DesCartes
(Combined)

Subject: Mathematics
Goal: Measurement

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: Below 161

Skills and Concepts to Develop Below 161	Skills and Concepts to Introduce 161 - 170
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**
• Identifies time of day (e.g., morning, afternoon)*	• Estimates and measures length of an object to the nearest inch using a picture of a ruler* • Tells time to the nearest hour* • Tells time to the nearest half hour
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**
	• Measures length with customary measures to the inch mark* • Measures length with metric measures to the centimeter mark
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**
New Vocabulary: none	*New Vocabulary:* centimeter, minute, tall, time
New Signs and Symbols: : used with time	*New Signs and Symbols:* cm centimeter/centimetre, ft feet

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 161 - 170

Skills and Concepts to Enhance Below 161	Skills and Concepts to Develop 161 - 170	Skills and Concepts to Introduce 171 - 180
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Identifies time of day (e.g., morning, afternoon)*	• Estimates and measures length of an object to the nearest inch using a picture of a ruler* • Tells time to the nearest hour* • Tells time to the nearest half hour	• Estimates and measures length of an object to the nearest centimeter using a picture of a ruler* • Knows the approximate weight of familiar objects • Tells time to the nearest hour* • Tells time to the nearest half hour • Tells time to the nearest 5 minutes
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
	• Measures length with customary measures to the inch mark* • Measures length with metric measures to the centimeter mark	• Measures length with customary measures to the inch mark* • Reads Fahrenheit thermometers to the nearest degree*
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
		• Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour)
New Vocabulary: none	*New Vocabulary:* centimeter, minute, tall, time	*New Vocabulary:* gram, line segment, metric, morning, quart, quarter, second
New Signs and Symbols: : used with time	*New Signs and Symbols:* cm centimeter/centimetre, ft feet	*New Signs and Symbols:* a.m., °F degrees Fahrenheit, g gram, = is equal to, p.m.

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 171 - 180

Skills and Concepts to Enhance 161 - 170	Skills and Concepts to Develop 171 - 180	Skills and Concepts to Introduce 181 - 190
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Estimates and measures length of an object to the nearest inch using a picture of a ruler* • Tells time to the nearest hour* • Tells time to the nearest half hour	• Estimates and measures length of an object to the nearest centimeter using a picture of a ruler* • Knows the approximate weight of familiar objects • Tells time to the nearest hour* • Tells time to the nearest half hour • Tells time to the nearest 5 minutes	• Knows the approximate size of an inch • Knows the approximate length of familiar objects* • Identifies the correct time, given the words, and vice versa • Determines elapsed clock time • Determines elapsed time under 1 hour or to the hour • Determines elapsed time involving whole hours, whole days, whole years • Tells time to the nearest 5 minutes
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Measures length with customary measures to the inch mark* • Measures length with metric measures to the centimeter mark	• Measures length with customary measures to the inch mark* • Reads Fahrenheit thermometers to the nearest degree*	• Selects and uses the appropriate type and size of unit in customary system (length) • Selects and uses the appropriate type and size of unit in customary system (height)* • Measures length with non-standard units • Measures length with customary measures to the half-inch mark • Selects and uses the appropriate type and size of unit in customary system (weight)* • Selects and uses the appropriate type and size of unit in customary system (capacity)* • Selects and uses the appropriate type and size of unit in customary system (time)* • Reads Fahrenheit thermometers to the nearest degree*
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
	• Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour)	• Identifies the appropriate instrument used to measure length* • Computes simple conversions among units of time (days, weeks)*
New Vocabulary: centimeter, minute, tall, time	*New Vocabulary:* gram, line segment, metric, morning, quart, quarter, second	*New Vocabulary:* clock, cup, distance, estimation, foot, gallon, half past, how much time, kilometer, liter, measurement, noon, o'clock, pint, quarter past, quarter to, rod, teaspoon, ton, unit, what time, yard
New Signs and Symbols: cm centimeter/centimetre, ft feet	*New Signs and Symbols:* a.m., °F degrees Fahrenheit, g gram, = is equal to, p.m.	*New Signs and Symbols:* : used with time

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 181 - 190

Skills and Concepts to Enhance 171 - 180	Skills and Concepts to Develop 181 - 190	Skills and Concepts to Introduce 191 - 200
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Estimates and measures length of an object to the nearest centimeter using a picture of a ruler* • Knows the approximate weight of familiar objects • Tells time to the nearest hour* • Tells time to the nearest half hour • Tells time to the nearest 5 minutes	• Knows the approximate size of an inch • Knows the approximate length of familiar objects* • Identifies the correct time, given the words, and vice versa • Determines elapsed clock time • Determines elapsed time under 1 hour or to the hour • Determines elapsed time involving whole hours, whole days, whole years • Tells time to the nearest 5 minutes	• Knows the approximate size of a foot • Knows the approximate size of a mile* • Knows the approximate size of an ounce* • Knows the approximate size of a pint* • Identifies the correct time, given the words, and vice versa • Determines elapsed clock time • Tells time to the nearest quarter hour • Determines elapsed time involving whole hours, whole days, whole years • Tells time to the nearest 1 minute • Solves simple problems involving elapsed time, with the conversion of hours
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Measures length with customary measures to the inch mark* • Reads Fahrenheit thermometers to the nearest degree*	• Selects and uses the appropriate type and size of unit in customary system (length) • Selects and uses the appropriate type and size of unit in customary system (height)* • Measures length with non-standard units • Measures length with customary measures to the half-inch mark • Selects and uses the appropriate type and size of unit in customary system (weight)* • Selects and uses the appropriate type and size of unit in customary system (capacity)* • Selects and uses the appropriate type and size of unit in customary system (time)* • Reads Fahrenheit thermometers to the nearest degree*	• Selects and uses the appropriate type and size of unit in customary system (length) • Selects and uses the appropriate type and size of unit in customary system (height)* • Measures length with non-standard units • Selects and uses the appropriate type and size of unit in customary system (weight)* • Uses balance scale to measure weight of an unknown object* • Selects and uses the appropriate type and size of unit in customary system (capacity)* • Selects and uses the appropriate type and size of unit in customary system (time)* • Reads Celsius thermometers to the nearest degree
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour)	• Identifies the appropriate instrument used to measure length* • Computes simple conversions among units of time (days, weeks)*	• Converts between cups and pints* • Converts between cups, pints, and quarts* • Computes simple conversions among units of time (minutes, hours) • Computes simple conversions among units of time (hours, days)*

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

		• Solves problems involving measurement of temperature • Solves simple problems involving the perimeter of squares, rectangles, or triangles • Explores maps and relates them to measurements of real distances, using the scale*
New Vocabulary: gram, line segment, metric, morning, quart, quarter, second	*New Vocabulary:* clock, cup, distance, estimation, foot, gallon, half past, how much time, kilometer, liter, measurement, noon, o'clock, pint, quarter past, quarter to, rod, teaspoon, ton, unit, what time, yard	*New Vocabulary:* approximate, decade, latest, rise, scale
New Signs and Symbols: a.m., °F degrees Fahrenheit, g gram, = is equal to, p.m.	*New Signs and Symbols:* : used with time	*New Signs and Symbols:* °C degrees Celsius, $ dollar sign, kg kilogram, pt pint, qt quart, yd yard

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 191 - 200

Skills and Concepts to Enhance 181 - 190	Skills and Concepts to Develop 191 - 200	Skills and Concepts to Introduce 201 - 210
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Knows the approximate size of an inch • Knows the approximate length of familiar objects* • Identifies the correct time, given the words, and vice versa • Determines elapsed clock time • Determines elapsed time under 1 hour or to the hour • Determines elapsed time involving whole hours, whole days, whole years • Tells time to the nearest 5 minutes	• Knows the approximate size of a foot • Knows the approximate size of a mile* • Knows the approximate size of an ounce* • Knows the approximate size of a pint* • Identifies the correct time, given the words, and vice versa • Determines elapsed clock time • Tells time to the nearest quarter hour • Determines elapsed time involving whole hours, whole days, whole years • Tells time to the nearest 1 minute • Solves simple problems involving elapsed time, with the conversion of hours	• Knows the approximate size of a yard • Knows the approximate size of a centimeter • Knows the approximate size of a pound • Knows the approximate size of a gram • Applies dimensional analysis to simple real-world problems (time)* • Solves problems using a calendar* • Solves simple problems involving elapsed time, with the conversion of hours • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Uses basic indirect methods to estimate measurements (grids for area of irregular figures)*
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Selects and uses the appropriate type and size of unit in customary system (length) • Selects and uses the appropriate type and size of unit in customary system (height)* • Measures length with non-standard units • Measures length with customary measures to the half-inch mark • Selects and uses the appropriate type and size of unit in customary system (weight)* • Selects and uses the appropriate type and size of unit in customary system (capacity)* • Selects and uses the appropriate type and size of unit in customary system (time)* • Reads Fahrenheit thermometers to the nearest degree*	• Selects and uses the appropriate type and size of unit in customary system (length) • Selects and uses the appropriate type and size of unit in customary system (height)* • Measures length with non-standard units • Selects and uses the appropriate type and size of unit in customary system (weight)* • Uses balance scale to measure weight of an unknown object* • Selects and uses the appropriate type and size of unit in customary system (capacity)* • Selects and uses the appropriate type and size of unit in customary system (time)* • Reads Celsius thermometers to the nearest degree	• Selects and uses the appropriate type and size of unit in metric system (length) • Selects and uses the appropriate type and size of unit in metric system (height)* • Measures length to the nearest centimeter*
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Identifies the appropriate instrument used to measure length* • Computes simple conversions among units of time (days, weeks)*	• Converts between cups and pints* • Converts between cups, pints, and quarts* • Computes simple conversions among units of time (minutes, hours) • Computes simple conversions among units of time (hours, days)*	• Converts between inches and feet • Selects and uses balances for measuring weight or mass* • Converts between milligrams and grams* • Converts between cups and pints* • Converts between cups, pints, and quarts*

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

	• Solves problems involving measurement of temperature • Solves simple problems involving the perimeter of squares, rectangles, or triangles • Explores maps and relates them to measurements of real distances, using the scale*	• Computes simple conversions among units of time (hours, days)* • Computes more difficult conversions among units of time • Solves problems involving measurement of time • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems comparing area and perimeter (customary units)* • Identifies situations where it is appropriate to calculate area • Estimates and finds volume of a figure using cubic units
New Vocabulary: clock, cup, distance, estimation, foot, gallon, half past, how much time, kilometer, liter, measurement, noon, o'clock, pint, quarter past, quarter to, rod, teaspoon, ton, unit, what time, yard	*New Vocabulary:* approximate, decade, latest, rise, scale	*New Vocabulary:* circumference, cubic centimeter, cubic unit, decameter, decimeter, kilogram, larger, milligram, milliliter
New Signs and Symbols: : used with time	*New Signs and Symbols:* °C degrees Celsius, $ dollar sign, kg kilogram, pt pint, qt quart, yd yard	*New Signs and Symbols:* ∠ angle, ° degrees, ' feet, in. inch, " inches, m measure of angle, m meter/metre, min minute, mm millimeter/millimetre, • point, right angle marker, □ variable

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 201 - 210

Skills and Concepts to Enhance 191 - 200	Skills and Concepts to Develop 201 - 210	Skills and Concepts to Introduce 211 - 220
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Knows the approximate size of a foot • Knows the approximate size of a mile* • Knows the approximate size of an ounce* • Knows the approximate size of a pint* • Identifies the correct time, given the words, and vice versa • Determines elapsed clock time • Tells time to the nearest quarter hour • Determines elapsed time involving whole hours, whole days, whole years • Tells time to the nearest 1 minute • Solves simple problems involving elapsed time, with the conversion of hours	• Knows the approximate size of a yard • Knows the approximate size of a centimeter • Knows the approximate size of a pound • Knows the approximate size of a gram • Applies dimensional analysis to simple real-world problems (time)* • Solves problems using a calendar* • Solves simple problems involving elapsed time, with the conversion of hours • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Uses basic indirect methods to estimate measurements (grids for area of irregular figures)*	• Knows the approximate size of a millimeter* • Knows the approximate size of a kilometer* • Knows the approximate size of an ounce* • Knows the approximate size of a gallon* • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Selects and uses the appropriate units depending on degree of accuracy required to solve problems*
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Selects and uses the appropriate type and size of unit in customary system (length) • Selects and uses the appropriate type and size of unit in customary system (height)* • Measures length with non-standard units • Selects and uses the appropriate type and size of unit in customary system (weight)* • Uses balance scale to measure weight of an unknown object* • Selects and uses the appropriate type and size of unit in customary system (capacity)* • Selects and uses the appropriate type and size of unit in customary system (time)* • Reads Celsius thermometers to the nearest degree	• Selects and uses the appropriate type and size of unit in metric system (length) • Selects and uses the appropriate type and size of unit in metric system (height)* • Measures length to the nearest centimeter*	• Selects and uses the appropriate type and size of unit in metric system (length) • Selects and uses the appropriate type and size of unit in metric system (height)* • Measures length to the nearest half inch* • Measures length to the nearest quarter of an inch • Measures length to the nearest eighth of an inch • Selects and uses the appropriate type and size of unit in metric system (mass)* • Reads Celsius thermometers to 0.1 degrees*
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Converts between cups and pints* • Converts between cups, pints, and quarts* • Computes simple conversions among units of time (minutes, hours) • Computes simple conversions among units of time (hours, days)*	• Converts between inches and feet • Selects and uses balances for measuring weight or mass* • Converts between milligrams and grams* • Converts between cups and pints* • Converts between cups, pints, and quarts*	• Converts between inches and feet • Converts between inches, feet, and yards • Converts between feet, yards, and miles* • Computes basic addition with units of length • Apply dimensional analysis to simple real-world problems (length)*

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

• Solves problems involving measurement of temperature • Solves simple problems involving the perimeter of squares, rectangles, or triangles • Explores maps and relates them to measurements of real distances, using the scale*	• Computes simple conversions among units of time (hours, days)* • Computes more difficult conversions among units of time • Solves problems involving measurement of time • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems comparing area and perimeter (customary units)* • Identifies situations where it is appropriate to calculate area • Estimates and finds volume of a figure using cubic units	• Solves simple problems involving measurement of weight* • Apply dimensional analysis to simple real-world problems (weight/mass)* • Converts between cups, pints, quarts, and gallons • Apply dimensional analysis to simple real-world problems (capacity)* • Solves simple problems involving capacity* • Computes basic operations with units of time • Relates years, decades, centuries, and millenniums • Selects and uses protractors for measuring angles* • Solves problems involving the perimeter of squares, rectangles, or triangles • Finds the perimeter of a polygon using a formula • Determines the diameter, given the radius, and vice versa* • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems comparing area and perimeter (customary units)* • Estimates and finds volume of a figure using cubic units • Determines an appropriate scale for representing a distance on a map* • Uses similar figures to construct ratios and solve for a missing side*
New Vocabulary: approximate, decade, latest, rise, scale	*New Vocabulary:* circumference, cubic centimeter, cubic unit, decameter, decimeter, kilogram, larger, milligram, milliliter	*New Vocabulary:* century, how long, micrometer, protractor
New Signs and Symbols: °C degrees Celsius, $ dollar sign, kg kilogram, pt pint, qt quart, yd yard	*New Signs and Symbols:* ∠ angle, ° degrees, ' feet, in. inch, " inches, m measure of angle, m meter/metre, min minute, mm millimeter/millimetre, • point, right angle marker, □ variable	*New Signs and Symbols:* + addition, c cup, fl oz fluid ounce, gal gallon, hr hour, lb pound, l length, ↓ measurement span down, ← measurement span left, → measurement span right, ↑ measurement span up, oz ounce, P perimeter, sec second, s side, – subtraction, w width

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 211 - 220

Skills and Concepts to Enhance 201 - 210	Skills and Concepts to Develop 211 - 220	Skills and Concepts to Introduce 221 - 230
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Knows the approximate size of a yard • Knows the approximate size of a centimeter • Knows the approximate size of a pound • Knows the approximate size of a gram • Applies dimensional analysis to simple real-world problems (time)* • Solves problems using a calendar* • Solves simple problems involving elapsed time, with the conversion of hours • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Uses basic indirect methods to estimate measurements (grids for area of irregular figures)*	• Knows the approximate size of a millimeter* • Knows the approximate size of a kilometer* • Knows the approximate size of an ounce* • Knows the approximate size of a gallon* • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Selects and uses the appropriate units depending on degree of accuracy required to solve problems*	• Knows the approximate size of a meter • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • Uses the appropriate unit of measure for volume*
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Selects and uses the appropriate type and size of unit in metric system (length) • Selects and uses the appropriate type and size of unit in metric system (height)* • Measures length to the nearest centimeter*	• Selects and uses the appropriate type and size of unit in metric system (length) • Selects and uses the appropriate type and size of unit in metric system (height)* • Measures length to the nearest half inch* • Measures length to the nearest quarter of an inch • Measures length to the nearest eighth of an inch • Selects and uses the appropriate type and size of unit in metric system (mass)* • Reads Celsius thermometers to 0.1 degrees*	• Uses the appropriate unit of measure for length* • Measures length to the nearest millimeter
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Converts between inches and feet • Selects and uses balances for measuring weight or mass* • Converts between milligrams and grams* • Converts between cups and pints* • Converts between cups, pints, and quarts* • Computes simple conversions among units of time (hours, days)* • Computes more difficult conversions among units of time	• Converts between inches and feet • Converts between inches, feet, and yards • Converts between feet, yards, and miles* • Computes basic addition with units of length • Apply dimensional analysis to simple real-world problems (length)* • Solves simple problems involving measurement of weight* • Apply dimensional analysis to simple real-world problems (weight/mass)*	• Converts between inches, feet, and yards • Converts between feet, yards, and miles* • Computes basic addition with units of length • Computes basic subtraction and multiplication with units of length • Converts between millimeters, centimeters, meters, and kilometers • Apply dimensional analysis to simple real-world problems (length)* • Solves problems involving length in the customary

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

• Solves problems involving measurement of time • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems comparing area and perimeter (customary units)* • Identifies situations where it is appropriate to calculate area • Estimates and finds volume of a figure using cubic units	• Converts between cups, pints, quarts, and gallons • Apply dimensional analysis to simple real-world problems (capacity)* • Solves simple problems involving capacity* • Computes basic operations with units of time • Relates years, decades, centuries, and millenniums • Selects and uses protractors for measuring angles* • Solves problems involving the perimeter of squares, rectangles, or triangles • Finds the perimeter of a polygon using a formula • Determines the diameter, given the radius, and vice versa* • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems comparing area and perimeter (customary units)* • Estimates and finds volume of a figure using cubic units • Determines an appropriate scale for representing a distance on a map* • Uses similar figures to construct ratios and solve for a missing side*	system and converts to larger or smaller units • Converts between ounces and pounds • Converts between ounces, pounds, and tons* • Computes basic operations with units of weight/mass* • Converts between cups, pints, quarts, and gallons • Converts within the metric system • Solves problems involving capacity in the customary system and converts to larger or smaller units* • Computes basic operations with units of time • Relates years, decades, centuries, and millenniums • Computes 2-step conversions between units of time • Solves problems involving the perimeter of squares, rectangles, or triangles • Finds the perimeter using the formula with a variable* • Solves problems involving the perimeter of irregular or complex shapes • Solves problems involving perimeter and converts to larger or smaller units • Determines the diameter, given the radius, and vice versa* • Defines pi and knows common estimates (3.14 and 22/7)* • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* • Calculates area and perimeter of a rectangle (customary units) • Uses the appropriate unit of measure for area* • Calculates the volume of rectangular solids • Calculates the volume of a rectangular prism, and converts to a different measurement scale (customary units)* • Uses similarity to solve problems using scale drawings • Uses similar figures to construct ratios and solve for a missing side* • Uses similar triangles to construct ratios and solve for a missing side
New Vocabulary: circumference, cubic centimeter, cubic unit, decameter, decimeter, kilogram, larger, milligram, milliliter	*New Vocabulary:* century, how long, micrometer, protractor	*New Vocabulary:* cord, cubic feet, cubic inch, cubic meter, cubic millimeter, cubic yard, equilateral, long, pi, rectangular shape
New Signs and Symbols: ∠ angle, ° degrees, ' feet, in. inch,	*New Signs and Symbols:* + addition, c cup, fl oz fluid	*New Signs and Symbols:* ′ , ″, dm decimeter/decimetre, h

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

" inches, m measure of angle, m meter/metre, min minute, mm millimeter/millimetre, • point, right angle marker, □ variable	ounce, gal gallon, hr hour, lb pound, l length, ↓ measurement span down, ← measurement span left, → measurement span right, ↑ measurement span up, oz ounce, P perimeter, sec second, s side, – subtraction, w width	height, km kilometer/kilometre, ↔ line symbol, mL milliliter/millilitre, × multiplication, π pi, : ratio, segment overbar, × multiplication, = is equal to, Δ triangle, V volume

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 221 - 230

Skills and Concepts to Enhance 211 - 220	Skills and Concepts to Develop 221 - 230	Skills and Concepts to Introduce 231 - 240
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Knows the approximate size of a millimeter* • Knows the approximate size of a kilometer* • Knows the approximate size of an ounce* • Knows the approximate size of a gallon* • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Selects and uses the appropriate units depending on degree of accuracy required to solve problems*	• Knows the approximate size of a meter • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • Uses the appropriate unit of measure for volume*	• Uses the appropriate unit of measure for volume* • Uses basic indirect methods to estimate measurements*
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Selects and uses the appropriate type and size of unit in metric system (length) • Selects and uses the appropriate type and size of unit in metric system (height)* • Measures length to the nearest half inch* • Measures length to the nearest quarter of an inch • Measures length to the nearest eighth of an inch • Selects and uses the appropriate type and size of unit in metric system (mass)* • Reads Celsius thermometers to 0.1 degrees*	• Uses the appropriate unit of measure for length* • Measures length to the nearest millimeter	• Measures length to the nearest millimeter
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Converts between inches and feet • Converts between inches, feet, and yards • Converts between feet, yards, and miles* • Computes basic addition with units of length • Apply dimensional analysis to simple real-world problems (length)* • Solves simple problems involving measurement of weight* • Apply dimensional analysis to simple real-world problems (weight/mass)* • Converts between cups, pints, quarts, and gallons	• Converts between inches, feet, and yards • Converts between feet, yards, and miles* • Computes basic addition with units of length • Computes basic subtraction and multiplication with units of length • Converts between millimeters, centimeters, meters, and kilometers • Apply dimensional analysis to simple real-world problems (length)* • Solves problems involving length in the customary system and converts to larger or smaller units	• Converts between feet, yards, and miles* • Computes basic subtraction and multiplication with units of length • Converts between millimeters, centimeters, meters, and kilometers • Solves problems involving length in the customary system and converts to larger or smaller units • Solves problems involving length in the metric system and converts to larger or smaller units* • Converts between grams and kilograms* • Solves problems involving weight in the customary

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

• Apply dimensional analysis to simple real-world problems (capacity)* • Solves simple problems involving capacity* • Computes basic operations with units of time • Relates years, decades, centuries, and millenniums • Selects and uses protractors for measuring angles* • Solves problems involving the perimeter of squares, rectangles, or triangles • Finds the perimeter of a polygon using a formula • Determines the diameter, given the radius, and vice versa* • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems comparing area and perimeter (customary units)* • Estimates and finds volume of a figure using cubic units • Determines an appropriate scale for representing a distance on a map* • Uses similar figures to construct ratios and solve for a missing side*	• Converts between ounces and pounds • Converts between ounces, pounds, and tons* • Computes basic operations with units of weight/mass* • Converts between cups, pints, quarts, and gallons • Converts within the metric system • Solves problems involving capacity in the customary system and converts to larger or smaller units* • Computes basic operations with units of time • Relates years, decades, centuries, and millenniums • Computes 2-step conversions between units of time • Solves problems involving the perimeter of squares, rectangles, or triangles • Finds the perimeter using the formula with a variable* • Solves problems involving the perimeter of irregular or complex shapes • Solves problems involving perimeter and converts to larger or smaller units • Determines the diameter, given the radius, and vice versa* • Defines pi and knows common estimates (3.14 and 22/7)* • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* • Calculates area and perimeter of a rectangle (customary units) • Uses the appropriate unit of measure for area* • Calculates the volume of rectangular solids • Calculates the volume of a rectangular prism, and converts to a different measurement scale (customary units)* • Uses similarity to solve problems using scale drawings • Uses similar figures to construct ratios and solve for a missing side* • Uses similar triangles to construct ratios and solve for a missing side	system and converts to larger or smaller units • Computes basic operations with units of capacity • Converts within the metric system • Solves problems involving capacity in the customary system and converts to larger or smaller units* • Converts from Celsius to Fahrenheit, given conversion ratios • Solves problems involving the perimeter of irregular or complex shapes • Solves perimeter problems comparing width and length • Determines the circumference when given the diameter or radius (or vice versa) • Determines the circumference when given the area of a circle (or vice versa)* • Identifies the formula for circumference of a circle* • Knows the relationship between radius, diameter, and circumference • Determines the area of a triangle, given the formula • Describes the change in area of a rectangle when dimensions of an object are altered* • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* • Identifies the formula for area of circle* • Understands the procedure for finding the area and surface area of figures • Calculates the volume of rectangular solids • Calculates the length, width, or height of a rectangular prism, given the area (customary units)* • Calculates the volume of a rectangular prism, and converts to a different measurement scale (customary units)* • Uses similarity to solve problems using scale drawings • Explores maps and relates them to measurements of real distances, using proportional reasoning • Determines an appropriate scale for representing an object in a scale drawing* • Uses similar triangles to construct ratios and solve for a missing side
New Vocabulary: century, how long, micrometer, protractor	*New Vocabulary:* cord, cubic feet, cubic inch, cubic meter, cubic millimeter, cubic yard, equilateral, long, pi, rectangular shape	*New Vocabulary:* minus, tripled

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

New Signs and Symbols: + addition, c cup, fl oz fluid ounce, gal gallon, hr hour, lb pound, l length, ↓ measurement span down, ← measurement span left, → measurement span right, ↑ measurement span up, oz ounce, P perimeter, sec second, s side, – subtraction, w width	*New Signs and Symbols:* ′ , ″, dm decimeter/decimetre, h height, km kilometer/kilometre, ↔ line symbol, mL milliliter/millilitre, × multiplication, π pi, : ratio, segment overbar, × multiplication, = is equal to, Δ triangle, V volume	*New Signs and Symbols:* ( ) order of operations, A area, C circumference, d diameter, > greater than, ≥ greater than or equal to, < less than, ≤ less than or equal to, – negative number, r radius, π pi

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 231 - 240

Skills and Concepts to Enhance 221 - 230	Skills and Concepts to Develop 231 - 240	Skills and Concepts to Introduce 241 - 250
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Knows the approximate size of a meter • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • Uses the appropriate unit of measure for volume*	• Uses the appropriate unit of measure for volume* • Uses basic indirect methods to estimate measurements*	• Uses significant digits appropriately as they relate to precision* • Uses an indirect method to measure the height of an inaccessible object*
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Uses the appropriate unit of measure for length* • Measures length to the nearest millimeter	• Measures length to the nearest millimeter	
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Converts between inches, feet, and yards • Converts between feet, yards, and miles* • Computes basic addition with units of length • Computes basic subtraction and multiplication with units of length • Converts between millimeters, centimeters, meters, and kilometers • Apply dimensional analysis to simple real-world problems (length)* • Solves problems involving length in the customary system and converts to larger or smaller units • Converts between ounces and pounds • Converts between ounces, pounds, and tons* • Computes basic operations with units of weight/mass* • Converts between cups, pints, quarts, and gallons • Converts within the metric system • Solves problems involving capacity in the customary system and converts to larger or smaller units* • Computes basic operations with units of time • Relates years, decades, centuries, and millenniums • Computes 2-step conversions between units of time • Solves problems involving the perimeter of squares, rectangles, or triangles • Finds the perimeter using the formula with a variable*	• Converts between feet, yards, and miles* • Computes basic subtraction and multiplication with units of length • Converts between millimeters, centimeters, meters, and kilometers • Solves problems involving length in the customary system and converts to larger or smaller units • Solves problems involving length in the metric system and converts to larger or smaller units* • Converts between grams and kilograms* • Solves problems involving weight in the customary system and converts to larger or smaller units • Computes basic operations with units of capacity • Converts within the metric system • Solves problems involving capacity in the customary system and converts to larger or smaller units* • Converts from Celsius to Fahrenheit, given conversion ratios • Solves problems involving the perimeter of irregular or complex shapes • Solves perimeter problems comparing width and length • Determines the circumference when given the diameter or radius (or vice versa) • Determines the circumference when given the area of a	• Solves problems involving length in the metric system and converts to larger or smaller units* • Solves problems involving weight in the customary system and converts to larger or smaller units • Solves problems involving capacity in the metric system and converts to larger or smaller units* • Uses dimensional analysis for unit conversions (time) • Converts from Celsius to Fahrenheit, given conversion ratios • Solves problems involving measurement of angles* • Solves complex problems involving the measurement of angles* • Solves problems involving the perimeter of squares, rectangles, or triangles (analysis) • Solves perimeter problems comparing width and length • Determines the circumference when given the diameter or radius (or vice versa) • Determines the circumference when given the area of a circle (or vice versa)* • Solves problems involving area of a rectangle and converts to larger or smaller units (customary) • Describes the change in area of a rectangle when dimensions of an object are altered* • Solves problems involving area of a circle

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

• Solves problems involving the perimeter of irregular or complex shapes • Solves problems involving perimeter and converts to larger or smaller units • Determines the diameter, given the radius, and vice versa* • Defines pi and knows common estimates (3.14 and 22/7)* • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* • Calculates area and perimeter of a rectangle (customary units) • Uses the appropriate unit of measure for area* • Calculates the volume of rectangular solids • Calculates the volume of a rectangular prism, and converts to a different measurement scale (customary units)* • Uses similarity to solve problems using scale drawings • Uses similar figures to construct ratios and solve for a missing side* • Uses similar triangles to construct ratios and solve for a missing side	circle (or vice versa)* • Identifies the formula for circumference of a circle* • Knows the relationship between radius, diameter, and circumference • Determines the area of a triangle, given the formula • Describes the change in area of a rectangle when dimensions of an object are altered* • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* • Identifies the formula for area of circle* • Understands the procedure for finding the area and surface area of figures • Calculates the volume of rectangular solids • Calculates the length, width, or height of a rectangular prism, given the area (customary units)* • Calculates the volume of a rectangular prism, and converts to a different measurement scale (customary units)* • Uses similarity to solve problems using scale drawings • Explores maps and relates them to measurements of real distances, using proportional reasoning • Determines an appropriate scale for representing an object in a scale drawing* • Uses similar triangles to construct ratios and solve for a missing side	• Determines the surface area of a cylinder, given a formula (customary units)* • Calculates the length of one side of a cube, given the volume (customary units)* • Determines the effects of changing dimensions on volume (no units)
New Vocabulary: cord, cubic feet, cubic inch, cubic meter, cubic millimeter, cubic yard, equilateral, long, pi, rectangular shape	*New Vocabulary:* minus, tripled	*New Vocabulary:* linear foot, quadrupled, rectangular area, semicircle, square kilometer, square yard
New Signs and Symbols: ′, ″, dm decimeter/decimetre, h height, km kilometer/kilometre, ↔ line symbol, mL milliliter/millilitre, × multiplication, π pi, : ratio, segment overbar, × multiplication, = is equal to, Δ triangle, V volume	*New Signs and Symbols:* ( ) order of operations, A area, C circumference, d diameter, > greater than, ≥ greater than or equal to, < less than, ≤ less than or equal to, − negative number, r radius, π pi	*New Signs and Symbols:* ≈ approximately equal to, cubic centimeter/centimetre, mph miles per hour, square centimeter/centimetre

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 241 - 250

Skills and Concepts to Enhance 231 - 240	Skills and Concepts to Develop 241 - 250	Skills and Concepts to Introduce 251 - 260
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Uses the appropriate unit of measure for volume* • Uses basic indirect methods to estimate measurements*	• Uses significant digits appropriately as they relate to precision* • Uses an indirect method to measure the height of an inaccessible object*	• Uses fractional units appropriately as they relate to precision*
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
• Measures length to the nearest millimeter		
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Converts between feet, yards, and miles* • Computes basic subtraction and multiplication with units of length • Converts between millimeters, centimeters, meters, and kilometers • Solves problems involving length in the customary system and converts to larger or smaller units • Solves problems involving length in the metric system and converts to larger or smaller units* • Converts between grams and kilograms* • Solves problems involving weight in the customary system and converts to larger or smaller units • Computes basic operations with units of capacity • Converts within the metric system • Solves problems involving capacity in the customary system and converts to larger or smaller units* • Converts from Celsius to Fahrenheit, given conversion ratios • Solves problems involving the perimeter of irregular or complex shapes • Solves perimeter problems comparing width and length • Determines the circumference when given the diameter or radius (or vice versa) • Determines the circumference when given the area of a circle (or vice versa)* • Identifies the formula for circumference of a circle* • Knows the relationship between radius, diameter, and	• Solves problems involving length in the metric system and converts to larger or smaller units* • Solves problems involving weight in the customary system and converts to larger or smaller units • Solves problems involving capacity in the metric system and converts to larger or smaller units* • Uses dimensional analysis for unit conversions (time) • Converts from Celsius to Fahrenheit, given conversion ratios • Solves problems involving measurement of angles* • Solves complex problems involving the measurement of angles* • Solves problems involving the perimeter of squares, rectangles, or triangles (analysis) • Solves perimeter problems comparing width and length • Determines the circumference when given the diameter or radius (or vice versa) • Determines the circumference when given the area of a circle (or vice versa)* • Solves problems involving area of a rectangle and converts to larger or smaller units (customary) • Describes the change in area of a rectangle when dimensions of an object are altered* • Solves problems involving area of a circle • Determines the surface area of a cylinder, given a formula (customary units)* • Calculates the length of one side of a cube, given the	• Solves complex real-world problems involving capacity* • Uses dimensional analysis for unit conversions (time) • Solves complex problems involving the measurement of angles* • Solves problems comparing area to perimeter (analysis) • Solves real-world problems involving surface area* • Determines the surface area of a pyramid (customary units)* • Calculates the length of one side of a cube, given the volume (customary units)* • Determines the volume of a cylinder • Calculates the radius of a sphere, given the volume and formula (metric units)* • Solves real-world problems comparing volumes of figures

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

circumference • Determines the area of a triangle, given the formula • Describes the change in area of a rectangle when dimensions of an object are altered* • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* • Identifies the formula for area of circle* • Understands the procedure for finding the area and surface area of figures • Calculates the volume of rectangular solids • Calculates the length, width, or height of a rectangular prism, given the area (customary units)* • Calculates the volume of a rectangular prism, and converts to a different measurement scale (customary units)* • Uses similarity to solve problems using scale drawings • Explores maps and relates them to measurements of real distances, using proportional reasoning • Determines an appropriate scale for representing an object in a scale drawing* • Uses similar triangles to construct ratios and solve for a missing side	volume (customary units)* • Determines the effects of changing dimensions on volume (no units)	
New Vocabulary: minus, tripled	*New Vocabulary:* linear foot, quadrupled, rectangular area, semicircle, square kilometer, square yard	*New Vocabulary:* cross-section area, right cylinder, right pyramid, slant height
New Signs and Symbols: ( ) order of operations, A area, C circumference, d diameter, > greater than, ≥ greater than or equal to, < less than, ≤ less than or equal to, – negative number, r radius, π pi	*New Signs and Symbols:* ≈ approximately equal to, cubic centimeter/centimetre, mph miles per hour, square centimeter/centimetre	*New Signs and Symbols:* square root symbol

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: 251 - 260

Skills and Concepts to Enhance 241 - 250	Skills and Concepts to Develop 251 - 260	Skills and Concepts to Introduce Above 260
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**	**Measurable Attributes of Objects and Figures**
• Uses significant digits appropriately as they relate to precision* • Uses an indirect method to measure the height of an inaccessible object*	• Uses fractional units appropriately as they relate to precision*	
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**	**Units, Systems, and Processes of Measurement**
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**	**Measurement Techniques, Tools and Formulas**
• Solves problems involving length in the metric system and converts to larger or smaller units* • Solves problems involving weight in the customary system and converts to larger or smaller units • Solves problems involving capacity in the metric system and converts to larger or smaller units* • Uses dimensional analysis for unit conversions (time) • Converts from Celsius to Fahrenheit, given conversion ratios • Solves problems involving measurement of angles* • Solves complex problems involving the measurement of angles* • Solves problems involving the perimeter of squares, rectangles, or triangles (analysis) • Solves perimeter problems comparing width and length • Determines the circumference when given the diameter or radius (or vice versa) • Determines the circumference when given the area of a circle (or vice versa)* • Solves problems involving area of a rectangle and converts to larger or smaller units (customary) • Describes the change in area of a rectangle when dimensions of an object are altered* • Solves problems involving area of a circle • Determines the surface area of a cylinder, given a formula (customary units)* • Calculates the length of one side of a cube, given the	• Solves complex real-world problems involving capacity* • Uses dimensional analysis for unit conversions (time) • Solves complex problems involving the measurement of angles* • Solves problems comparing area to perimeter (analysis) • Solves real-world problems involving surface area* • Determines the surface area of a pyramid (customary units)* • Calculates the length of one side of a cube, given the volume (customary units)* • Determines the volume of a cylinder • Calculates the radius of a sphere, given the volume and formula (metric units)* • Solves real-world problems comparing volumes of figures	• Solves complex problems comparing the areas of circles • Solves real-world problems involving surface area* • Analyzes a problem solving situation to determine the surface area of a cylinder (customary)*

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

volume (customary units)* • Determines the effects of changing dimensions on volume (no units)		
New Vocabulary: linear foot, quadrupled, rectangular area, semicircle, square kilometer, square yard	*New Vocabulary:* cross-section area, right cylinder, right pyramid, slant height	*New Vocabulary:* none
New Signs and Symbols: ≈ approximately equal to, cubic centimeter/centimetre, mph miles per hour, square centimeter/centimetre	*New Signs and Symbols:* square root symbol	*New Signs and Symbols:* sq in. square inch

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.

Subject: Mathematics
Goal Strand: Measurement
RIT Score Range: Above 260

Skills and Concepts to Enhance 251 - 260	Skills and Concepts to Develop Above 260
Measurable Attributes of Objects and Figures	**Measurable Attributes of Objects and Figures**
• Uses fractional units appropriately as they relate to precision*	
Units, Systems, and Processes of Measurement	**Units, Systems, and Processes of Measurement**
Measurement Techniques, Tools and Formulas	**Measurement Techniques, Tools and Formulas**
• Solves complex real-world problems involving capacity* • Uses dimensional analysis for unit conversions (time) • Solves complex problems involving the measurement of angles* • Solves problems comparing area to perimeter (analysis) • Solves real-world problems involving surface area* • Determines the surface area of a pyramid (customary units)* • Calculates the length of one side of a cube, given the volume (customary units)* • Determines the volume of a cylinder • Calculates the radius of a sphere, given the volume and formula (metric units)* • Solves real-world problems comparing volumes of figures	• Solves complex problems comparing the areas of circles • Solves real-world problems involving surface area* • Analyzes a problem solving situation to determine the surface area of a cylinder (customary)*
New Vocabulary: cross-section area, right cylinder, right pyramid, slant height	*New Vocabulary:* none
New Signs and Symbols: square root symbol	*New Signs and Symbols:* sq in. square inch

* Both data from test items and review by NWEA curriculum specialists are used to place learning continuum statements into appropriate RIT ranges.
Blank cells indicate data are limited or unavailable for this range or document version.