Unit 6: Introduction to Integers	Time Frame: 2 Weeks (Jan 18 - Feb 5, 2015)
Content Standards	**Standards for Mathematical Practice**
Major Standards	(1) Make sense of problems and persevere in solving them.
6.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 zero sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	(2) Reason abstractly and quantitatively.
	(3) Construct viable arguments and critique the reasoning of others.
	(4) Model with mathematics.
	(5) Use appropriate tools strategically.
	(6) Attend to precision.
6.NS.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar for negative number coordinates.	(7) Look for and make use of structure.
	(8) Look for and express regularity in repeated reasoning.
a. Recognize opposite sign 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.	
b. Understand signs of numbers 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.	
c. Find the 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.	
6.NS.7 Understand ordering and absolute value of rational numbers.	

a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.
b. Write, interpret, and explain statements of order for rational numbers in real-world contexts.
c. 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.
d. Distinguish comparisons of absolute value from statements about order.

6.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.

Supporting Standards

6.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. Apply these techniques in the context of solving real-world problems.

Additional Standards

Pre-requisite Standards

Hattiesburg Public School District
Grade 6 Mathematics Units
2015 – 2016

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Lesson Topic: Introducing Integers **Standard Ref:** 6.NS.5 **Resource:** Engage NY: Module 3, Topic A, Lessons 1, 2, & 3 **Strategy:**	**Lesson Topic:** Integers on the number line **Standard Ref:** 6.NS.6 **Resource:** Engage NY: Module 3, Topic A, Lessons 4 & 5 **Strategy:**	**Lesson Topic:** Introduce absolute value **Standard Ref**: 6.NS.7 **Resource**: Engage NY: Module 3, Topic B, Lessons 7 & 8 **Strategy:**	**Lesson Topic:** Compare integers & absolute value **Standard Ref:** 6.NS.7c **Resource:** Engage NY: Module 3, Topic B, Lesson 9 **Strategy:**	**Lesson Topic**: Integers on coordinate grid **Standard Ref**: 6.NS.8 **Resource:** Engage NY: Module 3, Topic C, Lessons 18 & 19 **Strategy:**

Lesson 6	Performance Task			
Lesson Topic: Polygons on the coordinate Grid **Standard Ref**: 6.G.3 **Resource**: Engage NY: Module 5: Topic B, Lessons 7 & 8 **Strategy:**	https://docs.google.com/document/d/1_3f-3FdWcWONmnQPdbJrWlCVURRd3LSqNWdwhi5jfqQ/edit#heading=h.1fob9te (Hot Summer, Cold Winter)			