

## 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 represent 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.

Example: Mathematics Grade 3

Nevada Academic Content Standards (NVACS)	NVAC Connectors
Use place value understanding and properties of operations to perform multi-digit arithmetic. 0	
3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100. (2)	• Use place value to round whole numbers to the nearest 10. (3)
3.NBT.A.2 Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. (2)	<ul> <li>Fluently add and subtract within 1,000 with non-regrouping numbers. (3)</li> </ul>

- (1) Mathematics Cluster Heading
- (2) Mathematics Content Standards
- (3) Connectors to the content standards

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**

Nevada Academic Content Standards (NVACS)	NVAC Connectors
Write and interpret numerical expressions	
5.OA.A.1 Use parentheses, brackets, or braces in	Use parentheses to solve expressions.
numerical expressions, and evaluate expressions with	r
these symbols.	
5.OA.A.2 Write simple expressions that record	Interpret simple numeric expressions.
calculations with numbers, and interpret numerical	
expressions without evaluating them.	
Analyze patterns and relationships.	
5.OA.B.3 Generate two numerical patterns using two	Identify addition, subtraction, and multiplication
given rules. Identify apparent relationships between	relationships in a pattern.
corresponding terms. Form ordered pairs consisting of	10 mulanipa in u puncini
corresponding terms from the two patterns, and graph	
the ordered pairs on the coordinate plane.	
Understand the place value system.	
5.NBT.A.1 Recognise that in a multi-digit number, a	Identify the value of adigit in a multi-digit number from
digit in one place represents 10 times as much as it	0.01 to 100.
represents in the place to its right and 1/10 of what it	0.01 to 100.
represents in the place to its light and 1/10 of what it represents in the place to its left.	
5.NBT.A.4 Use place value understanding to round	Use place value to round decimals to the nearest hundredths
decimals to any place.	place.
Perform operations with multi-digit whole	piace.
numbers and with decimals to	
hundredths.	
5.NBT.B.5 Fluently multiply multi-digit whole	Fluently multiply a two-digit number by a one-digit
numbers using the standard algorithm.	number.
5.NBT.B.7 Add, subtract, multiply, and divide	Use concrete models or drawings to add and subtract
decimals to hundredths, using concrete models or	decimals.
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.	
	Add or subtract simple fractions with like denominators.
way as to produce an equivalent sum or difference of	
fractions with like denominators.	
5.NF.A.2 Solve word problems involving addition and	Solve simple addition and subtraction fraction word
subtraction of fractions referring to the same whole,	problems with like denominators using visual fraction
including cases of unlike denominators, e.g. by using	models.
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.	
Use equivalent fractions as a strategy to add and subtract fractions.  5.NF.A.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a	Add or subtract simple fractions with like denominators.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
Convert like measurement units within a given measurement system.	
5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g. convert 5cm to 0.05m) and use these conversions in solving multi-step real world problems.	Convert among different-sized metric measurement units using one step.
Represent and interpret data	
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.
Geometric measurement: Understand	
<ul> <li>concepts of volume.</li> <li>5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</li> <li>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.</li> <li>5.MD.c.3.b A solid figure which can be packed without gaps or overlaps using <i>n</i> unit cubes is said to have a volume of <i>n</i> cubic units.</li> </ul>	Identify the volume of a figure by using unit cubes.
Classify two-dimensional figures into categories based on their properties.	
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 in a category of two-dimensional figures.
5.G.B.4 Classify two-dimenstional figures in a hierarchy based on properties.	Identify two-dimensional figures based on properties.