



Nevada Alternate Assessment

Nevada Academic Content Standard Connectors for Mathematics

Grade 3

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Nevada Academic Content Connectors

The Nevada Academic Content Connectors (NACC) for Math represent the academic skills upon which students are 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)	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Fluently add and subtract within 1,000 with non-regrouping numbers. (3)

- (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 3

Nevada Academic Content Standards (NVACS)	NVAC Connectors
Represent and solve problems involving multiplication and division.	
3.OA.A.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.	Represent the multiplication equation by determine the total number of objects in each group.
Understand properties of multiplication and the relationship between multiplication and division	
3.OA.B.5 Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)	Identify equivalent expressions.
Solve problems involving the four operations, and identify and explain the patterns in arithmetic	
3.OA.D.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Solve two-step word problems using the addition and subtraction in context.
3.OA.D.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	Identify addition and subtraction patterns.
Use place value understanding and properties of operations to perform multi-digit arithmetic.	
3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	Use place value to round whole numbers to the nearest 10.
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.	Fluently add and subtract within 1,000 with non-regrouping numbers.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
Develop understanding of fractions as numbers.	
3.NF.A.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.	Identify how many equal parts make up a whole.
3.NF.A.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. 3.NF.A.2.a Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.	Identify basic unit fractions on a number line.
3.NF.A.3 Explain equivalence of fractions in special cases and compare fractions by reasoning about their size. 3.NF.A.3.a Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line. 3.NF.A.3.c Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.	Identify basic equivalent fractions.
Solve problems involving measurement and estimation.	
3.MD.A.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g. by representing the problem on a number line diagram.	Identify time to the nearest 15 minutes. Determine simple elapsed time.
Represent and interpret data.	
3.MD.B.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.	Solve simple one-step problems using pictographs or bar graphs.
3.MD.B.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units – whole numbers, halves, or quarters.	Use measurement data to solve problems.

Nevada Academic Content Standards (NVACS)	NVAC Connectors
Reason with shapes and their attributes.	
3.G.A.1 Understand that shapes in different categories (e.g. rhombuses, rectangles, and others) may share attributes (e.g. having four sides), and that the shared attributes can define a larger category (e.g. quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	Identify attributes of quadrilaterals.
3.G.A.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	Given a partitioned shape, identify the unit fraction.
Solve problems involving the four operations and identify and explain patterns in arithmetic.	
3.OA.D.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Solve two-step word problems using addition and subtraction in context.