DesCartes: A Continuum of Learning®

Mathematics
Goal: Geometry

RIT Score Range: 191 - 200
Statements Last Updated: Mar 10, 2014

Skills and Concepts to Enhance (73% Probability*) 181 - 190	Skills and Concepts to Develop (50% Probability*) 191 - 200	Skills and Concepts to Introduce (27% Probability*) 201 - 210
Geometric Measurement and Relationships	Geometric Measurement and Relationships	Geometric Measurement and Relationships
• Selects and uses the appropriate type and size of unit in customary system (length) • Measures length with customary measures to the half-inch mark • Uses a variety of non-standard units to measure the same length • Determines more capacity or less capacity • Determines the perimeter of a figure where all sides are labeled • Determines the area of irregular shapes by counting square units • Classifies polygons by sides and vertices • Identifies and names a cube • Identifies and names a sphere	• Selects and uses the appropriate type and size of unit in customary system (length) • Determines the perimeter of a figure where all sides are labeled • Determines the perimeter of a figure where some sides are labeled • Solves simple problems involving the perimeter of squares, rectangles, or triangles • Estimates the area of rectangles using square units • Identifies lines • Identifies parallel lines • Uses models to compare angles relative to right angles • Identifies right angles • Identifies corners (vertices) of cubes • Identifies the number of faces on rectangular prisms • Identifies and names a cylinder • Identifies and names a sphere • Sorts 2-D shapes and objects according to their attributes • Creates a new shape by combining different shapes, or identifies the different shapes that were used to make the original shape • Explores maps and relates them to measurements of real distances, using the scale	• Uses the appropriate unit of measure for length • Knows the approximate size of a yard • Measures length to the nearest centimeter • Knows the approximate size of a pound • Knows the approximate size of a gram • 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 • Describes the change in area of a triangle when 1 dimension of an object is altered (metric units) • 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) • Identifies parallel lines • Uses models to compare angles relative to right angles • Identifies and names a parallelogram • Identifies and names a trapezoid • Identifies and names a hexagon • Classifies polygons by number of sides • Classifies polygons by sides and angles • Identifies corners (vertices) of cubes • Classifies cubes by their properties (e.g., edges with equal lengths, faces with equal areas and congruent shapes, right angle corners) • Identifies a cube from a net • Identifies and names a cylinder
Congruence, Similarity, Right Triangles, & Trig	Congruence, Similarity, Right Triangles, & Trig	Congruence, Similarity, Right Triangles, & Trig
• Identifies congruent figures • Identifies figures that are similar • Identifies plane figures with line symmetry • Identifies transformations of plane figures (rotations/turns)	• Identifies congruent figures • Identifies congruent polygons and their corresponding sides and angles • Identifies plane figures with line symmetry • Identifies the number of lines of symmetry in plane figures • Identifies transformations of plane figures (reflections/flips)	• Identifies congruent polygons and their corresponding sides and angles • Classifies plane figures by the number of lines of symmetry
New Vocabulary: estimation, millimeter, symmetry	*New Vocabulary:* face, intersect, large, parallel, vertical line	*New Vocabulary:* cubic centimeter, cubic unit, edge, larger, parallel line, regular polygon, trapezoid
New Signs and Symbols: None	*New Signs and Symbols:* $ dollar sign, ft feet, in. inch, m meter/metre, yd yard	*New Signs and Symbols:* cm centimeter/centimetre, ° degrees, g gram

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.