



Middle School

Math

The middle School math program at SSDHDS is designed to offer students opportunities to problem solve through collaboration. Using a hands-on approach, students are encouraged to apply their existing knowledge in order to advance their learning in an engaging and challenging way.

Our middle school math program offers the following courses, with an accelerated option for students with top academic achievement.

Option 1- Traditional

6th Grade: Math 6/ Pre-Algebra

7th Grade: Pre-Algebra

8th Grade: Algebra 1

Option 2- Accelerated

6th Grade: Math 6/ Pre-Algebra

7th Grade: Algebra

8th Grade: Geometry

MATH 6/ PRE ALGEBRA Core Curriculum by Units

- Fractions & Decimals
- The Four Operations of Fractions
- Percentage
- Ratio and Proportion
- Rate and Speed
- Circles
- Volume of Prisms and Cylinders
- Angles
- Construction of Triangles and Quadrilaterals
- Data Handling
- Probability
- Negative Numbers
- Algebra, Integers, and Equations
- Algebra and Rational Numbers
- Linear Equations, Inequalities, and Functions
- Applying Algebra to Geometry
- Extending Algebra to Statistics and Polynomials

ALGEBRA 1 Core Curriculum by Units

- Exploring Expressions, Equations, and Functions
- Exploring Rational Numbers
- Solving Linear Equations
- Using Proportional Reasoning
- Graphing Relations and Functions
- Analyzing Linear Equations
- Solving Linear Inequalities
- Solving Systems of Linear Equations and Inequalities
- Exploring Polynomials
- Using Factoring
- Exploring Quadratic and Exponential Functions
- Exploring Rational Expressions and Equations
- Exploring Radical Expressions and Equations

GEOMETRY

- Euclidean and Construction Tools
 - Coordinate and Transformation Tools
 - Geometric Reasoning (including mathematical proofs)
 - Parallel and Perpendicular Lines
 - Triangle Congruence
 - Properties and Attributes of Triangles
 - Polygons and Quadrilaterals
 - Similarity
 - Right Triangles and Intro to Trigonometry
 - Geometric Perimeter, Circumference, and Area
 - Spatial Reasoning
 - Circles
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Social Studies

In Social Studies class we take an in-depth look at history. We don't just focus on dates and names, but instead on being critical thinkers who can analyze the who, what, why, how, and when of any event to get a complete picture of it with greater understanding. Classes consist of group activities, simulations, presentations, skits, projects and more, all of which utilize technology and 1 to 1 computing. In addition to history we also discuss geography and current events to round out our look at social studies and make sure students are developing into informed citizens of the world.

6th Grade-

We will begin by learning about Geography and Climate and how they affect how humans live. From there, we will learn about how humans lived prior to the development of society. Next, we will establish the framework with which we will study several ancient societies. These societies include:

- Ancient Mesopotamia, Egypt, Kush, and the ancient Hebrews
- Ancient Greece
- Ancient Rome
- Ancient India
- Ancient China

7th Grade-

We will begin by learning about Geography and Climate and how they affect how humans live. Next, we will establish the framework with which we will study several ancient societies. These societies include:

- The end of the Roman Empire
- The Middle East during the Middle Ages
- Ghana and Mali during the Middle Ages
- Medieval Japan and China
- Mesoamerican and Andean Societies
- Medieval Europe

In addition to studying those societies, we will be examining the Reformation of the Catholic church, the Renaissance, and the Scientific Revolution.

8th Grade-

We will begin by learning about the geography of the United States and then dive into the following time periods:

- Colonial America (Establishing English Colonies in the West Indies, French Indian War)
- Road to the Revolution (Events that lead up to the Revolutionary War)
- The War for Independence (Key places, battles, people, and events)
- Building a New Nation (Post Revolution, Federalist vs. Confederalist, Constitution, Bill of Rights)
- Westward Expansion (Manifest Destiny, Louisiana Purchase, Lewis and Clark Expedition)
- Early US Foreign Policy (Monroe Doctrine, Barbary Wars, War of 1812)
- Division of a Nation (Pre-Civil War, abolitionists vs. pro-slavery)
- Civil War (Key places, battles, people, and events)
- Reconstruction (who won, who lost, and who was in the same position as before)
- Westward Expansion II and Industrial Revolution (Construction of the Transcontinental Railroad)

English

The focus of middle school English is expression. Students learn how to shape their thoughts to communicate them intelligently; recognizing the audience and the best modality to reach their goal. This means students work on writing robust sentences, flowing paragraphs, and quality essays and papers. They also apply these basic skills of communication to speaking, debating, artistic and digital projects. Students will read a variety of genres including novels, poems, short stories and non-fiction, which will all be analyzed, discussed and written about. They will be properly prepared for high school by learning how to take efficient notes, increasing vocabulary and perfecting their grammar. Over the three year span of English classes, your child will be a proficient communicator.

6th Grade-

Class Texts: *novels subject to change*

The Giver by Lois Lowry
Where the Red Fern Grows by
Wilson Rawls
Roll of Thunder Hear My Cry
Short Stories/Nonfiction
Book of Choice
Wordly Wise 3000
Grammar for Writing
Step Up Writing
Summer Reading: Tangerine and
Crash

7th Grade-

Class Texts: *novels subject to change*

Nothing But the Truth by Avi
And Then There Were None by
Agatha Christie
The Outsiders by S.E. Hinton
The Miracle Worker by William
Gibson
Book of Choice
Wordly Wise 3000
Grammar for Writing
Step Up Writing
Summer Reading: My Guardian
Angel and Hatchet

8th Grade-

Class Texts: *novels are subject to change*

Fahrenheit 451 by Ray Bradbury
Animal Farm by George Orwell
To Kill a Mockingbird by Harper
Lee
Book of Choice
Poetry
Wordly Wise 3000
Grammar for Writing
Step Up Writing
Summer Reading: A Wrinkle in
Time and Turnabout

Science

Science in middle school means working cooperatively to solve problems. Students are encouraged to explore the world around them, ask questions, and use experimentation to discover how and why the world works the way it does. Each branch of science is covered, including engineering. Students use the scientific method to investigate problems. They learn to research and write formally. They collect data, interpret results, and make decisions based on evidence. Students are able to connect content to the real world through hands on labs. Their experience culminates in 8th grade when each student comes up with their own problem and uses the knowledge they have gained to complete a science fair project.

6th Grade-	7th Grade-	8th Grade-
<p>Scientific Method</p> <p>Chemistry Using the lab safely Matter Elements Compounds Solutions Reactions Acids and bases Polymers Polarity Hydrophobicity</p> <p>Space Science History and exploration Probes and satellites Living and working in space Earth's moon Stars and galaxies Asteroids, meteors, and comets Solar system and planets</p> <p>Coding</p> <p>Earth Science Composition of Earth Types of rock Earthquakes and volcanoes Atmosphere and weather Fresh water Resources and conservations</p>	<p>Scientific Method</p> <p>Body Systems Skeletal and muscular Digestive Genetics Circulatory and respiratory Nervous</p> <p>Electricity Circuit Voltage Current</p> <p>The Living Organism Cells and organelles Microscopes</p> <p>Exploratorium</p> <p>Classification Viruses Kingdom Monera Kingdom Protista Fungi Kingdom Plant Kingdom Invertebrates and Vertebrates</p> <p>Evolution Darwin Natural Selection Common misconceptions</p>	<p>The Scientific Method</p> <p>Motion Speed, velocity, and acceleration Momentum</p> <p>Force Balanced & unbalanced forces Friction Newton's laws of motion Inertia Weight, mass, & gravity Pressure Density & buoyancy Aviation</p> <p>Science Fair</p> <p>Energy Mechanical, chemical, electromagnetic, and nuclear Kinetic & potential energy Conservation of energy Heat & electricity Waves Light, color, & sound</p> <p>Work and Power Calculations Simple & compound machines Work input & output Efficiency</p> <p>Engineering Egg Drop Rube Goldberg projects</p>

Talmud - Analysis of Jewish Law and Concepts

Talmud, or Gemorah, is a textual study of conversations and debates of our Rabbis on issues of Jewish law and Torah. 6th-8th grade boys learn the skills necessary to translate the text and Rashi, the most prevalent commentator. They also hone their logical thinking and debating skills as they cover a wide range of content including blessings, prayers, Shema, monetary damages, and holidays. Boys will complete numerous projects using 21st century skills of creativity, collaboration and digital expertise.

- History and making of the Talmud
- Reading Fluency including tone which represents punctuation
- Translation of key aramaic phrases and words from required sections of the Talmud
- Comprehension of the debate and discussion of ideas read

Your son will be introduced to a number of topics in the Talmud volumes of Brachot (blessings), Baba Kama (damages), and Rosh Hashana. He will understand a scope of ideas and pick up some important beginning skills to this new area of Jewish study.

Yahadut - General Jewish Concepts

Yahadut is a three year, middle school program developed by Mrs. Betty Weiser for girls, emphasizing how meaningful a Jewish woman's life is. The ideas and concepts motivate and inspire, yet often are overlooked in the standard Jewish education program. The courses, based on in-depth analysis of original sources, connect her students to authentic Torah thinking.

Hebrew

At Soille Hebrew Day, we take great pride in our connection to the State of Israel. As a school, we strive to instill a deep-rooted love of Israel in every single student. As part of our Hebrew language curriculum at Soille, we show our students the beauty of Israel and its significance to us as Jews. Many of our alumni have demonstrated the connection they have formed with Israel by studying in Israel, making Aliya, or joining the Israel Defense Forces.

The Hebrew language curriculum focuses on strong conversation skills and vocabulary. Most importantly, our students learn to appreciate the Hebrew language as a living, evolving language; they are introduced to various aspects of Israeli culture and politics, in addition to Jewish holidays and history. Our goal is for our students to be able to feel comfortable carrying a conversation in Hebrew, and be able to read and understand Hebrew texts with ease.

READING COMPREHENSION

Reading for comprehension will be emphasized as well as reading skills. Students should be able to read and understand stories taken from the text books to practice both reading and reading comprehension skills. Stories about the holidays and Jewish events, Derech Eretz and stories with morals to them.

GRAMMAR

Reviewing last year's material. Learning all of the Hebrew pronouns, present, past and future tense, command, numbers 1-1,000,000 and infinitive. In addition the students will learn preposition, the five senses and expressions with the word "heart".

CREATIVE WRITING

Students should be able to answer written questions in complete sentences, and should also be able to build sentences according to the correct rules of grammar that were taught during the year. Students should also be able to write short essays according to the correct rules of composition.

CONVERSATION

Emphasis will be put on encouraging students to converse in Hebrew, based on their individual level. Students should express the way they feel on a daily basis using an interactive board in the class.

Chumash - Torah Study

Students will develop skills useful for in-depth exploration of the Chumash and commentaries, in and out of class. We will cover topics within the books of Shmot, Vayikra, & Bamidbar. Through our exploration of the text, students will gain critical thinking skills, the ability to maneuver the text more independently, and an overall love of the Torah and the ideas it brings forth!

OVERALL EXPECTATIONS:

- Comprehension of issues and situations discussed in the Torah
- Comfort in utilizing commentaries
- A knowledge of over 100 Shorashim and their definitions.
- Grasp Jewish philosophy law.
- Increase proficiency in understanding how to maneuver around the text and the concepts through study, review, interpretation, and discussion.
- View Judaism as a lifelong source
 - A source for a philosophy
 - A source for answers

Middot (character development):

- Following the Successful Me Curriculum
- Implementing the ideas into daily practice

6th Grade-	7th Grade-	8th Grade-
<p><u>SUBJECTS:</u></p> <ul style="list-style-type: none"> - Yitro's arrival at Har Sinai - The establishment of the Jewish Court System - The Ten Commandments - A compilation of laws within the Torah portion of Mishpatim. - The Mishkan - The Sin of the Golden Calf 	<p><u>SUBJECTS:</u></p> <ul style="list-style-type: none"> - Jewish Law between Man and his fellow - Korbanot - The Camps of Bnei Yisrael in the desert - The Nazir - The Sotah - The traveling methods of Bnei Yisrael - The Manna - The story of Eldad and Medad - The quail - Miriam's Loshon Horah - The Meraglim - The rebellion of Korach 	<p><u>SUBJECTS:</u></p> <ul style="list-style-type: none"> - Miriam's Loshon Horah - The Meraglim - The rebellion of Korach - Parah Adumah - Miriam's Death - "Hitting the Rock" - Aaron's Death - Balak & Bilaam - Cursing Bnei Yisrael - Pinchas' Jealousy - Beginning of the conquest of Eretz Yisrael - Shema

Jewish Knowledge

The Jewish Knowledge class focuses on three important parts of Jewish study: 1) Navi (or prophets) 2) Jewish Holidays and laws 3) Weekly Torah Portion.

Navi is the study of Jewish history beginning after the Five Books of Moshe. Students are exposed to the values and lessons we learn together from the people of our past. Stories are taught in depth so students understand the timeline of events, significance to Jewish people and take-home messages gleaned. Jewish holidays explore the various laws and customs associated with each holiday, as well as, general understanding and reasoning behind the holiday. The weekly Torah portion is a summary of what Jews read in Synagogue the upcoming Shabbat and lessons found therein.

Jewish knowledge provides a large scope of information and ideas to strengthen your child's connection to the Jewish people and Jewish calendar year.

GOALS & OBJECTIVES

View Judaism as a lifelong source

- A source for a philosophy
- A source for answers

Identifying as a Jew:

- Mastering a working knowledge of basics of Jewish history (Abigail, David, Solomon)
- Mastering a working knowledge of the basics of Jewish law (Shabbat, Holidays, Charity)
- Mastering a working knowledge of the basics of Jewish philosophy (sacredness of life, Tzedaka, Tikun Olam)
- Mastering a working knowledge of the basics of Jewish character (slow to pursue vengeance and anger, pursuant of justice and peace)

SUBJECTS

Navi (Prophets):

I. Knowledge of Jewish History:

- Know what occurred and When
- Know the characters record
- Understand History requires perspectives:
 - Nation
 - Kings
 - Individuals
 - People's character

II. Knowledge of Law and Ethics

- What we can learn that still applies
- How to understand what happened at the time

III. Skills

- Crystallized knowledge acquisition
- Short/Long term information recall
- Working with a Partner (Chevrusa) or Group (Chevrah)
 - Staying on task
 - Working together
 - Dividing tasks
 - Setting smaller objectives to reach larger goals

- Reading
- Translating

Dinim (laws):

I. Learning Law

- For Knowledge
- For Practice

II. Understanding the Reasoning Behind the Law
