Middle School CURRICULUM MAP

### 5TH GRADE
- **Mathematics**
  - Whole numbers, decimals, factors, multiples, fractions, word problems, and probability
  - Operations with fractions and mixed numbers
  - Measurement conversion
  - Introduction to ratios and proportions

- **Science**
  - Simple machines, electricity, magnetism, forces, motion
  - Energy flow

- **Social Studies**
  - Local, state, and national history
  - Government concepts
  - Civics

- **English**
  - Reading comprehension
  - Vocabulary development
  - Writing skills

- **Art**
  - Introduction to visual art concepts
  - Materials and techniques

- **Physical Education**
  - Team building
  - Fitness challenge
  - Swimming

### 6TH GRADE
- **Mathematics**
  - Operations with rational numbers
  - Algebraic expressions
  - Solving equations and inequalities
  - Ratios and proportions

- **Science**
  - Physical Science & Perception:
    - Structures, functions, anatomy
  - Geology, Hunter-Gatherers,
    - Rocks, minerals, fossils
  - Astronomy, Space Exploration:
    - Solar system, stars, galaxies
  - Chemistry, Molecules, Reactants:
    - Chemical reactions, formulas
  - Environmental Science:
    - Pollution, conservation

- **Social Studies**
  - Expansion, Civil War & Reconstruction,
    - Causes, effects, consequences
  - Rights, LGBTQ Rights, Oral History,
    - Civil rights, discrimination

- **English**
  - Literature, fiction and nonfiction
  - Creative writing

- **Art**
  - 8TH GRADE ARTS CYCLE
    - Artists students gain insight into the meaning and purpose of visual art and how it serves as a window and/or a mirror into a time period and/or a culture. We also introduce new and different media and techniques with different goals and purposes.

- **Physical Education**
  - Team building, fitness, football, swimming, yoga, unique games

### 7TH GRADE
- **Mathematics**
  - Accelerated Pre-Algebra:
    - Linear equations, inequalities
  - Accelerated Algebra:
    - Quadratic equations, functions
  - Honors Algebra 2:
    - Exponential functions, logarithms
  - Geometry:
    - Coordinate geometry, proofs

- **Science**
  - Environmental Science:
    - Pollution, conservation
  - Physical Science & Perception:
    - Simple machines, electricity, magnetism
  - Biomedical Science:
    - Human body systems, health
  - Oceanography:
    - Marine biology, ocean conservation

- **Social Studies**
  - Integration, Soccer as a Microcosm
    - Social justice, activism
  - World History:
    - Ancient civilizations, empires

- **English**
  - Creative writing, grammar, vocabulary

- **Art**
  - 8TH GRADE ARTS CYCLE
    - Students continue refining their use of design, mixed media, technology and drawing.

- **Physical Education**
  - Team building, fitness, football, swimming, unique games, exercise

### 8TH GRADE
- **Mathematics**
  - Algebra 1:
    - Linear equations, inequalities
  - Honors Algebra 2:
    - Exponential functions, logarithms
  - Pre-Calculus:
    - Functions, limits, derivatives

- **Science**
  - Physical Science & Perception:
    - Simple machines, electricity, magnetism
  - Chemistry, Molecules, Reactants:
    - Chemical reactions, formulas
  - Environmental Science:
    - Pollution, conservation
  - Geology, Hunter-Gatherers:
    - Rocks, minerals, fossils

- **Social Studies**
  - Integration, Soccer as a Microcosm
    - Social justice, activism
  - World History:
    - Ancient civilizations, empires

- **English**
  - Literature, fiction and nonfiction
  - Creative writing

- **Art**
  - 8TH GRADE ARTS CYCLE
    - Students will be introduced to the choreographic process, movement improvisation and the technique and history of various genres of dance.

- **Physical Education**
  - Team building, fitness, football, swimming, yoga, unique games, exercise

The middle school mathematics curriculum expands on the areas of number theory, geometry, algebra and other pre-algebra concepts and skills. As students are preparing for the more advanced studies, they are required to have a solid foundation in mathematics. The middle school arts program is designed to introduce students to various art forms, including music, drama, dance, visual arts, and media arts. The middle school physical education program is designed to develop skills, improve fitness, increase cognitive function and social development. The middle school science program is designed to introduce students to the scientific method, scientific inquiry, and the natural world. The middle school social studies program is designed to provide students with a basic understanding of the units. Students design and conduct experiments, create models, and write reports to demonstrate their understanding of scientific concepts. The middle school English program is designed to develop students' reading, writing and critical thinking skills. The middle school mathematics program is designed to develop students' understanding of mathematical concepts and skills. The middle school science program is designed to develop students' understanding of scientific concepts and skills.