

| Skills and Concepts to Enhance (73% Probability*) 201 - 210 | Skills and Concepts to Develop (50% Probability*) 211 - 220 | Skills and Concepts to Introduce (27% Probability*) 221 - 230 |
|---|--|--|
| <p>Geometric Measurement and Problem Solving</p> <ul style="list-style-type: none"> • Computes the value of multiple bills and coins (addition/subtraction only) • Computes with dollars and cents up to and including \$5.00 and converts to decimals (multiplication/division) • Computes addition and subtraction on multiple-step real-world problems involving money • Computes money problems with multiple operations (addition/subtraction only) • Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money • Uses the appropriate unit of measure for length • Knows the approximate size of a yard • Measures length to the nearest centimeter • Converts between inches and feet • Knows the approximate size of a pound • Knows the approximate size of a gram • 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 simple problems involving elapsed time, with the conversion of hours • Solves simple problems involving miles per gallon • Solves simple problems involving miles/kilometers per hour • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Determines the perimeter of a figure where some sides are labeled • Estimates the area of rectangles using square units • Determines the area of irregular shapes with partial square units • Identifies situations where it is appropriate to calculate area • Estimates and finds volume of a figure using cubic units • Uses basic indirect methods to estimate measurements (grids for area of irregular figures) | <p>Geometric Measurement and Problem Solving</p> <ul style="list-style-type: none"> • Computes the value of multiple bills and coins (addition/subtraction only) • Analyzes and computes 1 operation on real-world problems involving money over \$5.00 (addition/subtraction only) • Analyzes and computes 1 operation on real-world problems involving money over \$5.00 (multiplication/division) • Computes with dollars and cents over \$5.00 and converts to decimals (multiplication/division) • Computes addition and subtraction on multiple-step real-world problems involving money • Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money • Uses the appropriate unit of measure for length • Knows the approximate size of a millimeter • Converts between inches and feet • Converts between inches, feet, and yards • Selects and uses the appropriate type and size of unit in metric system (mass) • Converts between cups, pints, quarts, and gallons • Apply dimensional analysis to simple real-world problems (capacity) • Computes more difficult conversions among units of time • Applies dimensional analysis to simple real-world problems (time) • Solves difficult problems involving elapsed time, with the conversion of hours • Solves simple problems involving miles per gallon • Solves problems involving rates • Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents • Measures angles using a protractor • Determines the perimeter of a figure using non-standard units • Solves problems involving the perimeter of squares, rectangles, or triangles • Finds the perimeter of a polygon using a formula • Describes the change in perimeter when dimensions of an object are altered • Determines the area of irregular shapes with partial square units • Estimates and finds volume of a figure using cubic units • Identifies properties of angles | <p>Geometric Measurement and Problem Solving</p> <ul style="list-style-type: none"> • Computes with dollars and cents over \$5.00 and converts to decimals (multiplication/division) • Computes the value of multiple bills and coins (multiplication/division) • Measures length to the nearest millimeter • Converts between inches, feet, and yards • Converts between millimeters, centimeters, meters, and kilometers • 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 • Converts between cups, pints, quarts, and gallons • Converts within the metric system • Apply dimensional analysis to simple real-world problems (capacity) • 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 complex problems involving miles/kilometers per hour • Solves problems involving rates • Determines the perimeter of a figure using non-standard units • Solves problems involving the perimeter of squares, rectangles, or triangles • Solves problems involving the perimeter of irregular or complex shapes • Solves problems involving perimeter and converts to larger or smaller units • Describes the change in perimeter when dimensions of an object are altered • Calculates the area of a rectangle, given labeled sides (customary units) • Determines the length or width of a rectangle, given the area (metric units) • Determines the area of irregular shapes (customary units) • Calculates area and perimeter of a rectangle (customary units) • Calculates the volume of rectangular solids |

Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. 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.

| Skills and Concepts to Enhance (73% Probability*) 201 - 210 | Skills and Concepts to Develop (50% Probability*) 211 - 220 | Skills and Concepts to Introduce (27% Probability*) 221 - 230 |
|--|--|---|
| <p>Represent and Interpret Data</p> <ul style="list-style-type: none"> • Solves problems using pictographs • Organizes data to create simple bar graphs • Solves problems using bar graphs • Solves problems using dual bar graphs • Draws conclusions from data - bar graphs | <p>Represent and Interpret Data</p> <ul style="list-style-type: none"> • Solves problems using pictographs • Solves problems using bar graphs • Reads and interprets data in line plots | <p>Represent and Interpret Data</p> <ul style="list-style-type: none"> • Determines appropriate intervals and/or scale for a bar graph |
| <p><i>New Vocabulary:</i> bar graph, cubic centimeter, cubic unit, larger</p> | <p><i>New Vocabulary:</i> century, coin, how long</p> | <p><i>New Vocabulary:</i> cubic meter</p> |
| <p><i>New Signs and Symbols:</i> cm centimeter/centimetre, variable</p> | <p><i>New Signs and Symbols:</i> \$ dollar sign, hr hour, ↓ measurement span down, ← measurement span left, → measurement span right, ↑ measurement span up</p> | <p><i>New Signs and Symbols:</i> h height, l length, mL milliliter/millilitre, mm millimeter/millimetre, V volume, w width</p> |

Explanatory Notes

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. 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.