

Nevada Alternate Assessment

Nevada Academic Content Standard
Connectors for Mathematics
Grade 5

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Nevada Academic Content Connectors

The Nevada Academic Content Connectors (NACC) for Math represents the academic skills upon which students to be instructed. The NACCs for Math are linked to the Nevada Academic Content Standards and represent the key academic knowledge, skills and abilities of the Math content at each grade level. The Nevada Alternate Assessment, for Mathematics, will report to the Smarter Balanced Claims for Mathematics.

- **Claim #1- Concepts & Procedures**-“Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.”
- **Claim #2 – Problem Solving** “Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies.”
- **Claim #3 – Communicating Reasoning** “Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.”
- **Claim #4- Modeling and Data Analysis-** “Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.”

Example:

Nevada Academic Content Standards (NVACS)	NVAC Connectors
<p><i>Math Content Standard</i> 5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</p>	<p>Use parentheses to solve expressions. <i>(Connector to the content standard)</i></p>
<p><i>Math Content Standard</i> 5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.</p>	<p>Interpret simple numeric expressions. <i>(Connector to the content standard)</i></p>

The Nevada Alternate Assessment was developed to allow students an opportunity to fully demonstrate their knowledge in each content area. This ability to demonstrate knowledge of core content and skills is critical as educators seek to provide access to the general education curriculum while fostering higher expectations for students with significant cognitive disabilities.

NAA Mathematics NVAC Connectors

Grade 5

Write and interpret numerical expressions.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Use parentheses to solve expressions.
5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	Interpret simple numeric expressions.

Analyze patterns and relationships.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.OA.B.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.	Identify addition, subtraction, and multiplication relationships in a pattern.

Understand the place value system.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.NBT.A.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	Identify the value of a digit in a multi-digit number from 0.01 – 100.
5.NBT.A.4 Use place value understanding to round decimals to any place.	Use place value to round decimals to the nearest hundredths place.

Perform operations with multi-digit whole numbers and with decimals to hundredths.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.NBT.B.5 Fluently multiply multi-digit whole numbers using the standard algorithm.	Fluently multiply a two-digit number by a one-digit number.
5.NBT.B.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Use concrete models or drawings to add and subtract decimals.

Use equivalent fractions as a strategy to add and subtract fractions.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.NF.A.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.	Add or subtract simple fractions with like denominators.

Convert like measurement units within a given measurement system.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	Convert among different-sized metric measurement units using one step.

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 5.MD.C.3.a A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume. 5.MD.C.3.b A solid figure which can be packed without	Identify the volume of a figure by using unit cubes.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
gaps or overlaps using n unit cubes is said to have a volume of n cubic units.	

Use equivalent fractions as a strategy to add and subtract fractions.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.NF.A.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.	Solve simple addition and subtraction fraction word problems with like denominators using visual fraction models.

Represent and interpret data.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.MD.B.2 Make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$). Use operations on fractions for this grade to solve problems involving information presented in line plots.	Use line plots to solve problems using fractions.

Classify two-dimensional figures into categories based on their properties.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.	Identify attributes that belong to a category of two-dimensional figures.
5.G.B.4 Classify two-dimensional figures in a hierarchy based on properties.	Identify two-dimensional figures based on properties.