

# Hillel Yeshiva Middle School

2020 - 2021

## GENERAL STUDIES

## CURRICULUM

## Course Descriptions



## **MATH**

Middle School Math begins with concrete topics, with examples that our students encounter in real life. As students move through the courses, the topics build from one to the next, and become increasingly abstract. Students are encouraged to use mathematical reasoning and critical thinking to make strides in their math education.

The goal of these courses is for all students to understand mathematical concepts and procedures; and to be able to apply procedures, concepts, and processes to the solution of challenging problems. The course balances three important components of mathematics - conceptual understanding (making sense of mathematics), procedural proficiency (skills, facts, and procedures), and problem solving and mathematical processes (using mathematics to reason, think, and apply mathematical knowledge.)

Classes in the Middle School are tracked and some of the courses may overlap depending on the track.

### **FIFTH GRADE - PROGRESS IN MATHEMATICS**

- Mastery of Basic Math Facts, Whole Number and Decimal Concepts, Place Value and Operations of Whole Numbers and Decimal Numbers, Number Notations, Number Relationships, Geometry Concepts, Perimeter and Area of Polygons, Fraction Concepts and Operations, Data Analysis

### **SIXTH GRADE - PROGRESS IN MATHEMATICS**

- Base Ten Place Value System, Scientific Notation, Decimal concepts, computation and problem solving, Fractions concepts, computation, and problem solving, Orders of Operations, Variables and Expressions, Basic Equations, Rate, Ratios, Proportions, Percent Concepts, Geometry Concepts, Perimeter and Area, Circle Graphs, Integers

### **SEVENTH GRADE - FUNDAMENTALS OF ALGEBRA**

- Real Number System, Rational Numbers, Integers, Expressions and Equations, Inequalities, Ratios and Proportions, Percent and Consumer Applications, Two-Dimensional Geometry, Two-Dimensional Geometry and Measurement Applications, Three Dimensional Geometry, Data Analysis and Statistics, Probability

### **EIGHTH GRADE - FOUNDATIONS OF ALGEBRA**

- Rational Numbers, Real Numbers, Expressions and Equations, Inequalities, Polynomials and Factoring, Linear Functions and Inequalities, Ratio and Proportion, Percent Applications, Two-Dimensional Geometry, Geometric Measures and Coordinate Geometry, Patterns and Nonlinear Functions, Three Dimensional Geometry, Data Analysis and Statistics

### **ALGEBRA I -**

- Basic Concepts of Algebra, Linear Equations, Linear Inequalities, Relations and Functions, Linear Functions, Systems of Linear Equations and Inequalities, Operations with Polynomials, Factoring Polynomials, Radical Expressions and Equations, Quadratic Functions and Equations, Ratio, Proportion, Verbal Problems, Rational Expressions and Equations, Data Analysis and Probability

## **SOCIAL STUDIES**

History asks us to remember all those who came before us - wanderers, fighters and soldiers, explorers and inventors, leaders, presidents, religious leaders and business leaders, the people who wrote the Constitution, and the people who fought to end slavery, and the people who brought to where we are today.

Students will learn how people lived and why they made the decisions they did. They will use this knowledge to try and understand how history affects our lives on a daily basis.

As a yeshiva, our vision of the ancient world, the medieval world, and the world of today is studied through Jewish eyes. We explore the different civilizations of the past, while always mindful of the Jewish presence in that world, and, through regular focus on current events, mindful of the Jewish presence in the world today. We aim to foster civic-minded, globally aware, and socially responsible students.

Map Skills, primary resources, comics, and current events are included in each curriculum.

### **FIFTH GRADE**

- The Age of Exploration, Contact and Exploration, The Settlement of North America, Establishment of the 13 English Colonies and Life in the Colonies, European Rivalries in North America- French and Indian War, Breaking Ties with Great Britain and the American Revolution
- Organization of The United States Government
- World Map of 7 continents, 4 Oceans, World Landmarks

### **SIXTH GRADE**

- Ancient World: What is a Civilization, Prehistory, Fertile Crescent, Ancient Egypt and Nubia, Ancient India and China, Ancient Greece and Rome
- Medieval Times to Today: Europe in the Middle Ages, Golden Age in Spain
- Map of Ancient Civilizations and where they are today

### **SEVENTH GRADE:**

- Europe Looks for Colonization, Colonies Take Root, The American Revolution, Creating the Constitution, Launching the New Nation, Early Presidents, The North and South Take Different Paths
- Map of 50 States and Capitals
- Heritage Fair
- Trip to Philadelphia, PA

### **EIGHTH GRADE:**

- Causes of the Civil War, WWI, WWII, Events of the Wars, Reconstruction Period, Progressive Era, Roaring 20s, Stock Market Crash, The Great Depression, Dust Bowl
- World Map, 50 States and Capitals, Map of Europe
- Trip to Washington, D.C.

## **SCIENCE**

Throughout the Middle School years, students will be introduced to a variety of topics in Science, including Earth Science, Environmental Science, Biology, Chemistry, and Engineering, among others. Our educators recognize the importance of ensuring that students are not only engaged, but also obtain depth of knowledge. They accomplish this by building our students' conceptual understanding and developing the processes, skills, and fluency they require to become lifelong problem solvers.

Students will think, model, and actively experience Science in deep, meaningful ways that extend beyond the textbook, lectures, and the traditional lab setting. Students are introduced to the Scientific Method early on and they study and explore the various topics through experimentation and experiences.

### **FIFTH GRADE**

- **Environmental Science:** populations and communities, ecosystems, protecting our environment
- **Animals:** sponges, mollusks, fish, amphibians, reptiles, birds, mammals

### **SIXTH GRADE**

- **Weather and Climate:** atmosphere - importance and composition, layers of atmosphere, effects of air pollution, air quality, energy from the sun, heat transfer, winds, water cycle, clouds
- **Inside Earth:** forces in earth's crusts, earthquakes, volcanoes and plate tectonics, properties of magma, volcanic eruptions and minerals, formation of minerals, classifying rocks, rock cycle

### **SEVENTH GRADE**

- **Engineering:** Engineering, science and society; Systems and System Models; The Engineering Design Process; Defining Engineering Problems; Developing and Testing Solutions; Optimizing Solutions
- **Cells:** The Characteristics of Cells; Cell Structures and Function; Organization of Organisms, Plant Bodies as Systems, Animal Bodies as Systems, Information Processing in Animals; Inheritance; Asexual and Sexual Reproduction; Plant Reproduction and Growth; Animal Reproduction and Growth
- **Energy:** Introduction; Kinetic and Potential Energy; Transforming Potential Energy; Changes in Energy; Temperature and Heat; Thermal Energy Transfer in Systems

### **EIGHTH GRADE**

- **Engineering:** Engineering, science and society; Systems and System Models; The Engineering Design Process; Defining Engineering Problems; Developing and Testing Solutions; Optimizing Solutions
- **Chemistry:** The Properties of Matter; Atoms and Elements; Molecules and Extended Structures; States of Matter; Changes of States; Chemical Reactions; Chemical Equations; Thermal Energy and Chemical Process; Natural and Synthetic Materials; The Life Cycle of Synthetic Materials
- **Forces, Motion, and Fields:** Introduction, Gravity and Friction; Newton's Laws of Motion; Collisions between Objects; Magnetic Forces; Electric Forces; Fields; Electromagnetism

## **LANGUAGE ARTS**

Reading, writing, grammar and vocabulary are all interconnected. Through mini lessons and guided instruction, our teachers use various texts to teach and model skills to the students. Our goal is to expand, and enhance the skills, strategies, and tools students can use to make meaning of, and interact with text. There are opportunities to read to the students (using mentor texts), read with students (using shared texts) and have students read and write independently.

### **WRITING: Fundamentals / Schoolwide**

Writing for different purposes in different forms for different audiences is something students need to be prepared to do. To understand what it means to write well, students need time to study the art of writing and time to write. Having a writing workshop affords students both of these things. Writing workshop is the time when students learn from mentor authors, as well as from each other. Students study and explore various text types and purposes for writing, and it is the time when students collaborate with one another and use what they are learning to write purposefully and effectively.

#### **FIFTH GRADE**

- Essay; Memoir

#### **SIXTH GRADE**

- Personal Narrative; Argumentative Essay; Feature Article

#### **SEVENTH GRADE**

- Book Review; Photo Essay, Family Research Project

#### **EIGHTH GRADE**

- Research Report; DBQ

### **VOCABULARY: Sadlier Oxford:**

Grades 5 - 8

- Focus on: Parts of Speech, Analogies, Synonyms, Antonyms

## READING:

Our students engage in readers and writers workshops throughout their Language Arts classes. Anthologies, in class novels, as well as monthly independent reading allow our students to read proficiently and to acquire a repertoire of many classic pieces of literature.

Our units of study are broken down into fiction and nonfiction, and at times a poetry unit as well. Readers of all ages are drawn to fiction, and it may very well be the genre students are most likely to choose as they search through a library or bookstore. Fiction stories are typically the most familiar to students. These are the stories they remember hearing when they were younger—often told and retold from generation to generation and from one culture to another. Each story takes you on a journey, an adventure, and an experience with memorable characters and events. The world is full of stories, and through stories we learn about ourselves and others.

Nonfiction is a rich, engaging genre offering a variety of topics that will entice any reader! Students will spend a great deal of time in school (and their lives outside of school) reading nonfiction, from newspaper articles to textbooks, recipes, biographies, travel brochures and informational websites. Reading nonfiction is empowering. So often students feel like "experts" on the topics or subjects they have read about. Nonfiction reading sparks students' curiosity and opens their eyes to new worlds and different points of view. Nonfiction has so much to offer readers and is an essential genre to study.

### FIFTH GRADE

- **Fiction:** What is Fiction?; Structure of Fiction; Elements of a Story; Analyzing Characters; Exploring Point of View; Historical Fiction; Modern Day Fairy Tale; Identifying Theme; Building a Story; Words Make Time Pass; Different Types of Characters; Conflict; Plot Structure; Navigating a Play; Theme
- **Non Fiction:** Introduction; The Look of Reference Nonfiction; Structures; How Do We Read Nonfiction; Unlocking Unfamiliar Vocabulary; Author's Purpose; Main Idea; Checking for Understanding; Process of Reading Nonfiction; Problem and Solution Text Structure

### SIXTH GRADE

- **Fiction:** Different types of fiction; Organization of fiction; Narrator's Point of View; Changes in Characters; Character Growth; Conflict; Setting; Theme and Big Ideas; Common Themes; Plot; Power of Rereading; Characters in Historical Fiction; Mood and Tone; Dramatic Reading; Comparing two forms of fiction; Asking Critical Questions to build Understanding
- **Class Novels:**
  - *Sadako and the Thousand Paper Cranes* by Eleanor Coerr
  - *Fish In A Tree* by Lynda Mullaly Hunt
  - *Among The Hidden* by Margeret Peterson
- **Non Fiction:** Introduction; Text Features; Structure of Nonfiction; Figuring out unfamiliar vocabulary; Author's Purpose; Central Idea; Checking for Understanding; Paraphrasing; Narrative Nonfiction; Compare and Contrast Text Structures; Problem and Solution Texts; Big Ideas; Analyze the Argument; Expanding Content Knowledge
- **Poetry:** Understanding the Genre; Sound devices; Visualization; Inferences; Schema, Making Connections; Figurative Language; Analyzing Structure; Narrative Poetry; Big Idea; Textual Evidence; Theme

### SEVENTH GRADE

- **Anthology of Short Stories:** Literary Devices; First and Third Person Narratives; Author's Point of View and Purpose; Figurative Language; Drawing Conclusions; Structure of a Story; Elements of a Story; Characterization
- **Class Novels**

#### **EIGHTH GRADE**

- **Anthology of Short Stories:** comprehension through Plot, Setting, Character, Vocabulary, Figurative Language, Theme, Main Idea, Key Details, Vocabulary, Text Features
- **Class Novels:**
  - *The Old Man and The Sea* by Ernest Hemingway
  - *The Family Aguilar* by Marcus Lehmann
  - *To Kill A Mockingbird* by Harper Lee
  - *Night* by Elie Wiesel

### **WRITING**

#### **FIFTH GRADE**

- Essay; Memoir

#### **SIXTH GRADE**

- Personal Narrative; Argumentative Essay; Feature Article

#### **SEVENTH GRADE**

- Book Review; Photo Essay, Family Research Project

#### **EIGHTH GRADE**

- Research Report; DBQ

## **GRAMMAR: Fundamentals of Grammar**

Grammar and conventions play an integral role in shaping meaning. They are tools that assist writers with creating texts that readers will understand and enjoy. Our writers are taught to write with proper use and application of grammar and conventions, so they ensure that their message is both clear and engaging.

This program utilizes authentic literature that includes various books and short shared texts. The skills are presented through both the interactive read-aloud and the mini-lessons. Students have the opportunity to discuss and analyze the conventional decisions and grammatical structures that the writers have employed. By teaching and modeling grammar and conventions in context, students will be able to effectively use language as readers, writers, listeners, and speakers.

### **FIFTH GRADE**

- Text layout
- Capitalization
- Punctuation: the common comma, hyphens and dashes, punctuation in dialogue, parentheses and other ways to add information
- Parts of Speech: interjections, conjunctions, verb tenses
- Pronouns
- Sentence Structure: simple, compound, and complex sentences, transitions and prepositional phrases, participle phrases
- Structure of Paragraphs
- Sentence structure

### **SIXTH GRADE**

- Comma usages: direct address in conversation, conversation without dialogue, to indicate what is being modified
- Em Dash: effect of it, signify interruptions
- Use of a colon
- Pronouns: indicate point of view, antecedents, agreeable pronouns, usage in various parts of speech
- Sentence Structure: Compound sentences, coordinating conjunctions, correcting run-ons
- Style and Tone: when to break the rules of grammar, awareness of audience, argumentative writing, varying sentence patterns, subject-verb agreement with inverted sentences

### **SEVENTH GRADE**

- Precise Language: cut down on redundancy, replace wordiness, help readers visualize the writing
- Punctuation: Commas with adjectives, using commas with modifiers
- Sentence Structure: Prepositional and Participial Phrases, Phrases and Clauses: definitions and functions, Misplaced and Dangling Modifiers, Transitions: introducing and connecting ideas
- Style and Tone: Writing for Purpose and Audience, Author's Tone, word choice, adding emphasis
- Text Layout: text features

### **EIGHTH GRADE**

- Parts of Speech: Active vs. Passive, Verbs for Audience, Verb Tenses, Verb endings, Subjunctive mood
- Punctuation: Em Dash, Commas, Voice, Parentheses
- Style and Tone: Straying from the conventions, Varying sentence lengths, Simple, compound, and complex sentences, Poetic sentences



