

**STRONGER  GETHER**



**HILLEL YESHIVA**

**MIDDLE SCHOOL**

**2021 - 2022**

# **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**

### **“Inspire investigations, exploration, and problem solving” - HMH**

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.

Currently, we use the HMH Science Dimensions series in grades 5 - 8.

#### **FIFTH GRADE**

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

#### **SIXTH GRADE**

- **Earth’s Water & Atmosphere:** Circulation in Earth’s Air and Water, The Water Cycle, Weather and Climate, the Dynamic Earth - Weathers, Erosion and Deposition, The Rock Cycle, Earth’s Plates
- **Earth & Human Activity:** Natural Hazards, Natural Resources, Human Impacts on the Environment, Climate Change
- **Space Science:** Patterns in the Solar System: The Earth-Sun-Moon System, Seasons, The Solar System and the Universe, Gravity

#### **SEVENTH GRADE**

- **Engineering & Science:** Engineering, science and society; Systems and System Models; The Engineering Design Process; Defining Engineering Problems; Developing and Testing Solutions; Optimizing Solutions
- **Cells and Heredity:** 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

#### **EIGHT GRADE**

- **Energy & Energy Transfer:** Introduction; Kinetic and Potential Energy; Transforming Potential Energy; Changes in Energy; Temperature and Heat; Thermal Energy Transfer in Systems
- **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
- **Waves, and their Applications:** Waves, The Behavior of Mechanical Waves, Light Waves, Communication and Wavers, Analog and Digital Signals, Communication Technology

## LANGUAGE ARTS

**“Of the subjects taught in school, reading is first among equals-the most singular in importance because all others rely on it.”(Lemov, 1).**

Our primary objective, for every student without exception, is that he/she will make significant gains toward mastery of the written word. Here is where educational theory meets proven methodology in idealistic yet pragmatic ways. Every student will read to understand complex and nuanced ideas. As well, our students will develop the depth and breadth of their own thinking both verbally and in writing. Our method rests on four tenets:

- Text choice matters, both in rigor and importance.
- Close Reading defines and separates the casual act of ‘gist’ reading from the scholarship of secondary school.
- Informational texts, vocabulary and background knowledge funding are foundational for comprehension. To this end, we prime the pump.
- Writing-on-Reading is not just formative and summative, it is developmental as well. We demonstrate what we know with written language, but we also know what we know through writing.

This objective of mastery in critical thinking and academic writing is predicated on bedrock Jewish educational ethos: *al pi darchko*, *Torah im Derech Eretz*, consideration of the child as a whole person, not merely a student in a classroom. In the Hirschian tradition, our student is both a believer in the divine authority of the Torah as the mantle of eternal values as well as a cultured person belonging to the modern world. Our curriculum supports the primary objective; our culture roots our future scholars/community leaders/informed citizens in their proud Jewish identity.

### FIFTH GRADE

Our fifth grade curriculum pivots away from the elementary emphasis on learning to read and begins to position our young scholar toward reading/writing to learn. Before this pivot can occur, however; scholars are assessed for skills and comprehension status. This is the juncture in which we meet deficit and/or interrupted skills with intervention strategies and continued benchmark assessment for mastery.

Every single student is met with macro and micro attention.

Our year begins with a unit on the skill/strategy of Close Reading, bolstered by an introduction to academic writing, beginning at the sentence level and working toward the expository essay. Our next unit focuses on literary skills and strategies in short stories. Our writing is developed through content-rich modeling and scaffolding. Our third through sixth units are novel- based. Each is paired with informational texts, background knowledge and vocabulary funding, poetry, short stories, aggregated articles, teacher-generated materials and more.

A strong emphasis is placed in all units on writing that is woven and procured from all reading and learning. To that end, scholars will contribute to a writing portfolio (one that will follow the scholar through her/his middle school years) with two pieces to publication this year: in academic writing, an expository essay, and in creative writing, works of poetry.

Grammar and vocabulary are taught both in isolation and embedded within the reading and writing content. As a touchstone year for grammar proficiency of parts of speech, capitalization and punctuation, comma use, etc. is emphasized and recursively reinforced.

### SIXTH GRADE

In grade six we continue the work of reading and writing- to-learn with significance placed on negotiating between two forms of language: informal everyday speech/text and the academic forms of written and spoken language

expected of them in secondary school and beyond. A strong push toward shoring comprehension lag ensures every student will meet higher education fully prepared.

Our year begins with a unit on the strategy/skill of Close Reading, coupled with academic writing, beginning at the sentence level and working toward the compare and contrast essay. Our next unit focuses on literary skills and strategies in short stories. Our writing is developed through content-rich modeling and scaffolding. Our third through sixth units are novel-based. Each is paired with informational texts, background knowledge and vocabulary funding, poetry, short stories, aggregated articles, teacher-generated materials and more.

A strong emphasis is placed in all units on writing that is woven and procured from all reading and learning. To that end, scholars will contribute to a writing portfolio (one that will follow the scholar through her/his middle school years) with two pieces to publication this year: in academic writing, a compare and contrast essay, and in creative writing, an autobiography.

Grammar and vocabulary are taught both in isolation and embedded within the reading and writing content. A thorough understanding of the art of sentence writing, using such things as varying types, appositives, subordinate clauses, coordinating conjunctions, etc., as well as proficiency in parts of speech, capitalization and punctuation, comma use, etc. is emphasized and recursively reinforced.

## SEVENTH GRADE

Grade seven scholars experience another seismic pivot toward the true expectations of higher education. Emphasis is placed on academic writing and speech with evidence based response required, both spoken and written.

Moreover, reading choices this year and beyond are carefully curated to reflect the best selection of rigorous, enriching content. Scholars cannot be expected to dig for deep meaning in malnourished soil. A strong push toward shoring comprehension lag ensures every student will meet higher education fully prepared.

Our year begins with a unit on the strategy/skill of Close Reading, academic writing, sentence refinement and work toward the argument essay. Our next unit focuses on literary skills and strategies in short stories. Our writing is developed through content-rich modeling and scaffolding. Our third through sixth units are novel-based. Each is paired with informational texts, background knowledge and vocabulary funding, poetry, short stories, aggregated articles, teacher-generated materials and more.

A strong emphasis is placed in all units on writing that is woven and procured from all reading and learning. To that end, scholars will contribute to a writing portfolio (one that will follow the scholar through her/his middle school years) with two pieces to publication this year: in academic writing, an argument essay, and in creative writing, journaling and the six-word story.

Grammar and vocabulary are taught both in isolation and embedded within the reading and writing content. A thorough understanding of the art of sentence writing, using such things as varying types, appositives, subordinate clauses, coordinating conjunctions, etc., as well as proficiency in misplaced/dangling modifiers, passive v. active verbs, comma/colon/semi-colon/dash use etc. is emphasized and recursively reinforced.

## EIGHTH GRADE

In grade eight scholars see the culmination of all their hard work manifest in the caliber of their critical thinking skills and their ability to articulate those thoughts with semantic and syntactic control. A strong push toward shoring comprehension lag ensures every student will meet higher education fully prepared.

An eye toward classic works of the canon (i.e. George Orwell, Flannery O'Connor, William Shakespeare) as well as the best of contemporary authors (i.e. Amy Tan, Leah Goldberg, Haruki Murakami, Ayelet Tsabari)

Our year begins with a unit on the strategy/skill of Close Reading, academic writing, sentence refinement and work toward Holocaust research paper. Our third unit centers on *Animal Farm* by George Orwell, our fourth on *Night* by Elie Wiesel, our fifth on sonnets by William Shakespeare and our final on *The Chosen* by Chaim Potok. Each is paired

with informational texts, background knowledge and vocabulary funding, poetry, short stories, aggregated articles, teacher-generated materials and more.

Our writing is developed through content-rich modeling and scaffolding. A strong emphasis is placed in all units on writing that is woven and procured from all reading and learning. To that end, scholars will contribute to a writing portfolio (one that will follow the scholar through her/his middle school years) with two pieces to publication this year: in academic writing, a research paper, and in creative writing, a short story.

Grammar and vocabulary are taught both in isolation and embedded within the reading and writing content. A thorough understanding of the art of sentence writing, using such things as varying types, appositives, subordinate clauses, coordinating conjunctions, etc., as well as proficiency in misplaced/dangling modifiers, passive v. active verbs, verbals, gerunds, etc. is emphasized and recursively reinforced.

## **VOCABULARY: Sadlier Oxford:**

Grades 5 - 8

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

## **GRAMMAR: Fundamentals of Grammar**

## **INDEPENDENT READING:**

Each month students choose from a selection of books on a given genre.