

Wyoming Content Standard 1. Number Operations and Concepts		
Skill 1. Understand the meaning of arithmetic operations and make reasonable estimates.		
Benchmark	Where in CCSS	Content Limits:
03.1.7 Students use estimation strategies (rounding to the nearest 10 or 100, or front-end loading) to solve problems.	N1 is embedded in N2 and N3.	

Wyoming Content Standard 1. Number Operations and Concepts		
Skill 2. Understand ways to represent numbers, relationships among numbers, and number systems.		
Benchmark	Where in CCSS	Content Limits:
03.1.1 Students use the concept of place value to read and write designated numbers up to 9,999.	2.NBT.3 (Read and write numbers to 1000...) 4.NBT.2 (Read and write multi-digit whole numbers ...)	<ul style="list-style-type: none"> Numbers being compared should be in the same form (word, standard and/or number form). Symbols (<, >, =) may be used. No more than four values should be compared. Number lines should include only whole numbers. Numbers in the stimulus should not be presented in numerical order. Expanded forms of numbers will not be assessed. Items may require student to order numbers from least to greatest or from greatest to least. Items should be set in either a real-world or mathematical context. CR items may have students "Show your work or explain your answer." Graphics should be used in some of these items, as appropriate
03.1.2 Students compare and order whole numbers up to 9,999.	2.NBT.4 (Compare two three-digit numbers... using >, =, and < ...) 4.NBT.2 (compare 2-multi-digit numbers)	

Wyoming Content Standard 1. Number Operations and Concepts		
Skill 3. Develop the connection between conceptual understanding and computational proficiency.		
Benchmark	Where in CCSS	Content Limits:
03.1.3 Students use coins and bills to compare the values and make combinations up to five dollars.	2.MD.8 (Solve word problems involving dollars, quarters, dimes, nickels & pennies) 4.MD.2 (Use 4 operations to solve word problems, including money)	<ul style="list-style-type: none"> Items will assess addition, subtraction of whole numbers, and solving problems in the context of money using coins and bills to compare values and make combinations up to \$5. Items will be limited to one operation, with the exception of combining addition and subtraction. Addition and subtraction of two- and three-digit numbers. The use of decimal notation will be limited to the context of money (including addition and subtraction). Items will not include whole numbers with more than three digits, and/or decimals greater than hundredths. Items may use drawings, symbols, number sentences, or real-world problem situations. Graphics should be used in some of these items, as appropriate. Items involving estimation should be limited to use of whole numbers. Students may be required to use any of the following estimation strategies: clustering, reasonableness, front-end, compatible numbers, grouping, etc. CR items may have students "Show your work or explain your answer." Rounding will be limited to the nearest tens and hundreds place.
03.1.4 Students demonstrate computational fluency with basic facts (add to 20 and subtract from 20).	2.OA.2 (Fluently add and subtract within 20 using mental strategies)	
03.1.5 Students add and subtract two- and three-digit numbers with and without regrouping.	3.NBT.2 (Fluently add and subtract within 1000 . . .)	
3.1.7 Students use estimation strategies (rounding to the nearest 10 or 100, or front-end loading) to solve problems.	3.NBT.1 (Use place value to understand rounding.)	
03.1.8 Students communicate their choice of procedures and results when performing number operations in a problem-solving situation.	2.NBT.9 (Explain why addition and subtraction strategies work...) Core Practice #6	

Wyoming Content Standard 2. Geometry		
Skill 2. Analyze characteristics and properties of two- and three-dimensional geometric shapes.		
Benchmark	Where in CCSS	Content Limits:
03.2.1 Students describe 2- and 3-dimensional geometric objects and relationships.	3.G.1 (Understand shapes in different categories may share attributes...)	<ul style="list-style-type: none"> Items may assess names of 2-dimensional objects up to 4 sides; circles; sides and bases. Items should use only two-dimensional figures. Items may be presented either on a grid, using only quadrant 1, or in picture form Items should be set in either a real-world or mathematical context CR items may have students "Show your work or explain your answer." Graphics should be used in most of these items, as appropriate.
03.2.3 Students select, use, and communicate organizational methods in problem-solving situations appropriate to grade level.	3.G.1 (Understand shapes in different categories may share attributes...and shared attributes can define a larger category)	

Wyoming Content Standard 2. Geometry		
Skill 3. Apply transformations and use symmetry to analyze mathematical situations.		
Benchmark	Where in CCSS	Content Limits:
03.2.2 Students describe and compare various geometric objects using congruency and lines of symmetry.	4.G.3 (Lines of symmetry) 8.G.2 (Understand congruence)	<ul style="list-style-type: none"> Items may assess properties and relationships pertaining to regular two-dimensional shapes, and the concepts of symmetry or congruency. Items may assess understanding and application of symmetry and congruency. Items should assess only geometric concepts of two-dimensional figures; Items will not assess three-dimensional figures. Polygons may be regular or irregular with up to 8 sides. Items may be presented either on a grid, using only quadrant 1, or in picture form Items may be set in either a real-world or mathematical context. CR items may have students "Show your work or explain your answer." Graphics should be used in most of these items, as appropriate.
03.2.3 Students select, use, and communicate organizational methods in problem-solving situations appropriate to grade level.	3.G.1 (Understand shapes in different categories may share attributes and shared attributes can define a larger category)	

Wyoming Content Standard 3. Measurement		
Skill 1. Understand measurable attributes of objects and the units, systems, and processes of measurement.		
Benchmark	Where in CCSS	Content Limits:
03.3.1 Students apply estimation and measurement of length to content problems using actual measuring devices and express the results in U.S. customary units (inches, feet, and yards).	2.MD.1 (Measure length using appropriate tools) 2.MD.3 (Estimate lengths with inches, feet, centimeters and meters)	<ul style="list-style-type: none"> • Items will assess measurements of length and capacity. • Items may include standard units of measurement in inches, feet, or yards; cups, quarts, or gallons. • Units of time may include years, months, days, hours, minutes, or seconds. • Items will assess comparison of length, capacity, or time. • Units may include miles when no measurement tasks are involved (i.e. rounding). • Conversions should be limited to one-step conversions involving length, time or capacity (e.g., inches-feet, seconds-minutes, cups-quarts, quarts-gallons). • All units must be within the customary system of measurement. • Items should not assess vocabulary • Items should be set in a real-world context. • Graphics should be used in most of these items, as appropriate. • CR items may have students “Show your work or explain your answer.” • Pictorial models, schedules, or calendars will be used to assess length, elapsed time, and capacity. • Problem solving situations will include reading time using digital and analog clocks.
03.3.2 Students apply estimation and measurement of capacity in problem-solving situations using actual measuring devices and express the results in U.S. customary units (cups, quarts, and gallons).		
03.3.3 Students demonstrate relationships within the U.S. customary units in problem-solving situations.	4.MD.1 (Know relative sizes of measurement units within one system of units ...express measurements in a larger unit in terms of a smaller unit.) 4.MD.2 (Use the four operations to solve word problems...that require expressing measurements given in a larger unit in terms of a smaller unit.) 5.MD.1 (Convert among different-sized standard measurement units within a given measurement system ... and use these conversions in solving multi-step, real world problems.)	
03.3.5 Students tell time, using both analog and digital clocks, to the nearest	3.MD.1 (Tell and write time to the nearest minute and . . .)	

minute using A.M. and P.M.		
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Wyoming Content Standard 3. Measurement		
Skill 2. Apply appropriate techniques, tools, and formulas to determine perimeter, area or volume.		
Benchmark	Where in CCSS	Content Limits:
<p>03.3.4 Students determine perimeter of rectangles and squares using models in problem solving situations.</p>	<p>3. MD. 8 (. . . real world and mathematical problems involving perimeters of polygons, . . .)</p>	<ul style="list-style-type: none"> • Items may assess perimeter (squares and rectangles). • The concepts of perimeter of rectangles will be assessed. • Given the perimeter of a square or a rectangle, students may be asked to find one of the dimensions. • Items should use geometric properties and formulas for two-dimensional shapes only; three-dimensional shapes will not be assessed under this context. • Items may use nonstandard units or standard customary units. • Graphic models will be used to assess perimeter. • The number of two-dimensional figures assessed in an item cannot exceed two. • Dimensions included in items should be numbers appropriate for this grade level. • Items will use the following measurement units: length (inch, foot, or yard) • Graphics of measuring instruments should be labeled. • Graphics should be used in most of these items, as appropriate. • CR items may have students “Show your work or explain your answer.” • Items should be set in either a real-world or mathematical context.

Wyoming Content Standard 4. Algebra		
Skill 1. Understand patterns, relations, and functions.		
Benchmark	Where in CCSS	Content Limits:
03.4.1 Students recognize, describe, create, and extend patterns by using manipulatives, numbers, and graphic representations.	4.OA.5 (Generate and analyze number and shape patterns)	<ul style="list-style-type: none"> • Items will assess graphic or number patterns. • Operations in growing or decreasing patterns such as function tables will be limited to addition or subtraction. • Patterns should be limited to one operation. • Students should be asked to extend the pattern up to two steps or to provide up to two missing elements. • The pattern given should be shown with at least two examples of the pattern repeated. • A repeating pattern set should contain no more than 5 elements. • Items may use drawings, tables, or number sequences. • The pattern repetition should be clearly divided by spaces or lines. • Items may be set in either a real-world or mathematical context. • CR items may have students "Show your work or explain your answer." • Graphics should be used in most of these items, as appropriate.
03.4.2 Students apply knowledge of appropriate grade level patterns when solving problems.	4.OA.5 (Generate and analyze number and shape patterns)	

Wyoming Content Standard 4. Algebra		
Skill 2. Use mathematical models to represent and understand quantitative relationships.		
Benchmark	Where in CCSS	Content Limits:
No Benchmarks for this Skill		Not Assessed at this Grade

Wyoming Content Standard 5. Data Analysis and Probability		
Skill 1. Collect, organize, and display relevant data to answer questions and use appropriate statistical methods to analyze the data.		
Benchmark	Where in CCSS	Content Limits:
<p>03.5.1 Students collect, organize, and compare data using graphs and Venn diagrams.</p>	<p>3.MD.3 (Scaled picture graph, scaled bar graph) 3.MD.4 (Line Plot)</p>	<ul style="list-style-type: none"> • Items will assess identifying different parts of a correct graph and interpreting and comparing information from charts, tables, pictographs, single-bar graphs, and Venn diagrams. • Data sets should contain no more than 7 one-digit numbers. • In multiple-choice items that assess identification of correct graphical representations, the correct response should be based on the correctness of the data, not the labels. • In constructed-response items, students will be told which parts of a graph they should include. • Graphs presented for students to interpret should contain all elements of a correct graph. • Titles and labels should be worded appropriately for the grade level. • Increment grid lines should be shown on graphs. • Scale increments should include units of 1, 2, 5, 10, 20, 50 and 100. • The data presented in graphs should represent no more than 5 categories. • Items should be set in a real-world context. • CR items may have students “Show your work or explain your answer.” • Graphics should be used in all of these items
<p>03.5.2 Students communicate conclusions about a set of data by interpreting information using graphs and Venn diagrams.</p>	<p>3.MD.3 (Scaled picture graph, scaled bar graph)</p>	

Wyoming Content Standard 5. Data Analysis and Probability		
Skill 2. Develop and evaluate inferences and predictions that are based on data.		
Benchmark	Where in CCSS	Content Limits:
03.5.3 Students predict, perform, and record likely results of simple probability experiments.	7.SP.5 (Understand probability expresses the likelihood of an event occurring and is expressed as a number between 0 and 1) 7.SP. 6 (Predict relative frequency of various probabilities) 7.SP.7 (Develop a probability model and use it to find probabilities of events) 7.SP.8 (Find probabilities of compound events)	<ul style="list-style-type: none"> • Items will assess identifying all possible combinations of given events or objects. • Items should not assess more than 6 possible outcomes. • Item may include numeric probabilities of simple events with 6 or fewer outcomes. • Most items developed for this context should assess simple events. • Probabilities should be based on whole numbers. • Items will assess determining which outcomes are certain, likely, unlikely, or impossible to occur in certain situations. • Items should be set in a real-world context. • Items may use models such as organized lists, charts, or tree diagrams. • CR items may have students "Show your work or explain your answer." • Graphics should be used in most of these items, as appropriate.

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