

Geometry: Grade 5

Stage 1 Desired Results

ESTABLISHED GOALS: <u>Competencies:</u> • Students will demonstrate the ability to reason with the coordinate plane in order to plot and interpret points. • Students will demonstrate the ability to reason with two- and three- dimensional figures in order to measure, categorize, and classify. <u>Content Standards:</u> • 5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). • 5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. • 5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. • 5.G.4 Classify two-dimensional figures in a hierarchy based on properties. • MP1 Make sense of problems and persevere in solving them. • MP3 Construct viable arguments and critique the reasoning of others. • MP5 Use appropriate tools strategically. • MP7 Look for and make use of structure.	<table border="1"> <tr> <th colspan="2">Transfer</th></tr> <tr> <td colspan="2">Students will be able to independently use their learning to navigate from one point to another.</td></tr> <tr> <th colspan="2">Meaning</th></tr> <tr> <td> ENDURING UNDERSTANDINGS Students will understand that... • geometric attributes provide descriptive information about an object's properties and position in space, and support visualization and problem solving. </td><td> ESSENTIAL QUESTIONS • How can you get from Point A to Point B? • Is what you name something as important as how you describe it? </td></tr> <tr> <th colspan="2">Acquisition</th></tr> <tr> <td> Students will know... • that the horizontal axis is generally labeled as the x-axis, and the vertical axis is generally labeled as the y-axis. • that the intersection of the axes is called the origin, and at this point both the x and y value are zero. • that an ordered pair provides the location of the point on the coordinate plane. • that a category's attributes must also be attributes of its subcategory. <u>vocabulary:</u> perpendicular, axis/axes, intersect, coordinate system, origin, coordinates, x-axis, y-axis, x-coordinate, y-coordinate, ordered pair, quadrant, coordinate plane </td><td> Students will be skilled at... • graphing points in the first quadrant of a coordinate plane given an ordered pair. • modeling both real world and mathematical problems with points in quadrant I. • relating the coordinate values of a graphed point to the context of the problem. • constructing a coordinate system with two intersecting perpendicular lines • identifying an ordered pair (x,y) as an x-coordinate followed by a y-coordinate. • classifying two-dimensional figures by their attributes, and identifying their subcategories. • grouping together all shapes that share a single property, and then among those shapes, grouping together those that share a second property, and then among those, group together those that share a third property, etc. </td></tr> </table>	Transfer		Students will be able to independently use their learning to navigate from one point to another.		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Content Area Literacy Standards													
not applicable	21st Century Skills • <i>make judgments and decisions</i> • <i>think creatively</i> • <i>use and manage information</i>												

Stage 2 - Evidence

<i>Evaluative Criteria</i>	<i>Assessment Evidence</i>
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

<i>Language Arts Integration</i>	<i>Mathematics Integration</i>
• 1.OA.1 Use	• 1.OA.1 Use
<i>Technology Integration</i>	<i>District Materials</i>
• 1.OA.1 Use	