



## **What Incoming 8<sup>th</sup> Graders Need to Know**

The following are essential learnings and expectations for graduating 7<sup>th</sup> graders, as identified by Middle School teachers.

### **Math**

**Students will demonstrate knowledge of:**

- **Compare and write equivalent representations of positive and negative rational numbers.**
- **Add, subtract, multiply and divide positive and negative rational numbers**
- **Plot coordinate pairs on a coordinate grid**
- **Identify proportional relationships**
- **Solve one- and two-step equations**
- **Understand and apply the order of operations.**
- **Write equivalent algebraic expressions by simplifying**

### **Reading**

**Students will demonstrate knowledge of:**

- **How to summarize main idea and supporting details in their own words**
- **How to make inferences based on their reading**
- **Theme**
- **Characterization**
- **How to write a one page book review with a main ideas and supporting details**
- **Setting**
- **All 5 parts of a plot line**
- **Dialogue**
- **Context clues**
- **Figurative language, including metaphor, simile, and analogy**
- **1<sup>st</sup>, 2<sup>nd</sup>, and all types of 3<sup>rd</sup> person point of view**

### **Writing**

**Students will demonstrate knowledge of:**

- **7<sup>th</sup> grade spelling**
- **Formal writing**
- **Formal speeches**

- **Advanced grammar: colons, semi-colons, gerund phrases**
- **Writing creative nonfiction**
- **Creative poetry**
- **Narrative/persuasive/informational writing**
- **The Writing Process**

### Science

**Students will demonstrate knowledge of:**

- **Earth is composed of “fluid” layers**
- **Land formations happen over long periods of time due to geological processes**
- **Rocks and fossils are used to date the age of the Earth and everything it contains**
- **Our Solar System and Earth Rotation/Revolution**
- **Sun’s Energy**
- **Water Cycle-Basics**
- **Weather: clouds, wind, rain, etc.**
- **Academic uses of technology**
- **Lab safety**

### Social Studies

**Students will demonstrate knowledge of:**

- **European Exploration**
- **American Revolution War**
- **American Civil War**
- **Slavery**
- **Migration & Immigration Patterns**
- **World War I**
- **World War II**
- **Cold War**
- **Civil Rights**
- **War on Terrorism**