| Standard(s) | MGSE6.NS. 5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, debits/credits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. MGSE6.NS. 6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. MGSE6.NS.6a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3)=3$, and that 0 is its own opposite. MGSE6.NS.6b Understand signs of number in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. MGSE6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. MGSE6.NS. 7 Understand ordering and absolute value of rational numbers. MGSE6NS.7a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. MGSE6.NS.7b Write, interpret, and explain statements of order for rational numbers in real-world contexts. MGSE6.NS.7c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. MGSE6.NS.7d Distinguish comparisons of absolute value from statements about order. |  |  | MGSE6.NS. 8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. <br> MGSE6.G.3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. <br> Apply those techniques in the context of solving realworld mathematical problems. |  |
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| Essential questions Or "I Can..." statements | Monday <br> I can compare integers on a number line. | Tuesday <br> I can locate a point on a horizontal and/or a vertical number line. <br> What is a coordinate plane? | Wednesday <br> I can locate points on a coordinate grid. I understand that a coordinate grid is a combination of a vertical and a horizontal number line. | Thursday <br> I can find the distance between two points on a coordinate grid. <br> I can find perimeter of a figure on the coordinate plane. | Friday |
| Warm-up | \#59 | \#60 | \#61 | \#62 |  |
| Opening | Review integers, absolute value, comparing and ordering from Friday | -video <br> https://www.brainpop. com/math/geometryan dmeasurement/coordin ateplane/ | Review homework | Review homework | No School -Veteran's Day |
| Work Session | -sea level activity and picture | -coordinate plane, take the brainpop quiz as a class $\text { -p } 226$ <br> -wb 371 \& 374 | -coordinate plane, create a picture by plotting and connecting the points (seahorse) | -stopwatch pizzazz sheet -"tommy's afternoon" coordinate plane -find distance between points on grid paper, use select questions from wb <br> - Explore \#3 (L) |  |
| Homework | Weekly sheet- week 14 |  |  | NONE | NONE |
| Closing | Discuss other real life situations where negative numbers are used. | Make sure students understand what all the standards are asking them to be able to do. | Can you tell what the picture is? | After creating an $F$ on coordinate grid, what other kinds of questions might we be asked? Perimeter? Area? |  |
| Assessment for understanding | Formative-calling on students, monitoring their work on sea level picture | Formative-calling on students, walking around to check/monitor, responses to quiz on smartboard | Formativewatching/helping students with picture | Formative-checking for misconceptions and those that have issues counting spaces on coordinate plane |  |

Unit 7 plan: https://www.georgiastandards.org/Georgia-Standards/Frameworks/6th-Math-Unit-7.pdf

