

## Nevada Alternate Assessment

# Nevada Academic Content Standard Connectors for Mathematics 

## Grade 5

Contents
Nevada Academic Content Connectors ..... 2
Example: Mathematics Grade 3 ..... 2
NAA Mathematics NVAC Connectors - Grade 5 ..... 3
Write and interpret numerical expressions ..... 3
Analyze patterns and relationships. ..... 3
Understand the place value system ..... 3
Perform operations with multi-digit whole numbers and with decimals to hundredths. ..... 3
Use equivalent fractions as a strategy to add and subtract fractions .....  3
Convert like measurement units within a given measurement system. ..... 4
Represent and interpret data ..... 4
Geometric measurement: Understand concepts of volume. ..... 4
Classify two-dimensional figures into categories based on their properties ..... 4

## 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 <br> (NV ACS) | NVAC Connectors |
| :--- | :--- |
| Use place value understanding and properties <br> of operations to perform multi-digit <br> arithmetic. 0 |  |
| 3.NBT.A.1 Use place value understanding to round <br> whole numbers to the nearest 10 or 100. (2) | Use place value to round whole numbers to the <br> nearest 10. (3) |
| 3.NBT.A.2 Fluently add and subtract within 1,000 using <br> strategies and algorithms based on place value, <br> properties of operations, and/or the relationship between <br> addition and subtraction. (2) | -Fluently add and subtract within 1,000 with <br> 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 5

| Nevada Academic Content Standards (NVACS) | NVAC Connectors |
| :---: | :---: |
| Write and interpret numerical expressions |  |
| 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. |  |
| 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 the coordinate plane. | Identify addition, subtraction, and multiplication relationships in a pattern. |
| Understand the place value system. |  |
| 5.NBT.A. 1 Recognise 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 adigit in a multi-digit number from 0.01 to 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. |  |
| 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. |  |
| 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. |
| 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. |


| Nevada Academic Content Standards <br> (NVACS) | NV AC Connectors |
| :--- | :--- |
| Convert like measurement units within a <br> given measurement system. |  |
| 5.MD.A.1 Convert among different-sized standard <br> measurement units within a given measurement <br> system (e.g. convert 5 cm to 0.05m) and use these <br> conversions in solving multi-step real world problems. | Convert among different-sized metric measurement units <br> using one step. |
| Represent and interpret data |  |
| 5.MD.B.2 Make a line plot to display a data set of <br> measurements in fractions of a unit $(1 / 2,1 / 4,1 / 8)$. <br> Use operations on fractions for this grade to solve <br> problems involving information presented in line <br> plots. | Use line plots to solve problems using fractions. |
| Geometric measurement: Understand <br> concepts of volume. |  |
| 5.MD.C.3 Recognize volume as an attribute of solid <br> figures and understand concepts of volume <br> measurement. | Identify the volume of a figure by using unit cubes. |
| 5.MD.C.3.a A cube with side length 1 unit, called a <br> "unit cube", is said to have one "cubic unit" of <br> volume, and can be used to measure volume. |  |
| 5.MD.c.3.b A solid figure which can be packed <br> without gaps or overlaps using $n$ unit cubes is said to <br> have a volume of $n$ cubic units. |  |
| Classify two-dimensional figures into <br> categories based on their properties. |  |
| 5.G.B.3 Understand that attributes belonging to a <br> category of two-dimensional figures also belong to all <br> subcategories of that category. | Identify attributes that belong in a category of two- <br> dimensional figures. |
| 5.G.B.4 Classify two-dimenstional figures in a <br> hierarchy based on properties. | Identify two-dimensional figures based on properties. |

