Crest Memorial School Curriculum and Pacing Guide		
Grade: 8th	Subject Area: Math	
Adoption Date:	Revision Date: February 16, 2024	

#### **Mission and Vision Statements**

*Mission:* Successful teaching and learning of mathematics play an important role in ensuring that students have the right skills required to compete in a 21st century global economy. When properly implemented and coupled with opportunities for students to engage in mathematical investigation, communication and problem solving, rigorous mathematics standards hold the promise of elevating the mathematical knowledge and skill of every learner to levels competitive with the best in the world, of preparing our college entrants to undertake advanced work in the mathematical sciences, and of readying the next generation for the jobs their world will demand.

*Vision:* A New Jersey education in Mathematics builds quantitatively and analytically literate citizens prepared to meet the demands of college and career, and to engage productively in an information-driven society. All students will have access to a high-quality mathematics education that fosters a population that:

- leverages data in decision-making and as a lens for discussing, analyzing, and responding to practical questions.
- persists to make sense of and model problems arising in everyday life, society, and the workplace.

r

- thinks critically and strategically to assess quantitative relationships and to solutions to complex problems.
- employs precise reasoning and constructs viable arguments to deduce conclusions, recognize false statements and assess peers' reasoning.
- interprets, evaluates and critiques the mathematics embedded in social, scientific and commercial systems, as well as the claims made in the private and public sectors.
- communicates precisely when conveying, representing, and justifying both qualitative and quantitative perspectives

Integration of Technology		
9.4.8.TL.2 9.4.8.TL.6:		

	21st Century Skills
9.4.5.IML.3 9.4.8.IML.5	

### **Career Education**

## 9.2.8.CAP.39.2.8.CAP.2

# Interdisciplinary Connection SCI.MS-ESS1-3

Accommodations and Modifications		
Special Education	<ul> <li>follow 504/IEP accommodations</li> <li>provide a student copy of class notes</li> <li>read test questions aloud</li> <li>provide a "second chance" grading option (correct answers for additional points)</li> <li>allow extra time to complete assignments</li> <li>color code notebook dividers by tests, study guides, etc.</li> </ul>	
English Language Learners	<ul> <li>create visual word wall with labels</li> <li>highlight and define important vocabulary</li> <li>ask yes/no questions</li> <li>provide sentence frames or sentence stems</li> <li>allow for use of pictures in science journal with dictation support</li> <li>create a word map</li> </ul>	
Students At-Risk of Failure	<ul> <li>Allow verbalization before writing</li> <li>Use audio materials when necessary</li> <li>Read tests aloud</li> <li>Restate, reword, clarify directions</li> <li>Re-teach concepts using small groups</li> <li>Provide educational "breaks" as necessary</li> <li>Chunking content into "digestible bites"</li> <li>Shorten assignments to focus on mastery concept</li> <li>Assignment, Project, and Assessment Modification Based on Individual Student Needs</li> <li>Use mnemonic devices</li> </ul>	
Gifted and Talented	Student Choice	
	Assignment, Project, and Assessment Modification Based on Individual Student Needs	

Students with 504 Plans	<ul> <li>Allow verbalization before writing</li> <li>Use audio materials when necessary</li> <li>Read tests aloud</li> <li>Restate, reword, clarify directions</li> <li>Re-teach concepts using small groups</li> <li>Provide educational "breaks" as necessary</li> <li>Chunking content into "digestible bites"</li> <li>Shorten assignments to focus on mastery concept</li> <li>Use mnemonic devices</li> </ul>
-------------------------	---

Assessments		
Formative	<ul> <li>Warm-Ups</li> <li>Lesson Quick Checks (Exit Tickets)</li> <li>Teacher Observation</li> <li>Effective Questioning</li> </ul>	
Summative	<ul><li>Unit Exams</li><li>Short Lessons</li></ul>	
Benchmark	<ul> <li>MAP Test</li> <li>Unit Exams</li> </ul>	
Alternative	<ul> <li>Projects</li> <li>Performance Exams</li> </ul>	

Pacing Guide	
Unit 1: Real Numbers, Exponents, and Scientific Notation	26 Days
Unit 2: Proportional and Non-Proportional Relationships and Functions	39 Days
Unit 3: Solving Linear Equations	39 Days
Unit 4: Geometry	48 Days

- ٠
- Students will be able to identify and utilize rational numbers Students will be able to understand roots and rational exponents ٠
- Students will be able to understand exponent rules ٠
- Students will be able to understand scientific notation ٠

Core Instructional Materials	Supplemental Materials
• Textbook	<ul><li>Online Math Dictionary</li><li>Math Antics Videos</li></ul>

Daily Targets	NJSLS Performance Expectations	Instructional Activities
<ul> <li>Day 1: Rational and Irrational Numbers</li> </ul>	• MA.8.EE.A1	<ul> <li>Setup Textbook/Binder</li> <li>Complete Unit 1 Vocabulary using an online math dictionary</li> </ul>
Day 2: Identifying Rational Numbers	• MA.8.EE.A2a	<ul> <li>Warm-Up: Identifying Rational Numbers</li> <li>Begin Lesson 1.1: Converting Decimals to Fractions, Identifying Square and Cube Roots</li> <li>Complete Rational Number worksheet</li> </ul>
<ul> <li>Day 3: Identifying and Understanding Irrational Numbers</li> </ul>	<ul> <li>MA.8.NS.8.1</li> <li>MA.8.NS.8.2</li> <li>MA.8.NS.A</li> </ul>	<ul> <li>Warm-Up: Estimating Square Roots</li> <li>Complete Lesson 1.1: Estimating roots of irrational numbers</li> <li>Practice Workbook Page on estimating roots of irrational numbers</li> </ul>
<ul> <li>Day 4: Classifying Real Numbers</li> </ul>	• MA.8.NS.8.1	<ul> <li>Notes on Lesson 1.2 Classifying Real Numbers</li> <li>Practice Workbook Page on Classifying Real Numbers</li> </ul>
Day 5: Classifying Real Numbers	• MA.8.NS.8.1	Warm-Up: Identifying Classifications of Real Numbers

		<ul> <li>Complete notes on Lesson 1.2 Classifying Real Numbers</li> <li>Prepare Study Guide</li> </ul>
<ul> <li>Day 6: Assessment on Lessons</li> </ul>	<ul> <li>MA.8.NS.8.1</li> <li>MA.8.NS.8.2</li> <li>MA.8.NS.A</li> <li>MA.8.EE.A2a</li> <li>MA.8.EE.A1</li> </ul>	Quiz on Lessons 1.1 and 1.2
<ul> <li>Day 7: Ordering Real Numbers - Comparing and Ordering Irrational Numbers</li> </ul>	• MA.8.NS.A.2	<ul> <li>Warm-Up: Estimate Irrational Numbers</li> <li>Begin notes on Lesson 3.1 Comparing and Ordering Irrational Numbers</li> <li>Guided Practice</li> </ul>
<ul> <li>Day 8: Ordering Real Numbers - Comparing and Ordering Irrational Numbers</li> </ul>	• MA.8.NS.A.2	<ul> <li>Warm-Up: Compare Irrational Numbers</li> <li>Complete notes on Lesson 3.1 Comparing and Ordering Irrational Numbers</li> <li>Guided Practice</li> </ul>
Day 9: Lessons 1.1-1.3 Review	<ul> <li>MA.8.NS.A.2</li> <li>MA.8.NS.8.1</li> <li>MA.8.NS.8.2</li> <li>MA.8.NS.A</li> <li>MA.8.EE.A2a</li> <li>MA.8.EE.A1</li> </ul>	<ul> <li>Warm-Up: Order given irrational numbers least to greatest</li> <li>Review concepts presented in Lessons 1.1 - 1.3 in preparation for assessment</li> </ul>
<ul> <li>Day 10: Lessons 1.1-1.3 Review</li> </ul>	<ul> <li>MA.8.NS.A.2</li> <li>MA.8.NS.8.1</li> <li>MA.8.NS.8.2</li> <li>MA.8.NS.A</li> <li>MA.8.EE.A2a</li> <li>MA.8.EE.A1</li> </ul>	<ul> <li>Warm-Up: Order given irrational numbers greatest to least</li> <li>Continue reviewing concepts presented in Lessons 1.1 - 1.3 in preparation for assessment</li> </ul>
<ul> <li>Day 11: Assessment Lessons 1.1 through 1.3</li> </ul>	<ul> <li>MA.8.NS.A.2</li> <li>MA.8.NS.8.1</li> <li>MA.8.NS.8.2</li> <li>MA.8.NS.A</li> <li>MA.8.EE.A2a</li> <li>MA.8.EE.A1</li> </ul>	Quiz on Lessons 1.1 through 1.3
Day 12: Rules of Exponents	• MA.8.EE.A.1	Begin notes on Lesson 2.1 Rules of Simplifying Exponents

		1
Day 13 Rules of Exponents	• MA.8.EE.A.1	<ul> <li>Warm-Up: Simplify the exponents</li> <li>Finish Guided Notes on Lesson 2.1</li> <li>Exponent Practice Worksheet</li> <li>Exponent Color by Solution Activty</li> </ul>
<ul> <li>Day 14: Assessment on Rules of Exponents</li> </ul>	• MA.8.EE.A.1	Quiz on Lesson 2.1
Day 15: Scientific Notation	• MA.8.EE.A.3	<ul> <li>Warm-Up: Simplify the Exponents</li> <li>Guided Notes on 2.2 Scientific Notation with Positive Powers of 10</li> <li>Guided Practice Worksheet</li> </ul>
<ul> <li>Day 16: Scientific Notation</li> </ul>	• MA.8.EE.A.3	<ul> <li>Warm-Up: Convert between Standard and Scientific Notation</li> <li>Review Homework</li> <li>Guided Notes on 2.3 Scientific Notation with Negative Powers of 10</li> </ul>
Day 17: Scientific Notation	• MA.8.EE.A.3	<ul> <li>Warm-Up: Convert between Standard and Scientific Notation</li> <li>Review Homework</li> <li>VersaTiles Scientific Notation Worksheets</li> </ul>
Day 18: Operations with Scientific Notation	• MA.8.EE.A.4	<ul> <li>Warm-Up: Convert between Standard and Scientific Notation</li> <li>Guided Notes on 2.4 Operations with Scientific Notation</li> </ul>
Day 19: Operations with Scientific Notation	• MA.8.EE.A.4	<ul> <li>Warm-Up: Convert between Standard and Scientific Notation</li> <li>Finish Guided Notes on 2.4 Operations with Scientific Notation</li> <li>Guided Practice Problems</li> </ul>
Day 20: Operations with Scientific Notation	• MA.8.EE.A.4	<ul> <li>Warm-Up: Multiplying Scientific Notations</li> <li>Scientific Notation Operation Task Cards</li> </ul>
Day 21: Operations with Scientific Notation	• MA.8.EE.A.4	<ul> <li>Warm-Up: Dividing Scientific Notation</li> <li>FinishScientific Notation Operation Task Cards</li> <li>Module Review Worksheet</li> </ul>
<ul> <li>Day 21: Reviewing Exponents and Scientific Notation</li> </ul>	<ul> <li>MA.8.EE.A.1</li> <li>MA.8.EE.A.3</li> </ul>	<ul> <li>Warm-Up: Review Questions</li> <li>Quizizz Review</li> <li>Create Information Sheet with remaining</li> </ul>

	• MA.8.EE.A.4	time
Day 22: Assessing Exponents and Scientific Notation	<ul> <li>MA.8.EE.A.1</li> <li>MA.8.EE.A.3</li> <li>MA.8.EE.A.4</li> </ul>	Quiz on Lessons 2.1 through 2.4
<ul> <li>Day 23-24: Reviewing Unit 1</li> </ul>	<ul> <li>MA.8.EE.A.1</li> <li>MA.8.EE.A.3</li> <li>MA.8.EE.A.4</li> </ul>	<ul> <li>Warm-Up: Review Questions from all sections</li> <li>Unit 1 Study Guide</li> <li>Quizizz Review</li> <li>Study Independently</li> </ul>
Day 25-26: Assessing Unit 1	See Days 1-24	Unit 1 Assessment

#### Inclusive concepts

• Explain any character education effort where you are encouraging inclusivity and culture competency.

- Students will be able to recognize proportional and non-proportional relationships
  Students will be able to find the slope and y-intercept and write equations in slope-intercept form
- Students will be able to Identify Functions
- Students will be able to graph and model functions

Core Instructional Materials	Supplemental Materials
Teacher Created Textbook	<ul><li>Online Math Dictionary</li><li>Math Antics Videos</li></ul>

Daily Targets	NJSLS Performance Expectations	Instructional Activities
<ul> <li>Day 1: Understanding Proportional Relationships</li> </ul>	• MA.8.EE.B	<ul> <li>Warm-Up: Finish Unit 1 Assessment</li> <li>Watch Introduction video on Proprtional Relationships</li> <li>Clean out Unit 1 and Insert Unit 2</li> </ul>

		Complete Unit 2 Vocabulary and Crossword
<ul> <li>Day 2: Understanding Proportional Relationships</li> </ul>	• MA.8.EE.B.5	<ul> <li>Warm-Up: Solve Problems with integers</li> <li>Guided Notes on 3-1 Proportional Relationships</li> <li>Guided Practice Worksheet on Proportions</li> </ul>
<ul> <li>Day 3: Understanding Proportional Relationships</li> </ul>	• MA.8.EE.B.5	<ul> <li>Warm-Up: Are the graph proportional?</li> <li>Proportional Sort</li> <li>Proportions Independent Practice Worksheet</li> </ul>
Day 4: Finding Slope	• MA.8.EE.B.6	<ul> <li>Warm-Up: Find the Constant</li> <li>Guided Notes on Lesson 3-2 Slope</li> </ul>
Day 5: Finding Slope	<ul> <li>MA.8.EE.B.5</li> <li>MA.8.EE.B.6</li> <li>MA.8.F.A.2</li> </ul>	<ul> <li>Warm-Up: Find the slope from two points</li> <li>Finish Guided Notes on 3-2</li> <li>Complete Graphing Riddle</li> </ul>
Day 6: Finding Slope	<ul> <li>MA.8.EE.B.5</li> <li>MA.8.EE.B.6</li> <li>MA.8.F.A.2</li> </ul>	Halloween Slope Activity
Day 7: Finding Slope	<ul><li>MA.8.EE.B.5</li><li>MA.8.EE.B.6</li></ul>	<ul> <li>Warm-Up: Find the Slope from the Graph</li> <li>Slope Partner Matching Activty</li> </ul>
Day 8: Finding Slope	<ul> <li>MA.8.EE.B.5</li> <li>MA.8.EE.B.6</li> </ul>	<ul> <li>Warm-Up: Find the Slope from two points and a graph</li> <li>Slope Scavenger Hunt Activity</li> <li>Independent Practice Slope Worksheet</li> </ul>
Day 9: Review Proportions and Slope	<ul> <li>MA.8.EE.B.5</li> <li>MA.8.EE.B.6</li> <li>MA.8.F.A.2</li> </ul>	<ul> <li>Warm-Up: Find Slope</li> <li>Quizizz Game Review</li> <li>Create Study Guide</li> </ul>
Day 10: Assessing Proportions and Slope	• MA.8.EE.B.5	• Quiz on 3-1 and 3-2

	<ul> <li>MA.8.EE.B.6</li> <li>MA.8.F.A.2</li> </ul>	
Day 11: Graphing Functions	<ul> <li>MA.8.F.A.1</li> <li>MA.8.F.B.4</li> </ul>	<ul> <li>Warm-Up: Spiral Review</li> <li>Guided Notes on 4-1 Non-proportional Relationships</li> <li>Guided Practice Graphing Functions</li> </ul>
Day 12: Graphing Functions	<ul> <li>MA.8.F.A.1</li> <li>MA.8.F.B.4</li> <li>MA.8.F.B.5</li> </ul>	<ul> <li>Warm-Up: Use Input Output Tables</li> <li>Finish Notes on 4-1</li> <li>Graphing Riddle Worksheet</li> </ul>
Day 13: Slope-Intercept Form	<ul><li>MA.8.F.A.3</li><li>MA.8.EE.B.6</li></ul>	<ul> <li>Warm-Up: Create a Table of Values from a function</li> <li>Guided Notes on 4-2 Slope Intercept Form</li> </ul>
Day 14: Slope-Intercept Form	<ul> <li>MA.8.F.A.3</li> <li>MA.8.EE.B.6</li> </ul>	<ul> <li>Warm-Up: Find the Slope and Y-Intercept</li> <li>Finish Notes on 4-2</li> <li>Guided Practice Page on Slope</li> </ul>
Day 15: Slope-Intercept Form	<ul> <li>MA.8.F.A.3</li> <li>MA.8.EE.B.6</li> </ul>	<ul> <li>Warm-Up: Find the Slope and Y-Intercept</li> <li>Slope Intercept Form Independent Practice Worksheet</li> <li>Slopes and Intercepts Activity</li> </ul>
<ul> <li>Day 16: Distinguishing Between Proportional and Non-Proportional Relationships</li> </ul>	• MA.8.F.A.1	<ul> <li>Warm-Up: Find Slope and Y-Intercept of each Graph</li> <li>Guided Notes on Lesson 4-3 Distinguishing Between Proportional and Non-Proportional Relationships</li> <li>Practice Worksheet</li> </ul>
<ul> <li>Day 17: Graphing Using Slope Intercept Form</li> </ul>	• MA.8.EE.B.5	<ul> <li>Warm-Up: Is the following Proportional?</li> <li>Review Homework Together</li> <li>Notes on 4-4 Graphing Using Slope and y-Intercept</li> </ul>
Day 18: Graphing Using Slope Intercept Form	• MA.8.EE.B.5	<ul><li>Warm-Up: Graph the Equations</li><li>Killing Zombies Graphing Activity</li></ul>
<ul> <li>Day 19-20: Reviewing Proportional and Non-Proportional Relationships</li> </ul>	• MA.8.EE.B.6	<ul> <li>Warm-Up: Graph and Identify Parts of a Linear Equation</li> </ul>

	<ul> <li>MA.8.F.A.1</li> <li>MA.8.F.A.3</li> <li>MA.8.F.B.4</li> <li>MA.8.F.B.5</li> </ul>	<ul> <li>Review Study Guide Together</li> <li>Module Review worksheets</li> <li>Quizizz Review</li> <li>Study Independently</li> </ul>
<ul> <li>Day 21-22: Assessing Proportional and Non-Proportional Relationships</li> </ul>	<ul> <li>MA.8.EE.B.6</li> <li>MA.8.F.A.1</li> <li>MA.8.F.A.3</li> <li>MA.8.F.B.4</li> <li>MA.8.F.B.5</li> </ul>	• Quiz on 4-1 through 4-4
Day 23: Writing Linear Equations	• MA.8.EE.B.6	<ul> <li>Warm-Up: Spiral Review</li> <li>Guided Notes on 5-1 Writing Linear Equations</li> <li>Writing Linear Equations Practice Worksheet</li> </ul>
Day 24: Writing Linear Equations	• MA.8.EE.B.6	<ul> <li>Warm-Up: Write Equations from a Graph</li> <li>Guided Notes on 5-2 Writing Equations from a table</li> </ul>
Day 25: Writing Linear Equations	• MA.8.SP.A.3	Writing Linear Equations Activity
Day 26: Writing Linear Equations	• MA.8.SP.A.3	<ul> <li>Warm-Up: Write Equations from a table</li> <li>Guided Notes on Lesson 5-3 Writing Equations with slopes and points</li> <li>Independent Practice Worksheet on writing equations</li> </ul>
Day 27: Writing Linear Equations	<ul><li>MA.8.EE.B.6</li><li>MA.8.SP.A.3</li></ul>	<ul> <li>Warm-Up: Write the equation given points</li> <li>Writing Linear Equations Scavenger Hunt</li> <li>Writing Equation Worksheet if time remains</li> </ul>
Day 28: Reviewing Linear Equations	<ul><li>MA.8.EE.B.6</li><li>MA.8.SP.A.3</li></ul>	<ul> <li>Warm-Up: Write the equation given points</li> <li>Quizizz Review</li> <li>Make Study Guide</li> </ul>

Day 29: Assessing Linear Equations	<ul><li>MA.8.EE.B.6</li><li>MA.8.SP.A.3</li></ul>	• Quiz on 5-1 to 5-3
<ul> <li>Day 30: Identifying Functions</li> </ul>	• MA.8.F.A.1	<ul> <li>Warm-Up: Spiral Review</li> <li>Guided Notes on Lesson 6-1</li> <li>6-1 Identifying Functions Independent Practice</li> </ul>
Day 31: Graphing Functions	• MA.8.F.A.1	<ul><li>Warm-Up: Is it a function?</li><li>Guided Notes on 6-2 Graphing Functions</li></ul>
<ul> <li>Day 32: Comparing Functions</li> </ul>	<ul> <li>MA.8.F.B.4</li> <li>MA.8.F.B.5</li> </ul>	<ul> <li>Warm-Up: Graph the given function</li> <li>Guided Notes on Lesson 6-3 Comparing Functions</li> <li>Guided Practice Worksheet Comparing Functions</li> </ul>
<ul> <li>Day 33-34: Reviewing Functions</li> </ul>	<ul> <li>MA.8.F.A.1</li> <li>MA.8.F.B.4</li> <li>MA.8.F.B.5</li> </ul>	<ul> <li>Warm-Up: Questions from each section</li> <li>Review Worksheets</li> <li>Review Study Quide</li> <li>Quizizz Review</li> </ul>
<ul> <li>Day 35: Assessing Functions</li> </ul>	<ul> <li>MA.8.F.A.1</li> <li>MA.8.F.B.4</li> <li>MA.8.F.B.5</li> </ul>	Quiz on Lessons 6-1 through 6-3
<ul> <li>Day 36-37: Reviewing Functions Unit</li> </ul>	See Days 1-35	<ul> <li>Complete Study Guide on Unit 2</li> <li>Jeopardy Review for Test</li> <li>Make Infromation Sheet for Test</li> </ul>
Day 38-39: Assessing Functions Unit	See Days 1-35	Unit 2 Exam

	Inclusive concepts
<ul> <li>Explain any char</li> </ul>	aracter education effort where you are encouraging inclusivity and culture competency.

Core Instructional Materials	Supplemental Materials
• Textbook	<ul><li>Online Math Dictionary</li><li>Math Antics Videos</li></ul>

Daily Targets	NJSLS Performance Expectations	Instructional Activities
Day 1: Equations Introduction	• MA.8.EE.C.7a	<ul> <li>Warm-Up: Clean out binder of Unit 2 and Introduce Unit 3</li> <li>Spiral Review Worksheet</li> <li>Introduction to Algebra Video</li> <li>Complete Unit 3 Vocabulary</li> </ul>
Day 2: Solving Equations	• MA.8.EE.C.7a	<ul> <li>Warm-Up: Solve the two step equations</li> <li>Guided Notes on Lesson 7-1 Solving Equations with variables on both sides</li> <li>Equations Worksheet</li> </ul>
Day 3: Solving Equations	• MA.8.EE.C.7a	<ul> <li>Warm-Up: Solve the equations</li> <li>Finish 7-1 Notes</li> <li>Practice Worksheets on Solving Equations</li> </ul>
<ul> <li>Day 4: Solving Equations with Rational Coefficients</li> </ul>	• MA.8.EE.C.7b	<ul> <li>Warm-Up: Solve the equations</li> <li>Guided Notes on 7-2 Equations with Rational Coefficients</li> <li>Equation Practice Whiteboard Problems</li> </ul>
<ul> <li>Day 5: Solving Equations with Rational Coefficients</li> </ul>	• MA.8.EE.C.7b	<ul> <li>Warm-Up: Solve the Equations</li> <li>Review Homework Together</li> <li>Pixel Art Solving Activity</li> </ul>
<ul> <li>Day 6: Solving Equations with Rational Coefficients</li> </ul>	• MA.8.EE.C.7b	<ul> <li>Warm-Up: Solve the Equations</li> <li>Review Homework Together</li> <li>Finish Pixel Art Solving Activity</li> </ul>
<ul> <li>Day 7: Solving Equations with Rational Coefficients</li> </ul>	• MA.8.EE.C.7b	<ul> <li>Warm-Up: Solve the Equations</li> <li>Review Homework Together</li> <li>Practice 7-2 Worksheet</li> </ul>

•

		Solving Equations Riddles
<ul> <li>Day 8: Solving Equations with Distributive Property</li> </ul>	<ul> <li>MA.8.EE.C.7a</li> <li>MA.8.EE.C.7b</li> </ul>	<ul> <li>Warm-Up: Solve the Equation</li> <li>Guided Notes on 7-3 Equations with the Distributive Property</li> </ul>
<ul> <li>Day 9: Solving Equations with Distributive Property</li> </ul>	<ul> <li>MA.8.EE.C.7a</li> <li>MA.8.EE.C.7b</li> </ul>	<ul><li>Warm-Up: Solve the Equation</li><li>Color by Answer Worksheet</li></ul>
<ul> <li>Day 10: Solving Equations with Many and No Solutions</li> </ul>	<ul> <li>MA.8.EE.C.7a</li> <li>MA.8.EE.C.7b</li> </ul>	<ul> <li>Warm-Up: Solve the Equations</li> <li>Guided Notes on 7-4 Equations with Many and No Solutions</li> <li>7-4 Practice Worksheet</li> </ul>
<ul> <li>Day 11: Solving Equations with Many and No Solutions</li> </ul>	<ul> <li>MA.8.EE.C.7a</li> <li>MA.8.EE.C.7b</li> </ul>	Solving Equations Scavenger Hunt
<ul> <li>Day 12-13: Reviewing Solving Equations</li> </ul>	<ul> <li>MA.8.EE.C.7a</li> <li>MA.8.EE.C.7b</li> </ul>	<ul> <li>Warm-Up: Questions from each section</li> <li>Module Review Worksheets</li> <li>Study Guide Worksheet</li> <li>Quizizz Review Game</li> </ul>
<ul> <li>Day 14: Assessing Solving Equations</li> </ul>	<ul> <li>MA.8.EE.C.7a</li> <li>MA.8.EE.C.7b</li> </ul>	• Quiz on 7-1 through 7-4
<ul> <li>Day 15: Solving Systems of Equations by Graphing</li> </ul>	• MA.8.EE.C.8a	<ul> <li>Warm-Up: Spiral Review</li> <li>Video on Systems of Equations</li> <li>Guided Notes on 8-1 Solvinh Systems by Graphing</li> <li>Guided Practice Worksheet on Graphing</li> </ul>
<ul> <li>Day 16: Solving Systems of Equations by Graphing</li> </ul>	<ul> <li>MA.8.EE.C.8a</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve the System by Graphing</li> <li>Finish 8-1 Notes</li> <li>Practice Worksheet 8-1</li> </ul>
<ul> <li>Day 17: Assessing Systems of Equations by Graphing</li> </ul>	<ul> <li>MA.8.EE.C.8a</li> <li>MA.8.EE.C.8c</li> </ul>	Quiz on Solving Systems by Graphing
<ul> <li>Day 18: Solving Systems of Equations by Substitution</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve the System by Graphing</li> <li>Notes on Lesson 8-2 Solving Systems by Substitution</li> </ul>
<ul> <li>Day 19: Solving Systems of Equations by Substitution</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve the system by substitution</li> <li>Finish Notes on Lesson 8-2</li> </ul>

<ul> <li>Day 20: Solving Systems of Equations by Substitution</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Video showing solutions by substitution</li> <li>Solving Systems Partner Activity</li> </ul>
<ul> <li>Day 21-23: Solving Systems of Equations by Substitution</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve the System</li> <li>Solving by Substitution Riddle</li> <li>Solving Systems Partner Activity</li> <li>Solving Systems Scavenger Hunt</li> </ul>
<ul> <li>Day 24: Assessing Solving Systems of Equations by Substitution</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Quiz on Solving Systems of Equations by Substitution</li> </ul>
<ul> <li>Day 25: Solving Systems of Equations by Elimination</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve by Substitution</li> <li>Guided Notes on 8-3 Solving Systems by Elimination</li> </ul>
<ul> <li>Day 26: Solving Systems of Equations by Elimination</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve by Elimination</li> <li>Finish Guided Notes on 8-3 Solving Systems by Elimination</li> <li>Solving by Elimination Independent Practice Worksheet</li> </ul>
<ul> <li>Day 27: Solving Systems of Equations by Elimination with Multiplication</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Review Quiz</li> <li>Guided Notes on Lesson 8-4 Solving Systems by Elimination with Multiplication</li> </ul>
<ul> <li>Day 28: Solving Systems of Equations by Elimination with Multiplication</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve by Elimination with Multiplication</li> <li>Riddle Worksheet</li> </ul>
<ul> <li>Day 29: Solving Systems of Equations by Elimination with Multiplication</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Solve by Elimination with Multiplication</li> <li>Matchup Worksheet</li> </ul>
<ul> <li>Day 30: Assessing Systems of Equations by Elimination with Multiplication</li> </ul>	<ul> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	Quiz on Solving Systems of Equations with Elimination
<ul> <li>Day 31-32: Reviewing Systems of Equations</li> </ul>	<ul> <li>MA.8.EE.C.8a</li> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Warm-Up: Review Questions</li> <li>Review Worksheet</li> <li>Study Guide</li> <li>Quizizz Review Game</li> </ul>
<ul> <li>Day 33-34: Reviewing Systems of Equations</li> </ul>	<ul> <li>MA.8.EE.C.8a</li> <li>MA.8.EE.C.8b</li> </ul>	Quiz on Lessons 8-1 through 8-4

	• MA.8.EE.C.8c	
<ul> <li>Day 35-37: Reviewing Equations and Systems of Equations</li> </ul>	<ul> <li>MA.8.EE.C.8a</li> <li>MA.8.EE.C.8b</li> <li>MA.8.EE.C.8c</li> </ul>	<ul> <li>Study Guide on Unit 3</li> <li>Unit Review Worksheet</li> <li>Board Races to Review (2 Days)</li> </ul>
<ul> <li>Day 38-39: Assessing Equations and Systems of Equations</li> </ul>	See Days 1-37	<ul> <li>Unit Test on Equations and Systems of Equations</li> </ul>

## Inclusive concepts

• Explain any character education effort where you are encouraging inclusivity and culture competency.

- Students will be able to use transformations in Geometry to change the location, orientation, or size of a figure
- Students will be able to use angle relationships to solve problems
- Students will be able to use triangle theorems to find missing angles
- Students will be able to use the Pythagorean Theorem to solve real-world problems
- Students will be able to find the Volume of 3-Dimensional object

Core Instructional Materials	Supplemental Materials
Teacher Created Textbook	<ul><li>Online Math Dictionary</li><li>Math Antics Videos</li></ul>

Daily Targets	NJSLS Performance Expectations	Instructional Activities
Day 1: Geometry Introduction	• MA.8.G	<ul> <li>Warm-Up: Clean out binder of Unit 3</li> <li>Insert New Unit into binder</li> <li>Watch Introduction to transformations video</li> <li>Complete Unit 4 Vocabulary</li> </ul>
Day 2: Understanding Translations	• MA.8.G.A.1a	Warm-Up: Define Vocabulary Terms Using

	• MA.8.G.A.2	<ul> <li>Dictionary, Computer, or Notes</li> <li>Guided Notes on 9-1 Properties of Translations</li> <li>Independent Practice on Translations</li> </ul>
Day 3: Understanding Reflections	<ul> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Warm-Up: Graph the Translation</li> <li>Guided Notes on 9-2 Properties of Reflections</li> <li>Independent Practice on Reflections</li> </ul>
Day 4: Practice Translations and Reflections	<ul> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Warm-Up: Graph the Reflection</li> <li>Reflections and Rotation Picture Drawing Activity</li> </ul>
Day 5: Understanding Rotations	<ul> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Warm-Up: Graph the Given Transformations</li> <li>Start Guided Notes on Lesson 9-3 Properties of Reflections</li> </ul>
Day 6: Understanding Rotations	<ul> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Warm-Up: Graph the Given Transformations</li> <li>Complete "Emoji Rotations" worksheet</li> </ul>
<ul> <li>Day 7-8: Practicing Translations, Reflections, and Rotations</li> </ul>	<ul> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Warm-Up: Graph the Given Transformations</li> <li>Complete Hero Shield Transformation Project</li> </ul>
Day 9: Understanding Dilations	<ul> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Warm-Up: Spiral Review</li> <li>Guided Notes on Lesson 10-1 Dilations</li> <li>Independent Practice on Dilations</li> </ul>
Day 10: Practicing Dilations	<ul><li>MA.8.G.A.2</li><li>MA.8.G.A.3</li></ul>	<ul> <li>Warm-Up: Perform the Dilation</li> <li>Review Homework Together</li> <li>Dilations Emoji Worksheet</li> </ul>

	• MA.8.G.A.4	
Day 11-12: Reviewing Transformations	<ul> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Warm-Up: Perform the Transformation</li> <li>Review Study Guide</li> <li>Review Worksheet</li> <li>Quizizz Game Review</li> <li>Study with Remaining Time</li> </ul>
Day 13-14: Assessing Transformations	<ul> <li>MA.8.G.A.1a</li> <li>MA.8.G.A.2</li> <li>MA.8.G.A.3</li> <li>MA.8.G.A.4</li> </ul>	<ul> <li>Quiz on Lessons 9-1 through 10-1</li> </ul>
<ul> <li>Day 15: Understanding Parallel Lines and Transversals</li> </ul>	<ul> <li>MA.8.G.A.1b</li> <li>MA.8.G.A.1c</li> <li>MA.8.G.A.5</li> </ul>	<ul> <li>Warm-Up: Spiral Review Worksheet</li> <li>Video Introduction to Parallel Lines and Transversals</li> <li>Guided Notes on Lesson 11-1 Parallel Lines and Transversals</li> </ul>
<ul> <li>Day 16: Practicing Parallel Lines and Transversals</li> </ul>	<ul> <li>MA.8.G.A.1c</li> <li>MA.8.G.A.5</li> </ul>	<ul> <li>Warm-Up: Find the Angle Measurement</li> <li>Finish Guided Notes on Lesson 11-1 Parallel Lines and Transversals</li> <li>Indepdent Practice Worksheet on Parallel Lines and Transversals</li> </ul>
<ul> <li>Day 17-18: Practicing Parallel Lines and Transversals</li> </ul>	• MA.8.G.A.5	<ul> <li>Warm-Up: Find the Missing Angle Measurement</li> <li>Short Project on Parallel Lines and Transversals</li> </ul>
<ul> <li>Day 19: Reviewing Parallel Lines and Transversals</li> </ul>	• MA.8.G.A.5	<ul> <li>Warm-Up: Spiral Review Questions</li> <li>Complete Riddles Pages 61-64</li> </ul>
<ul> <li>Day 20: Assessment on Parallel Lines and Transversals</li> </ul>	<ul> <li>MA.8.G.A.1b</li> <li>MA.8.G.A.1c</li> <li>MA.8.G.A.5</li> </ul>	<ul> <li>Quiz on 11-1 Parallel Lines and Transversals</li> </ul>
Day 21: Understanding Triangle Theorems	• MA.8.G.A.5	<ul> <li>Warm-Up: Find the Missing Angle Measurement</li> <li>Guided Notes on Lesson 11-2 Triangle</li> </ul>

		<ul><li>Theorems</li><li>Guided Practice Worksheet</li></ul>
Day 22: Practicing Triangle Theorems	• MA.8.G.A.5	<ul> <li>Warm-Up: Find the Missing Angle Measurement</li> <li>Finish Notes on 11-2</li> <li>Independent Practice Worksheet on Triangles</li> </ul>
<ul> <li>Day 23-24: Understanding Angle-Angle Similarity</li> </ul>	<ul> <li>MA.8.G.A.4</li> <li>MA.8.G.A.5</li> </ul>	<ul> <li>Warm-Up: Find the missing angles of the triangle</li> <li>Guided Notes on Lesson 11-3 Angle-Angle Similarity</li> <li>Angle-Angle Similarity Practice Worksheet</li> </ul>
<ul> <li>Day 25-26: Reviewing Parallel Lines, Transversals, and Triangles</li> </ul>	<ul> <li>MA.8.G.A.1b</li> <li>MA.8.G.A.1c</li> <li>MA.8.G.A.5</li> </ul>	<ul> <li>Warm-Up: Questions from each Lesson</li> <li>Study Guide Review</li> <li>Module Review and Practice Worksheets</li> <li>Quizizz Review on Module 11</li> </ul>
<ul> <li>Day 27: Assessing Parallel Lines, Transversals, and Triangles</li> </ul>	<ul> <li>MA.8.G.A.1b</li> <li>MA.8.G.A.1c</li> <li>MA.8.G.A.5</li> </ul>	<ul> <li>Quiz Parallel Lines, Transverals and Triangles</li> </ul>
<ul> <li>Day 28: Understanding the Pythagorean Theorem</li> </ul>	<ul> <li>MA.8.G.B.6</li> <li>MA.8.G.B.7</li> </ul>	<ul> <li>Warm-Up: Roots and Squares</li> <li>Guided Notesmon Lesson 12-1 The Pythagorean Theorem</li> <li>Guided Practice Worksheet on The Pythagorean Theorem</li> </ul>
<ul> <li>Day 29: Practicing the Pythagorean Theorem</li> </ul>	<ul> <li>MA.8.G.B.6</li> <li>MA.8.G.B.7</li> </ul>	<ul> <li>Warm-Up: Find the Missing Side of a Triangle</li> <li>Color by Solution Pythagorean Theorem Worksheet</li> <li>Independent Practice Worksheet for homework</li> </ul>
<ul> <li>Day 30: Understanding the Converse of the Pythagorean Theorem</li> </ul>	<ul> <li>MA.8.G.B.6</li> <li>MA.8.G.B.7</li> </ul>	<ul> <li>Warm-Up: Find the Missing Side of a Triangle</li> <li>Guided Notes on Lesson 12-2 The Converse of the Pythagorean Theorem</li> <li>Independent Practice Worksheet for homework</li> </ul>

<ul> <li>Day 31: Understanding the Distance Between Two Points</li> </ul>	• MA.8.G.B.8	<ul> <li>Warm-Up: Use the Converse to determine if it is a right triangle</li> <li>Guided Notes 12-3 Distance between two points</li> <li>Guided Practice Worksheet</li> </ul>
<ul> <li>Day 32-33: Practicing the Distance Between Two Points</li> </ul>	• MA.8.G.B.8	<ul> <li>Warm-Up: Find the Distance Between Two Points</li> <li>Create the Riddle Worksheet to find Distance</li> <li>Zoo Activity to find Distance Between two Exhibits</li> </ul>
<ul> <li>Day 34-35: Reviewing the Pythagorean Theorem</li> </ul>	<ul> <li>MA.8.G.B.6</li> <li>MA.8.G.B.7</li> <li>MA.8.G.B.8</li> </ul>	<ul> <li>Warm-Up: Questions from Each Section</li> <li>Study Guide Review</li> <li>Module Review Worksheet</li> <li>Quizizz Game Review</li> </ul>
<ul> <li>Day 36: Assessing the Pythagorean Theorem</li> </ul>	<ul> <li>MA.8.G.B.6</li> <li>MA.8.G.B.7</li> <li>MA.8.G.B.8</li> </ul>	<ul> <li>Quiz on Lessons 12-1 through 12-3</li> </ul>
<ul> <li>Day 36: Understanding Volume of Cylinders</li> </ul>	• MA.8.G.C.9	<ul> <li>Warm-Up: Spiral Review Worksheet</li> <li>Guided Notes on 13-1 Volume of Cylinders</li> <li>Guided Practice Worksheet</li> </ul>
Day 37: Practicing Volume of Cylinders	• MA.8.G.C.9	<ul> <li>Warm-Up: Find the Volume</li> <li>Volume of Cylinders Maze</li> <li>Volume of Cylinders Riddle</li> </ul>
Day 38: Understanding Volume of Cones	• MA.8.G.C.9	<ul> <li>Warm-Up: Find the Volume</li> <li>Guided Notes on 13-2 Volume of Cones</li> <li>Independent Practice Worksheet</li> </ul>
Day 39: Practicing Volume of Cones	• MA.8.G.C.9	<ul> <li>Warm-Up: Find the Volume</li> <li>Volume of Cones Practice Worksheets</li> </ul>
Day 40: Understanding Volume of Spheres	• MA.8.G.C.9	<ul> <li>Warm-Up: Find the Volume</li> <li>Guided Notes on 13-3 Volume of Spheres</li> <li>Guided Practice on Spheres</li> </ul>
Day 41: Practicing Volume of Spheres	• MA.8.G.C.9	<ul> <li>Warm-Up: Find the Volume</li> <li>Volume of Spheres Maze</li> </ul>

Day 42-43: Reviewing Volume	• MA.8.G.C.9	<ul> <li>Warm-Up: Find the Volume</li> <li>Module Review Worksheet</li> <li>Quizizz Review on Volume</li> </ul>
Day 44: Assessing Volume	• MA.8.G.C.9	• Quiz on 13-1 through 13-3
<ul> <li>Day 45-46 Reviewing Geometry</li> </ul>	• See Days 1-45	<ul><li>Geometry Task Cards</li><li>Gemetry Study Guide</li><li>Geometry Review Game</li></ul>
Day 47-48 Assessing Geometry	• See Days 1-45	Unit 4 Test on Geometry

Inclusive concepts	
• Explain any character education effort where you are encouraging inclusivity and culture competency.	