



# Curriculum Guide

Overview  
2022-2023

## Curriculum Review Process -Valley Catholic Middle School

Valley Catholic Middle School's curriculum is reviewed and updated on a yearly basis with an in-depth study of individual subjects occurring at least every three years, as determined by the Archdiocese of Portland. In addition, Valley Catholic Middle School's staff and administration review curriculum as follows:

### Middle School Curriculum Review Committees

#### Departments

Departments are based on the subject (math, fine arts, etc.) and all Valley Catholic teachers attend department meetings. These meetings happen at least quarterly. If a teacher has classes in more than one subject area (math and religion, for example), then the teacher attends both department meetings (split time between the two meetings).

#### Middle School Staff/Program

There are thirty staff members, plus the principal and counselors, identified as the middle school core staff. These teachers specialize in the needs of middle school students, from day-to-day classroom procedures to school environment (social, extra-curricular, transitional/age-appropriate adjustments, etc.) Middle School core meetings address everything from middle school-specific curriculum to individual student needs.

### Tools for Review of the Middle School Program

#### Middle School Test Results

Summative standardized tests are administered to our current sixth, seventh, and eighth grade students. The results are compared with those of students in other Catholic schools as well as to the national average.

#### High School Placement Tests

STS High School Placement Test Results are reviewed for our current eighth grade students. The results are compared to students throughout the Archdiocese who have applied as freshmen to a Catholic high school (This includes public and private school applicants). Note: All local Catholic high schools give the same entrance test to all freshman applicants.

## **Tools for Review of the Middle School Program**

### **High School Performance Results**

The review process includes, but is not limited to the following feedback:

- PSAT and SAT scores of Valley Catholic Middle School (VCMS) alumni
- AP (advanced placement) test scores for VCMS alumni
- High school GPAs
- College acceptances and placement for VCMS alumni (as well as honors and awards received)
- Personal check-in at feeder high schools (admission directors, department heads, teachers) to see how VCMS alumni perform in general

### **Other**

**Content Review and Textbook Adoption Cycle** Valley Catholic Middle school staff members review each core content area annually. This review process is a key component in Valley Catholic's textbook adoption cycle so that as the state and Archdiocese make changes, VCMS can address the changes in our textbook adoptions.

**Trends in Education and Department Meetings** Curriculum updates and educational trends are considered on a yearly basis within department meetings. This information is used to review, adjust, or confirm our current curriculum. Updates to the VCMS Curriculum Guide go into effect the following school year.

**Annual Review of Other Programs** Each year, Valley Catholic Middle School reviews the programs of leading middle schools in the greater Portland area as well as new approaches in education. Through these reviews, the staff gains insight and evaluates whether the current middle school program could benefit from those changes. These reviews validate Valley Catholic Middle School's unique educational opportunities and approach while allowing the staff members to remain current on other trends in education. The reviews serve to explain why Valley Catholic may or may not choose to follow those trends.

**Regular Student and Parent Feedback** Quarterly student surveys provide vital information about student perceptions, peer-to-peer interactions, the effectiveness of cross-curricular skill development within each grade level. Students and parents are also surveyed after significant projects or events in an effort to continually improve signature projects.



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Study Skills	<a href="#">Study Skills</a>	N/A	N/A
Visual Arts	N/A	<a href="#">Introduction to Art</a>	<a href="#">Advanced Art</a> <a href="#">Watercolor</a>
World Languages	N/A	<a href="#">Spanish I</a>	<a href="#">Spanish I</a>



# Sixth Grade English

English Department  
2022-23

## Required Texts – Grade Level (G)

*Voyages in English* Loyola Press  
*The Giver* by Lois Lowry  
*Merci Suarez Changes Gears* by Meg Medina  
*Dragonwings* by Laurence Yep  
*A Wrinkle in Time* by Madeleine L'Engle

## Required Texts – Honors (H)

*Voyages in English*, Loyola Press  
*The Giver* by Lois Lowry  
*Esperanza Rising* by Pam Muñoz Ryan  
*Chains* by Laurie Halse Anderson  
*The Hobbit* by J.R.R. Tolkien

## Course Description:

In 6<sup>th</sup> grade English, students read and comprehend complex literary and informational texts independently and proficiently. They connect themes across genres and develop social responsibility through reading and writing. They develop the use of language to describe, entertain, inform, analyze, persuade, and express feelings in writing. Students express ideas with clarity and coherence in writing and oral communication. In addition, students build a larger vocabulary by looking closely at context clues in writing. They develop public speaking skills through in class presentations.

## Class Scope and Sequence:

Literature: <i>The Giver</i> (G&H)	Writing
<b>Themes:</b> memory, conformity vs individualism free will, meaning of love <b>Literary elements:</b> characterization, symbolism, Utopia/Dystopia	<b>Writing Type:</b> Argumentative analysis <b>Grammar/Vocab:</b> Greek & Latin Roots, Parts of Speech, focus on nouns
Literature: <i>Merci Suarez Changes Gears</i> (G) / <i>Esperanza Rising</i> (H)	Writing
<b>Themes:</b> understanding and overcoming our prejudices, different points of view, personal growth <b>Literary elements:</b> setting, conflict, point of view, plot structure, figurative language	<b>Writing Type:</b> Narrative <b>Grammar/Vocab:</b> Greek & Latin Roots, pronouns, adjectives
Literature: <i>Dragonwings</i> (G), <i>Chains</i> (H)	Writing
<b>Themes:</b> power structures, oppression vs opportunity, family relationships <b>Literary elements:</b> point of view, conflict, setting, narrative style	<b>Writing Type:</b> Research/Informative Explanatory <b>Grammar/Vocab:</b> Greek & Latin Roots, Verbs, Adverbs
Literature: <i>The Shadow Spinner</i> (G) / <i>The Hobbit</i> (H)	Writing
<b>Themes:</b> the making of a hero, greed/power corrupts, the road to self-discovery, the power of words/stories <b>Literary elements:</b> a hero's journey, setting, characterization, conflict, narrative structure	<b>Writing Type:</b> Argumentative analysis <b>Grammar/Vocab:</b> Greek & Latin Roots, Sentences, Conjunction, Punctuation, Capitalization



# Seventh Grade English

English Department

2022-23

## Required Texts – Grade Level (G)

*Voyages in English*, Loyola Press  
*The Outsiders* by S.E. Hinton  
*Inside Out and Back Again* by Thanhha Lai  
*The Pearl* by John Steinbeck  
*The Dark is Rising* by Susan Cooper

## Required Texts – Honors (H)

*Voyages in English*, Loyola Press  
*The Outsiders* by S.E. Hinton  
*Brown Girl Dreaming* by Jacqueline Woodson  
*Animal Farm* by George Orwell  
*A Wizard of Earthsea* by Ursula LeGuin

## Course Description:

In 7<sup>th</sup> grade English, students continue to build upon the skills acquired in 6<sup>th</sup> grade English. They master the use of language to narrate, describe, analyze, explain, argue, persuade, inform, entertain and express feelings in writing and orally. Students express ideas with clarity and coherence in writing and oral communication. They continue to develop public speaking skills through in class presentations. In literature, students compare texts, connect themes across genres, and develop social responsibility through reading, writing, and reflecting on important time-periods in history.

## Class Scope and Sequence:

Literature: <i>The Outsiders</i> (G&H)	Writing
<b>Themes:</b> Sources of happiness, conformity vs individualism, personal identity, friendship <b>Literary elements:</b> Characterization, Dynamic/Static, Allusion, Slang, Setting	<b>Writing Type:</b> Argumentative analysis <b>Grammar/Vocab:</b> Greek & Latin Roots, Parts of Speech, focus on nouns
Literature: <i>Inside Out and Back Again</i> (G) / <i>Brown Girl Dreaming</i> (H)	Writing
<b>Themes:</b> racism, family, identity <b>Literary elements:</b> narrative style and structure, poetic elements, theme	<b>Writing Type:</b> Narrative/Poetry <b>Grammar/Vocab:</b> Greek & Latin Roots, adjectives, pronouns
Literature: <i>The Pearl</i> (G), <i>Animal Farm</i> (H)	Writing
<b>Themes:</b> greed and corruption, class structure <b>Literary elements:</b> Symbolism, allegory, author's style	<b>Writing Type:</b> Research <b>Grammar/Vocab:</b> Greek & Latin Roots, verbs, verbals
Literature: <i>The Dark is Rising</i> (G) / <i>A Wizard of Earthsea</i> (H)	Writing
<b>Themes:</b> The power of names/language, greed/power corrupts, the road to self-discovery, redemption & destiny <b>Literary elements:</b> a hero's journey, motifs of fantasy genre, setting, characterization, symbolism	<b>Writing Type:</b> Argumentative analysis <b>Grammar/Vocab:</b> Greek & Latin Roots, adverbs, prepositions



# Eighth Grade English

English Department

2022-23

## Required Texts – Grade Level (G)

*Voyages in English* Loyola Press  
*To Kill a Mockingbird* by Harper Lee  
*Treasure Island* by Robert Louis Stevenson  
*Uglies* by Scott Westerfeld  
*Farewell to Manzanar* by Jeanne Wakatsuki Houston and James D. Houston

## Required Texts – Honors (H)

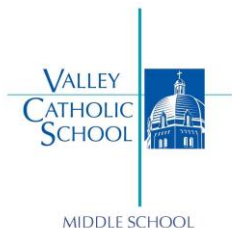
*Voyages in English* Loyola Press  
*To Kill a Mockingbird* by Harper Lee  
*Lord of the Flies* by William Golding  
*The House of the Scorpion* by Nancy Farmer  
*Night* by Elie Wiesel

## Course Description:

In 8<sup>th</sup> grade English, students continue to build upon the skills acquired in 6<sup>th</sup> and 7<sup>th</sup> grade English. They maintain the use of appropriate vocabulary as well as develop a larger, more diverse vocabulary. Students use correct grammar with appropriate and varied sentence structure. They master the use of language to narrate, describe, analyze, explain, argue, persuade, inform, entertain and express feelings in writing and orally. Students express ideas with clarity and coherence in writing and oral communication. They continue to develop public speaking skills through in class presentations. In literature, students compare texts, connect themes across genres, and develop social responsibility through reading, writing, and reflecting on important time-periods in history.

## Class Scope and Sequence:

Literature: <i>To Kill a Mockingbird</i> (G&H)	Writing
<b>Themes:</b> Gender and race prejudice, Empathy, Justice, Social change, Circle of Obligation <b>Literary elements:</b> characterization, symbolism, setting, narrative structure	<b>Writing Type:</b> Argumentative analysis <b>Grammar/Vocab:</b> Greek & Latin Roots, Parts of Speech, focus on nouns
Literature: <i>Treasure Island</i> (G) / <i>Lord of the Flies</i> (H)	Writing
<b>Themes:</b> Greed, Deception, Duty, Human nature, power structures <b>Literary elements:</b> Plot structure, conflict, theme, point of view, character development, symbolism	<b>Writing Type:</b> Argumentative analysis <b>Grammar/Vocab:</b> Greek & Latin Roots, adjectives, pronouns
Literature: <i>Uglies</i> (G) / <i>The House of the Scorpion</i> (H)	Writing
<b>Themes:</b> dignity of life, greed/power corrupts, the road to self-discovery, identity <b>Literary elements:</b> Symbolism, characterization, theme	<b>Writing Type:</b> Narrative <b>Grammar/Vocab:</b> Greek & Latin Roots, verb, verbals
Literature: <i>Farewell to Manzanar</i> (G), <i>Night</i> (H)	Writing
<b>Themes:</b> hope, family relationships, growth through conflict <b>Literary elements:</b> Point of View, conflict, author's style	<b>Writing Type:</b> Research (Capstone) <b>Grammar/Vocab:</b> Greek & Latin Roots, adverb, prepositions



# 6th Grade-Level/Honors Math

Math Department

2022-23

## Required Textbook:

*Big Ideas Math Modeling Real Life (6<sup>th</sup> Advanced)* by Ron Larson

## Course Description:

This course gives extensive practice and review of concepts, computational skills and problem-solving strategies necessary for success in Pre-Algebra. In this course, students explore the language of algebra, geometry, and other areas of mathematics in verbal, graphical, and symbolic form. Skills and concepts are tied to real-world applications and to other mathematics topics.

## Class Scope and Sequence:

### Tools for Problem Solving

- Order of Operations
- Variables and Expressions
- Powers and Exponents
- Solving Equations Mentally

### Patterns and Number Sense

- Divisibility Patterns
- Prime Factorization
- Sequences
- Greatest Common Factor
- Least Common Multiple

### Integers

- Comparing and Ordering Integers
- The Coordinate System
- Adding/Subtracting Integers
- Multiplying/Dividing Integers
- Solving Equations
- Integers as Exponents

### Applications with Decimals

- Decimals: Comparing, Rounding and Estimating, Multiplying and Dividing
- Powers of Ten
- Scientific Notation

### Applications with Fractions

- Mixed Numbers and Improper Fractions
- Simplifying Fractions
- Adding and Subtracting Fractions and Mixed Numbers
- Dividing Fractions and Mixed Numbers

### Investigations in Geometry

- Angles
- Polygons
- Triangles and Quadrilaterals
- Area
- Surface Area and Volume

### Statistics and Data

#### Analysis

- Mean, Median, and Mode
- Stem-Leaf Plots
- Misleading Statistics

### An Introduction to Algebra

- Using Inverse Operations
- Addition and Subtraction Equations
- Multiplication and Division Equations
- Writing Algebraic Expressions



# 6th Advanced Pre-Algebra

Math Department

2022-23

## Required Textbook:

*Big Ideas Math Modeling Real Life (7<sup>th</sup> Advanced)* by Ron Larson

## Course Description:

In this course, students explore the language of algebra, geometry, and other areas of mathematics in verbal, graphical, and symbolic form. Skills and concepts are tied to applications that are part of the students' real world or to connections with other mathematics topics. There is a strong emphasis on efficient problem solving. Students learn to analyze a new problem and discover different ways to solve it. Problem solving activities and applications encourage the students to model patterns and relationships with variables and functions and to classify geometric figures. This course gives extensive practice and review of concepts, computational skills, solving equations, and problem-solving strategies necessary for a strong mathematical foundation.

## Class Scope and Sequence:

### Equations and Inequalities

- Using Inverse Operations
- One-Step and Multi-Step Equations and Inequalities
- Writing Expressions, Inequalities, and Equations

### Probability

- Developing and Applying Models
- Compound Events
- Theoretical and Experimental

### Investigations in Geometry

- Circles
- Composite Figures
- Angle Measures
- Polygons
- Interior and Exterior Angles
- Area, Surface Area, and Volume
- Parallel Lines and Transversals

### Exponents

- Write and Evaluate Expressions
- Equivalent Expressions with Product and Quotient of Powers
- Zero and Negative Exponents
- Perform Operations with Scientific Notation

### Transformations

- Translations, Reflections, Rotations, and Dilations
- Similar Figures

### Real Number System

- Classify Real Numbers
- Find and Estimate Square Roots
- Apply the Pythagorean Theorem and its Converse
- Convert Between Fractions, Decimals, and Percentages

### Statistics and Data Analysis

- Measures of Center and Variation
- Representation of Data
- Samples and Populations

### Functions

- Understand and Use Functions
- Represent and Model Functions
- Differentiate Between Linear and Non-Linear Functions

### Linear Equations

- Graphing Using Points, Slope-Intercept, or Standard Form
- Finding and Interpreting Slope
- Writing Linear Equations
- Solving Systems of Linear Equations





# 7th Math Grade Level/Honors

Math Department

2022-23

## Required Textbook:

*Big Ideas Math Modeling Real Life (7<sup>th</sup> Advanced)* by Ron Larson

## Course Description:

In this course, students explore the language of algebra, geometry, and other areas of mathematics in verbal, graphical, and symbolic form. Skills and concepts are tied to applications that are part of the students' real world or to connections with other mathematics topics. There is a strong emphasis on efficient problem solving. Students learn to analyze a new problem and discover different ways to solve it. Problem solving activities and applications will encourage the students to model patterns and relationships with variables and functions and to classify geometric figures. This course gives extensive practice and review of concepts, computational skills, solving equations, and problem-solving strategies necessary for a strong mathematical foundation.

## Class Scope and Sequence:

### Equations and Inequalities

- Using Inverse Operations
- One-Step and Multi-Step Equations and Inequalities
- Writing Expressions, Inequalities, and Equations

### Probability

- Developing and Applying Models
- Compound Events
- Theoretical and Experimental

### Investigations in Geometry

- Circles
- Composite Figures
- Angle Measures
- Polygons
- Interior and Exterior Angles
- Area, Surface Area, and Volume
- Parallel Lines and Transversals

### Exponents

- Write and Evaluate Expressions
- Equivalent Expressions with Product and Quotient of Powers
- Zero and Negative Exponents
- Perform Operations with Scientific Notation

### Transformations

- Translations, Reflections, Rotations, and Dilations
- Similar Figures

### Real Number System

- Classify Real Numbers
- Find and Estimate Square Roots
- Apply the Pythagorean Theorem and its Converse
- Convert Between Fractions, Decimals, and Percentages

### Statistics and Data Analysis

- Measures of Center and Variation
- Representation of Data
- Samples and Populations

### Functions

- Understand and Use Functions
- Represent and Model Functions
- Differentiate Between Linear and Non-Linear Functions

### Linear Equations

- Graphing Using Points, Slope-Intercept, or Standard Form
- Finding and Interpreting Slope
- Writing Linear Equations
- Solving Systems of Linear Equations



# 7<sup>th</sup> Advanced Algebra

Math Department

2022-23

## Required textbooks:

*Elementary and Intermediate Algebra* by Jerome E. Kaufmann and Karen L. Schwitters

## Course Description:

This course covers all the material traditionally taught in a first-year algebra course, and introduces some of the concepts and computational skills usually seen in Algebra II. Some topics not covered in standard textbooks will be discussed. Students will also practice on competitive math exams. The course is designed for motivated students with high mathematical ability. The students will take Advanced Geometry their 8<sup>th</sup> grade year.

## Class Scope and Sequence:

### Basics

- Numeric and algebraic expressions
- Properties of the four operations
- Operations on real numbers

### Polynomials

- Operations on monomials and polynomials
- Zero/negative exponents
- Factoring general polynomials
- Long division of polynomials and synthetic division

### Equations and Inequalities

- Solving linear equations
- Inequalities and compound inequalities
- Applied problems (interest, mixtures, rates, etc.)
- Problem solving practice

### Rational Expressions

- Simplifying rational expressions
- Operations on rational expressions
- Equations with rational expressions

### Coordinate Geometry

- Graphing linear equations
- Four forms of a linear equation
- Solving linear systems (graphing, substitution, elimination, Cramer's Rule)

### Exponents and Radicals

- Simplifying and combining radicals
- Operations on radicals
- Radical Equations

### Quadratic Equations and Inequalities

- Completing the square
- The quadratic formula
- Complex numbers
- Graphing quadratic equations



# 8<sup>th</sup> Grade-Level Algebra

Math Department

2022-23

## Required Textbooks:

*Big Ideas Math Algebra 1* by Ron Larson

## Course Description:

This course introduces the material of first-year algebra with an emphasis on foundational math skills that will prepare them to be successful in high school Algebra I. Students who master the material of the course will be prepared to challenge Algebra I in high school.

## Class Scope and Sequence:

### Algebra Basics

- Expressions, equations, order of operations
- Properties of addition and multiplication
- Operations with integers and rational numbers

### Powers and Roots

- Rules for operations with monomials
- Negative exponents
- Square roots and the Pythagorean Theorem

### Solving Equations

- Single-step and multi-step equations
- Equations with absolute value
- Equations with variables on both sides

### Solving Equations and Inequalities

- Single-step and multi-step inequalities
- Inequalities with variables on both sides

### Polynomials

- Basic operations on polynomials
- Special products
- Factoring polynomials

### Functions and Graphs

- Definition of function
- Graphing linear relations
- Writing linear equations in various forms

### Quadratic Functions

- Graphing quadratic functions
- Radical expressions
- Solving quadratics by completing the square
- Solving quadratics by using the Quadratic Formula

### Systems of Equations

- Graphing systems of linear equations
- Solving systems using substitution and elimination
- Solving systems of linear inequalities



# 8<sup>th</sup> Honors Algebra

Math Department

2022-23

## Required textbooks:

*Elementary and Intermediate Algebra* by Jerome E. Kaufmann and Karen L. Schwitters

## Course Description:

This course covers all the material traditionally taught in a first-year algebra course, and introduces some of the concepts and computational skills usually seen in Algebra II. Some topics not covered in standard textbooks will be discussed. The course is designed for motivated students with high mathematical ability. Students mastering the content will take Advanced Geometry their 9<sup>th</sup> grade year.

## Class Scope and Sequence:

### Basics

- Numeric and algebraic expressions
- Properties of the four operations
- Operations on real numbers

### Polynomials

- Operations on monomials and polynomials
- Zero/negative exponents
- Factoring general polynomials
- Long division of polynomials and synthetic division

### Quadratic Equations and Inequalities

- Completing the square
- The quadratic formula
- Complex numbers
- Graphing quadratic equations

### Equations and Inequalities

- Solving linear equations
- Inequalities and compound inequalities
- Applied problems (interest, mixtures, rates, etc.)
- Problem solving practice

### Rational Expressions

- Simplifying rational expressions
- Operations on rational expressions
- Equations with rational expressions

### Coordinate Geometry

- Graphing linear equations
- Four forms of a linear equation
- Solving linear systems (graphing, substitution, elimination, Cramer's Rule)

### Exponents and Radicals

- Simplifying and combining radicals
- Operations on radicals
- Radical Equations



# 8<sup>th</sup> Advanced Geometry

Math Department

2022-23

## Required Textbooks:

Glencoe/McGraw Hill Geometry

## Course Description:

This course covers all the material traditionally taught in a first-year Geometry course, and reinforces some of the concepts and computational skills usually seen in Algebra I. Some topics not covered in standard textbooks will be discussed. The course is designed for motivated students with exceptional mathematical ability. The students will typically take Algebra II their freshmen year of high school.

## Class Scope and Sequence:

### The Language of Geometry

- Language and symbols
- Segments, Midpoints and Distance
- Rays and Angles

### Congruent Triangles

- Classifying Triangles and Testing for Congruent Triangles
- Angle Measure

### Similarity

- Application of Proportion
- Similar Polygons
- Similar Triangles
- Proportional Parts

### Polygon and Area

- Polygons and Polyhedra
- Areas and Polygons
- Area and Circumference of Circles
- Geometric Probability

### Reasoning and Proof

- Logic
- Properties of Algebra
- Two-Column Proofs

### Applying Congruent Triangles

- Right Triangles
- Inequalities of Triangles
- Triangle Inequality

### Right Triangles and Trigonometry

- Geometric Mean
- Pythagorean Theorem
- Special Right Triangles
- Trigonometry
- Law of Sines and Cosines

### Surface Area and Volume

- Prisms and Cylinders
- Pyramids and Cones

### Parallels

- Parallels and Transversals
- Parallels in Proofs
- Slopes and Distances

### Quadrilaterals

- Parallelograms
- Tests for Parallelograms
- Rectangles
- Squares and Rhombi
- Trapezoids

### Circles

- Parts of Circles
- Angles, Arcs and Chords
- Inscribed Angles
- Tangents
- Special Segments

### Coordinate Geometry

- Linear Equations
- Algebra and Statistics
- Coordinate Proof
- Vectors



# Sixth Grade STEM

Multidisciplinary STEM Projects

2022-23

## Class Description:

In 6th grade STEM, students develop a variety of tools to help them succeed academically and to help them transfer new skills into authentic life experiences. In STEM, students complete several projects aimed at building skills based in engineering and design philosophy. Projects consist of physical and digital projects designed to build critical thinking, communication, and problem solving skills. These projects include a Plastic Pollution Solution and a cross-curricular Mars Project in partnership with the Science and English departments.

## Class Scope and Sequence:

### Technology Skills

- Google Apps for Education
- Textbook use
- Study skills

### Innovative Designer

- Learning new design programs to enhance project assignments
- Canva
- 3D Design in TinkerCAD
- Adobe Creative Cloud
- Glowforge

### Digital Citizenship

- Copyright and Fair Use
- Online Safety
- Personal information

### Creative Communicator and Collaborator

- Digital media creation
- Public speaking skills
- Slideshows
- Project teamwork

### Engineering Design

- Project-based Learning
- Engineering Design Process
- Brainstorming
- Developing Prototypes

### Plastics Project

- Research skills
- Engineering Design Process
- Prototyping

### Mars Project

- Online research skills
- Research writing
- Engineering Design Process
- Brainstorming
- Presentation Skills



# Sixth Grade Mars Project

Multidisciplinary STEM Projects

2022-23

## Project Description:

Students work with a team to develop solutions for barriers to human survival on Mars. Students work through the engineering and design process to create a brochure, poster, and promotional video of their design. After an in-class survey, each student is assigned a specific role in the group with responsibilities and deliverables. It is the responsibility of each student to complete their assigned pieces and work together with the students in their group to finish the project.

**Goal:** A team of (4) students will find solutions to barriers to human survival on Mars. They will apply these researched solutions in their choice of a design

**Overarching Question:** How can a \_\_\_\_\_ be designed on Mars? (Example: Ice-cream shop, football stadium)

**Individual Project:** Students will research barriers to human survival on Mars (oxygen, gravity, food and water, and (optional 4<sup>th</sup>) and write a research paper in their English class.

## Project Scope and Sequence:

### Writing

- 5-paragraph essay; intro; explanation of three barriers, conclusion
- Description of solutions/design for brochure

### Research

- Layout of infographic
- Solutions to barriers and how they can be applied to the design

### Presentation

- Promotional video
- Final presentation
- Presentation Fair

### Product

- Infographic that highlights solutions and design
- Poster to showcase design features
- Promotional video
- Model of building



# Seventh Grade STEM

Multidisciplinary STEM Projects

2022-23

## Class Description:

In 7th grade STEM, students focus on study skills to develop a variety of tools to succeed academically and be able to transfer new skills into the existing curriculum. Students engage in coursework to learn and practice transferable life skills. Students complete several projects aimed at developing their research skills, developing a business acumen through the Business Project and exposure to engineering and design through hands-on projects like Future City. Physical and digital projects are designed to build critical thinking, communication, and problem-solving skills. These projects include this year's Future City project.

## Scope and Sequence:

### Digital Citizenship

- Copyright and Fair Use
- Online Safety
- Personal information

### Technology Skills

- Google Apps for Education
- Digital Citizenship

### Public Speaking Skills

- Oral presentation
- Eye contact, voice quality, body language

### Design Skills

- Infographics
- Canva
- 3D Design with TinkerCAD
- 3D Modeling with Recycled Materials
- Notability

### Creative Communicator and Collaborator

- Digital media creation
- Public speaking skills
- Slideshows
- Project teamwork

### Future City Project

- Research and Writing
- Engineering & Design
- City Model
- Presentation Skills

### Business Project

- Research
- Product Design
- Writing Skills
- Presentation Skills





# Seventh Grade Future City

Multidisciplinary STEM Projects

**2022-23**

## Project Description:

Future City is a collaborative project for 7<sup>th</sup> grade students. Students work in groups of 4-6 students to design a city 100 years in the future that addresses a theme established by the Future City competition. Students must engineer solutions to identified problems within the established theme. In order to accomplish this, students learn traditional research skills about the provided theme and design a virtual city using SimCity software. This allows them to find out what infrastructure is needed for a stable and happy city to function.

A school competition at VCMS is held to decide which groups will represent VCMS at the Future City Regional Competition. Teams are chosen based on their performance in ALL of the deliverables for Future City. More information about the Future City project, including all resource materials, can be obtained from the Future City website: <https://futurecity.org/>.

## Project Scope and Sequence:

### City Essay

Written communication  
 Scientific/academic writing  
 Research Skills  
 Citations

### City Model

Scale  
 Design  
 Planning  
 Simple Machines

### City Presentation

Oral communication skills  
 Script writing and pacing  
 Visual aids  
 Question and answer skills

### Engineering/Design

Scientific Research  
 Engineering Process  
 Future thinking  
 Complex problem solving

### Research

Scientific Research  
 Presentation of research  
 Proper citations  
 Academic research skills



# Seventh Grade Business Project

Multidisciplinary STEM Projects

2022-23

## Project Description:

**Individual Project:** Students research an assigned company and write or film a creative project on the story of how that company started and grew into what it is today. The purpose of this assignment is for students to apply their skills in research, writing, technology, and study skills to plan, write, and produce a creative project on an assigned company.

**Group Project:** Students work with a team of students to develop a business plan and product that aligns to a specific industry. Each student completes an application and creates a resume to apply for an industry and role. After interviewing, each student is “hired” for a specific role with responsibilities and deliverables. It is the responsibility of each student to complete their assigned pieces and work together with the students in their group to build a business and product.

## Project Scope and Sequence:

### Writing

- Individual product storyboard and script
- Sales Pitch
- Business Plan Executive Summary

### Research

- Assigned start-up company for individual project
- Industry analysis for business plan

### Presentation

- Final presentation (*Shark Tank* style)

### Product

- Final individual product on assigned company
- Commercial and Print Advertisement
- Company logo and website
- Final group product

### Roles and Responsibilities:

#### Marketing Director

Create marketing and advertising materials, supports all roles

#### Product Engineer

Design and create the product with the help of your group, supports all roles

#### Business Director

Sales pitch, designs business structure, face of the business, supports all roles



# Eighth Grade Capstone

Multidisciplinary STEM Projects

2022-23

## Project Description:

The Valley Catholic Middle School (VCMS) Capstone is an intensive, year-end, cross-curricular project. In Capstone, students explore their interests and narrow their focus to one topic about which they are passionate. They design a project, conduct background research, and interview a professional in the field. During the final weeks of school, students create projects and share their learning through a website and oral presentation. Through Capstone, students refine academic skills learned over three years at VCMS—research, writing and presentation. Students learn time management and planning, self-advocacy and communication--skills that will benefit them in high school, college, and their professional lives. Students direct their own learning and advance their personal and academic growth.

## Project Scope and Sequence:

### Research and Writing

- Source Analysis
- Interview of an Expert
- Written Presentation of Evidence
- Conventions, Language and Style

### Project

- Time Management
- Effort and Ethical Conduct
- Creativity and Originality
- Learning Stretch

### Presentation

- Content and Organization
- Delivery
- Visual Component

### Website

- Graphic Design
- Functionality and Accessibility
- Effective Communication of Student Work

Capstone promotes the values embodied in the VCMS Profile of a Graduate—openness to growth, intellectual curiosity, faith formation, compassionate leadership, global citizenship and striving for wellness of mind and body. Specifically, Capstone demonstrates:

- personal and academic growth as students take responsibility for their learning
- the ability to plan, manage, and complete a self-designed activity
- research skills, including the formulation of questions, evaluation of sources and accurate documentation
- Written, verbal and visual communication skills
- the ability to create a project that displays knowledge and skills acquired during Capstone



# Band

## Performing Arts

### 2022-23

#### **Course Description:**

The goals of this class are to build the playing fundamentals and musical skills of all members. Rehearsal time will be spent on music methods, theory, scales, rhythms, and learning each musician's instrument. 6<sup>th</sup> and 7<sup>th</sup> grade band will be learning and performing multiple concert pieces throughout the semester ending with a public performance in the Winter and spring. Difficult sections of Concert Band and Pep Band music are reviewed and rehearsed within class. The Pep Band supports the school's sports teams at home games. Opportunities are provided for public performance.

#### **Class Scope and Sequence:**

##### **Unit One:**

- Finding our first notes
- Proper care of our instruments
- Practice versus rehearsal

##### **Unit Two:**

- Practice skills
- Sight-reading
- Building our musical literacy

##### **Unit Three:**

- Instrumental Technique
- Wind ensemble etiquette

##### **Unit Four:**

- Listening and Music appreciation
- Musical History

##### **Evaluation:**

- Daily preparedness and participation
- In class behavior
- Concert attendance



# Choir

## Performing Arts

### 2022-23

#### Course Description:

6<sup>th</sup>/7<sup>th</sup> Grade Choir focuses on fundamental musical, vocal, and ensemble skills, such as listening, singing in unison and harmony, and music literacy. The 8<sup>th</sup> Grade choir reinforces fundamental musical, vocal, and ensemble skills, while developing more advanced skills in music literacy, harmony singing, and sight-reading. Each middle school choir studies and performs a broad spectrum of music from various eras, genres, cultures, and styles. Students learn to use the voice as an instrument by learning healthy/proper vocal technique. Each choir group performs at least twice a year at Valley Catholic choir concerts. The 8<sup>th</sup> Choir may participate in middle school music festivals and other off-campus field trips.

#### Class Scope and Sequence:

##### Unit One:

- Healthy vocal production, good singing technique
- Unison singing and ensemble skills.

##### Unit Two:

- Basic music literacy: rhythmic and melodic notation, time signatures.
- Introduction to solfege
- Whole notes, half notes, quarter notes and rests.

##### Unit Three:

- Music appreciation through diverse repertoire
- Singing in languages other than English
- Unison and 2-part music
- Basic sight-reading

##### Unit Four:

- Listening and responding to music
- Applying solfege to sight-reading.
- 8<sup>th</sup> notes, 16<sup>th</sup> notes and rests.
- Expressive performing

##### Unit Five:

- Unison, 2-, and 3-Part Music
- Compound time signatures and triplets
- Intermediate sight-reading

##### Unit Six:

- Key signatures
- Minor scales
- Musical analysis

##### Unit Seven:

- Songwriting and improvisation.
- Chromatic melodies
- 4-Part music
- Advanced sight-reading

##### Evaluation:

- Daily work and class participation
- Music Theory and sight-reading work in class.
- Music Theory and sight-reading homework
- Concert attendance and participation
- Performance reflections



# Drama

## Performing Arts

### 2022-23

#### **Course Description:**

In this course, students are introduced to the basic concepts of theater arts. Students use various techniques to build trust and confidence, stimulate imagination, role-play, and movement. Students learn and use drama and theatre vocabulary, and develop acting skills through improvisations, scene work, and exercises. Students have the opportunity to exhibit and reinforce their skills through exercises, games, individual and group presentations, performances, and script and journal writing.

#### **Class Scope and Sequence:**

##### **Ensemble Building**

- Build trust within the group to help create a safe and trusting space for student performers

##### **Improvisation**

- Explore various literary plots through improvisation activities to inform story and character development.
- Group collaboration will lead to the culmination of the unit, in which students create a scene derived from a story told from a perspective different from the original narrative.

##### **Monologues**

- Score and perform a basic monologue

##### **Performance Techniques**

- Practice various techniques for using voice, body, movement, and space to tell a story to an audience.

##### **Performance**

- Students perform a full play



# Orchestra

## Performing Arts

### 2022-23

#### **Course Description:**

The students in this course learn orchestral techniques and in music fundamentals. The objectives include the spiritual, musical, aesthetic, cultural, and social growth of each individual through participation in this musical group as well as an increase in love and knowledge of music. Opportunities are provided for public performance.

#### **Class Scope and Sequence:**

##### **Unit One:**

- Scales and warm-ups

##### **Unit Two:**

- Sight-reading practice

##### **Unit Three:**

- Basic analysis

##### **Unit Four:**

- Music appreciation based on the literature performed, and, through required quarter reports on specified composers and current musical personalities, and on live or TV classical concerts

##### **Unit Five:**

- Ensemble playing taught through the selected literature, stressing expression, musicality, technical accuracy, and precision

**Evaluation:** Class performance, playing quizzes, and semester and final exams, written and playing



# Sixth Grade PE

Physical Education

2022-23

## Required Text

None

## Course Description:

In 6th grade physical education, students are expected to engage in physical activity by participating in a variety of individual and team sports. The Valley Catholic Middle School physical education program is based upon the acquisition of knowledge and skills that are the foundation for engaging in physical activity. Our mission is to empower all students to sustain regular, lifelong, physical activity as a foundation for a healthy, productive and fulfilling life. Students will be exposed to the basic skills and rules of different games and sports. Students are expected to show a reasonable effort to learn and improve while participating in all activities. Sportsmanship and fair play will be exercised at all times.

## Class Scope and Sequence:

### Motor skill and movement pattern development

- Locomotor and non-locomotor movements, rhythmic movements, hand-eye coordination
- Introduction of manipulative skills (catch, kick, bounce, strike with hand, pass)

### Display of acceptable personal and social behaviors

- Introduction of personal and social behaviors (personal hygiene, group dynamics)
- Introduction to proper behaviors and actions during PE class (sportsmanship)

### Knowledge of concepts, strategies and tactics related to performance

- Introduction of sports, rules and game play strategies
- On-the-ball tactical movements (passing receiving, attacking, preventing scoring, creating space)
- Basic First Aid/Infant CPR

### Ability to understand the health benefits, enjoyment and social interaction of physical activity

- Introduction of health benefits, enjoyment and social interaction within a physically active environment

### Knowledge and skills to achieve a healthy lifestyle

- Introduction to physical fitness, cardiovascular and strength activities





# Seventh Grade PE

Physical Education

2022-23

## Required Text

None

## Course Description:

In 7th grade physical education, students are expected to engage in physical activity by participating in a variety of individual and team sports. The Valley Catholic Middle School physical education program is based upon the acquisition of knowledge and skills that are the foundation for engaging in physical activity. Our mission is to empower all students to sustain regular, lifelong, physical activity as a foundation for a healthy, productive and fulfilling life. Students will be exposed to the basic skills and rules of different games and sports. They are expected to show a reasonable effort to learn and improve while participating in all activities. Sportsmanship and fair play will be exercised at all times.

## Class Scope and Sequence:

### Motor skill and movement pattern development (development)

- Locomotor and non-locomotor movements, rhythmic movements, hand-eye coordination
- Development of manipulative skills (catch, kick, bounce, strike with hand, pass)

### Knowledge of concepts, strategies and tactics related to performance

- Development of sports, rules and game play strategies
- Adult CPR, AED training, First Aid

### Knowledge and skills to achieve a healthy lifestyle

- Performing fitness tasks
- Develop a fitness plan based on individual preferences/interests

### Display of acceptable personal and social behaviors

- Development of personal and social behaviors (personal hygiene, group dynamics)
- Development of proper behaviors and actions during PE class (sportsmanship)

### Ability to understand the health benefits, enjoyment and social interaction of physical activity

- Development of personal fitness plan
- Working with others in a group to learn social interaction among peers



# Eighth Grade PE

Physical Education

2022-23

## Required Text

None

## Course Description:

In 8th grade physical education, students are expected to engage in physical activity by participating in a variety of individual and team sports. The Valley Catholic Middle School physical education program is based upon the acquisition of knowledge and skills that are the foundation for engaging in physical activity. Our mission is to empower all students to sustain regular, lifelong, physical activity as a foundation for a healthy, productive and fulfilling life. Students will be exposed to the basic skills and rules of different games and sports. They are expected to show a reasonable effort to learn and improve while participating in all activities. Sportsmanship and fair play will be exercised at all times.

## Class Scope and Sequence:

### Motor skill and movement pattern development (proficiency)

- Locomotor and non-locomotor movements, rhythmic movements, hand-eye coordination
- Development of manipulative skills (catch, kick, bounce, strike with hand, pass)

### Knowledge of concepts, strategies and tactics related to performance

- Show proficiency/improvement in sport games, rules and game play strategies
- Adult CPR, AED training, First Aid

### Knowledge and skills to achieve a healthy lifestyle

- Show proficiency/improvement in physical fitness, cardiovascular and strength activities

### Display of acceptable personal and social behaviors

- Development of personal and social behaviors (personal hygiene, group dynamics)
- Development of proper behaviors and actions during PE class (sportsmanship)

### Ability to understand the health benefits, enjoyment and social interaction of physical activity

- Development of health benefits, enjoyment and social interaction within a physically active environment



# Sixth Grade Religion

Old Testament  
Religion Department

**2022-23**

## Required textbooks:

*Christ Our Life 6: God Calls a People*, Loyola Press, 2009

*The New American Bible*

*Family Life 6*, RCL Benzinger, 2010

## Course Description:

Sixth grade religion looks at the origins of the Catholic faith by studying the development of the Old Testament. We will study the origins of the Jewish people in ancient Mesopotamia and follow their history until modern times; at the historical events that shaped the stories of the Old Testament and how they relate to the Catholic faith. The course also makes connections between customs and traditions of the Catholic Church and other religions. Students will learn the history of the Bible and how to navigate it. This course deepens student understanding of the history and faith of the Old Testament. Students also spend time focused on character development. Students are guided through lessons that are designed to develop a community of support and respect throughout the school. They work to develop skills of compassion for others and think critically about how their actions impact the community. Students work on skills that will help them make positive and responsible choices throughout their lives.

## Class Scope and Sequence:

<b>Historical Context</b>	<ul style="list-style-type: none"> <li>● Geography and History of the Biblical World</li> <li>● Jewish Customs and Traditions</li> <li>● Connections between Abrahamic Faiths</li> </ul>
<b>Scripture</b>	<ul style="list-style-type: none"> <li>● Organization and History of the Bible, Pentateuch</li> <li>● Historical and Prophetic Books of the Bible</li> <li>● Wisdom Literature: Psalms, Proverbs, Ecclesiastes, etc.</li> </ul>
<b>Catholic Traditions</b>	<ul style="list-style-type: none"> <li>● Origins of Mass, Liturgical Year</li> <li>● Styles of Prayer, Saints, Mary, Sacraments</li> </ul>
<b>Character Development</b>	<ul style="list-style-type: none"> <li>● Empathy, Problem Solving, Relationships</li> <li>● Effective Communication, Virtues</li> <li>● Second Step, Project Genesis, Called to Protect</li> </ul>
<b>Service</b>	<ul style="list-style-type: none"> <li>● Importance of Service</li> <li>● Connections to Church Teaching</li> <li>● Required Service to School Community</li> </ul>



# Seventh Grade Religion

Life of Christ  
Religion Department

**2022-23**

## Required Texts:

*Christ Our Life 7: Jesus the Way, the Truth, and the Life*, Loyola Press, 2009

*The New American Bible* [www.usccb.org/books](http://www.usccb.org/books)

*Family Life 6*, RCL Benzinger, 2010

## Course Description:

This class presents a chronological narrative of the life of Christ from His birth to His Ascension using *The New American Bible* and the *Christ Our Life* textbook. It takes an in-depth look at all four Gospels and Acts of the Apostles, specifically the stories and themes within them. Moral Christian living, peer relationships and other social-emotional skills are discussed throughout the year. Major projects and exams may include art pieces, presentations, creating videos, writing tasks and semester final exams.

## Class Scope and Sequence:

<b>Historical Context</b>	<ul style="list-style-type: none"> <li>● Inter-testament Period</li> <li>● 1<sup>st</sup> Century Palestine</li> </ul>
<b>Scripture</b>	<ul style="list-style-type: none"> <li>● Gospels</li> <li>● Acts of the Apostles</li> </ul>
<b>Catholic Traditions</b>	<ul style="list-style-type: none"> <li>● Prayer, Liturgy, Sacraments</li> <li>● Advent, Christmas, Lent</li> <li>● Holy Days, Feast Days</li> <li>● Vocations, Holy Orders</li> </ul>
<b>Character Development</b>	<ul style="list-style-type: none"> <li>● Empathy, Communication</li> <li>● Call to Protect, Project Genesis</li> <li>● Cardinal Virtues, Beatitudes</li> <li>● Emotion Management, Substance Abuse</li> <li>● Second Step, Project Genesis, Called to Protect</li> </ul>
<b>Service</b>	<ul style="list-style-type: none"> <li>● Waves of Love</li> <li>● Community Service Projects</li> </ul>



# Eighth Grade Religion

Church History  
Religion Department

**2022-23**

## Required Texts:

*Christ Our Life 8: The Church Then and Now*, Loyola Press, 2009

*The New American Bible*

*Family Life 6, RCL Benzinger, 2010*

## Course Description:

This course focuses on the history of the Catholic Church while also integrating important character development lessons and helping students become the best versions of themselves. Students explore identity, self-esteem, empathy as a way to explore ethical decision making and the Seven Themes of Catholic Social Teaching. Students learn the history and development of the Catholic Church through the following themes: Early Church, Conflict, Challenges, and Modernization. Students explore the Biblical origins of the church with a focus on the Epistles and learn how a small group of Jesus' followers emerged into a more formalized Church. Students also learn how various internal and external conflicts in the Church influenced its development. Students gain an understanding of the modern church and how it works in the modern world.

## Class Scope and Sequence:

<b>Historical Context</b>	<ul style="list-style-type: none"> <li>● Early Church: Councils, Church Fathers, Heresies</li> <li>● Conflicts: Medieval to Modern Period</li> <li>● Challenges: Reformation, Scientific Revolution, Age of Enlightenment</li> <li>● Modernization: Anti-Catholic Attitudes, 2<sup>nd</sup> Vatican Council, The Future Church</li> </ul>
<b>Scripture</b>	<ul style="list-style-type: none"> <li>● The Epistles</li> <li>● Scripture as foundations of Church teachings, practices, and traditions</li> </ul>
<b>Catholic Traditions</b>	<ul style="list-style-type: none"> <li>● Prayer, Liturgical Year, Saints</li> <li>● Sacraments, Catechism of the Church</li> <li>● Catholic Social Teaching</li> <li>● Monasticism</li> </ul>
<b>Character Development</b>	<ul style="list-style-type: none"> <li>● Self Esteem, Empathy, Problem Solving, Motivation and Goal Setting</li> <li>● Ethical Decision Making</li> <li>● Effective Communication</li> <li>● Second Step, Project Genesis, Called to Protect</li> </ul>
<b>Service</b>	<ul style="list-style-type: none"> <li>● Importance of Service</li> <li>● Connections to Church Teaching</li> <li>● Required Service to School Community</li> </ul>



# Sixth Grade Science

Earth Science  
Science Department  
2022-2023

## Required Text:

*CK-12 Earth Science Concepts for Middle School © 2022*

## Course Description:

This inquiry-based course builds on the natural curiosity of students by asking questions about the world around us and Earth's place in the Universe. This course is designed to give students an appreciation for the natural world, while emphasizing critical thinking and problem-solving skills. This course will also give students the opportunity to consider humanity's impact on our environment and develop their ability to design and evaluate solutions to these issues. Scientific concepts are explored within the context of moving toward becoming mature, responsible citizens who incorporate Catholic values.

## Class Scope and Sequence:

### Earth's Water & Atmosphere

- The Water Cycle
- Air Masses and Weather
- Air & Ocean Currents
- Climate & Biomes

### Geologic Processes & History

- Rocks & Minerals
- Landforms & Geologic Features
- Fossils & Earth's History
- Evidence of Plate Tectonics
- Geologic Time Scale

### Space Science

- Space Exploration & Mars
- Moon Phases & Eclipses
- Gravity & Motions in Space
- Objects in the Solar System

### Earth & Human Activity

- Natural Resources
- Natural Hazards
- Human Impacts on the Environment
- Global Climate Change

## Science and Engineering Practices

- Asking Questions and Defining Problems
- Developing and Using Models
- Planning and Carrying Out Investigations
- Using Mathematics and Computational Thinking
- Analyzing and Interpreting Data
- Constructing Explanations and Designing Solutions
- Engaging in Argument from Evidence
- Obtaining, Evaluating, and Communicating Information



# Seventh Grade Science

Physical Science  
Science Department  
2022-2023

## Required Text:

*CK-12 Physical Science Concepts for Middle School* © 2022

## Course Description:

This course combines chemistry and physics, focusing on matter, energy, forces and waves. Critical thinking and problem-solving skills are emphasized, as well as hands-on, laboratory experiences, and evaluation of data from primary sources. Performance expectations blend core ideas with scientific and engineering practices and crosscutting concepts to support students in developing usable knowledge as they explain real-world phenomena.

## Class Scope and Sequence:

### Scientific Problem Solving

- Lab safety
- Scientific processes
- Experimental design

### Motion and Forces

- Metric System
- Describing Motion
- The Laws of Motion
- Forces

### Energy and Matter

- Energy & Energy Resources
- Thermal Energy
- Foundations of Chemistry
- States of Matter

### Properties & Interactions of Matter

- Understanding the Atom
- The Periodic Table
- Elements & Chemical Bonds
- Chemical Reactions & Equations
- Mixtures & Solubility
- Carbon Chemistry

### Waves, Electricity, & Magnetism

- Waves
- Sound
- Electromagnetic Waves
- Light
- Electricity
- Magnets

### Science and Engineering Practices

- Asking Questions and Defining Problems
- Developing and Using Models
- Planning and Carrying Out Investigations
- Using Mathematics and Computational Thinking
- Analyzing and Interpreting Data
- Constructing Explanations and Designing Solutions
- Engaging in Argument from Evidence
- Obtaining, Evaluating, and Communicating Information



# Eighth Grade Science

Life Science  
Science Department  
2022-23

## Required Text:

*CK-12 Life Science Concepts for Middle School © 2022*

## Course Description:

This course is devoted to the study of living organisms and their processes. Students will have an opportunity to formulate answers to the following essential questions:

- How do cells contribute to the function of living organisms?
- How does a system of living and nonliving things operate to meet the needs of the organisms in the system?
- How do living organisms pass traits from one generation to the next?
- How do organisms change over time in response to changes in the environment?

Throughout this course, students will develop scientific literacy skills, laboratory techniques, and emphasize critical thinking and problem-solving skills to encourage the application of biological knowledge to make decisions.

## Class Scope and Sequence:

### From Molecules to Organisms: Structures and Processes

- Biochemistry
- Cell Organelles
- Cell Processes and Energy
- Cell Division

### Biological Evolution: Unity and Diversity

- Adaptation and Natural Selection
- Mechanisms of Change
- Evidence for Evolution
- Biodiversity

### Heredity: Inheritance and Variation of Traits

- DNA structure and function
- Mendelian Genetics
- Gene Mutations & Disorders
- Bioethics

### Relationships in Ecosystems

- Interdependent Relationships in Ecosystems
- Cycles of Matter and Energy Transfer in Ecosystems
- Ecosystem Dynamics

### Science and Engineering Practices

- Asking Questions and Defining Problems
- Developing and Using Models
- Planning and Carrying Out Investigations
- Analyzing and Interpreting Data
- Engaging in Argument from Evidence
- Obtaining, Evaluating, and Communicating Information
- Microscopy



- Computational Thinking

- Dissection



# Sixth Grade Social Studies

World History, Culture, and Geography  
Social Studies Department

2022-23

## Required Text:

*Social Studies Techbook: World Geography and World History*–Discovery Education (digital)  
*The Nystrom Desk Atlas*

## Course Description:

6<sup>th</sup> grade students practice the skills of a student historian while learning about the Americas in semester one and the ancient world in Eurasia in semester two. Students interpret different map types and explore physical and human geography, seeing how people use and depend on the environment. Through a study of culture and history, students learn how people around the world organize their communities and interact with others. Students determine the achievements and learn how history has shaped cultures. Students compare and contrast forms of government, investigate current issues, and the means of change. Throughout their coursework, students will develop these foundational research skills: how to assess the credibility of sources, discern fact from opinion, paraphrase and take notes, and construct an argument using multiple sources. Students will improve their writing skills, plan projects, and give oral presentations.

## Class Scope and Sequence:

### The Americas

- Growth, achievement, and decline of pre-colonial empires; exploration and colonialism; modern societies

### Asia

- Growth of civilization: rise of agriculture, religion, writing
- Achievements and influence
- Trade & cultural exchange

### Mediterranean

- Greek city-states, the Roman Republic and Roman Empire to its fall
- Achievements and influence

### Geography, Economics, Civics, and Research for All Regions

- Geography: map comparison, five themes, sustainability, respect and responsibility for God’s creation
- Economics: labor and natural resources, trade as exchange and relationships
- Civics: types of government and social organization, roles of citizens, means of promoting the common good
- Research: investigate current challenges, analyze sources, explore solutions and develop arguments



# Seventh Grade Social Studies

World History, Culture, and Geography

Social Studies Department

2022-23

## Required Texts

*Social Studies Techbook: World Geography and World History*–Discovery Education (digital)  
*Student Atlas of the World, 6<sup>th</sup> Edition* – National Geographic Society

## Course Description:

7<sup>th</sup> grade students learn the history, cultures and geography of the eastern hemisphere: Asia as traversed by the Silk Road; the Mediterranean region including Europe, the Maghreb and Near East; and sub-Saharan Africa. Students analyze maps, find patterns in human and physical systems, and explore the interdependence of peoples and land. Historical lessons cover the growth of religions and cultures, political systems and technologies. Students learn how people exchanged ideas through trade, travel, and conflict, and how those histories shaped the present. Students investigate current issues, and the means of change. Students will have hands-on opportunities to investigate different cultures, explore and create different art forms. They will improve research, writing, citation, and presentation skills.

## Class Scope and Sequence:

### Eurasia

Early Middle Ages: migration, Age of Faith

- Europe: Byzantine and Carolingian Empires, Viking expansion,
- Asia: Tang China, Islamic Empires

High Middle Ages: art and architecture, intellectual growth

- Europe: Normans, Crusades, Magna Carta
- Asia: Abbasid and Song Dynasties

Late Medieval and Early Modern Period: political consolidation, cultural change

- Europe: rise of cities, Renaissance, Reformation, Exploration
- Asia: rise of Ottomans, Ming China, Tokugawa Japan

### Africa

- Map making, biomes, human-environment interaction; respect and responsibility for God’s creation
- Trade and cultural exchange: Arab and Mediterranean influence, gold-salt trade, Aksum, Swahili Coast and Indian Ocean trade
- Medieval kingdoms of West Africa, Ethiopia, southern Africa; colonialism and resource extraction
- Governmental and grass roots approaches to change
- Research skills: topic selection, source analysis, note taking, organization of ideas, writing analyze sources



# Eighth Grade Social Studies

American History, Culture, and Geography  
Social Studies Department

2022-23

## Required Texts:

*Social Studies Techbook: United States History, World Geography, and Civics* –Discovery Education (digital)

## Course Description:

This course focuses on themes of migration, liberty and political development. Students learn about migration as a defining feature of the American experience. People’s movements across oceans and across the continent have shaped the country’s borders, economic and social development. Their cooperation and conflicts revealed the need for protection of all citizens’ rights. Students will learn about struggles to formalize these rights for women, native people and African-Americans. This country’s emphasis on rights developed from English roots to a unique democratic experiment in the 19<sup>th</sup> century. Students will learn about our government’s origins, how citizens have shaped it, and how the Civil War transformed the nation into a more centralized republic. Students will learn how citizens took action to defend the rights of all Americans and how the nation’s history is represented in music, art and film. Students learn to think like a historian through close reading, analyzing primary and secondary sources, and defending claims with evidence.

## Class Scope and Sequence:

### Geography

- Physical characteristics and regions
- Expansion and settlement
- Resources, technological development, and human-environment interaction
- Respect and responsibility for God’s creation

### Civics and Government

- English Political Influence
- Declaring Independence
- Constitution: values, structure, amendments
- Roles of citizens
- Civil liberties

### Migration and Cultural Change

- Colonial settlement and legacy
- Westward expansion: key individuals & groups
- Immigration: industrialism, urbanization and cultural diffusion
- Cultural regions of the United States
- American music, art, and film

### Conflict, Cooperation & Interdependence

- Relations with Native Americans
- Roads, Rails, and Canals
- Social Reform Movements
- Mexican War
- Civil War and its Impact
- Reconstruction and Jim Crow



# 6<sup>th</sup> grade Study Skills

## 2022-23

**Required Materials** – School-issued agenda planner

**Course Description:**

Study skills class offers the following enhancements to the existing curriculum. Students will use class-work and homework from other classes to learn the following skills. In a few cases, practice assignments or extension activities may be assigned to help reinforce a particular skill or concept.

**Class Scope and Sequence:**

**Organizational Skills– Starting the Year Off Right**

- Locker
- Backpack
- Agenda
- Work space
- Time Management
- Project/Long Term Assignment Planning

**General Study Habits**

- Detailing Homework Assignments
- Attention to details and timelines
- Study techniques and skills

**Learning Styles**

- Visual Learning
- Auditory Learning
- Kinesthetic Learning
- Seven (Eight) Intelligences
- How to Apply Different Study Techniques in a Way That Works for You

**Alternative Study Techniques – How to Study**

- Active Study Strategies
- Visualization
- Mnemonic devices
- Word Association
- Acronyms
- Categorizing
- Developing a Study Plan for the Final Exams

**Formative and Summative Testing**

- Types of Tests
- Test Taking Tips
- Testing Formats
- Developing a Study Plan for the Final Exams

**Public Speaking Skills Unit**

- Oral Reading Skills
- Eye Contact, Voice Quality, Body Language

**Advanced Organizers**

- SQR
- Text Learning Strategies
- Guided Reading
- Speed Reading basics
- Improving Reading Comprehension



# Intermediate Art

Visual Arts Department

**2022-23**

## **Course Description:**

Students will have the opportunity to hone skills such as line, form, shape, and color which will be included in finished pieces of art. Students will work with various mediums in their art projects while expanding their knowledge of basic art principles. The semester will culminate with a final project that utilizes students' acquired skills and knowledge. This semester will finish up with students learning how to mat their work for display in a professional manner.

Concepts include but are not limited to:

- Observation
- Line
- Form
- Color Theory
- Texture
- Space
- Stretch & Explore
- Reflect
- Display their work

## **Class Scope and Sequence (may include but not limited to):**

### **Unit One: Grid Drawing for Line and Form**

- Graph and Shading Projects

### **Unit Two: Color Theory**

- Watercolor Techniques
- Color Theory
- Watercolor Projects
- Stained Glass

### **Unit Three: Shape, and Value Paintings**

- Negative Space Art
- Acrylic Paintings
- Watercolor Paintings

### **Unit Four: Texture and Form Paper Art/ Displaying Art**

- Studying Various Artists
- Paper Art





# Watercolor Art

Visual Arts Department

2022-23

## Course Description:

In this 8<sup>th</sup> grade advanced class, students will learn focused sketching and watercolor techniques. Students learn how to mix and match colors while developing skills through painting skies, trees, fruit, and other small studies. The semester will culminate with a final project that utilizes students' acquired skills and knowledge. This semester will finish up with students learning how to mat their work for display in a professional manner. The concepts learned will carry over to other artistic mediums and make the students a better all-around artist.

Concepts include but are not limited to:

- Line
- Form
- Color
- Space
- Balance
- Shape
- Observations
- Display their work

**Class Scope and Sequence (may include but not limited to):**

### Unit One: Introducing Watercolor Techniques

- Watercolor Mixing
- Watercolor washes
- Color Wheel
- Troubleshooting Techniques

### Unit Two: Practicing Watercolor Techniques

- Blending, and sketching
- Painting Fruit
- Painting Skies
- First Landscape

### Unit Three: Final Painting

- Discuss Final Reference
- Draw Final
- Watercolor Test
- Mat Final for Display





# Advanced Art

Visual Arts Department

2022-23

## Course Description:

In this 8th grade art class, students will learn drawing skills that they can apply in future art classes, such as acrylic painting, watercolor, or animation. Students will learn that all subjects—such as real life—or references—such as photos—can be broken down into form, lines, and space. In the process, they will learn how to translate what they see into art. Students will apply the skills they learn to other mediums for future projects. This semester will finish up with students learning how to matte their work for display in a professional manner.

- Line
- Form
- Color
- Space
- Balance
- Critique
- Observations
- Display their work

## Class Scope and Sequence (may include but not limited to):

### Unit One: Grid Drawing

- Discuss Graphing
- Blind Contours
- Shading

### Unit Two: Color Theory

- Watercolor painting
- Stained Glass
- Color Wheel

### Unit Three: Shape, Value, and Texture

- Negative Space Art

### Unit Four: Texture, Form, and Display

- Paper Paintings
- Discuss Display and Matting



# 7<sup>th</sup> & 8<sup>th</sup> Grade Spanish

World Language Department

2022-23

**Course Description:** When students learn another language, it not only opens doors of communication for them, it also brings lifelong benefits. Through their language studies, students practice skills such as pattern recognition and critical thinking that will serve them throughout their lives. Valley Catholic Middle School's Spanish Language curriculum is ACTFL-aligned and designed to build proficiency in the three modes of communication: interpretive, interpersonal, and presentational. By rooting the program in communication, we are able to provide an immersive experience in which students and instructors speak Spanish almost exclusively. Students will practice real-world communication skills while also engaging with the history and culture of the Spanish speaking world by reading, watching, and listening to authentic materials. The classroom is a dynamic space where students are encouraged to pursue the topics that interest them while utilizing the Spanish language. The goal for the first year of Spanish is for each student to reach the Novice High level of proficiency which includes the ability to navigate with some success in day-to-day survival situations as well as the ability to ask and answer simple questions.

## Class Scope and Sequence:

### Linguistic Competencies

- Introductions
- Identity
- Basic conversations
- Descriptions: color, size, shape
- Weather
- Food and snacks
- Families
- Sports

### Cultural Competencies

- Spanish speaking regions and countries
- Día de los muertos celebrations
- Las posadas and Christmas in the Spanish-speaking world