position, composition) of various space objects (e.g., sun, Earth, moon, planets, comets, asteroids) in the solar system.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-8.2 (SOL 6.2a-d)</p>	<p>The student will: Recognize that gravity influences the way objects move on Earth and in space.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing the direction that common objects fall due to gravity on Earth <i>to</i> • recognizing the role of gravity in the movement of Earth and the sun or Earth and the moon <i>to</i> • recognizing the role of gravity in the movement of other objects in the solar system (e.g., planets and the sun, moons of other planets, comets and the sun).
<p>S-8.3 (SOL 6.3a-e)</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"> • recognizing the difference between day and night <i>to</i> • recognizing that the sun gives the vast majority of light and heat energy to Earth and its organisms <i>to</i> • recognizing the connection between Earth's rotation and daytime and nighttime and Earth's tilt on its axis and the four major seasons.
<p>S-8.6 (SOL 6.7a-f)</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"> • recognizing simple weather conditions (e.g., rainy, cloudy, sunny, foggy, thunder and lightning) <i>to</i> • recognizing that changes in simple weather conditions are connected to decisions about everyday activities or actions <i>to</i> • connecting weather to characteristics of the atmosphere (e.g., temperature, cloudy versus clear, windy versus calm) and common weather tools and information (e.g., thermometers, weather forecasts).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-8.8 (SOL 6.9a-f)</p>	<p>The student will: Recognize ways in which people and communities use and impact Earth's environment and resources.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing activities that pollute or harm Earth (e.g., automobile with exhaust, trash on the ground) compared to unrelated and/or common activities that help protect Earth (e.g., walking, riding bike, picking up trash) <i>to</i> • recognizing simple and common options that help protect the environment or conserve natural resources (e.g., picking up trash, recycling materials, turning off lights) <i>to</i> • identifying ways to protect Earth's environment or conserve natural resources as compared to activities that pollute or harm Earth's environment (e.g., pollution from a factory, plastic in streams or oceans).
<p>S-8.9 (SOL 6.9a-f)</p>	<p>The student will: Recognize different materials humans use that come from Earth's natural resources.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing different types of common objects or materials that come from Earth <i>to</i> • recognizing different natural resources and incorporating the term "natural resource" <i>to</i> • connecting renewable or nonrenewable natural resource with common uses and objects (e.g., paper from forests/trees/wood, energy from coal/sun, drinking water from watersheds).

Reporting Category: Force, Motion, Energy, and Matter

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-8.4 (SOL 6.4a-d)</p>	<p>The student will: Recognize temperature as a measure of how hot or cold matter is and that thermal energy is transferable.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing the difference between hot and cold in common contexts <i>to</i> • recognizing that hot and cold are related to measures of temperature or changes in temperature <i>to</i> • recognizing common examples of heat transfer and how it can be minimized (e.g., wearing a coat to stay warm, using an oven mitt) or maximized (e.g., sitting in the sun to get warm, using a fan to get cool).
<p>S-8.5 (SOL 6.6a-f)</p>	<p>The student will: Recognize water phases and how water changes its phase through the water cycle.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing the three phases of water <i>to</i> • connecting the phases of water to common experiences at different points in the water cycle (e.g., liquid water falling as rain, solid water falling as snow or hail, water vapor rising from a boiling pot of water) <i>to</i> • identifying a specific phase of water as compared to other phases of water using common examples at different points in the water cycle (e.g., ice melts to a liquid, a puddle of water evaporates to a gas, rain falls as a liquid from the atmosphere).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-8.18 (SOL PS.2a-c)	<p>The student will: Recognize that objects, animals, and plants are made of smaller parts and identify various seen and unseen parts.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing the smaller parts of large common objects (e.g., cars, trucks, buses, bikes, scooter - wheels; houses and other building - doors and windows; building blocks - smaller blocks; smart phones, computers, laptops, and tablets - screen, keyboard) <i>to</i> • recognizing smaller and more complex parts of common objects and living organisms <i>to</i> • identifying more complex parts of common objects and living organisms including those that are very small or too small to be seen with the naked eye (e.g., objects, water, animals, plants - atoms and molecules) including that we can use technology to see them (e.g., magnifying glass, microscope).
S-8.19 (SOL PS.3a-d)	<p>The student will: Recognize and measure the physical and chemical properties of matter including before or after a physical or chemical change occurs.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing physical properties of common objects including size and shape <i>to</i> • recognizing and comparing simple physical/chemical properties of common objects (e.g., size, shape, hardness/softness, weight, mass, and density) <i>to</i> • identifying changes in physical/chemical properties that result from common activities (e.g., cooking an egg, dissolving sugar in water, boiling water, burning wood).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-8.20 (SOL PS.5a-c)	<p>The student will: Recognize basic forms of energy and that energy is transferred and transformed.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing basic forms/types of energy compared to other forms/types of energy (i.e., kinetic, electrical, sound, thermal, and light energy) <i>to</i> • identifying basic forms/types of energy based on common use or source <i>to</i> • understanding that energy is transferred and transformed to help people meet their needs (e.g., electrical energy lights a light bulb and heats a stove).
S-8.21 (SOL PS.8a-b)	<p>The student will: Recognize objects in motion involving actions and reactions.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing objects that are at rest or in motion while using common terminology (e.g., sitting, still, moving) <i>to</i> • recognizing objects that are at rest or in motion by incorporating the concepts of forces (force, push, pull) and changes in motion (e.g., change in direction, motion to rest, rest to motion) <i>to</i> • identifying and comparing simple actions and reactions for common objects at rest or in motion (i.e., more or less force, presence or absence of force).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-8.22 (SOL PS.8a-b)</p>	<p>The student will: Recognize that the force, mass, and motion of objects are related and comparable.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing common objects in relation to their weight and mass <i>to</i> • connecting mass, force, and motion in common situations, (e.g., pushing/pulling objects) <i>to</i> • comparing force, mass, and change in motion (e.g., more mass requires more force to move or more force moves the same mass more quickly) in common situations (e.g., pushing an object uphill, throwing/kicking/hitting a ball harder).

HIGH SCHOOL

Reporting Category: Life at the Molecular/Cellular and Systems/Organisms Levels

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-HS.1 (SOL BIO.2a-e)</p>	<p>The student will: Recognize that humans and animals need oxygen to breathe, water to drink, and food to eat in order to grow and obtain energy.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing the difference between air/oxygen, water, and food, and that humans and animals need these to survive and grow <i>to</i> • recognizing that air/oxygen, water, and food help provide energy to humans and animals <i>to</i> • recognizing that energy and growth may change based on the type, amount, or availability of air/oxygen, water, and food.
<p>S-HS.2 (SOL BIO.2a-e)</p>	<p>The student will: Recognize that plants need light, air, and water to grow and create energy through photosynthesis.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing the difference between light, air, and water and that plants need them to survive and grow <i>to</i> • recognizing the term and role of photosynthesis and characterizing or comparing the growth of a plant, tree, or flower when different amounts of light, air, or water are provided <i>to</i> • recognizing plant parts associated with the basic inputs (water, sunlight, carbon dioxide) and outputs (oxygen, sugar) of photosynthesis (e.g., roots take in water during photosynthesis, leaves take in sunlight during photosynthesis, leaves release oxygen during photosynthesis).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-HS.3 (SOL BIO.4a-e)	<p>The student will: Recognize that bacteria and viruses have an impact on human health and that people can take simple steps to support health and wellness.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing simple steps that people can take to support their health (e.g., washing hands, brushing teeth, washing and eating healthy food, getting regular sleep) <i>to</i> • recognizing that simple steps to support health can be framed as choices that people can make compared to other unrelated or poor choices <i>to</i> • recognizing that bacteria, viruses, and germs are too small to be seen with the naked eye and that they can cause illness/sickness if simple steps are not taken to support health and wellness.
S-HS.4 (SOL BIO.5a-b)	<p>The student will: Recognize that reproduction produces offspring with similar, though varied, traits.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing that the offspring of a living organism (plants, animals, humans) are the same species of living organism (plants, animals, humans) <i>to</i> • recognizing that the offspring of a living organism (plants, animals, humans) may not be identical, may have variations of the same or similar traits, and could develop a helpful trait.

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-HS.5 (SOL BIO.6a-f)	<p>The student will: Recognize and compare plants and animals and the ways in which their unique structures and behaviors are connected to their functions.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing plants and animals from each other <i>to</i> • recognizing common structures and behaviors of plants and animals <i>to</i> • connecting structures and behaviors plants and animals to their primary functions (e.g., the flower of a plant attracts bees, a rabbit’s ears help it hear predators, a cheetah’s legs help it run fast to catch prey).

Reporting Category: Interactions of Life Forms and Ecosystem Dynamics

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-HS.6 (SOL BIO.7a-d)	<p>The student will: Recognize that animals have traits that help them reproduce and survive and those with advantageous traits are more likely to reproduce and survive.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing simple traits of animals that help them reproduce or survive compared to traits from other species that are unrelated (e.g., birds, bats, and insects have wings while other animals do not) <i>to</i> • identifying the function of the trait of the animal from among other traits from the same species (e.g., the trait that helps giraffes reach food in the tall trees, the trait that helps owls see prey in the dark) <i>to</i> • recognizing survival of an animal or group of the same animals is related to variations of a trait (e.g., camouflage) and environmental conditions (e.g., beneficial or challenging changes in habitat).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
S-HS.7 (SOL BIO.7a-d)	<p>The student will: Recognize ways in which living organisms' traits help them adapt to and survive their environment.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing simple traits (i.e., body parts, behaviors) of humans, animals, and plants that involve survival <i>to</i> • identifying the function of the traits of humans, animals, and plants that involve survival <i>to</i> • identifying a simple trait based on the function or purpose of the trait (e.g., rabbits use their ears to detect predators, ducks use their webbed feet to swim).
S-HS.8 (SOL BIO.8a-d)	<p>The student will: Recognize resources and factors that affect living organisms and how living organisms respond to changes within their ecosystem.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing simple resources or environmental factors that individual living organisms or groups of living organisms need to grow, reproduce, and sustain their population <i>to</i> • identifying simple changes in resources or environmental factors and how the change could affect living organisms (e.g., removing a forest habitat decreases animal populations in an area) <i>to</i> • recognizing how the variety of life on Earth (plants and animals) might change based on environmental factors (e.g., changes in resources like food, water, habitat).

VESOL Code (SOL Code)	VESOL Text Complexity Continuum
<p>S-HS.9 (SOL BIO.8a-d)</p>	<p>The student will: Recognize ways in which living organisms interact with other living and non-living parts of environments and ecosystems and how interactions might change under different conditions.</p> <p>Complexity Continuum: Using simple pictures, diagrams, or representations, concepts could range from:</p> <ul style="list-style-type: none"> • recognizing simple interactions between living organisms and the living and non-living parts of an environment or ecosystem (e.g., living organisms' homes, habitats, shelters, access to water) <i>to</i> • recognizing simple interactions between living organisms including in simple food chains (e.g., predator-prey, competitive, mutually beneficial) <i>to</i> • recognizing a change that affects interactions between living organisms and living and non-living parts of an environment or ecosystem and the result (e.g., loss of habitat forces groups of animals to relocate or decreases their population, loss of predators results in an increase in prey population) including the use of simple food chains/webs.