



**2011–2012
Grade 5**

This three part document serves as a guide for the transition from the Nevada State Standards (NSS) to the Common Core State Standards (CCSS). Users of this document should also refer to the Grade 5 Introduction and Narrative, and the Glossary of the CCSS.

Part I: The tables below list the Common Core State Standards introduced into Grade 5 in school year 2011–2012. Corresponding Nevada State Standards are listed where the content matches in whole or in part. Teachers are expected to maintain the NSS as well as teach these CCSS. In many cases, the expectations of the CCSS exceed the NSS. Teachers must move their instruction, and therefore their students’ mathematical knowledge, from the level of the NSS to the CCSS. Teachers must also incorporate the *Standards for Mathematical Practice* into instruction to complete students’ educational experiences. Additional clarification is provided in the comments for some CCSS.

Operations and Algebraic Thinking			
Write and interpret numerical expressions.			
Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change¹	Comments
5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	1.5.7 Add and subtract decimals. Multiply and divide decimals by whole numbers in problems representing practical situations. Use order of operations to evaluate expressions with whole numbers.	0	Extend order of operations in the NSS to multiple forms of grouping symbols. While operations with decimals in the NSS is still expected, it is not explicitly stated in this CCSS.
5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2 as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.			

¹ Grade Level Change from current NSS to CCSS. (i.e., –1 indicates that the NSS was previously taught in the grade above.)



Operations and Algebraic Thinking
Analyze patterns and relationships.

Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change ¹	Comments
5.OA.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. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i>	2.6.4 When given a rule relating two variables, create a table and represent the ordered pairs on a coordinate plane.	-1	Extend creating tables and graphs of numerical patterns in the NSS to comparing those patterns from two rules.

Measurement and Data
Convert like measurement units within a given measurement system.

Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change ¹	Comments
5.MD.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.	3.5.1 Estimate and convert units of measure for weight and volume/capacity within the same measurement system (customary and metric).	0	Extend conversion of units in the NSS to include units of length, mass, time, etc.

Represent and interpret data.

Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change ¹	Comments
5.MD.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. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i>	1.6.2 Add and subtract fractions with unlike denominators. Multiply and divide with fractions using models, drawings, and numbers. Use models to translate among fractions, decimals, and percents.	-1	This CCSS focuses on adding and subtracting fractions on a line plot.
	5.4.1 Pose questions that can be used to guide the collection of categorical and numerical data. Organize and represent data using a variety of graphical representations including frequency tables and line plots.	+1	While collecting categorical data and making frequency tables in the NSS is still expected, it is not explicitly stated in this CCSS.
	5.4.3 Interpret data and make predictions using frequency tables and line plots.	+1	Extend interpreting data in the NSS to include adding and subtracting fractions using information from a line plot.

¹ Grade Level Change from current NSS to CCSS. (i.e., -1 indicates that the NSS was previously taught in the grade above.)



Measurement and Data			
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.			
Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change¹	Comments
5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 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.	3.7.3 Select, model, and apply formulas to find the volume and surface area of solid figures.	-2	Extend modeling of volume in the NSS to the concept of “packing,” using unit cubes.
5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.	3.7.3 Select, model, and apply formulas to find the volume and surface area of solid figures.	-2	Extend modeling of volume in the NSS to the concept of “packing,” using unit cubes.
5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	3.7.3 Select, model, and apply formulas to find the volume and surface area of solid figures.	-2	Extend modeling of volume in the NSS to the concept of counting packed unit cubes.
5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the Associative property of multiplication.	3.7.3 Select, model, and apply formulas to find the volume and surface area of solid figures.	-2	
5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. b. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems.	3.7.3 Select, model, and apply formulas to find the volume and surface area of solid figures.	-2	

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Measurement and Data

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

Common Core State Standard (CCSS)	Nevada State Standard (NSS)	Change ¹	Comments
5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.	3.7.3 Select, model, and apply formulas to find the volume and surface area of solid figures.	-2	

Part II: The table below lists the Nevada State Standards (NSS) teachers are expected to continue to teach in Grade 5 in school year 2011–2012. In some cases, only part of the standard is to be maintained. These standards are still eligible to be assessed. Standards in **bold** indicate those found in Part I that link to the CCSS. Standards underlined indicate those that cannot be assessed on the state Criterion Reference Test (CRT). Additional clarification is provided in the comments.

Nevada State Standard (NSS)	Comments
1.5.1, 1.5.2, <u>1.5.3</u> , 1.5.5, <u>1.5.6</u> , 1.5.7 , 1.5.8 <u>2.5.1</u> , 2.5.2 3.5.1 , <u>3.5.2</u> , 3.5.3, 3.5.6 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.6, <u>4.5.7</u> , 4.5.9 5.5.1, 5.5.2, 5.5.3, 5.5.4, <u>5.5.5</u> , <u>5.5.6</u>	Continue to teach the entire standard.

Part III: The table below lists the Nevada State Standards (NSS) teachers are no longer expected to teach in Grade 5 in school year 2011–2012. In some cases, only part of a standard is to be deleted. Additional clarification is provided in the comments.

Nevada State Standard (NSS)	Comments
2.5.3 Complete number sentences with the appropriate words and symbols including \geq , \leq and \neq .	This standard is in the CCSS in Grade 4.
3.5.4 Determine totals, differences, and change due for monetary amounts in practical situations.	This standard is not formally in the CCSS in Grade 5, although it should be considered an application of standards involving decimals, such as 5.NBT.7.

¹ Grade Level Change from current NSS to CCSS. (i.e., -1 indicates that the NSS was previously taught in the grade above.)