

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
<ul style="list-style-type: none"> Identifies time of day (e.g., morning, afternoon)* 	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> centimeter, minute, tall, time
<i>New Signs and Symbols:</i> : used with time	<i>New Signs and Symbols:</i> cm centimeter/centimetre, ft feet

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 <ul style="list-style-type: none"> Identifies time of day (e.g., morning, afternoon)* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Measures length with customary measures to the inch mark* Measures length with metric measures to the centimeter mark 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour)
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> centimeter, minute, tall, time	<i>New Vocabulary:</i> gram, line segment, metric, morning, quart, quarter, second
<i>New Signs and Symbols:</i> : used with time	<i>New Signs and Symbols:</i> cm centimeter/centimetre, ft feet	<i>New Signs and Symbols:</i> a.m., °F degrees Fahrenheit, g gram, = is equal to, p.m.

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 <ul style="list-style-type: none"> 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 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Measures length with customary measures to the inch mark* Measures length with metric measures to the centimeter mark 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> Measures length with customary measures to the inch mark* Reads Fahrenheit thermometers to the nearest degree* 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour) 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> Identifies the appropriate instrument used to measure length* Computes simple conversions among units of time (days, weeks)*
<i>New Vocabulary:</i> centimeter, minute, tall, time	<i>New Vocabulary:</i> gram, line segment, metric, morning, quart, quarter, second	<i>New Vocabulary:</i> 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
<i>New Signs and Symbols:</i> cm centimeter/centimetre, ft feet	<i>New Signs and Symbols:</i> a.m., °F degrees Fahrenheit, g gram, = is equal to, p.m.	<i>New Signs and Symbols:</i> : used with time

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
<p>Measurable Attributes of Objects and Figures</p> <ul style="list-style-type: none"> 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 	<p>Measurable Attributes of Objects and Figures</p> <ul style="list-style-type: none"> 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 	<p>Measurable Attributes of Objects and Figures</p> <ul style="list-style-type: none"> 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
<p>Units, Systems, and Processes of Measurement</p> <ul style="list-style-type: none"> Measures length with customary measures to the inch mark* Reads Fahrenheit thermometers to the nearest degree* 	<p>Units, Systems, and Processes of Measurement</p> <ul style="list-style-type: none"> 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* 	<p>Units, Systems, and Processes of Measurement</p> <ul style="list-style-type: none"> 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
<p>Measurement Techniques, Tools and Formulas</p> <ul style="list-style-type: none"> Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour) 	<p>Measurement Techniques, Tools and Formulas</p> <ul style="list-style-type: none"> Identifies the appropriate instrument used to measure length* Computes simple conversions among units of time (days, weeks)* 	<p>Measurement Techniques, Tools and Formulas</p> <ul style="list-style-type: none"> 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)* Solves simple problems involving elapsed time, with the conversion of hours

		<ul style="list-style-type: none"> • Solves problems involving measurement of temperature • Solves simple problems involving the perimeter of squares, rectangles, or triangles
<i>New Vocabulary:</i> gram, line segment, metric, morning, quart, quarter, second	<i>New Vocabulary:</i> 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	<i>New Vocabulary:</i> approximate, decade, latest, rise
<i>New Signs and Symbols:</i> a.m., °F degrees Fahrenheit, g gram, = is equal to, p.m.	<i>New Signs and Symbols:</i> : used with time	<i>New Signs and Symbols:</i> °C degrees Celsius, \$ dollar sign, kg kilogram, pt pint, qt quart, yd yard

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 <ul style="list-style-type: none"> • 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 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> • 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 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> • 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 • Uses basic indirect methods to estimate measurements (grids for area of irregular figures)*
Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> • 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* 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> • 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 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Identifies the appropriate instrument used to measure length* • Computes simple conversions among units of time (days, weeks)* 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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)* • Solves simple problems involving elapsed time, with the conversion of hours 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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)*

	<ul style="list-style-type: none"> • Solves problems involving measurement of temperature • Solves simple problems involving the perimeter of squares, rectangles, or triangles 	<ul style="list-style-type: none"> • Computes more difficult conversions among units of time • Solves problems involving measurement of time • 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
<i>New Vocabulary:</i> 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	<i>New Vocabulary:</i> approximate, decade, latest, rise	<i>New Vocabulary:</i> decameter, decimeter, kilogram, larger, milligram, milliliter
<i>New Signs and Symbols:</i> : used with time	<i>New Signs and Symbols:</i> °C degrees Celsius, \$ dollar sign, kg kilogram, pt pint, qt quart, yd yard	<i>New Signs and Symbols:</i> ' feet, in. inch, " inches, m meter/metre, min minute, mm millimeter/millimetre, □ variable

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 <ul style="list-style-type: none"> 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 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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 Uses basic indirect methods to estimate measurements (grids for area of irregular figures)* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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* Selects and uses the appropriate units depending on degree of accuracy required to solve problems*
Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> 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 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> 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* 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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)* Solves simple problems involving elapsed time, with the conversion of hours 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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)* 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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*

<ul style="list-style-type: none"> • Solves problems involving measurement of temperature • Solves simple problems involving the perimeter of squares, rectangles, or triangles 	<ul style="list-style-type: none"> • Computes more difficult conversions among units of time • Solves problems involving measurement of time • 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 	<ul style="list-style-type: none"> • 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 • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • 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
<p><i>New Vocabulary:</i> approximate, decade, latest, rise</p>	<p><i>New Vocabulary:</i> decameter, decimeter, kilogram, larger, milligram, milliliter</p>	<p><i>New Vocabulary:</i> century, how long, micrometer, protractor</p>
<p><i>New Signs and Symbols:</i> °C degrees Celsius, \$ dollar sign, kg kilogram, pt pint, qt quart, yd yard</p>	<p><i>New Signs and Symbols:</i> ' feet, in. inch, " inches, m meter/metre, min minute, mm millimeter/millimetre, □ variable</p>	<p><i>New Signs and Symbols:</i> + 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</p>

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 <ul style="list-style-type: none"> 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 Uses basic indirect methods to estimate measurements (grids for area of irregular figures)* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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* Selects and uses the appropriate units depending on degree of accuracy required to solve problems* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> Knows the approximate size of a meter
Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> 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* 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> 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* 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> Uses the appropriate unit of measure for length* Measures length to the nearest millimeter
Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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 Solves problems involving measurement of time 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 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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 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 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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

	<ul style="list-style-type: none"> • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • 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 	<ul style="list-style-type: none"> • 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 millennia • Computes 2-step conversions between units of time • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • 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 • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)*
<i>New Vocabulary:</i> decameter, decimeter, kilogram, larger, milligram, milliliter	<i>New Vocabulary:</i> century, how long, micrometer, protractor	<i>New Vocabulary:</i> cubic feet, cubic inch, equilateral, rectangular shape
<i>New Signs and Symbols:</i> ' feet, in. inch, " inches, m meter/metre, min minute, mm millimeter/millimetre, □ variable	<i>New Signs and Symbols:</i> + addition, c cup, fl oz fluid ounce, gal gallon, hr hour, lb pound, ⊥ length, ↓ measurement span down, ← measurement span left, → measurement span right, ↑ measurement span up, oz ounce, P perimeter, sec second, s side, – subtraction, w width	<i>New Signs and Symbols:</i> dm decimeter/decimetre, km kilometer/kilometre, ↔ line symbol, mL milliliter/millilitre, × multiplication, segment overbar

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 <ul style="list-style-type: none"> • 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* • Selects and uses the appropriate units depending on degree of accuracy required to solve problems* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> • Knows the approximate size of a meter 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> • Uses basic indirect methods to estimate measurements*
Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> • 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* 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> • Uses the appropriate unit of measure for length* • Measures length to the nearest millimeter 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> • Measures length to the nearest millimeter
Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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 • 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 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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

<ul style="list-style-type: none"> • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • 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 	<ul style="list-style-type: none"> • 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 millennia • Computes 2-step conversions between units of time • Applies dimensional analysis to simple real-world problems (time)* • Solves difficult problems involving elapsed time, with the conversion of hours • 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 • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* 	<p>ratios</p> <ul style="list-style-type: none"> • Solves problems involving the perimeter of irregular or complex shapes • Solves perimeter problems comparing width and length • Determines the area of a triangle, given the formula • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)*
<p><i>New Vocabulary:</i> century, how long, micrometer, protractor</p>	<p><i>New Vocabulary:</i> cubic feet, cubic inch, equilateral, rectangular shape</p>	<p><i>New Vocabulary:</i> minus</p>
<p><i>New Signs and Symbols:</i> + 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</p>	<p><i>New Signs and Symbols:</i> dm decimeter/decimetre, km kilometer/kilometre, ↔ line symbol, mL milliliter/millilitre, × multiplication, segment overbar</p>	<p><i>New Signs and Symbols:</i> A area, > greater than, ≥ greater than or equal to, < less than, ≤ less than or equal to, – negative number, right angle marker</p>

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 <ul style="list-style-type: none"> Knows the approximate size of a meter 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> Uses basic indirect methods to estimate measurements* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Uses the appropriate unit of measure for length* Measures length to the nearest millimeter 	Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> Measures length to the nearest millimeter 	Units, Systems, and Processes of Measurement
Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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 Applies dimensional analysis to simple real-world problems (time)* Solves difficult problems involving elapsed time, with the conversion of hours Solves problems involving the perimeter of squares, rectangles, or triangles 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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 area of a triangle, given the formula Solves simple problems involving the area of a square or rectangle Determines the area of a trapezoid, given the formula (metric units)* 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> 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 the perimeter of squares, rectangles, or triangles (analysis) Solves perimeter problems comparing width and length Solves problems involving area of a rectangle and converts to larger or smaller units (customary) Solves problems involving area of a circle

<ul style="list-style-type: none"> • 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 • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* 		
<i>New Vocabulary:</i> cubic feet, cubic inch, equilateral, rectangular shape	<i>New Vocabulary:</i> minus	<i>New Vocabulary:</i> linear foot, rectangular area, semicircle, square kilometer, square yard
<i>New Signs and Symbols:</i> dm decimeter/decimetre, km kilometer/kilometre, \leftrightarrow line symbol, mL milliliter/millilitre, \times multiplication, segment overbar	<i>New Signs and Symbols:</i> A area, $>$ greater than, \geq greater than or equal to, $<$ less than, \leq less than or equal to, $-$ negative number, right angle marker	<i>New Signs and Symbols:</i> \approx approximately equal to, mph miles per hour, \bullet point

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 <ul style="list-style-type: none"> • Uses basic indirect methods to estimate measurements* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> • Uses significant digits appropriately as they relate to precision* • Uses an indirect method to measure the height of an inaccessible object* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> • Uses fractional units appropriately as they relate to precision*
Units, Systems, and Processes of Measurement <ul style="list-style-type: none"> • Measures length to the nearest millimeter 	Units, Systems, and Processes of Measurement	Units, Systems, and Processes of Measurement
Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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 area of a triangle, given the formula • Solves simple problems involving the area of a square or rectangle • Determines the area of a trapezoid, given the formula (metric units)* 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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 the perimeter of squares, rectangles, or triangles (analysis) • Solves perimeter problems comparing width and length • Solves problems involving area of a rectangle and converts to larger or smaller units (customary) • Solves problems involving area of a circle 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • Solves complex real-world problems involving capacity* • Uses dimensional analysis for unit conversions (time)
<i>New Vocabulary:</i> minus	<i>New Vocabulary:</i> linear foot, rectangular area, semicircle,	<i>New Vocabulary:</i> none

	square kilometer, square yard	
<i>New Signs and Symbols:</i> A area, > greater than, \geq greater than or equal to, < less than, \leq less than or equal to, - negative number, right angle marker	<i>New Signs and Symbols:</i> \approx approximately equal to, mph miles per hour, • point	<i>New Signs and Symbols:</i> none

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 <ul style="list-style-type: none"> • Uses significant digits appropriately as they relate to precision* • Uses an indirect method to measure the height of an inaccessible object* 	Measurable Attributes of Objects and Figures <ul style="list-style-type: none"> • Uses fractional units appropriately as they relate to precision* 	Measurable Attributes of Objects and Figures
Units, Systems, and Processes of Measurement	Units, Systems, and Processes of Measurement	Units, Systems, and Processes of Measurement
Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • 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 the perimeter of squares, rectangles, or triangles (analysis) • Solves perimeter problems comparing width and length • Solves problems involving area of a rectangle and converts to larger or smaller units (customary) • Solves problems involving area of a circle 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • Solves complex real-world problems involving capacity* • Uses dimensional analysis for unit conversions (time) 	Measurement Techniques, Tools and Formulas <ul style="list-style-type: none"> • Solves complex problems comparing the areas of circles
<i>New Vocabulary:</i> linear foot, rectangular area, semicircle, square kilometer, square yard	<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> \approx approximately equal to, mph miles per hour, • point	<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> π pi, sq in. square inch

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
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • Solves complex real-world problems involving capacity* • Uses dimensional analysis for unit conversions (time) 	<ul style="list-style-type: none"> • Solves complex problems comparing the areas of circles
<i>New Vocabulary: none</i>	<i>New Vocabulary: none</i>
<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: π pi, sq in. square inch</i>