

5TH GRADE MATH CURRICULUM MAP

4th QUARTER- 45 DAYS

Days	Standard	practices	explanation	resources
5 days	5.OA.B.3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so	5.MP.2. Reason abstractly and quantitatively. 5.MP.7. Look for and make use of structure	<ul style="list-style-type: none"> • Use the rule “add 3” to write a sequence of numbers. Starting with a 0, students write 0, 3, 6, 9, 12, . . . • Use the rule “add 6” to write a sequence of numbers. Starting with 0, students write 0, 6, 12, 18, 24, . . . <p>After comparing these two sequences, the students notice that each term in the second sequence is twice the corresponding terms of the first sequence. One way they justify this is by describing the patterns of the terms. Their justification may include some mathematical notation (See example below). A student may explain that both sequences start with zero and to generate each term of the second sequence he/she added 6, which is twice as much as was added to produce the terms in the first sequence. Students may also use the distributive property to describe the relationship between the two numerical patterns by reasoning that $6 + 6 + 6 = 2(3 + 3 + 3)$.</p> <p>o 0, +3 3, +3 6, +3 9, +3 12, . . . o 0, +6 6, +6 12, +6 18, +6 24, . . .</p> <p>Once students can describe that the second sequence of numbers is twice the corresponding terms of the first sequence, the terms can be written in ordered pairs and then graphed on a coordinate grid. They should recognize that each point on the graph represents two quantities in which the second quantity</p>	Engage Ny 7-12 18-20 envisions topic 8 galileo

4 days	<p>5.G.A.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).</p>	<p>5.MP.4. Model with mathematics. 5.MP.6. Attend to precision. 5.MP.7. Look for and make use of structure.</p>	<ul style="list-style-type: none">• Students can use a classroom size coordinate system to physically locate the coordinate point (5, 3) by starting at the origin point (0,0), walking 5 units along the x axis to find the first number in the pair (5), and then walking up 3 units for the second number in the pair (3). The ordered pair names a point in the plane.	Engage Ny 1-17 envisions Topic 16
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4 days	5.G.A.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.MP.1. Make sense of problems and persevere in solving them. 5.MP.2. Reason abstractly and quantitatively. 5.MP.4. Model with mathematics. 5.MP.5. Use appropriate tools strategically. 5.MP.6. Attend to precision. 5.MP.7. Look for and make use of structure.	<ul style="list-style-type: none"> • Sara has saved \$20. She earns \$8 for each hour she works. o If Sara saves all of her money, how much will she have after working 3 hours? 5 hours? 10 hours? o Create a graph that shows the relationship between the hours Sara worked and the amount of money she has saved. o What other information do you know from analyzing the graph? 	engage NY 13-20 envisions Topic 16 galileo
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5 days	<p>5.G.B.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.</p>	<p>5.MP.2. Reason abstractly and quantitatively. 5.MP.6. Attend to precision. 5.MP.7. Look for and make use of structure.</p>	<p>Geometric properties include properties of sides (parallel, perpendicular, congruent), properties of angles (type, measurement, congruent), and properties of symmetry (point and line). Example: • If the opposite sides on a parallelogram are parallel and congruent, then rectangles are parallelograms • A sample of questions that might be posed to students include: o A parallelogram has 4 sides with both sets of opposite sides parallel. What types of quadrilaterals are parallelograms? o Regular polygons have all of their sides and angles congruent. Name or draw some regular polygons. o All rectangles have 4 right angles. Squares have 4 right angles so they are also rectangles. True or False? o A trapezoid has 2 sides parallel so it must be a parallelogram. True or False? Technology Connections: http://illuminations.nctm.org/ActivityDetail.aspx?ID=70</p>	<p>Engage Ny 16-21 envisions Topic 15 galileo</p>
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<p>5 days</p>	<p>5.G.B.4. Classify two-dimensional figures in a hierarchy based on properties.</p>	<p>5.MP.2. Reason abstractly and quantitatively. 5.MP.3. Construct viable arguments and critique the reasoning of others. 5.MP.5. Use appropriate tools strategically. 5.MP.6. Attend to precision. 5.MP.7. Look for and make use of structure.</p>	<p>Properties of figure may include:</p> <ul style="list-style-type: none"> • Properties of sides—parallel, perpendicular, congruent, number of sides • Properties of angles—types of angles, congruent <p>Examples:</p> <ul style="list-style-type: none"> • A right triangle can be both scalene and isosceles, but not equilateral. • A scalene triangle can be right, acute and obtuse. • Triangles can be classified by: <p>Angles</p> <ul style="list-style-type: none"> o Right: The triangle has one angle that measures 90°. o Acute: The triangle has exactly three angles that measure between 0° and 90°. o Obtuse: The triangle has exactly one angle that measures greater than 90° and less than 180°. <p>Sides</p> <ul style="list-style-type: none"> o Equilateral: All sides of the triangle are the same length. o Isosceles: At least two sides of the triangle are the same length. o Scalene: No sides of the triangle are the same length. 	<p>Engage Ny 16-21 envisions Topic 15 galileo</p>
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