The Mission of the Souderton Area School District is to prepare students to demonstrate competencies needed to contribute and to succeed in a changing world by building on a commitment to excellence and innovation, by working in partnership with family and community, and by assuring a quality education for all students in a safe and nurturing environment.

Eighth Grade Overview

The Souderton Area School District emphasizes student growth and achievement academically, socially, and emotionally. The District programs are developed and revised to meet district and PA Core standards in 12 subject areas and graduation requirements of the Chapter 4 Regulations. SASD ensures accomplishment of necessary curriculum characteristics in all standards areas by collaboratively working with teachers through curriculum reviews, curriculum mapping and curriculum writing. Planned course documents include academic standards, end of unit/course assessments, essential questions, enduring understandings, key concepts and competencies, major teaching points, instructional time, and materials and resources.

English Language Arts

In this course, eighth grade students are immersed in the reading and writing workshop model where they continue to develop their thinking skills and strategies to apply to increasingly complex texts. This year marks the end of middle school and preparation ground for high school courses. Highlights of the course include a deep dive into historical fiction where students will not see history as a collection of facts, but a series of compelling stories that will help them understand their past, present, and perhaps their future. Students will use this knowledge to create literary essays that focus on developing a theme and cultivating their craft as a writer. As the year progresses students will continue to expand their thinking and access a wide range of comprehension strategies as they explore more complex nonfiction texts. As their level of thinking while reading increases, so will the level of writing as they create position papers supported by evidence. Finally, the year concludes with looking at contemporary pieces of literature and journalistic style of writing. All reading units give students the opportunity to participate in book clubs where they explore a variety of topics and themes related to their own interest.

➢ READING

Launching Unit: The Classics
Students will read a classic novel, short stories, poetry, and plays to analyze the central themes, characters, author's craft, and/or patterns of events.

Historical Fiction Book Clubs:
This unit focuses on developing the reading skills necessary to understand historical settings and its complex narratives. Through this genre students will learn to understand historical conflicts and the human capacity for change.

- Historical Fiction Characters and the Conflicts that Shape Them
- Studying an Era
- Characters and Readers Come of Age

Literary Nonfiction Reading:
This unit focuses on the essential skills that students need in an era of global economies and global collaboration. Each bend within the unit gains in complexity, building on the skills of the prior bend. Students are invited to read literary nonfiction books that have more complex structures. Student are encouraged to look at how the complicated parts fit together in their books. Finally, the unit shifts to include a host of digital formats that students will investigate. Students will create a digital recommendation for the one text they most want to recommend on a topic of their choice.

- Embracing Complexity
- Making Connections
- Beyond Print: Transferring Literary Nonfiction Skills to Digital and Hybrid Media

Critical Literacy: Unlocking Contemporary Fiction:
This unit focuses on contemporary literature and the development of key critical literacy skills that will enable students to engage in texts. Students will read and discuss novels on more than one level, so they revel in characters and storylines with their peers.

- Deepen understandings of individual interpretations

➢ WRITING

The Literary Essay: Analyzing Craft and Theme**:** In this unit students become more independent with the essay writing skills they have acquired across their elementary and middle school years while also teaching them new, high leverage strategies that will help them meet and exceed the expectations of their high school community.

- The Thematic Essay
- The Author's Craft Essay
- The Comparative Essay

Position Papers: This unit not only focuses on writing, but also develops critical reading and thinking. It teaches students argumentation to teach them to advocate for themselves and others, to judge debated issues with critical reasoning, to expect and embrace complexity.

- Writing a Position Paper: Games Based on Fictional Violence - Diverting or Harmful
- Writing a Position Paper on a Complicated Issue: Should Child Soldiers Be Given Amnesty?

Investigative Journalism: In this unit students will learn to look closely at the world around them and illuminate social issues in newscasts and investigative reports.

- Reporting the Real Story: Newscasts
- Investigative Journalism: Writing to Inform and Illuminate
- Investigating the Bigger Story

Math

➢ 8th Grade Math

The story of this mathematics course is told in nine units. Each unit has a narrative that describes the mathematical work that will unfold in that unit. Each lesson in the unit also has a narrative. Lesson Narratives explain:

- A description of the mathematical content of the lesson and its place in the learning sequence.
- The meaning of any new terms introduced in the lesson.
- How the mathematical practices come into play, as appropriate.

Activities within lessons also have a narrative, which explain:

- The mathematical purpose of the activity and its place in the learning sequence.
- What students are doing during the activity.
- What teacher needs to look for while students are working on an activity to orchestrate an effective synthesis.
- Connections to the mathematical practices when appropriate.

Scope and Sequence

The progression of learning for the course and each unit of study is below:

- *Unit 1*: Rigid Transformations and Congruence
- *Unit 2*: Dilations, Similarity, and Introducing Slope
- *Unit 3*: Linear Relationships
- *Unit 4*: Linear Equations and Linear Systems
- *Unit 5*: Functions and Volume
- *Unit 6*: Associations in Data
- *Unit 7*: Exponents and Scientific Notation

- *Unit 8*: Pythagorean Theorem and Irrational Numbers
- *Unit 9*: Putting It All Together

➢ Algebra 1

Course Overview:
At the conclusion of this course students will be proficient in Algebra I. They will learn to solve systems of equations and inequalities, apply the laws of exponents, and factor polynomial expressions. They will solve and graph compound inequalities, inequalities involving absolute value, and inequalities in two variables Quadratic functions are explored by graphing parabolas, and by solving equations and inequalities by completing the square and using the quadratic formula. Rational functions are simplified and solved and inverse variations are explored. Ultimately, students learn to manipulate radical expressions in equations using the Pythagorean Theorem and the distance formula.

Scope and Sequence

The progression of learning for the course is below.

- *Unit 1*: Number and Operations
- *Unit 2*: Functions
- *Unit 3*: Systems of Linear Equations and Inequalities
- *Unit 4*: Polynomials
- *Unit 5*: Statistics and Probability

➢ Geometry

Course Overview:
This course will introduce terms, postulates, and theorems as they are applied in the study of Euclidean Geometry. Applications and justifications of those theorems will follow a detailed investigation of inductive and deductive reasoning. Coordinate geometry will be used throughout the course to solve problems and complete proofs. The geometric relationships between angles, perpendicular and parallel lines, congruent and similar polygons, and circles will be explored and defined. The trigonometric ratios are defined and then used to solve problems involving right triangles. Nets and isometric, orthogonal, and foundational drawings are used to enhance students' understanding of three-dimensional figures.

Science

➢ Earth Science 3: How is the Earth Changing?

Unit Summary:
In this unit, students investigate plate tectonics by investigating how the Earth has changed in the past and continues to change today. The unit begins with a historical perspective as students learn how the theory of plate tectonics was developed through the social processes of evidence gathering and explanation in the scientific community. Students then explore the modern explanation for why plates move on Earth's surface by applying their understanding of convection, built on previous study of convection in the atmosphere, to the Earth's mantle. They investigate how these internal earth processes drive plate motion and how that motion leads to events such as earthquakes and eruptions, and shape major surface features on Earth, including volcanoes, mountain ranges, islands, and oceanic trenches. They use this conceptual understanding to explain features and events found in selected case-study sites around the world.

➢ Life Science 3: Why do organisms look the way they do?

Unit Summary:
This unit uses investigations of organisms (including people) to raise questions about how similarities and differences between individuals and populations are influenced by inheritance of traits. Students investigate inheritance in plants they grow in class, and investigate pedigrees that document inheritance of human traits, developing a Mendelian model of inheritance to account for the patterns they uncover. Students use this model to explain the source of variation within a population, and why organisms of the same species exhibit many common characteristics. Students examine how changing environmental conditions can influence variation in a population. Through investigations of several data-rich scenarios of population change, students develop a model of how changing environmental conditions can lead to organisms with some variations of traits being more likely to survive and produce offspring, resulting in shifted distributions of those traits in future generations. Students generalize their explanations to develop a model of natural selection as defined by naturally occurring variation in inherited traits, changing environmental conditions and differential survival, addressing most notably the crosscutting concepts of patterns, and of stability and change in systems.

➢ Physical Science 3: How will it move?

Unit Summary:
This unit focuses on forces and motion in a variety of contexts: tug-of-war, baseball, planetary

motion, chemical bonds, and others. It begins with a surprising anchoring activity in which a ball speeds up unexpectedly and revisits this phenomenon several times throughout the unit. Students generalize from specific examples to construct principles commonly known as the core ideas of Newton's laws of motion. The differences between force and energy are emphasized, with rules-of-thumb being generated to decide which concept is more useful in given situations, and to address crosscutting concepts of system models, and energy and matter. The unit integrates several focal scientific practices: planning and carrying out investigations; data gathering, organization, and analysis; developing and using models; and constructing explanations and engaging in argument from evidence.

➢ Introduction to Chemistry 3: How does food provide my body with energy?

Unit Summary:
This cross-disciplinary units targets core ideas about food, photosynthesis and cellular respiration in the context of living systems. The unit builds core ideas, crosscutting concepts, and scientific practices addressed in other IQWST units, providing an opportunity to synthesize and to deepen understandings. Students address chemical reactions and the energy transformations associated with them and address their relevance in their own lives and to their own bodies. Students investigate food at the molecular level and explore how cellular respiration, as a chemical reaction, allows organisms to use the energy in food. They also examine photosynthesis as the chemical reaction in which plants transform light energy into chemical energy to store in food. This unit thus builds understanding of a key crosscutting concept—the flow of matter and energy—as students consider what happens in a system during cellular respiration and photosynthesis.

Social Studies

Middle School students will think, act, and behave just as historians do by developing explanations for their observations, hypotheses, and thoughts through investigating, reading, writing, and sharing.

Students will:

- Identify, analyze, and cite primary sources and evaluate the credibility and origin of the sources based on historical knowledge
- Analyze how the exploration and encounter of Europeans led to an exchange between the old and new worlds
- Trace how an everchanging colonial America and the new American nation discovered their identity while asserting themselves against Imperial Britain
- Explore how the limitations of the Articles of Confederation led to the creation of the United States Constitution

- Discuss how the government expanded democratic ideals while addressing an evolving population, a growing landscape, and an emerging market economy
- Identify important figures and then analyze their significance to the development of the United States
- Analyze how the U.S. became a “house divided against itself”

Scope and Sequence

The progression of learning for the course and each unit of study is below:

Unit 1: Exploration
Unit 2: Colonization
Unit 3: American Revolution
Unit 4: The U.S. Constitution
Unit 5: The New Nation
Unit 6: The Civil War