

Unit 7: Rational Numbers[Open Up Family Resource Link](#)

Lesson	Skill	Online Resources	Standard
1	Use positive and negative numbers to describe temperature and elevation. Explain what 0, positive numbers, and negative numbers mean in the context of temperature and elevation. Know what positive and negative numbers are.	http://virtualnerd.com/pre-algebra/algebra-tools/integers-absolute-value/integers/positive-negative-number-definitions https://www.youtube.com/watch?v=Kbne2eUrSzE https://www.youtube.com/watch?v=GfLs38JkfJl	6.NS.C.5, 6.NS.C.6
2	Represent negative numbers on a number line. Determine or approximate the value of any point on a number line. Understand what it means for numbers to be opposites.	https://www.youtube.com/watch?v=TIZVPfvTLXA https://www.youtube.com/watch?v=o3kli8g3mwI https://www.khanacademy.org/math/arithmetic/arith-review-negative-numbers/arith-review-number-opposites/v/opposite-of-a-number https://www.ixl.com/math/grade-6/integers-on-number-lines	6.NS.C.6.a, 6.NS.C.6.c, 6.NS.C.6
3	Use inequalities to compare positive and negative numbers. Explain how to use the positions of numbers on a number line to compare them. Explain what a rational number is.	https://www.youtube.com/watch?v=OAoLCXpao6s https://www.youtube.com/watch?v=Yj1mGDd4qqQ https://www.ixl.com/math/grade-6/compare-rational-numbers	6.NS.C.7.a, 6.NS.C.7.b
4	Use phrases like “greater than,” “less than,” and “opposite” to compare rational numbers. Compare and order rational numbers.	https://www.youtube.com/watch?v=hSWX6GNAulc https://www.youtube.com/watch?v=l89DOBYUCPQ https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-add-sub-rational-numbers/e/comparing-rational-numbers	6.NS.C, 6.NS.C.6.a, 6.NS.C.6, 6.NS.C.7
5	Interpret and use negative numbers in different contexts. Explain and use negative numbers in situations involving money.	https://www.youtube.com/watch?v=OAoLCXpao6s https://learnzillion.com/resources/54454/	6.NS.C.5
6	Recognize and use the notation for absolute value. Find the absolute values of rational numbers.	https://www.khanacademy.org/math/arithmetic/arith-review-negative-numbers/arith-review-abs-value/v/absolute-value-of-integers https://www.khanacademy.org/math/arithmetic/arith-review-negative-numbers/arith-	6.NS.C.7.c, 6.NS.C.7.d, 6.NS.C.7

	Explain what the absolute value of a number is.	review-abs-value/e/absolute_value https://www.khanacademy.org/math/algebra-basics/basic-alg-foundations/alg-basics-absolute-value-new/v/absolute-value-and-number-lines	
7	<p>Explain what absolute value means in situations involving elevation.</p> <p>Use absolute values to describe elevations.</p> <p>Use inequalities to compare rational numbers and the absolute values of rational numbers.</p>	https://us.sofatutor.com/mathematics/videos/introduction-to-absolute-value https://www.khanacademy.org/math/arithmetic-home/negative-numbers/abs-value/v/absolute-value-1 https://www.youtube.com/watch?v=odJkpQMuzaw	6.NS.C.6.a, 6.NS.C.7.d, 6.NS.C.7
8	<p>Write an inequality to represent a situation.</p> <p>Graph inequalities on a number line.</p>	https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/alg1-inequalities/v/inequalities-on-a-number-line https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/alg1-inequalities/e/inequalities_on_a_number_line https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/alg1-inequalities/v/real-world-situations-with-inequalities https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/alg1-inequalities/e/inequalities-in-one-variable-1	6.EE.B.6, 6.EE.B.8, 6.NS.C.7.b
9	<p>Explain what it means for a number to be a solution to an inequality.</p> <p>Determine if a particular number is a solution to an inequality.</p> <p>Graph the solutions to an inequality on a number line.</p>	https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/alg1-inequalities/v/testing-solutions-to-inequalities https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/alg1-inequalities/v/plotting-inequalities-on-a-number-line https://www.ixl.com/math/grade-6/graph-inequalities-on-number-lines	6.EE.B.5, 6.EE.B.8, 6.NS.C.7.a
10	<p>Write inequalities that involves more than one variable.</p> <p>Explain what the solution to an inequality means in a situation.</p>	https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/alg1-one-step-inequalities/v/inequalities https://www.youtube.com/watch?v=oElmCg5fcWU https://learnzillion.com/lesson_plans/8422-write-an-inequality-from-a-word-problem/	6.EE.A.2.b, 6.EE.B.5, 6.EE.B.6, 6.EE.B.8
11	<p>Know what negative numbers in coordinates tell us.</p> <p>Plot points with negative coordinates in the</p>	http://virtualnerd.com/algebra-1/relations-functions/coordinate-plane/coordinate-plane-graphing/coordinate-plane-graph-points-example https://www.khanacademy.org/math/basic-geo/basic-geo-coord-plane/coordinate-	6.NS.C.6.b, 6.NS.C.6.c, 6.NS.C.8

	coordinate plane.	plane-4-quad/v/plot-ordered-pairs https://www.khanacademy.org/math/basic-geo/basic-geo-coord-plane/coordinate-plane-4-quad/e/identifying_points_1	
12	Construct a coordinate plane with an appropriate scale and pair of axes.	https://www.youtube.com/watch?v=GIUPO0HIJuw https://www.youtube.com/watch?v=dNb7IMBKYuU	6.NS.C.6.c
13	<p>Explain what points in a four-quadrant coordinate plane represent in a situation.</p> <p>Plot points in a four-quadrant coordinate plane to represent situations and solve problems.</p> <p>Explain how rational numbers represent balances in a money context.</p>	https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-geometry-topic/cc-5th-coordinate-plane-word-problems/v/interpreting-plotted-points https://www.khanacademy.org/math/basic-geo/basic-geo-coord-plane/coordinate-plane-4-quad/v/coordinate-plane-word-problems-exercise https://www.khanacademy.org/math/basic-geo/basic-geo-coord-plane/coordinate-plane-4-quad/e/coordinate-plane-word-problems https://ca.ixl.com/math/grade-6/coordinate-planes-as-maps	6.NS.C.6.c, 6.NS.C.7.c, 6.NS.C.8
14	Find horizontal and vertical distances between points on the coordinate plane.	https://www.youtube.com/watch?v=H3QLFx7yH7Q https://www.khanacademy.org/math/cc-fifth-grade-math/cc-5th-geometry-topic/cc-5th-coordinate-plane-word-problems/e/distance-between-points-in-first-quadrant-of-coordinate-plane	6.NS.C.6.b, 6.NS.C.6, 6.NS.C.8
15	<p>Find the lengths of horizontal and vertical segments in the coordinate plane.</p> <p>Plot polygons on the coordinate plane when I have the coordinates for the vertices.</p>	https://learnzillion.com/lesson_plans/6406-find-the-length-of-a-line-segment-on-the-coordinate-plane-using-the-pythagorean-theorem/ https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic/cc-6th-quadrilaterals-on-plane/v/dimensions-of-rectangle-from-coordinates-example https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic/cc-6th-quadrilaterals-on-plane/v/example-of-shapes-on-a-coordinate-plane https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-geometry-topic/cc-6th-quadrilaterals-on-plane/v/constructing-polygon-on-coordinate-plane-example	6.G.A.3, 6.NS.C.6.c, 6.NS.C.8
16	<p>Explain what the greatest common factor is.</p> <p>Explain what a common factor is.</p> <p>Find the greatest common factor of two whole</p>	https://www.khanacademy.org/math/pre-algebra/pre-algebra-factors-multiples/pre-algebra-greatest-common-divisor/v/greatest-common-divisor-factor-exercise https://www.khanacademy.org/math/pre-algebra/pre-algebra-factors-multiples/pre-	6.NS.B.4

	<p>numbers.</p>	<p>algebra-greatest-common-divisor/v/greatest-common-divisor</p> <p>https://www.khanacademy.org/math/pre-algebra/pre-algebra-factors-multiples/pre-algebra-greatest-common-divisor/e/greatest-common-divisor</p> <p>https://www.ixl.com/math/grade-6/greatest-common-factor</p>	
<p>17</p>	<p>Find the least common multiple of two whole numbers.</p> <p>Explain what the least common multiple is.</p> <p>Explain what a common multiple is.</p>	<p>https://www.khanacademy.org/math/algebra2/rational-expressions-equations-and-functions/adding-and-subtracting-rational-expressions/v/least-common-multiple-exercise</p> <p>https://www.khanacademy.org/math/algebra2/rational-expressions-equations-and-functions/adding-and-subtracting-rational-expressions/v/least-common-multiple-exercise-2</p> <p>https://www.khanacademy.org/math/algebra2/rational-expressions-equations-and-functions/adding-and-subtracting-rational-expressions/e/least-common-multiple</p> <p>https://www.ixl.com/math/grade-6/least-common-multiple</p>	<p>6.NS.B.4</p>