

**Glassboro Public Schools**  
**8<sup>th</sup> Grade Math Pacing Guide, 2020-2021**

<b>Module 1</b>	<b>Transformations and Congruence</b>	<b>Total Days: 15</b>
1.1	<ul style="list-style-type: none"> <li>Explore and observe the effects of rigid motions on a figure</li> </ul>	2 days
1.2	<ul style="list-style-type: none"> <li>Describe translations and their effects on a figure</li> </ul>	2 days
1.3	<ul style="list-style-type: none"> <li>Describe reflections and their effects on a figure</li> </ul>	2 days
1.4	<ul style="list-style-type: none"> <li>Recognize and perform rotations</li> <li>Describe rotations algebraically</li> <li>Understand that rotating a figure produces an image that is congruent to the original</li> </ul>	2 days
1.5	<ul style="list-style-type: none"> <li>Perform and describe sequences of transformations on figures</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	5 days

<b>Module 2</b>		<b>Total Days: 10</b>
2.1	<ul style="list-style-type: none"> <li>Perform enlargements and reductions</li> <li>Understand that the result of enlarging or reducing an image creates a new image that is not congruent to the original</li> </ul>	2 days
2.2	<ul style="list-style-type: none"> <li>Describe and apply the properties of dilations</li> <li>Find the scale factor and center of dilation, both on and off the coordinate plane</li> </ul>	2 days
2.3	<ul style="list-style-type: none"> <li>Recognize and make similar figures when using dilations</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

<b>Module 3</b>	<b>Solve Linear Equations</b>	<b>Total Days: 10</b>
3.1	<ul style="list-style-type: none"> <li>Use algebraic properties to solve one-variable linear equations</li> </ul>	2 days
3.2	<ul style="list-style-type: none"> <li>Recognize and interpret linear equations that have no solution or infinitely many solutions</li> </ul>	2 days
3.3	<ul style="list-style-type: none"> <li>Solve and apply linear equations in one variable</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

<b>Module 4</b>	<b>Angle Relationships</b>	<b>Total Days: 10</b>
4.1	<ul style="list-style-type: none"> <li>Use angle relationships in triangles</li> </ul>	2 days
4.2	<ul style="list-style-type: none"> <li>Identify whether two triangles are similar, given angle measures in the triangles</li> </ul>	2 days
4.3	<ul style="list-style-type: none"> <li>Find missing angle measures when parallel lines are cut by a transversal</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

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<b>Module 5</b>	<b>Proportional Relationships</b>	<b>Total Days: 12</b>
5.1	<ul style="list-style-type: none"> <li>Relate right triangles to the coordinates of a line going through the origin</li> </ul>	2 days
5.2	<ul style="list-style-type: none"> <li>Write the equation of a proportional relationship</li> </ul>	2 days
5.3	<ul style="list-style-type: none"> <li>Graph proportional relationships</li> <li>Interpret unit rate as the slope of the graph of a proportional relationship</li> </ul>	2 days
5.4	<ul style="list-style-type: none"> <li>Demonstrate and interpret proportional relationships between quantities</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

<b>Module 6</b>	<b>Understand and Analyze Functions</b>	<b>Total Days: 17</b>
6.1	<ul style="list-style-type: none"> <li>Visually display a relationship between two variables</li> </ul>	2 days
6.2	<ul style="list-style-type: none"> <li>Write the equation of a linear function</li> </ul>	2 days
6.3	<ul style="list-style-type: none"> <li>Interpret the slope and y-intercept of a line</li> </ul>	2 days
6.4	<ul style="list-style-type: none"> <li>Construct a function to model a linear relationship</li> </ul>	2 days
6.5	<ul style="list-style-type: none"> <li>Use tables, graphs, and equations to compare functions</li> </ul>	2 days
6.6	<ul style="list-style-type: none"> <li>Sketch and analyze a graph that exhibits the qualitative features of a function</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	5 days

<b>Module 7</b>		<b>Total Days: 17 days</b>
7.1	<ul style="list-style-type: none"> <li>Interpret the graphical representation of two linear equations</li> </ul>	2 days
7.2	<ul style="list-style-type: none"> <li>Solve a system of two linear equations by graphing</li> </ul>	2 days
7.3	<ul style="list-style-type: none"> <li>Use substitution to solve a system of two linear equations</li> </ul>	2 days
7.4	<ul style="list-style-type: none"> <li>Use elimination to solve a system of two linear equations</li> </ul>	2 days
7.5	<ul style="list-style-type: none"> <li>Recognize and interpret systems of two linear equations that have no solution or infinitely many solutions</li> </ul>	2 days
7.6	<ul style="list-style-type: none"> <li>Use systems of two linear equations to solve real-world problems</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	5 days

<b>Module 8</b>	<b>Scatter Plots</b>	<b>Total Days: 10</b>
8.1	<ul style="list-style-type: none"> <li>Display and analyze data with two variables</li> </ul>	2 days
8.2	<ul style="list-style-type: none"> <li>Use trend lines to describe a linear relationship between two variables</li> </ul>	2 days
8.3	<ul style="list-style-type: none"> <li>Use scatter plots and trend lines to interpret linear data in context</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

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<b>Module 9</b>	<b>Two-Way Tables</b>	<b>Total Days: 10</b>
9.1	<ul style="list-style-type: none"> <li>Interpret data by constructing two-way frequency tables</li> </ul>	2 days
9.2	<ul style="list-style-type: none"> <li>Construct two-way relative frequency tables</li> </ul>	2 days
9.3	<ul style="list-style-type: none"> <li>Interpret and analyze data using two-way relative frequency</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

<b>Module 10</b>	<b>Real Numbers</b>	<b>Total Days: 10</b>
10.1	<ul style="list-style-type: none"> <li>Determine if a number is rational</li> </ul>	2 days
10.2	<ul style="list-style-type: none"> <li>Evaluate square and cube roots</li> </ul>	2 days
10.3	<ul style="list-style-type: none"> <li>Order a list of real numbers consisting of both rational and irrational numbers</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

<b>Module 11</b>	<b>The Pythagorean Theorem</b>	<b>Total Days: 12</b>
11.1	<ul style="list-style-type: none"> <li>Prove and use the Pythagorean Theorem</li> </ul>	2 days
11.2	<ul style="list-style-type: none"> <li>Prove and apply the Pythagorean Theorem and its converse</li> </ul>	2 days
11.3	<ul style="list-style-type: none"> <li>Use the Pythagorean Theorem to solve real-world problems</li> </ul>	2 days
11.4	<ul style="list-style-type: none"> <li>Use the Pythagorean Theorem to determine distance between any two points in the coordinate plane</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

<b>Module 12</b>	<b>Exponents and Scientific Notation</b>	<b>Total Days: 10</b>
12.1	<ul style="list-style-type: none"> <li>Develop and use the properties of integer exponents</li> </ul>	2 days
12.2	<ul style="list-style-type: none"> <li>Express numbers using scientific notation</li> </ul>	2 days
12.3	<ul style="list-style-type: none"> <li>Compute with numbers written in scientific notation</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

<b>Module 13</b>	<b>Volume</b>	<b>Total Days: 12</b>
13.1	<ul style="list-style-type: none"> <li>Develop and use the formula for the volume of a cylinder</li> </ul>	2 days
13.2	<ul style="list-style-type: none"> <li>Develop and use the formula for the volume of a cone</li> </ul>	2 days
13.3	<ul style="list-style-type: none"> <li>Develop and use the formula for the volume of a sphere</li> </ul>	2 days
13.4	<ul style="list-style-type: none"> <li>Use volume formulas to solve problems involving cylinders</li> </ul>	2 days
	<ul style="list-style-type: none"> <li>Supplement, test prep, assessment</li> </ul>	4 days

**Total Days: 155**