

# DesCartes (Combined)

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**Subject: Mathematics**  
**Goal: Geometry**



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

Skills and Concepts to Develop Below 161	Skills and Concepts to Introduce 161 - 170
<b>Two-Dimensional Geometric Shapes</b>	<b>Two-Dimensional Geometric Shapes</b>
<ul style="list-style-type: none"> <li>Identifies figures that are the same size and shape</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and names a triangle</li> <li>Identifies and names a square</li> <li>Identifies and names a rectangle*</li> <li>Identifies and names a circle*</li> <li>Identifies sides and vertices of polygons</li> <li>Identifies figures that are the same size and shape</li> </ul>
<b>Three-Dimensional Geometric Shapes</b>	<b>Three-Dimensional Geometric Shapes</b>
	<ul style="list-style-type: none"> <li>Identifies bases of a cylinder*</li> <li>Identifies and names a cone</li> <li>Sorts solid figures and objects according to attributes*</li> </ul>
<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b>
<ul style="list-style-type: none"> <li>Predicts the shape after unfolding a figure*</li> </ul>	
<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b>
<i>New Vocabulary: size</i>	<i>New Vocabulary: circle, corner, cylinder, flat, rectangle, side</i>
<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: none</i>

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<b>Two-Dimensional Geometric Shapes</b>	<b>Two-Dimensional Geometric Shapes</b>	<b>Two-Dimensional Geometric Shapes</b>
<ul style="list-style-type: none"> <li>Identifies figures that are the same size and shape</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and names a triangle</li> <li>Identifies and names a square</li> <li>Identifies and names a rectangle*</li> <li>Identifies and names a circle*</li> <li>Identifies sides and vertices of polygons</li> <li>Identifies figures that are the same size and shape</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and names a triangle</li> <li>Identifies and names a square</li> <li>Identifies and names a rectangle*</li> <li>Identifies and names a circle*</li> <li>Identifies figures that are similar</li> </ul>
<b>Three-Dimensional Geometric Shapes</b>	<b>Three-Dimensional Geometric Shapes</b>	<b>Three-Dimensional Geometric Shapes</b>
	<ul style="list-style-type: none"> <li>Identifies bases of a cylinder*</li> <li>Identifies and names a cone</li> <li>Sorts solid figures and objects according to attributes*</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and names a cube</li> </ul>
<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b>
<ul style="list-style-type: none"> <li>Predicts the shape after unfolding a figure*</li> </ul>		
<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b>
<i>New Vocabulary: size</i>	<i>New Vocabulary: circle, corner, cylinder, flat, rectangle, side</i>	<i>New Vocabulary: geometric figure, similar</i>
<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: ? next in sequence</i>

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies and names a triangle</li> <li>Identifies and names a square</li> <li>Identifies and names a rectangle*</li> <li>Identifies and names a circle*</li> <li>Identifies sides and vertices of polygons</li> <li>Identifies figures that are the same size and shape</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies and names a triangle</li> <li>Identifies and names a square</li> <li>Identifies and names a rectangle*</li> <li>Identifies and names a circle*</li> <li>Identifies figures that are similar</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies and names multiple shapes (e.g., square, rectangle, triangle, circle)*</li> <li>Classifies polygons by sides and vertices</li> <li>Identifies congruent figures</li> <li>Identifies figures that are similar</li> </ul>
<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies bases of a cylinder*</li> <li>Identifies and names a cone</li> <li>Sorts solid figures and objects according to attributes*</li> </ul>	<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies and names a cube</li> </ul>	<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies and names a cube</li> </ul>
<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Identifies plane figures with line symmetry</li> <li>Identifies transformations of plane figures (rotations/turns)</li> <li>Identifies transformations of plane figures (translations/slides)*</li> </ul>
<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Identifies points on a line*</li> <li>Identifies congruent line segments*</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</li> </ul>
<i>New Vocabulary:</i> circle, corner, cylinder, flat, rectangle, side	<i>New Vocabulary:</i> geometric figure, similar	<i>New Vocabulary:</i> clockwise, flip, grid, line of symmetry, rotation, symmetry, turn
<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> ? next in sequence	<i>New Signs and Symbols:</i> ( ) ordered pair, • point

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<b>Two-Dimensional Geometric Shapes</b>	<b>Two-Dimensional Geometric Shapes</b>	<b>Two-Dimensional Geometric Shapes</b>
<ul style="list-style-type: none"> <li>Identifies and names a triangle</li> <li>Identifies and names a square</li> <li>Identifies and names a rectangle*</li> <li>Identifies and names a circle*</li> <li>Identifies figures that are similar</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and names multiple shapes (e.g., square, rectangle, triangle, circle)*</li> <li>Classifies polygons by sides and vertices</li> <li>Identifies congruent figures</li> <li>Identifies figures that are similar</li> </ul>	<ul style="list-style-type: none"> <li>Identifies angles*</li> <li>Identifies points on a circle*</li> <li>Identifies diagonals of a polygon</li> <li>Identifies and names a polygon*</li> <li>Identifies and names a pentagon*</li> <li>Sorts 2-D shapes and objects according to their attributes</li> <li>Identifies figures that are the same size and shape (analysis)*</li> <li>Identifies congruent figures</li> </ul>
<b>Three-Dimensional Geometric Shapes</b>	<b>Three-Dimensional Geometric Shapes</b>	<b>Three-Dimensional Geometric Shapes</b>
<ul style="list-style-type: none"> <li>Identifies and names a cube</li> </ul>	<ul style="list-style-type: none"> <li>Identifies and names a cube</li> </ul>	<ul style="list-style-type: none"> <li>Identifies the number of faces on rectangular prisms</li> <li>Identifies and names a cylinder</li> </ul>
<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b>
	<ul style="list-style-type: none"> <li>Identifies plane figures with line symmetry</li> <li>Identifies transformations of plane figures (rotations/turns)</li> <li>Identifies transformations of plane figures (translations/slides)*</li> </ul>	<ul style="list-style-type: none"> <li>Identifies plane figures with line symmetry</li> <li>Identifies the number of lines of symmetry in plane figures</li> <li>Identifies transformations of plane figures (reflections/flips)</li> </ul>
<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b>
	<ul style="list-style-type: none"> <li>Identifies points on a line*</li> <li>Identifies congruent line segments*</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</li> </ul>	<ul style="list-style-type: none"> <li>Identifies parallel lines</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</li> </ul>
<i>New Vocabulary:</i> geometric figure, similar	<i>New Vocabulary:</i> clockwise, flip, grid, line of symmetry, rotation, symmetry, turn	<i>New Vocabulary:</i> diagonal, face, intersect, kite, large, oval, parallel, plane, polygon, rectangular, rhombus, same shape, skew, straight, twist, vertical line
<i>New Signs and Symbols:</i> ? next in sequence	<i>New Signs and Symbols:</i> ( ) ordered pair, • point	<i>New Signs and Symbols:</i> • multiplication symbol

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies and names multiple shapes (e.g., square, rectangle, triangle, circle)*</li> <li>Classifies polygons by sides and vertices</li> <li>Identifies congruent figures</li> <li>Identifies figures that are similar</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies angles*</li> <li>Identifies points on a circle*</li> <li>Identifies diagonals of a polygon</li> <li>Identifies and names a polygon*</li> <li>Identifies and names a pentagon*</li> <li>Sorts 2-D shapes and objects according to their attributes</li> <li>Identifies figures that are the same size and shape (analysis)*</li> <li>Identifies congruent figures</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies angles*</li> <li>Identifies and names a parallelogram*</li> <li>Identifies and names a polygon*</li> <li>Identifies and names a hexagon*</li> <li>Identifies and names a octagon*</li> <li>Classifies polygons by sides and angles</li> </ul>
<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies and names a cube</li> </ul>	<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies the number of faces on rectangular prisms</li> <li>Identifies and names a cylinder</li> </ul>	<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Classifies cubes by their properties (e.g., edges with equal lengths, faces with equal areas and congruent shapes, right angle corners)</li> <li>Identifies and names a cylinder</li> <li>Classifies cylinders by their properties (e.g., base shape, lateral surface shape, vertices)*</li> </ul>
<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Identifies plane figures with line symmetry</li> <li>Identifies transformations of plane figures (rotations/turns)</li> <li>Identifies transformations of plane figures (translations/slides)*</li> </ul>	<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Identifies plane figures with line symmetry</li> <li>Identifies the number of lines of symmetry in plane figures</li> <li>Identifies transformations of plane figures (reflections/flips)</li> </ul>	<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Classifies plane figures by the number of lines of symmetry*</li> <li>Defines transformations*</li> </ul>
<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Identifies points on a line*</li> <li>Identifies congruent line segments*</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</li> </ul>	<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Identifies parallel lines</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</li> </ul>	<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Identifies intersecting lines</li> <li>Identifies parallel lines</li> <li>Identifies right angles*</li> <li>Graphs ordered pairs in the first quadrant</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</li> <li>Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</li> <li>Locates the origin on a coordinate grid*</li> </ul>

<i>New Vocabulary:</i> clockwise, flip, grid, line of symmetry, rotation, symmetry, turn	<i>New Vocabulary:</i> diagonal, face, intersect, kite, large, oval, parallel, plane, polygon, rectangular, rhombus, same shape, skew, straight, twist, vertical line	<i>New Vocabulary:</i> coordinate, coordinate point, edge, larger, mirror image, octagon, ordered pair, origin, parallel line, quadrilateral, regular polygon, trapezoid, vertex
<i>New Signs and Symbols:</i> ( ) ordered pair, • point	<i>New Signs and Symbols:</i> • multiplication symbol	<i>New Signs and Symbols:</i> $\leftrightarrow$ line symbol

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies angles*</li> <li>Identifies points on a circle*</li> <li>Identifies diagonals of a polygon</li> <li>Identifies and names a polygon*</li> <li>Identifies and names a pentagon*</li> <li>Sorts 2-D shapes and objects according to their attributes</li> <li>Identifies figures that are the same size and shape (analysis)*</li> <li>Identifies congruent figures</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies angles*</li> <li>Identifies and names a parallelogram*</li> <li>Identifies and names a polygon*</li> <li>Identifies and names a hexagon*</li> <li>Identifies and names a octagon*</li> <li>Classifies polygons by sides and angles</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies right angles within adjacent angles*</li> <li>Identifies the diameter of a circle*</li> <li>Identifies the circumference of circle*</li> <li>Identifies the number of degrees in a circle*</li> <li>Identifies and names a quadrilateral*</li> <li>Identifies altitudes of polygons (not triangles)*</li> <li>Classifies polygons by type of angle*</li> <li>Classifies polygons by number of sides*</li> <li>Identifies similar and congruent triangles*</li> <li>Identifies congruent polygons and their corresponding sides and angles*</li> <li>Defines "similarity"*</li> <li>Recognizes similar figures in the real world*</li> </ul>
<p><b>Three-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies the number of faces on rectangular prisms</li> <li>Identifies and names a cylinder</li> </ul>	<p><b>Three-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Classifies cubes by their properties (e.g., edges with equal lengths, faces with equal areas and congruent shapes, right angle corners)</li> <li>Identifies and names a cylinder</li> <li>Classifies cylinders by their properties (e.g., base shape, lateral surface shape, vertices)*</li> </ul>	<p><b>Three-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies corners (vertices) of cubes*</li> <li>Identifies and names a rectangular prism*</li> <li>Classifies triangular prisms by their properties (e.g., base shape, lateral surface shape, vertices)*</li> <li>Compares simple plane figures to solid figures (e.g., circle/sphere, square/cube, rectangle/rectangular solid)*</li> </ul>
<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Identifies plane figures with line symmetry</li> <li>Identifies the number of lines of symmetry in plane figures</li> <li>Identifies transformations of plane figures (reflections/flips)</li> </ul>	<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Classifies plane figures by the number of lines of symmetry*</li> <li>Defines transformations*</li> </ul>	<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Classifies plane figures by the number of lines of symmetry*</li> <li>Identifies geometric transformations (rotations)*</li> <li>Identifies geometric transformations (translations)*</li> <li>Identifies geometric transformations (reflections)*</li> </ul>
<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Identifies parallel lines</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Identifies intersecting lines</li> <li>Identifies parallel lines</li> <li>Identifies right angles*</li> <li>Graphs ordered pairs in the first quadrant</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Identifies perpendicular lines*</li> <li>Describes relationships among points, lines, and planes, and identifies models in the environment*</li> <li>Identifies properties of angles</li> <li>Identifies acute angles</li> <li>Identifies obtuse angles</li> </ul>

	graph)* <ul style="list-style-type: none"> <li>• Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</li> <li>• Locates the origin on a coordinate grid*</li> </ul>	<ul style="list-style-type: none"> <li>• Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</li> <li>• Locates the origin on a coordinate grid*</li> </ul>
<i>New Vocabulary:</i> diagonal, face, intersect, kite, large, oval, parallel, plane, polygon, rectangular, rhombus, same shape, skew, straight, twist, vertical line	<i>New Vocabulary:</i> coordinate, coordinate point, edge, larger, mirror image, octagon, ordered pair, origin, parallel line, quadrilateral, regular polygon, trapezoid, vertex	<i>New Vocabulary:</i> acute angle, congruent angle, dilation, enlargement, geometric solid, obtuse angle, perpendicular line, straight angle, tessellation, three-dimensional, transformation, translation, union
<i>New Signs and Symbols:</i> • multiplication symbol	<i>New Signs and Symbols:</i> $\leftrightarrow$ line symbol	<i>New Signs and Symbols:</i> $\sphericalangle$ angle, angle marker (arc), $^{\circ}$ degrees, right angle marker, segment overbar

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies angles*</li> <li>Identifies and names a parallelogram*</li> <li>Identifies and names a polygon*</li> <li>Identifies and names a hexagon*</li> <li>Identifies and names an octagon*</li> <li>Classifies polygons by sides and angles</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies right angles within adjacent angles*</li> <li>Identifies the diameter of a circle*</li> <li>Identifies the circumference of circle*</li> <li>Identifies the number of degrees in a circle*</li> <li>Identifies and names a quadrilateral*</li> <li>Identifies altitudes of polygons (not triangles)*</li> <li>Classifies polygons by type of angle*</li> <li>Classifies polygons by number of sides*</li> <li>Identifies similar and congruent triangles*</li> <li>Identifies congruent polygons and their corresponding sides and angles*</li> <li>Defines "similarity"*</li> <li>Recognizes similar figures in the real world*</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies right angles within adjacent angles*</li> <li>Recognizes the interior angle relationships of triangles</li> <li>Classifies equilateral triangles*</li> <li>Identifies and names a trapezoid*</li> <li>Identifies the radius of a circle</li> <li>Identifies the diameter of a circle*</li> <li>Identifies the circumference of circle*</li> <li>Identifies the number of degrees in a circle*</li> <li>Identifies and names a quadrilateral*</li> <li>Compares polygons by properties</li> <li>Identifies the number of diagonals of regular polygons*</li> <li>Identifies properties of quadrilaterals*</li> <li>Classifies polygons by type of angle*</li> </ul>
<p><b>Three-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Classifies cubes by their properties (e.g., edges with equal lengths, faces with equal areas and congruent shapes, right angle corners)</li> <li>Identifies and names a cylinder</li> <li>Classifies cylinders by their properties (e.g., base shape, lateral surface shape, vertices)*</li> </ul>	<p><b>Three-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies corners (vertices) of cubes*</li> <li>Identifies and names a rectangular prism*</li> <li>Classifies triangular prisms by their properties (e.g., base shape, lateral surface shape, vertices)*</li> <li>Compares simple plane figures to solid figures (e.g., circle/sphere, square/cube, rectangle/rectangular solid)*</li> </ul>	<p><b>Three-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies the number of edges on rectangular prisms*</li> </ul>
<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Classifies plane figures by the number of lines of symmetry*</li> <li>Defines transformations*</li> </ul>	<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Classifies plane figures by the number of lines of symmetry*</li> <li>Identifies geometric transformations (rotations)*</li> <li>Identifies geometric transformations (translations)*</li> <li>Identifies geometric transformations (reflections)*</li> </ul>	<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Predicts changes necessary to create symmetry in basic plane shapes*</li> <li>Identifies geometric transformations (rotations)*</li> <li>Identifies geometric transformations (translations)*</li> <li>Identifies geometric transformations (reflections)*</li> </ul>
<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Identifies intersecting lines</li> <li>Identifies parallel lines</li> <li>Identifies right angles*</li> <li>Graphs ordered pairs in the first quadrant</li> <li>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Identifies perpendicular lines*</li> <li>Describes relationships among points, lines, and planes, and identifies models in the environment*</li> <li>Identifies properties of angles</li> <li>Identifies acute angles</li> <li>Identifies obtuse angles</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Determines which lines are perpendicular (analysis)*</li> <li>Identifies properties of parallel and perpendicular lines</li> <li>Identifies and determines missing angle measures for supplementary angles</li> <li>Identifies acute angles</li> <li>Determines coordinates of geometric figures in the first</li> </ul>

graph)* <ul style="list-style-type: none"> <li>• Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</li> <li>• Locates the origin on a coordinate grid*</li> </ul>	<ul style="list-style-type: none"> <li>• Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</li> <li>• Locates the origin on a coordinate grid*</li> </ul>	quadrant <ul style="list-style-type: none"> <li>• Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in city blocks)*</li> <li>• Graphs ordered pairs in all quadrants</li> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>
<i>New Vocabulary:</i> coordinate, coordinate point, edge, larger, mirror image, octagon, ordered pair, origin, parallel line, quadrilateral, regular polygon, trapezoid, vertex	<i>New Vocabulary:</i> acute angle, congruent angle, dilation, enlargement, geometric solid, obtuse angle, perpendicular line, straight angle, tessellation, three-dimensional, transformation, translation, union	<i>New Vocabulary:</i> center, congruent side, equilateral, interior angle, isosceles triangle, midpoint, obtuse triangle, right triangle, scalene triangle, sum of measures
<i>New Signs and Symbols:</i> $\leftrightarrow$ line symbol	<i>New Signs and Symbols:</i> $\sphericalangle$ angle, angle marker (arc), $^{\circ}$ degrees, right angle marker, segment overbar	<i>New Signs and Symbols:</i> ( ) order of operations, = is equal to, - negative number, parallel symbol

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies right angles within adjacent angles*</li> <li>Identifies the diameter of a circle*</li> <li>Identifies the circumference of circle*</li> <li>Identifies the number of degrees in a circle*</li> <li>Identifies and names a quadrilateral*</li> <li>Identifies altitudes of polygons (not triangles)*</li> <li>Classifies polygons by type of angle*</li> <li>Classifies polygons by number of sides*</li> <li>Identifies similar and congruent triangles*</li> <li>Identifies congruent polygons and their corresponding sides and angles*</li> <li>Defines "similarity"*</li> <li>Recognizes similar figures in the real world*</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies right angles within adjacent angles*</li> <li>Recognizes the interior angle relationships of triangles</li> <li>Classifies equilateral triangles*</li> <li>Identifies and names a trapezoid*</li> <li>Identifies the radius of a circle</li> <li>Identifies the diameter of a circle*</li> <li>Identifies the circumference of circle*</li> <li>Identifies the number of degrees in a circle*</li> <li>Identifies and names a quadrilateral*</li> <li>Compares polygons by properties</li> <li>Identifies the number of diagonals of regular polygons*</li> <li>Identifies properties of quadrilaterals*</li> <li>Classifies polygons by type of angle*</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies parts of a right triangle (legs, hypotenuse, angles)*</li> <li>Recognizes the interior angle relationships of triangles</li> <li>Classifies isosceles triangles</li> <li>Classifies scalene triangles*</li> <li>Identifies properties of circles</li> <li>Compares polygons by properties</li> <li>Identifies the components of the Pythagorean theorem*</li> <li>Identifies properties of congruent triangles*</li> <li>Solves problems involving properties of congruent triangles</li> </ul>
<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies corners (vertices) of cubes*</li> <li>Identifies and names a rectangular prism*</li> <li>Classifies triangular prisms by their properties (e.g., base shape, lateral surface shape, vertices)*</li> <li>Compares simple plane figures to solid figures (e.g., circle/sphere, square/cube, rectangle/rectangular solid)*</li> </ul>	<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies the number of edges on rectangular prisms*</li> </ul>	<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Classifies square pyramids by their properties (e.g., base shape, lateral surface shape, vertices)*</li> <li>Classifies rectangular pyramids by their properties (e.g., base shape, lateral surface shape, vertices)*</li> </ul>
<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Classifies plane figures by the number of lines of symmetry*</li> <li>Identifies geometric transformations (rotations)*</li> <li>Identifies geometric transformations (translations)*</li> <li>Identifies geometric transformations (reflections)*</li> </ul>	<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Predicts changes necessary to create symmetry in basic plane shapes*</li> <li>Identifies geometric transformations (rotations)*</li> <li>Identifies geometric transformations (translations)*</li> <li>Identifies geometric transformations (reflections)*</li> </ul>	<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Identifies geometric transformations (dilations)</li> </ul>
<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Identifies perpendicular lines*</li> <li>Describes relationships among points, lines, and planes, and identifies models in the environment*</li> <li>Identifies properties of angles</li> <li>Identifies acute angles</li> <li>Identifies obtuse angles</li> </ul>	<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Determines which lines are perpendicular (analysis)*</li> <li>Identifies properties of parallel and perpendicular lines</li> <li>Identifies and determines missing angle measures for supplementary angles</li> <li>Identifies acute angles</li> <li>Determines coordinates of geometric figures in the first</li> </ul>	<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Determines which lines are perpendicular (analysis)*</li> <li>Identifies and measures straight angles</li> <li>Identifies and determines a missing angle measure in corresponding, vertical, and alternate exterior/interior angles*</li> <li>Graphs ordered pairs in all quadrants</li> </ul>

<ul style="list-style-type: none"> <li>• Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</li> <li>• Locates the origin on a coordinate grid*</li> </ul>	<p>quadrant</p> <ul style="list-style-type: none"> <li>• Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in city blocks)*</li> <li>• Graphs ordered pairs in all quadrants</li> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>	<ul style="list-style-type: none"> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>
<p><i>New Vocabulary:</i> acute angle, congruent angle, dilation, enlargement, geometric solid, obtuse angle, perpendicular line, straight angle, tessellation, three-dimensional, transformation, translation, union</p>	<p><i>New Vocabulary:</i> center, congruent side, equilateral, interior angle, isosceles triangle, midpoint, obtuse triangle, right triangle, scalene triangle, sum of measures</p>	<p><i>New Vocabulary:</i> acute triangle, chord, corresponding side, equiangular triangle, secant, square pyramid, tangent</p>
<p><i>New Signs and Symbols:</i> <math>\angle</math> angle, angle marker (arc), <math>^\circ</math> degrees, right angle marker, segment overbar</p>	<p><i>New Signs and Symbols:</i> ( ) order of operations, = is equal to, - negative number, parallel symbol</p>	<p><i>New Signs and Symbols:</i> congruent segment symbol, <math>\cong</math> is congruent to, <math>\Delta</math> triangle</p>

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies right angles within adjacent angles*</li> <li>Recognizes the interior angle relationships of triangles</li> <li>Classifies equilateral triangles*</li> <li>Identifies and names a trapezoid*</li> <li>Identifies the radius of a circle</li> <li>Identifies the diameter of a circle*</li> <li>Identifies the circumference of circle*</li> <li>Identifies the number of degrees in a circle*</li> <li>Identifies and names a quadrilateral*</li> <li>Compares polygons by properties</li> <li>Identifies the number of diagonals of regular polygons*</li> <li>Identifies properties of quadrilaterals*</li> <li>Classifies polygons by type of angle*</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies parts of a right triangle (legs, hypotenuse, angles)*</li> <li>Recognizes the interior angle relationships of triangles</li> <li>Classifies isosceles triangles</li> <li>Classifies scalene triangles*</li> <li>Identifies properties of circles</li> <li>Compares polygons by properties</li> <li>Identifies the components of the Pythagorean theorem*</li> <li>Identifies properties of congruent triangles*</li> <li>Solves problems involving properties of congruent triangles</li> </ul>	<b>Two-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Recognizes that the sum of the measures of two sides of a triangle must be greater than the measure of the third side*</li> <li>Recognizes the exterior angle relationships of triangles*</li> <li>Classifies right triangles by defining properties*</li> <li>Identifies and names a rhombus*</li> <li>Uses the Pythagorean theorem to solve problems</li> <li>Identifies properties of similar figures*</li> </ul>
<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Identifies the number of edges on rectangular prisms*</li> </ul>	<b>Three-Dimensional Geometric Shapes</b> <ul style="list-style-type: none"> <li>Classifies square pyramids by their properties (e.g., base shape, lateral surface shape, vertices)*</li> <li>Classifies rectangular pyramids by their properties (e.g., base shape, lateral surface shape, vertices)*</li> </ul>	<b>Three-Dimensional Geometric Shapes</b>
<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Predicts changes necessary to create symmetry in basic plane shapes*</li> <li>Identifies geometric transformations (rotations)*</li> <li>Identifies geometric transformations (translations)*</li> <li>Identifies geometric transformations (reflections)*</li> </ul>	<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Identifies geometric transformations (dilations)</li> </ul>	<b>Transformations and Symmetry</b> <ul style="list-style-type: none"> <li>Determines the new coordinates of a transformed geometric figure</li> </ul>
<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Determines which lines are perpendicular (analysis)*</li> <li>Identifies properties of parallel and perpendicular lines</li> <li>Identifies and determines missing angle measures for supplementary angles</li> <li>Identifies acute angles</li> <li>Determines coordinates of geometric figures in the first quadrant</li> <li>Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in</li> </ul>	<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Determines which lines are perpendicular (analysis)*</li> <li>Identifies and measures straight angles</li> <li>Identifies and determines a missing angle measure in corresponding, vertical, and alternate exterior/interior angles*</li> <li>Graphs ordered pairs in all quadrants</li> <li>Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>Computes and interprets distance, given a set of</li> </ul>	<b>Location and Relationships in the Coordinate Plane</b> <ul style="list-style-type: none"> <li>Identifies properties of congruent angles*</li> <li>Identifies and determines missing angle measures for complementary angles</li> <li>Uses properties of angles and figures to solve algebraic problems*</li> <li>Identifies and determines a missing angle measure in corresponding, vertical, and alternate exterior/interior angles*</li> <li>Defines angles using properties (e.g., acute, obtuse,</li> </ul>

<p>city blocks)*</p> <ul style="list-style-type: none"> <li>• Graphs ordered pairs in all quadrants</li> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>	<p>ordered pairs (horizontal and vertical lines)*</p>	<p>right, straight, reflex)*</p> <ul style="list-style-type: none"> <li>• Identifies corresponding and alternate exterior/interior angles</li> <li>• Determines the distance between two points*</li> <li>• Determines the midpoint of a line on a coordinate grid*</li> <li>• Determines the figure when plotting ordered pairs</li> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>
<p><i>New Vocabulary:</i> center, congruent side, equilateral, interior angle, isosceles triangle, midpoint, obtuse triangle, right triangle, scalene triangle, sum of measures</p>	<p><i>New Vocabulary:</i> acute triangle, chord, corresponding side, equiangular triangle, secant, square pyramid, tangent</p>	<p><i>New Vocabulary:</i> adjacent angle, incline, Pythagorean theorem, transversal, x-axis, y-axis</p>
<p><i>New Signs and Symbols:</i> ( ) order of operations, = is equal to, - negative number, parallel symbol</p>	<p><i>New Signs and Symbols:</i> congruent segment symbol, <math>\cong</math> is congruent to, <math>\Delta</math> triangle</p>	<p><i>New Signs and Symbols:</i> + addition, cm centimeter/centimetre, ft feet, in. inch, km kilometer/kilometre, &lt; less than, m measure of angle, m meter/metre, / per, <math>\rightarrow</math> ray symbol, s second (SI metric), square root symbol</p>

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**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
<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies parts of a right triangle (legs, hypotenuse, angles)*</li> <li>Recognizes the interior angle relationships of triangles</li> <li>Classifies isosceles triangles</li> <li>Classifies scalene triangles*</li> <li>Identifies properties of circles</li> <li>Compares polygons by properties</li> <li>Identifies the components of the Pythagorean theorem*</li> <li>Identifies properties of congruent triangles*</li> <li>Solves problems involving properties of congruent triangles</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Recognizes that the sum of the measures of two sides of a triangle must be greater than the measure of the third side*</li> <li>Recognizes the exterior angle relationships of triangles*</li> <li>Classifies right triangles by defining properties*</li> <li>Identifies and names a rhombus*</li> <li>Uses the Pythagorean theorem to solve problems</li> <li>Identifies properties of similar figures*</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Recognizes that the sum of the measures of two sides of a triangle must be greater than the measure of the third side*</li> <li>Recognizes and uses medians in triangles*</li> <li>Recognizes the exterior angle relationships of triangles*</li> <li>Classifies right triangles by defining properties*</li> <li>Identifies and names a rhombus*</li> <li>Uses sums of interior/exterior angles to identify polygons</li> <li>Uses number of sides to find angle measures of polygons</li> <li>Classifies polygons by properties</li> <li>Uses the Pythagorean theorem to solve problems</li> <li>Verifies congruency of triangles using ASA, SAS, SSS, or AAS</li> <li>Solves problems involving similar polygons (not triangles)</li> <li>Solves problems involving properties of similar triangles (e.g., using geometric mean, Triangle Proportionality Theorem)</li> </ul>
<p><b>Three-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Classifies square pyramids by their properties (e.g., base shape, lateral surface shape, vertices)*</li> <li>Classifies rectangular pyramids by their properties (e.g., base shape, lateral surface shape, vertices)*</li> </ul>	<p><b>Three-Dimensional Geometric Shapes</b></p>	<p><b>Three-Dimensional Geometric Shapes</b></p>
<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Identifies geometric transformations (dilations)</li> </ul>	<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Determines the new coordinates of a transformed geometric figure</li> </ul>	<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Uses picture representations to identify corresponding parts of symmetric plane figures*</li> <li>Uses picture representations to identify symmetry of plane figures with respect to a point or line</li> </ul>
<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Determines which lines are perpendicular (analysis)*</li> <li>Identifies and measures straight angles</li> <li>Identifies and determines a missing angle measure in corresponding, vertical, and alternate exterior/interior</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Identifies properties of congruent angles*</li> <li>Identifies and determines missing angle measures for complementary angles</li> <li>Uses properties of angles and figures to solve algebraic</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Defines the properties or relationships between planes, including parallel, perpendicular, and intersecting planes and their angles of incidence*</li> <li>Identifies properties of congruent angles*</li> </ul>

<p>angles*</p> <ul style="list-style-type: none"> <li>• Graphs ordered pairs in all quadrants</li> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>	<p>problems*</p> <ul style="list-style-type: none"> <li>• Identifies and determines a missing angle measure in corresponding, vertical, and alternate exterior/interior angles*</li> <li>• Defines angles using properties (e.g., acute, obtuse, right, straight, reflex)*</li> <li>• Identifies corresponding and alternate exterior/interior angles</li> <li>• Determines the distance between two points*</li> <li>• Determines the midpoint of a line on a coordinate grid*</li> <li>• Determines the figure when plotting ordered pairs</li> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>	<ul style="list-style-type: none"> <li>• Uses properties of angles and figures to solve algebraic problems*</li> <li>• Identifies corresponding and alternate exterior/interior angles</li> <li>• Determines the midpoint of a line on a coordinate grid*</li> <li>• Determines an endpoint of a line segment on a coordinate grid, given the midpoint and the other endpoint</li> </ul>
<p><i>New Vocabulary:</i> acute triangle, chord, corresponding side, equiangular triangle, secant, square pyramid, tangent</p>	<p><i>New Vocabulary:</i> adjacent angle, incline, Pythagorean theorem, transversal, x-axis, y-axis</p>	<p><i>New Vocabulary:</i> collinear, exterior angle, line symmetry, point symmetry, regular hexagon, rotational symmetry</p>
<p><i>New Signs and Symbols:</i> congruent segment symbol, <math>\cong</math> is congruent to, <math>\Delta</math> triangle</p>	<p><i>New Signs and Symbols:</i> + addition, cm centimeter/centimetre, ft feet, in. inch, km kilometer/kilometre, &lt; less than, m measure of angle, m meter/etre, / per, <math>\rightarrow</math> ray symbol, s second (SI metric), square root symbol</p>	<p><i>New Signs and Symbols:</i> AAA angle angle angle, AAS angle angle side, ASA angle side angle, parallel line arrow markers, SAS side angle side, <math>\sim</math> similar to, SSA side side angle, SSS side side side, – subtraction</p>

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**RIT Score Range: 251 - 260**

Skills and Concepts to Enhance 241 - 250	Skills and Concepts to Develop 251 - 260	Skills and Concepts to Introduce 261 - 270
<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Recognizes that the sum of the measures of two sides of a triangle must be greater than the measure of the third side*</li> <li>Recognizes the exterior angle relationships of triangles*</li> <li>Classifies right triangles by defining properties*</li> <li>Identifies and names a rhombus*</li> <li>Uses the Pythagorean theorem to solve problems</li> <li>Identifies properties of similar figures*</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Recognizes that the sum of the measures of two sides of a triangle must be greater than the measure of the third side*</li> <li>Recognizes and uses medians in triangles*</li> <li>Recognizes the exterior angle relationships of triangles*</li> <li>Classifies right triangles by defining properties*</li> <li>Identifies and names a rhombus*</li> <li>Uses sums of interior/exterior angles to identify polygons</li> <li>Uses number of sides to find angle measures of polygons</li> <li>Classifies polygons by properties</li> <li>Uses the Pythagorean theorem to solve problems</li> <li>Verifies congruency of triangles using ASA, SAS, SSS, or AAS</li> <li>Solves problems involving similar polygons (not triangles)</li> <li>Solves problems involving properties of similar triangles (e.g., using geometric mean, Triangle Proportionality Theorem)</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies the number of diagonals of regular polygons using the formula*</li> <li>Uses the properties of 30-60-90 triangles to solve problems*</li> </ul>
<p><b>Three-Dimensional Geometric Shapes</b></p>	<p><b>Three-Dimensional Geometric Shapes</b></p>	<p><b>Three-Dimensional Geometric Shapes</b></p>
<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Determines the new coordinates of a transformed geometric figure</li> </ul>	<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Uses picture representations to identify corresponding parts of symmetric plane figures*</li> <li>Uses picture representations to identify symmetry of plane figures with respect to a point or line</li> </ul>	<p><b>Transformations and Symmetry</b></p>
<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Identifies properties of congruent angles*</li> <li>Identifies and determines missing angle measures for complementary angles</li> <li>Uses properties of angles and figures to solve algebraic problems*</li> <li>Identifies and determines a missing angle measure in corresponding, vertical, and alternate exterior/interior</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Defines the properties or relationships between planes, including parallel, perpendicular, and intersecting planes and their angles of incidence*</li> <li>Identifies properties of congruent angles*</li> <li>Uses properties of angles and figures to solve algebraic problems*</li> <li>Identifies corresponding and alternate exterior/interior</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p>

<p>angles*</p> <ul style="list-style-type: none"> <li>• Defines angles using properties (e.g., acute, obtuse, right, straight, reflex)*</li> <li>• Identifies corresponding and alternate exterior/interior angles</li> <li>• Determines the distance between two points*</li> <li>• Determines the midpoint of a line on a coordinate grid*</li> <li>• Determines the figure when plotting ordered pairs</li> <li>• Computes and interprets the midpoint, given a set of ordered pairs (horizontal and vertical lines)*</li> <li>• Computes and interprets distance, given a set of ordered pairs (horizontal and vertical lines)*</li> </ul>	<p>angles</p> <ul style="list-style-type: none"> <li>• Determines the midpoint of a line on a coordinate grid*</li> <li>• Determines an endpoint of a line segment on a coordinate grid, given the midpoint and the other endpoint</li> </ul>	
<p><i>New Vocabulary:</i> adjacent angle, incline, Pythagorean theorem, transversal, x-axis, y-axis</p>	<p><i>New Vocabulary:</i> collinear, exterior angle, line symmetry, point symmetry, regular hexagon, rotational symmetry</p>	<p><i>New Vocabulary:</i> decagon</p>
<p><i>New Signs and Symbols:</i> + addition, cm centimeter/centimetre, ft feet, in. inch, km kilometer/kilometre, &lt; less than, m measure of angle, m meter/metre, / per, → ray symbol, s second (SI metric), square root symbol</p>	<p><i>New Signs and Symbols:</i> AAA angle angle angle, AAS angle angle side, ASA angle side angle, parallel line arrow markers, SAS side angle side, ~ similar to, SSA side side angle, SSS side side side, – subtraction</p>	<p><i>New Signs and Symbols:</i> none</p>

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**RIT Score Range: 261 - 270**

Skills and Concepts to Enhance 251 - 260	Skills and Concepts to Develop 261 - 270	Skills and Concepts to Introduce Above 270
<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Recognizes that the sum of the measures of two sides of a triangle must be greater than the measure of the third side*</li> <li>Recognizes and uses medians in triangles*</li> <li>Recognizes the exterior angle relationships of triangles*</li> <li>Classifies right triangles by defining properties*</li> <li>Identifies and names a rhombus*</li> <li>Uses sums of interior/exterior angles to identify polygons</li> <li>Uses number of sides to find angle measures of polygons</li> <li>Classifies polygons by properties</li> <li>Uses the Pythagorean theorem to solve problems</li> <li>Verifies congruency of triangles using ASA, SAS, SSS, or AAS</li> <li>Solves problems involving similar polygons (not triangles)</li> <li>Solves problems involving properties of similar triangles (e.g., using geometric mean, Triangle Proportionality Theorem)</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies the number of diagonals of regular polygons using the formula*</li> <li>Uses the properties of 30-60-90 triangles to solve problems*</li> </ul>	<p><b>Two-Dimensional Geometric Shapes</b></p> <ul style="list-style-type: none"> <li>Identifies the number of diagonals of regular polygons using the formula*</li> </ul>
<p><b>Three-Dimensional Geometric Shapes</b></p>	<p><b>Three-Dimensional Geometric Shapes</b></p>	<p><b>Three-Dimensional Geometric Shapes</b></p>
<p><b>Transformations and Symmetry</b></p> <ul style="list-style-type: none"> <li>Uses picture representations to identify corresponding parts of symmetric plane figures*</li> <li>Uses picture representations to identify symmetry of plane figures with respect to a point or line</li> </ul>	<p><b>Transformations and Symmetry</b></p>	<p><b>Transformations and Symmetry</b></p>
<p><b>Location and Relationships in the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Defines the properties or relationships between planes, including parallel, perpendicular, and intersecting planes and their angles of incidence*</li> <li>Identifies properties of congruent angles*</li> <li>Uses properties of angles and figures to solve algebraic problems*</li> <li>Identifies corresponding and alternate exterior/interior</li> </ul>	<p><b>Location and Relationships in the Coordinate Plane</b></p>	<p><b>Location and Relationships in the Coordinate Plane</b></p>

<p>angles</p> <ul style="list-style-type: none"> <li>• Determines the midpoint of a line on a coordinate grid*</li> <li>• Determines an endpoint of a line segment on a coordinate grid, given the midpoint and the other endpoint</li> </ul>		
<i>New Vocabulary:</i> collinear, exterior angle, line symmetry, point symmetry, regular hexagon, rotational symmetry	<i>New Vocabulary:</i> decagon	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> AAA angle angle angle, AAS angle angle side, ASA angle side angle, parallel line arrow markers, SAS side angle side, ~ similar to, SSA side side angle, SSS side side side, – subtraction	<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> none

**Subject: Mathematics**  
**Goal Strand: Geometry**  
**RIT Score Range: Above 270**

Skills and Concepts to Enhance 261 - 270	Skills and Concepts to Develop Above 270
<b>Two-Dimensional Geometric Shapes</b>	<b>Two-Dimensional Geometric Shapes</b>
<ul style="list-style-type: none"> <li>• Identifies the number of diagonals of regular polygons using the formula*</li> <li>• Uses the properties of 30-60-90 triangles to solve problems*</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies the number of diagonals of regular polygons using the formula*</li> </ul>
<b>Three-Dimensional Geometric Shapes</b>	<b>Three-Dimensional Geometric Shapes</b>
<b>Transformations and Symmetry</b>	<b>Transformations and Symmetry</b>
<b>Location and Relationships in the Coordinate Plane</b>	<b>Location and Relationships in the Coordinate Plane</b>
<i>New Vocabulary:</i> decagon	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> none