OVERVIEW OF MIDDLE SCHOOL PROGRAM AT QUINCY CATHOLIC ACADEMY

ENGLISH / LANGUAGE ARTS

Precepts

- 21st century learners must be critical thinkers and evaluate information as it is presented in diverse formats.
- Students learn what it means to discern between reliable and questionable sources as well as how to effectively craft an argument based on empirical evidence.
- It is vital that all 8th grade students leave with a strong foundation of essential ELA skills in order to be successful in high school and the world beyond.

Students build a solid foundation of skills based on the following core values that contribute to a wellrounded education:

- Thinking: Creativity, critical thinking, problem-solving, decision-making and learning
- Working through: Communication and collaboration
- Tools for Working: Information and communications technology (ICT) and information literacy
- Living with moral purpose in the world: Citizenship, life and career, and personal and social responsibility

Overview:

Our English Language Arts program is anchored in the standards of the 2016 Massachusetts Curriculum Frameworks, which includes and expands upon the "Common Core" standards. Our curriculum is grouped into four strands: Reading, Writing, Speaking and Listening, and Language. Middle School ELA Classes are designed to promote a lifelong love of reading and the strongest possible development of reading and writing skills geared to promote the highest possible development of each student. A strong foundation in grammar with explicit instruction and rich expansion of vocabulary to aid in broad background knowledge, develops our students into highly successful readers. All students read outside of the curriculum independently throughout the year and write book reviews and conference with teachers about their reading throughout each term. Students explore the world around them through the use of a wide variety of literature texts and at the same time learn about themselves by practicing empathy as they read. There are frequent opportunities to read written work aloud, participate in rigorous discussion and engage in skillful debate so that students will eventually be well-prepared for fulfilling academic futures, careers and responsible civic participation.

GRADE SIX

The Sixth Grade's theme throughout the year is rooted in the development of personal identity and how young people can impact the world. In Grade Six, students are introduced and exposed to the vocabulary and grammar programs through Loyola Press (*Vocabulary in Action Level F* and *Voyages in English*). Students are taught the fundamentals of the English language and explore how various parts of speech can interact to improve the quality of writing. Students in Grade Six write for a variety of disciplines that span from business letters and "how to" articles to scripts and short stories. However, there is a strong emphasis on the narrative, informative and persuasive writing forms. Students actively work to revise writing and improve their compositional skills using the six traits of writing: content, organization, voice, sentence fluency, word choice and conventions. Students also save writing throughout the year in a writing portfolio that follows them through their year as a writer.

GRADE LEVEL CURRICULUM OVERVIEW

Grade Six students are exposed to a wide variety of texts with varying genres including biography, science fiction, realistic fiction, historical fiction, drama, poetry, short stories and nonfiction texts. Examples of texts include: *A Wrinkle in Time* by Madeleine L'Engle, *Refugee* by Alan Gratz, *I am Malala* by Malala Yousafzai, *Hatchet* by Gary Paulsen, *Titanic: Voices from the Disaster* by Deborah Hopkinson. Students establish an understanding of character, conflict and plot details with an indepth analysis and focus. Sixth graders also engage in a wide variety of project-based learning experiences, experiential learning trips and virtual reality expeditions to better connect the work they complete in class to the real world. Students are also introduced to producing work online through Google (Docs, Slides and Classroom) and researching information about a topic.

GRADE SEVEN

The Seventh Grade's theme throughout the year is the development of the individual. In Grade Seven, students begin to master the conventions of grammar and punctuation, are introduced to MLA style, expand their vocabulary and learn the basic writing skills they will need throughout their academic careers through the regular practice of a variety of types of writing that includes expository writing, various types of essays, narratives, scripts, plays, poetry, journals and song. Formal and informal prompts encourage creativity as well as the development of analytical and critical thinking skills in a variety of ways. Use of a writing portfolio provides motivation and engagement so that students see themselves as writers. Texts include: Witches! The Absolutely True Tale of Disaster in Salem by Rosalyn Schanzer, Anne Frank – Play, The Giver by Lois Lowry, and The Outsiders by S.E. Hinton, among others. In Language we use textbooks such as *Voyages in English* and for vocabulary building and the workbooks: Vocabulary in Action, and for grammar, Exercises in English. Our Field trips encourage experiential learning and our long-term partnership with the Huntington Theater Education Department enables skilled educators to come into our school to teach the basics of theater and develop an appreciation for the play students are about to see. The live performance at Huntington Theater is a highlight of the year and usually connects with a text that students have been reading in class. Students also go to Salem, Massachusetts to see a play about The Witch Trials, "Accused!" and visit the Museum and Memorial and finally seeing the cemetery where the accused witches they read about were buried. Project-based learning is taught and encouraged through inventive use of technology and research skills.

GRADE EIGHT

The Eighth Grade's theme throughout the year is the individual citizen in society. In Grade Eight, students build on their exceptionally strong writing skills through continual foundations in the structure of grammar, vocabulary building and narrative, creative, expository, descriptive and journal writing. Use of a writing portfolio provides motivation and engagement so that students see themselves as writers and learn the revision process. Analytical and critical thinking skills along with the principals of rhetoric are emphasized as students read within the genres of Historical Fiction, Poetry, Science Fiction, Drama/Plays, Short Stories and Non-Fiction at higher levels of text complexity. Among the titles read are: *To Kill a Mockingbird* by Harper Lee, *A Christmas Carol* by Charles Dickens, *Red Scarf Girl* by Ji-Li Jiang and *All Quiet on the Western Front* by Erich Maria Remarque. In Language we use textbooks such as *Voyages in English* and vocabulary building such as *Vocabulary in Action*, and for grammar we use *Exercises in English*. We make use of the cultural richness of Boston through field trips to The Huntington Theater for experiential learning. By the time students reach Grade Eight they are able to use their higher order thinking skills with dexterity and they regularly employ "knowledge, comprehension, application, analysis, synthesis and evaluation" in their lively class discussions.

<u>MATH</u>

GRADE LEVEL CURRICULUM OVERVIEW

Our Middle School Math program strives to develop confident students, mathematicians, critical thinkers and problem solvers. Our curriculum aligns with the Massachusetts Curriculum Standards and works towards an in depth learning of Math Concepts.

GRADE SIX

• Number Properties and Decimals

- 1. Properties of Operations
- 2. Order of Operations
- 3. Understanding Decimals
- 4. All Operations Decimals

• Expressions and Equations

- 1. Variables and Expressions
- 2. Solving One-Step Equations
 - a. Addition
 - b. Subtraction
 - c. Multiplication
 - d. Division

• Number Theory

- 1. Rules of Divisibility
- 2. Exponents
- 3. Prime Numbers and Prime Factorization
- 4. Greatest Common Factor
- 5. Least Common Multiple
- 6. The Distributive Property
- 7. Simplifying Algebraic Expressions

Fraction Operations

- 1. Addition and Subtraction of Fractions and Mixed Numbers
- 2. Multiplication of Fractions and Mixed Numbers
- 3. Divisions of Fractions and Mixed Numbers
- 4. Solving Equations with Fractions

• Ratios and Percent

- 1. Ratios
- 2. Unit Rates
- **3.** Equivalent Ratios
- 4. Using ratios to Convert Measurements
- 5. Understanding Percent
 - a. Finding the Percent of a Number
 - b. Finding the Whole
 - 6. Fractions, Decimals and Percent

Integers and Rational Numbers

- 1. Exploring Integers
- 2. Comparing and Ordering Integers
- 3. All Operations with Integers
- 4. Rational Numbers
- 5. Comparing and Ordering Rational Numbers
- 6. Solving one Step Inequalities

The Coordinate Plane

- 1. Points in the Coordinate Plane
- 2. Polygons in the Coordinate Plane

- 3. Functions
- 4. Graphing Functions
- 5. Functions in the Real World

Geometry and Measurement

- 1. Area of Parallelograms and Triangles
- 2. Areas of Polygons
- 3. Three-Dimensional Figures and Spatial Reasoning
- 4. Surface Area of Prisms and Pyramids
- 5. Volume of Regular Prisms

• Data and Graphs

- 1. Finding the Mean
- 2. Median and Mode
- 3. Frequency Tables and Dot Plots
- 4. Box and Whisker Plots
- 5. Histograms
- 6. Variability of Data
- 7. Statistical Questions

GRADE SEVEN

• Integers and Rational Numbers

- 1. Comparing and Ordering Integers
- 2. Addition and Subtraction of Integers
- 3. Multiplication and Division of Integers
- 4. Rational Numbers
- 5. Addition and Subtraction of Rational Numbers
- 6. Multiplication and Division of Rational Numbers

• Equations

- 1. Evaluating and Writing Algebraic Expressions
- 2. Simplifying Expressions
- 3. Solving One-Step Equations
- 4. Solving Two- Step Equations
- 5. Solving Equations Involving the Distributive Property
- Inequalities
 - 1. Graphing and Writing Inequalities
 - 2. Solving Inequalities by Adding or Subtracting
 - 3. Solving Inequalities by Multiplying or Dividing
 - 4. Solving Two-Step Inequalities

• Ratios, Rates and Proportions

- 1. Proportional Reasoning and Unit Rates
- 2. Proportions
- 3. Solving Proportions
- 4. Similar Figures
- 5. Maps and Scale Drawings
- 6. Proportional Relationships
- Percent
 - 1. Percent, Fractions and Decimals
 - 2. Solving Percent Problems Using Proportion
 - 3. Solving Percent Problems Using Equations
 - 4. Applications of Percent
 - 5. Simple Interest
 - 6. Finding Percent of Change

Geometry and Area

- 1. Angle Measures
- 2. Area of a Parallelogram
- 3. Area of a Triangle
- 4. Area of Other Figures
- 5. Circumference and Area of a Circle

Surface Area and Volume

- 1. Three-Dimensional Figures
- 2. Surface Areas of Cylinders and Prisms
- 3. Volumes of Cylinders and Prisms
- 4. Cross Sections

Analyzing Data

- 1. Random Samples and Surveys
- 2. Estimating Population Size
- 3. Inferences
- 4. Data Variability
- Probability
 - 1. Probability
 - 2. Experimental Probability
 - 3. Sample Spaces
 - 4. Compound Events
 - 5. Simulating Compound Events

GRADE EIGHT

• Foundations for Algebra

- 1. Variables and Expressions
- 2. Order of Operations and Evaluating
- 3. Real Numbers and the Number Line
- 4. Properties of Real Numbers
- 5. All Operations with Real Numbers
- 6. The Distributive Property
- 7. An Introduction to Equations
- 8. Graphing in the Coordinate Plane
- 9. Patterns Equations and Graphs

Solving Equations

- 1. Solving One-Step Equations
- 2. Solving Two-Step Equations
- 3. Solving Multi-Step Equations
- 4. Solving Equations with Variables on both Sides
- 5. Literal Equations and Formulas
- 6. Rations, Rates and Conversions
- 7. Solving Proportions
- 8. Proportions and Similar Figures
- 9. Percent
- 10. Change Expressed as a Percent

Solving Inequalities

- 1. Inequalities and their Graphs
- 2. Solving Inequalities using Addition or Subtraction
- 3. Solving Inequalities using Multiplication
- 4. Solving Multi-Step Inequalities
- 5. Working with Sets

- 6. Compound Inequalities
- 7. Absolute Value Equations and Inequalities
- 8. Unions and Intersections of Sets

• Introduction to Functions

- 1. Using Graphs to Relate Two Quantities
- 2. Patterns and Linear Functions
- 3. Patterns and Nonlinear Functions
- 4. Graphing a Function Rule
- 5. Writing a Function Rule
- 6. Formalizing Relations and Functions
- 7. Arithmetic Sequences

• Linear Functions

- 1. Rate of Change and Slope
- 2. Direct Variation
- 3. Slope-Intercept Form
- 4. Point-Slope Form
- 5. Standard Form
- 6. Parallel and Perpendicular Lines
- 7. Scatter Plots and Trend Lines
- 8. Graphing Absolute Value Functions

Systems of Equations and Inequalities

- 1. Solving Systems by Graphing
- 2. Solving Systems by Using Substitution
- 3. Solving Systems by Using Elimination
- 4. Applications of Linear Systems
- 5. Linear Inequalities
- 6. Systems of Linear Inequalities

• Exponents and Exponential Functions

- 1. Zero and Negative exponents
- 2. Multiplying Powers with the Same Base
- 3. Multiplication Properties of Exponents
- 4. Division Properties of Exponents
- 5. Rational Exponents and Radicals
- 6. Exponential Functions
- 7. Geometric Sequences

• Polynomials and Factoring

- 1. Adding and Subtracting Polynomials
- 2. Multiplying and Factoring
- 3. Multiplying Binomials
- 4. Multiplying Special cases
- 5. Factoring in Different Forms
- 6. Factoring by Grouping
- 7. Factoring Special Cases

SOCIAL STUDIES

Grade Six students explore the dawn of humankind, innovations allowing humans to populate most of the earth, conditions leading to the rise and fall of great civilizations, and the continued impact of early eras on modern life.

In **Grade Seven**, students gain a greater knowledge of the concepts of physical geography, environmental issues, global economic and political systems, resource management, and of the different countries and cultures of the world.

Acting as political scientists, **Grade Eight** students learn of the causes and effects of the major events in the history of the United States. Students also carefully study the Constitution and Constitutional law.

Middle School students will complete several projects throughout the year. The purpose of these projects is to gain a greater understanding of historical events and geographic concepts and issues and their effects, as well as to enhance skills in the areas of time management, prioritizing, and the meeting of deadlines. These projects are also designed to develop and reinforce research skills. They give students an opportunity to showcase their creative talents. They are also designed to serve as another form of assessment. This can prove especially valuable to students who may experience difficulty completing traditional tests.

Current and contemporary events are constantly monitored. Formal and informal debates allow students to create strategies and expand independent and higher order thinking skills to analyze legislative and public policy decisions and form well-thought out and researched opinions and beliefs, in the context of social justice.

Students participate in a mock trial sponsored by the Commonwealth of Massachusetts, Office of the Jury Commissioner. Field trips include a visit to the Edward Kennedy Institute, where students assume the role of Senators for the day, in a chamber that exactly replicates the Senate chamber in Washington, D.C. Students also visit the Commonwealth Museum at the Massachusetts Archives, where they are exposed to artifacts and archives, tracing the history of Massachusetts from colonial times until the present. Students also participate in a simulated archaeological dig.

GRADE SIX

GRADE LEVEL CURRICULUM OVERVIEW

Beginnings of Human Society

- Relationship Between Geography and History
- Prehistory
- Beginnings of Civilization

Fertile Crescent

- Mesopotamia
- Babylonia and Assyria
- Legacy of Mesopotamia
- Phoenicia
- Canaan

Ancient Egypt and Nubia

Geography of the Nile

- Egyptian Rulers
- Egyptian Culture
- Cultures of Nubia

Ancient India

- Civilization in the Indus and Ganges River Valleys
- Hinduism
- Buddhism
- Mauryan and Gupta Empires

Ancient China

- Civilization in China's River Valleys
- Confucius
- Warring Kingdoms and Chinese Dynasties
- Legacy of Ancient China

Ancient Greece

- Beginnings of Greek Culture and Government
- Religion, Philosophy, Arts
- Athens and Sparta
- Alexander the Great
- Hellenistic Kingdoms

Ancient Rome

- Roman Republic
- Roman Empire
- Daily Life in Rome
- Christianity

Byzantine and Muslim Civilizations

- The Byzantine Empire
- Beginnings of Islam
- Golden Age of Muslim Civilization

Civilizations of Africa

- The Bantu
- West African Kingdoms
- East Africa Trading Centers

Early Civilizations of the Americas

- The Inca
- Cultures of Mesoamerica
- Cultures of North America

GRADE SEVEN

Physical and Human Geography

- Geographic Tools
- Five Themes of Geography
- Changes Within the Earth
- Changes on Earth's Surface
- Weather and Climate
- Ecosystems
- Demography

- Culture
- Political Systems
- Economic Systems
- Resource Management and Land Use

The physical characteristics and present political, economic and social conditions of the countries of the following continents and regions:

- South America
- Europe and Russia
- Africa
- Southwest Asia
- South and Central Asia
- East and Southeast Asia
- Australia and the Pacific

GRADE EIGHT

- Early Americas and European Exploration
- European Colonization of North America
- The Revolutionary Era
- The United States Constitution
- The Early Republic
- The Jacksonian Age and Westward Expansion
- Society and Culture Before the Civil War
- Sectionalism and Civil War
- Reconstruction

SCIENCE

APPLICABLE TO ALL GRADES

- Blends traditional and innovative hands-on learning experiences
- Program follows the MA Curriculum Standards for grades 6, 7 & 8
- Core materials are from the program "Interactive Science" from Pearson Education
 - Text is specifically designed to meet MA Curriculum Standards
 - Renewable text allows direct student engagement in reading and writing on each page
 - Two to three inquiry lab experiences per lesson
 - Each unit offers a cumulative project-based learning opportunity
 - o Many diverse learning opportunities are provided through Pearson Realize Online
 - Access textbook online, key concept summary readings with visual and auditory aids, virtual labs, online tests and quizzes
- Supplemental lab inquiry opportunities are provided by the Science from Scientists program
 - Bi-weekly visits from former scientists leading students through experiments on a diversity of topics
- Science-related field trips such as the Biogen Community Lab and Science Museums
- Focus on STEM / STEAM throughout the year
 - Accurately model scientific concepts through diagramming, making 3D models, and acting out processes
 - Using technology to aid in research and presentation
 - Practice innovation using the Engineering Design Process, such as the egg drop challenge
 - Practice experimentation using the Scientific Method, such as the Science Fair project
- Environment week in April dedicated to learning about preservation of Earth
 - Reduce, reuse, recycle (Grade 6)
 - Energy conservation (Grade 7)
 - Pollution and solutions (Grade 8)
- Use of technology with Smart Boards, iPads, and ChromeBooks is highly integrated
 - Open communication with students via QCA email, RenWeb and/or Google Classroom
 - Open communication with parents via email, RenWeb, and the Remind App for homeroom announcements
 - Google Classroom resources include online assignments and course materials, outlines and PowerPoint presentations of lesson notes, links to class information/forms, project information, study aids, etc.
 - Other educational technology programs commonly used include Quizlet, Kahoot, BrainPop, Plickers, Google Suite

GRADE LEVEL CURRICULUM OVERVIEW

<u>GRADE SIX</u> (Concentration on Earth Sciences)

- Earth Science
 - Earth and its place in the universe (solar system, galaxies, lunar phases, eclipses)
 - Geologic time (fossils, Earth's history)
 - Plate Tectonics (inside Earth, mechanics of land formation)
- Life Science
 - Introduction to living things, cells, and the human body
- Physical Science
 - Introduction to matter and non-matter (sound and light waves)
- Science Skills

 What is science, methods of experimentation, branches of science, safety in science, tools of science

<u>GRADE SEVEN</u> (Concentration on Life Sciences)

- Earth Science
 - Weathering and soil
 - Energy Resources land, air, water
- Life Science
 - Plant and Animal reproduction
 - Cellular life
 - Ecosystems and biodiversity
- Physical Science
 - o Introduction to energy, magnetism, and electricity
- Science Skills
 - Practicing scientific thinking, safety and tools review, math in science

<u>GRADE EIGHT</u> (Concentration on Physical Sciences)

- Earth Science
 - Earth, Moon, Sun system and movement (seasons and tides)
 - Earth Systems (rock cycle, atmosphere, weather)
- Life Science
 - Cellular processes
 - Genetics and DNA
 - Adaptations of living things
- Physical Science
 - States of matter
 - Atoms and Bonding
 - Chemical reactions
 - Forces and motion
- Science Skills
 - Review of scientific thinking, safety and tools, math in science

SPANISH

In meetings twice a week, the Spanish program introduces students in Grades 6 through 8 important skills in the reading, writing, and speaking of the Spanish language. Students are also introduced to and develop an appreciation of many aspects of the Spanish culture. Students learn songs and prayers in Spanish. Upon entering high school, with instruction that builds upon the skills developed each year from Grade 6 through 8, most students have completed a course of study for Spanish I and prepared for Spanish II.

GRADE LEVEL CURRICULUM OVERVIEW

GRADE SIX

- Numbers (up to a million)
- Articles
- Adjectives
- Classroom objects
- Family members
- Time and dates

GRADE SEVEN

- Review and expand topics from Grade Six
- -ar, -er, and -ir verbs
- Ordinal numbers
- Additional vocabulary
- Introduction to the Verbs of Being

GRADE EIGHT

- Review and expand topics from Grade Seven
- Progressive form of verbs
- Implied future tense of verbs
- Irregular verbs
- Grammar instruction infused in story reading
- Reading aloud and translation
- Reading comprehension (Adventures of Alejandro)

** OPENING OF A NEW FOREIGN LANGUAGE LAB IN SEPTEMBER OF 2019 **

Spanish instruction by an instructor will continue for all students in Grades 6-8 twice a week. However, students will also have the opportunity to enhance their language skills in Spanish and/or begin to learn French, German, or Mandarin in a new QCA Foreign Language Lab. Students will work in the Rosetta Stone digital program that will allow them to learn to read, write, and speak a new language at their own pace!

Advantages of Rosetta Stone Online Learning (from the Rosetta Stone website):

"Dynamic Immersion

Activate learning with self-paced lessons and activities in the new language that surrounds students as they learn to speak, read, write, listen, and think in a whole new way.

TruAccent

Immediate pronunciation feedback guides students to speak the new language correctly, making learning instantly rewarding and building the foundation for greater speaking confidence.

Digital learning has activities for every learner level including Reading Aloud with speech feedback, writing for specific purposes, and listening and reading comprehension."