## Please Note:

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Teachers may use a wide variety of instructional materials throughout their course. The Possible Resources listed may include the district adopted instructional resource or supplemental resources that align to the topic and/or standard. These Possible Resources provide sample problems that align to the topic/standard.

## **Publisher Resource:**

Pearson (select your grade and course level and use your active directory)

## **Other Course Supplemental Resources:**

Khan Academy (7<sup>th</sup> Grade; does not support Internet Explorer)

<u>Illustrative Mathematics</u> (7<sup>th</sup> Grade; does not support Internet Explorer)

Math Nation (Clever – use your active directory; does not support Internet Explorer)

**FSA Portal** 

<u>Grade 7 Mathematics Test Item Specifications</u>
Grade 7 FSA Mathematics Computer-Based Practice Test Answer Key

PARCC (Partnership for Assessment of Readiness for College and Careers) - Mathematics Practice Tests with Answer Keys

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	Week	Major Concepts / Topics	Possible Resources
	1 8/16 – 8/20	<ul> <li>1-1 Rational Numbers as Decimals (8.NS.1.1)</li> <li>1-2 Understand Rational Numbers (8.NS.1.1)</li> <li>1-3 Compare and Order Real Numbers (8.NS.1.2)</li> </ul>	Converting a fraction to a repeating decimal - Khan Academy Converting repeating decimals to fractions - Khan Academy Comparing rational numbers - Khan Academy Ordering rational numbers practice - Khan Academy Academy
Quarter 1 Aug 16 – Oct 15	2 8/23 – 8/27	<ul> <li>1-4 Evaluate Square Roots and Cube Roots (8.EE.1.2)</li> <li>1-5 Solve Equations Using Square Roots and Cube Roots (8.EE.1.2)</li> <li>1-6 Use Properties of Integer Exponents (8.EE.1.2)</li> </ul>	Intro to square roots - Khan Academy Intro to cube roots - Khan Academy Exponent properties: products - Khan Academy Exponent properties: parentheses - Khan Academy Exponent properties: quotients - Khan Academy Negative exponents - Khan Academy Multiplying and dividing powers - Khan Academy Powers of products and quotients - Khan Academy Powers of zero - Khan Academy
	3 8/30 – 9/3	<ul> <li>1-7 More Properties of Integer Exponents (8.EE.1.1)</li> <li>1-8 Use Powers of 10 to Estimate Quantities (8.EE.1.3)</li> <li>1-9 Understand Scientific Notation (8.EE.1.4)</li> </ul>	Multiplying multiples of powers of 10 - Khan  Academy Approximating with powers of 10 - Khan  Academy Scientific notation - Khan Academy Scientific notation part 2 - Khan Academy
	4 9/6 – 9/10	<ul> <li>Labor Day Holiday – 9/6</li> <li>1-10 Operations with Numbers in Scientific Notation (8.EE.1.4)</li> <li>Remediate/Review</li> <li>Assess</li> <li>2-1 Write Two Step Equations (7.EE.2.4)</li> </ul>	Multiplying and dividing in scientific notation -  Khan Academy Subtracting in scientific notation - Khan  Academy

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5 9/13 – 9/17	<ul> <li>Interims Issued – 9/14</li> <li>2-2 Solve Two-Step Equations (7.EE.2.3, 7.EE.2.4a)</li> <li>2-3 Solve Equations Using the Distributive Property (7.EE.2.3, 7.EE.2.4a)</li> <li>2-4 Solve Inequalities Using Addition and Subtraction (7.EE.2.4b)</li> </ul>	Simplifying in scientific notation - Khan  Academy Intro to 2 step equations - Khan Academy Solving 2 step equations - Khan Academy 2 step equations with decimals and fractions - Khan Academy Same thing to both sides - Khan Academy Find the mistake: 2 step equations - Khan  Academy 1 step inequalities - Khan Academy
6 9/20 – 9/24	<ul> <li>2-5 Solve Inequalities Using Multiplication or Division (7.EE.2.4b)</li> <li>2-6 Solve Two Step Inequalities (7.EE.2.4b)</li> <li>2-7 Solve Multi-Step Inequalities (7.EE.2.4b)</li> </ul>	1 step inequalities - Khan Academy 2 step inequalities - Khan Academy 2 step inequalities word problem - Khan Academy Testing solutions to inequalities - Khan Academy Multi-step inequalities - Khan Academy
7 9/27 – 10/1	<ul> <li>Remediate/Review</li> <li>Assess</li> <li>3-1 Combine Like Terms to Solve Equations (8.EE.3.7b)</li> <li>3-2 Solve Equations with Variables on Both Sides (8.EE.3.7b)</li> </ul>	Intro to equations with variables on both sides - Khan Academy Equations with variables on both sides - Khan Academy Equations with variables on both sides: fractions - Khan Academy
8 10/4 – 10/8	<ul> <li>3-3 Solve Multistep Equations (8.EE.3.7b)</li> <li>3-4 Equations with No Solutions or Infinitely Many Solutions (8.EE.3.7a)</li> <li>3-5 Compare Proportional Relationships (8.EE.2.5)</li> </ul>	Equations with parentheses - Khan Academy Number of solutions to equations - Khan Academy Creating an equation with no solutions - Khan Academy Creating an equation with infinitely many solutions - Khan Academy
9 10/11 – 10/15	<ul> <li>PSAT/NMSQT – 10/13</li> <li>3-6 Connect Proportional Relationships and Slope (8.EE.2.6)</li> <li>3-7 Analyze Linear Equations: y = mx (8.EE.2.6)</li> </ul>	Intro to slope - <u>Khan Academy</u> Graphing proportional relationships - <u>Khan Academy</u>

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	•	3-8 Understand the y-intercept of a line (8.EE.2.6)	Intro to slope-intercept form - Khan Academy

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	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 18 – Dec 21	1 10/18 – 10/22	<ul> <li>Teacher Planning Day – 10/18</li> <li>3-9 Analyze Linear Equations: y = mx + b (8.EE.2.6)</li> <li>Remediate/Review</li> </ul>	Graph from slope-intercept form - Khan Academy Slope-intercept equation from graph - Khan Academy Writing equation from slope and point - Khan Academy
	2 10/25 – 10/29	<ul> <li>Report Cards – 10/26</li> <li>Assess</li> <li>4-1 Understand Relations and Functions (8.F.1.1)</li> <li>4-2 Connect Representations of Functions (8.F.1.1)</li> </ul>	Relations and Functions - Khan Academy What is a function - Khan Academy
	3 11/1 – 11/5	<ul> <li>4-3 Compare Linear and Nonlinear Functions (8.F.1.3, 8.F.1.2)</li> <li>4-4 Construct Functions to Model Linear Relationships (8.F.2.4, 8.F.1.2)</li> <li>4-5 Intervals of Increase and Decrease (8.F.2.5)</li> </ul>	Evaluate functions -Khan Academy Evaluate functions from their Graphs (practice) -Khan Academy Function rules from equations (practice) - Khan Academy Linear and nonlinear functions - Khan Academy Modeling with linear equations - Khan Academy Increase/decrease intervals - Khan Academy
	4 11/8 – 11/12	<ul> <li>Veterans Day 11/11</li> <li>4-6 Sketch Functions from Verbal Descriptions (8.F.2.5)</li> <li>Remediate/Review</li> </ul>	
	5 11/15 – 11/19	<ul> <li>Interims Issued – 11/16</li> <li>Assess</li> <li>5-1 Construct and Interpret Scatter Plots (8.SP.1.1)</li> <li>5-2 Analyze Linear Associations (8.SP.1.2, 8.F.1.3, 8.F.2.4)</li> </ul>	Constructing scatter plots - Khan Academy Example of direction in scatterplots - Khan Academy Analyze positive and negative linear associations from scatter plots - (practice) Khan Academy

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	6 11/22 – 11/26	<ul> <li>Thanksgiving Holiday 11/24 – 11/26</li> <li>5-3 Use Linear Models to Make Predications (8.SP.1.3, 8.F.1.3, 8.F.2.4)</li> <li>5-4 Interpret Two-Way Frequency Tables (8.SP.1.4)</li> </ul>	Estimating line of best fit - Khan Academy Interpreting a trend line - Khan Academy Interpreting Two-Way Tables - Khan Academy
	7 11/29 – 12/3	<ul> <li>5-5 Interpret Two-Way Relative Frequency Tables (8.SP.1.4)</li> <li>Remediate/Review</li> <li>Assess</li> </ul>	
	8 12/6 – 12/10	<ul> <li>6-1 Estimate Solutions by Inspection (8.EE.3.8b, 8.EE.3.8c)</li> <li>6-2 Solve Systems by Graphing (8.EE.3.8a, 8.EE.3.8c)</li> </ul>	Systems of equations part 1 - Khan  Academy Systems of equations part 2 - Khan  Academy Testing a solution to a system - Khan  Academy Systems of equations with graphing - Khan  Academy Systems of equations with substitution - Khan Academy
	9 12/13 – 12/17	<ul> <li>6-3 Solve Systems by Substitution (8.EE.3.8b, 8.EE.3.8c)</li> <li>6-4 Solve Systems by Elimination (8.EE.3.8b, 8.EE.3.8c)</li> <li>Remediate/Review</li> </ul>	System of equation with elimination part 1 - Khan Academy Systems of equations with elimination part 2 - Khan Academy Number of solutions to a system - Khan Academy
	10 12/20 – 12/24	<ul> <li>Second Quarter/First Semester Ends – 12/21</li> <li>Winter Break – 12/22 – ¼</li> <li>Assess</li> <li>Semester 1 Standards Review</li> </ul>	

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Quarter 3 Jan 6 – Mar 10	1 1/5 – 1/7	<ul> <li>Teacher Planning Day – 1/5</li> <li>7-1 Analyze Translations (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3)</li> </ul>	Analyzing translations - <u>Khan</u> <u>Academy</u> Translating shapes - <u>Khan Academy</u>
	2 1/10 – 1/14	<ul> <li>7-2 Analyze Reflections (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3</li> <li>7-3 Analyze Rotations (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3)</li> <li>7-4 Compose Transformations (8.G.1.1a, 8.G.1.1b, 8.G.1.1c, 8.G.1.3)</li> </ul>	Reflecting points - Khan Academy Determining rotations - Khan Academy Rotating points - Khan Academy Determining reflections - Khan Academy Determining translations - Khan Academy Academy Academy
	3 1/17 – 1/21	<ul> <li>Martin Luther King Jr. Holiday – 1/17</li> <li>Report Cards – 1/19</li> <li>7-5 Understand Congruent Figures (8.G.1.2, 8.G.1.3)</li> <li>7-6 Describe Dilations (8.G.1.3, 8.G.1.4)</li> </ul>	Understand Congruent Figures - Khan Academy Dilations: scale factor - Khan Academy Similar shapes and transformation - Khan Academy Side lengths after dilation - Khan Academy
	4 1/24 – 1/28	<ul> <li>7-7 Understand Similar Figures (8.G.1.3, 8.G.1.4)</li> <li>7-8 Angles, Lines, and Transversals (8.G.1.5)</li> <li>7-9 Interior and Exterior Angles of Triangles (8.G.1.5)</li> </ul>	Angles, parallel lines, and transversals - Khan Academy Angles in a triangle - Khan Academy Triangle exterior angles - Khan Academy
	5 1/31 – 2/4	<ul> <li>7-10 Angle-Angle Triangle Similarity (8.G.1.5)</li> <li>Remediate/Review</li> <li>Assess</li> <li>8-1 Understand Pythagorean Theorem (8.G.2.6, 8.G.2.7)</li> </ul>	Intro to triangle similarity - Khan Academy Intro to the Pythagorean theorem - Khan Academy
	6 2/7 – 2/11	<ul> <li>Teacher Inservice – 2/7</li> <li>Interims Issued – 2/8</li> <li>8-2 Understand the Converse of the Pythagorean Theorem (8.G.2.6, 8.G.2.7)</li> <li>8-3 Apply the Pythagorean Theorem to Solve Problems (8.G.2.7)</li> </ul>	Pythagorean theorem with isosceles triangle - Khan Academy Pythagorean theorem to find area - Khan Academy

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7 2/14 – 2/18	<ul> <li>8-4 Find Distance in the Coordinate Plane (8.G.2.8)</li> <li>Remediate/Review</li> <li>Assess</li> </ul>	Finding distance with the Pythagorean theorem - Khan Academy
	9-1 Solve Problems Involving Scale Drawings (7.G.1.1)	
	Presidents Day Holiday – 2/21	Identifying scale factor in drawings -
	9-2 Draw Geometric Figures (7.G.1.2)     10     10     10     10    10     10    10    10    10    10     10    10     10     10     10     10     10    10     10	Khan Academy
8	• 9-3 Draw Triangles with Given Conditions (7.G.1.2)	Interpreting scale factor in drawings - Khan Academy
2/21 – 2/25		Scale factor and area - Khan Academy
2/21-2/23		Scale drawings - Khan Academy
		Creating scale drawings - Khan
		Academy
	9-4 Solve Problems Using Angle Relationships (7.G.2.5)	Construct a triangle with constraints -
	<ul> <li>9-5 Solve Problems Involving Circumference of a Circle (7.G.2.4, 7.EE.2.4a)</li> </ul>	Khan Academy
	• 9-6 Solve Problems Involving Area of a Circle (7.G.2.4, 7.EE.2.3, 7.EE.2.4a)	Triangle inequality theorem - Khan
		Academy
		Angles: introduction - Khan Academy
9		Complementary and supplementary
2/28 – 3/4		angles - Khan Academy
		Vertical angles - Khan Academy
		Equations with complementary angles
		- <u>Khan Academy</u>
		Equations with supplementary angles
		- Khan Academy
	• Teacher Planning Day – 3/11	Radius, diameter, circumference and
	9-7 Describe Cross Sections (7.G.1.3)      0.0 Selection Residue Sections (7.G.1.3)      1.0 Selection Residue Sections (7.G.1.3)	pi - Khan Academy
10	9-8 Solve Problems Involving Surface Area (7.G.2.6, 7.NS.1.3, 7.EE.2.3, 7.EE.2.4a)	Label the parts of a circle - Khan Academy
3/7 – 3/11	7.EE.2.4a)  • 9-9 Solve Problems Involving Volume (7.G.2.6, 7.NS.1.3, 7.EE.2.3, 7.EE.2.4a)	Relating circumference and area -
	9-9 301Ve Flobiellis ilivolvilig volulile (7.G.2.0, 7.N3.1.3, 7.EE.2.3, 7.EE.2.4d)	Khan Academy
		Area of a circle - Khan Academy

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	1 3/14 – 3/18	SPRING BREAK – NO SCHOOL	
	2 3/21 – 3/25	<ul> <li>Remediate/Review</li> <li>Assess</li> <li>10-1 Find Surface Area of Three-Dimensional Figures (8.G.3.9)</li> </ul>	Slicing a rectangular pyramid -  Khan Academy Cross section of a cube - Khan Academy Find surface area by adding faces - Khan Academy Solve surface area word problems - Khan Academy
Quarter 4 Mar 14 – May 31	3 3/28 – 4/1	<ul> <li>Report Cards – 3/29</li> <li>10-2 Find Volume of Cylinders (8.G.3.9)</li> <li>10-3 Find Volume of Cones (8.G.3.9)</li> <li>10-4 Find Volume of Spheres (8.G.3.9)</li> </ul>	Surface area word problem -  Khan Academy  Cylinder volume and surface area - Khan Academy
Wal 14 Way 31	4 4/4 – 4/8	<ul> <li>Remediate/Review</li> <li>Assess</li> <li>11-1 Populations and Samples (7.SP.1.1)</li> </ul>	Volume of a cone - <u>Khan</u> <u>Academy</u> Volume of a sphere - <u>Khan</u> <u>Academy</u>
	5 4/11 – 4/15	<ul> <li>Holiday – 4/15</li> <li>11-2 Draw Inferences From Data (7.SP.1.1, 7.SP.1.2, 7RP.1.2c, 7.EE.2.3)</li> <li>11-3 Make Comparative Inferences About Populations (7.SP.2.3, 7.SP.2.4)</li> </ul>	Reasonable samples - <u>Khan</u> <u>Academy</u>
	6 4/18 – 4/22	<ul> <li>Holiday – 4/18</li> <li>11-4 Make More Comparative Inferences About Populations (7.SP.2.3, 7.SP.2.4)</li> <li>Remediate/Review</li> <li>Assess</li> </ul>	Making inferences from random samples practice - Khan Academy
	7 4/25 – 4/29	<ul> <li>Interims Issued – 4/26</li> <li>12-1 Understand Likelihood and Probability (7.SP.3.5, 7.EE.2.3)</li> <li>12-2 Understand Theoretical Probability (7.SP.3.6, 7.RP.1.2c)</li> </ul>	

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8 5/2 – 5/6	<ul> <li>12-3 Understand Experimental Probability (7.SP.3.6, 7.SP.3.7)</li> <li>12-4 Use Probability Models (7.SP.3.7a, 7.SP.3.7b, 7.EE.2.3)</li> <li>12-5 Determine Outcomes of Compound Events (7.SP.3.8b)</li> </ul>	Intro to theoretically probability - Khan Academy Simple probability - Khan Academy Experimental probability - Khan Academy Theoretical and experimental probabilities - Khan Academy Making predictions with probability - Khan Academy
9 5/9 – 5/13	<ul> <li>12-6 Find Probabilities of Compound Events (7.SP.3.8a)</li> <li>12-7 Simulate Compound Events (7.SP.3.8c)</li> <li>Remediate/Review</li> <li>Assess</li> <li>Standards Review</li> </ul>	Sample spaces for compound events - Khan Academy Probability of a compound event - Khan Academy Counting outcomes - Khan Academy Tree diagram - Khan Academy
10 5/16 – 5/20	Standards Review	
11 5/23 – 5/27	Standards Review	
12 5/30 – 6/2	<ul> <li>Memorial Day Holiday – 5/30</li> <li>Standards Review</li> </ul>	

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