5th GRADE MAJOR OUTCOMES:

Math:

- Use fractions and decimals in real-world and mathematical situations.
- Recognize and represent patterns of change; use patterns, tables, graphs and rules to solve real-world and mathematical problems.
- Use properties of arithmetic to generate equivalent numerical expressions and evaluate expressions involving whole numbers.
- Understand and interpret equations and inequalities involving variables and whole numbers.
- Describe, classify, and draw representations of three-dimensional figures.
- Determine the area of triangles and quadrilaterals; determine the surface area and volume of rectangular prisms in various contexts.
- Display and interpret data; determine mean, median and range.
- Read, write, represent and compare positive rational numbers expressed as fractions, decimals, percents and ratios; write positive integers as products of factors.

Language Arts:

- Demonstrate understanding of the conventions of grammar, capitalization, punctuation, and spelling.
- Demonstrate understanding of figurative language and word relationships, in word meanings.
- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- Determine the meaning of unknown and multiple-meaning words and phrases.
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings to develop word consciousness.
- Understand general academic and domain-specific words and phrases.

Science:

- Understand interactions among science, technology, engineering, math and society.
- Use appropriate tools and techniques in gathering, analyzing and interpreting data.
- Understand Structure and Function in Living Systems.
- Describe how Human Interactions effect Earth Systems.
- Demonstrate understanding of Interdependence Among Living Systems.
Social Studies 5 – History of North America:

- Understand that democratic government depends on informed and engaged citizens who exhibit civic skills and values, practice civic discourse, vote and participate in elections, apply inquiry and analysis skills, and take action to solve problems and shape public policy.
- The civic identity of the United States is shaped by historical figures, places and events and by key foundational documents and other symbolically important artifacts.
- Understand that individuals in a republic have rights, duties and responsibilities.
- Demonstrate that the United States government has specific functions that are determined by the way that power is delegated and controlled among various bodies: the three levels (federal, state, local) and the three branches (legislative, executive, judicial) of government.
- The primary purposes of rules and laws within the United States constitutional government are to protect individual rights, promote the general welfare and provide order.
- Demonstrate understanding that people make informed economic choices by identifying their goals, interpreting and applying data, considering the short- and long-run costs and benefits of alternative choices and revising their goals based on their analysis.
- Demonstrate basic understanding of the United States History.
6th GRADE MAJOR OUTCOMES:

Math:
- Understand concepts of ratio and its relationship to fractions.
- Multiply and divide decimals, fractions, and mixed numbers.
- Use patterns, tables, graphs and rules to solve real-world and mathematical problems.
- Generate equivalent numerical expressions and evaluate expressions involving positive rational numbers.
- Understand and interpret equations and inequalities involving variables and positive rational numbers.
- Read, write, represent and compare positive and negative rational numbers, expressed as integers, fractions and decimals.
- Use probabilities to solve real-world and mathematical problems; represent probabilities using fractions, decimals and percents.
- Choose appropriate units of measurement and use ratios to convert within measurement systems.

Language Arts:
- Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.
- Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- Describe how a particular story or drama’s plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.
- Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.
- Explain how an author develops the point of view of the narrator or speaker in a text.
- Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they “see” and “hear” when reading the text to what they perceive when they listen or watch.
- Compare and contrast texts in different forms in terms of their approaches to similar themes and topics.
Social Studies 6– World Cultures:

- Understand the significance of people, events, and ideas and how they impacted historical and cultural developments around the world
- Understand the effects of Geography and world civilizations
- Study Current events

Physical Science:

- Investigate motion, energy transfer, waves, matter and engineering
- Understand forces of nature
- Learn about the history and nature of science through scientific inquiry, experimental design and measurement
7th GRADE MAJOR OUTCOMES:

Math:

- Read, write, represent and compare positive and negative rational numbers, expressed as integers, fractions and decimals. Calculate with positive and negative rational numbers, and rational numbers with whole number exponents.
- Understand the concept of proportionality in real-world and mathematical situations, and distinguish between proportional and other relationships.
- Recognize proportional relationships and represent these and other relationships with tables, verbal descriptions, symbols and graphs; solve problems involving proportional relationships and explain results in the original context.
- Apply understanding of order of operations and algebraic properties to generate equivalent numerical and algebraic expressions containing positive and negative rational numbers and grouping symbols; evaluate such expressions.
- Solve equations symbolically, using the properties of equality. Also solve equations graphically and numerically. Interpret solutions in the original context.
- Use reasoning with proportions and ratios to determine measurements, justify formulas and solve real-world and mathematical problems involving circles and related geometric figures.
- Analyze the effect of change of scale, translations and reflections on the attributes of two-dimensional figures.
- Use mean, median and range to draw conclusions about data and make predictions.
- Display and interpret data in a variety of ways, including circle graphs and histograms.
- Calculate probabilities and reason about probabilities using proportions.

Language Arts:

- Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.
- Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- Describe how a particular story’s or drama’s plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.
- Analyze how a drama’s or poem’s form or structure (e.g., soliloquy, sonnet) contributes to its meaning.
- Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.
Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium.

Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.

Compare and contrast texts in different forms in terms of their approaches to similar themes and topics.

Life Science:

- Investigate cells, heredity and changes in biological populations over time.
- Investigate diversity among organisms, human biology and ecology.
- Increase knowledge of the history and nature of science through scientific inquiry and experimental design.

Social Studies 7- American History:

- Exemplify a theme of change in American History by connecting past experiences to the current world events.
- Analyze historical events from different points of view and understand cause and effect relationships.
- Describe how citizens contribute to a changing community through participation.
8th GRADE MAJOR OUTCOMES:

Math:

- Read, write, compare, classify and represent real numbers, and use them to solve problems in various contexts.
- Understand the concept of function and distinguish between linear and nonlinear functions.
- Represent linear functions and other functions with tables, verbal descriptions, symbols and graphs.
- Generate equivalent numerical and algebraic expressions and use algebraic properties to evaluate expressions.
- Solve equations and inequalities symbolically and graphically.
- Solve problems involving right triangles using the Pythagorean Theorem.
- Solve problems involving parallel and perpendicular lines on a coordinate system.
- Interpret data using scatterplots and approximate lines of best fit.

Language Arts:

- Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- Determine a theme or central idea of a text and analyze its development, including its relationship to the characters, setting, and plot; provide an objective summary of the text.
- Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
- Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.
- Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.
- Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.
- Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.
- Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories including describing how the material is rendered new.
- By the end of the year, read and comprehend literature and other texts including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently and independently with appropriate scaffolding for texts at the high end of the range.
Earth Science:

- Explore Astronomy, geology and meteorology.
- Investigate structures of matter.
- Increase knowledge of the history and the nature of science through scientific inquiry and designing of experiments.

Social Studies 8 – Geography

- Understand the relationship between physical and cultural geography throughout each region of the world.
- Demonstrate basic knowledge of economic principals.
- Study current events and relate them to other civilizations past and present.