Mathematics

7th Grade



Real number system

Identifying integers, rational numbers, and real numbers; performing the four operations on them, developing rules for positive and negative numbers



Algebra & Equations

Expressing real-life situations in algebraic terms; Solving linear equations in one variable; Forming linear equations in one variable to solve problems



Ratio, Rate & Speed

Building understanding between ratio, rate and speed; Solving real-life problems involves ratio, rate and speed



Percentage

Expressing one quantity as a percentage of another; Solving word problems involving discounts and sales tax.



Geometry

Identifying the different types of angles and quadrilaterals and explore their properties; Investigating and solving problems involving the sum of interior angles of an n-sided polygon



Number patterns

Understanding the idea of a sequence; Finding the formula for the general term of a sequence



Coordinates & Linear Graphs

Defining linear relationships between two variables



Inequalities

Representing linear inequality on a number line; Apply linear inequalities to solve word problems in everyday life



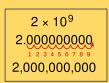
Proportions & Data Handling

Understanding direct and inverse proportion ideas; Using different data-collection methods



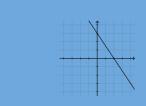
Probability of Simple & Combined Events

Calculate the probability of a simple and combined events using a possibility or tree diagram



Exponents & Scientific Notation

Connecting with decimals; harnessing the tool of bar modeling



Linear Equations in Two Variables

Plotting & solving linear equations in two variables



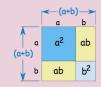
Irrational Expressions

Investigating the radical law of irrational expressions

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Quadratic Equations

Students will be able to solve quadratic equations using 4 different methods: graphing, factorization, quadratic formula, and completing the square



Expansion & Factorization

Expressing & solving quadratic equations using factorization





Congruence & Similarity

Understanding the difference between congruence and similarity



Social Studies

7th Grade



Medieval Europe

Learning about the Roman Empire, Christianity and Feudalism in Medieval Times



Islam in Medieval Times

Learning about Islam, Muslim advancements, Muslim Empires, and the Crusades during Medieval Times.



West African Kingdoms

Assessing the impacts of West African Culture and Kingdoms



Imperial China

Assessing the impacts of Imperial China's political developments, economic growth, and technological advancements



Japan in Medieval Times

Assessing the impacts of Japan's political developments and cultural influence



Civilizations of the Americas

Learning about the Maya, Aztec, and Inca Empires in the Americas



The Mongol Empire

Assessing the impacts of the Mongol Empire and the growing exchange of goods and ideas around the world



Renaissance & Exploration

Assessing the impacts of the Renaissance & Enlightenment on the Ages of Exploration & Revolution.



Life Science



Scientific Method & Science Fair

Employing and expressing the metric system; Using conversions; Repeating the scientific method steps from formulating scientific questions through hypotheses, research, planning, gathering and presenting data, analyzing and concluding



Life Forms

Identifying the characteristics of life and the needs of all living things; Practicing the classification of living things; Debating viruses as a form of life



Cells

Using a microscope to identify animal vs. plant cells; Applying understanding of the structure, function and surface area concept of cells' organelles; Identifying special cells in our body and their function



Cellular Processes

Understanding processes in the cell: diffusion, osmosis, cell cycle, mitosis, photosynthesis & cell respiration; Understanding the DNA structure.



Genetics

Studying DNA replication and protein synthesis processes; Focussing on Mendel's work and probability in DNA, heredity and genetic mutations



Evolution

Corroborating Darwin's Theory of Evolution using empirical evidence; applying understanding of artificial and natural selection concepts, variation, competition mutations and their effect on population changes



The Human Body

Understanding our body's levels of organization, its 11 systems and their function as one unit; Identifying main organs in the respiratory, circulatory, skeletal and muscular systems





Language Arts, Big Picture

7th Grade

Integration of Jewish Studies

- ★ What are the connections between the skills necessary to study Jewish and secular texts?
- ★ How do the themes and content of the Jewish and secular texts we study support each other and contradict each other?
- ★ How are our sacred Jewish texts relevant to who we are and who we are becoming?
- ★ What does it mean to walk in the world today as a Jew, and how does our rich textual tradition help us along the way?

Group Work and Community

- ★ How do I take care of myself, take care of others, and take care of the environment?
- ★ How do I work in a group on complex, multi-stage projects?
- ★ How do I do my share in a group writing project while also giving my group members a balance of support and independence?
- ★ How do I assert my own voice while allowing for the voices of others?
- ★ How do I bring my best self to class and contribute to a positive classroom environment?

Hevruta Study

- ★ How do we give the text a voice, engage in civil discourse, and dive deep into a text, offering interpretations that are rooted in textual evidence?
- ★ How does learning in partnership deepen our understanding of a text? How do we create a balanced partnership between ourselves, our partner, and the text?
- ★ How do we develop the skills of listening and articulating, wondering and focusing, and supporting and challenging, and how do these help to deepen our relationship to a text and to our hevruta?

Shift from Literal to Interpretive Thinking

- ★ How can I begin to shift my thinking from literal to figurative, from concrete to interpretive?
- ★ How do I recognize symbolism and metaphor?
- ★ How do I identify literary themes?
- ★ How do I move past summarizing and begin to provide my own analysis, practicing interpretive skills in order to make meaning from text.



Language Arts, Reading

7th Grade

Shared Novel: The Outsiders

- ★ How does an author use the elements of a story to create long-form fiction that is engaging and meaningful?
- ★ How do readers annotate long texts and why is this helpful?
- ★ How do readers use inferences in order to interpret and analyze character, plot, symbolism, and theme?
- ★ What does it mean to be an "outsider"?
- ★ Why is the world so often divided into "us" and "them"?
- ★ What is my identity and how do I reconcile different aspects of my identity?

The Hero with a Thousand Faces: Fantasy/Sci Fi Book Clubs and Shared Short Stories

- ★ What is the Hero's Journey?
- ★ How is the Hero's Journey portrayed in a variety of fantasy texts? What are the elements of Fantasy?
- ★ How does an author build a vibrant fantasy world?
- ★ How do readers identify themes and author's purpose in fantasy stories and novels?

The Holocaust and Human Behavior Shared Novel: *Milkweed*

- ★ What is the historical context of the Holocaust?
- ★ What were the choices that individuals, groups, and nations made in response to the Nazi terror, and what are the aspects of human behavior that contributed to those choices?
- ★ What are the universal themes related to democracy, racism, and antisemitism that this history raises and the world we live in today?
- ★ What are our responsibilities as global citizens to make choices that help bring about a more humane, just, and compassionate world?
- ★ What is the role of Jewish memory when learning about this history and in what it means to be Jewish today?
- ★ How is our Jewish identity tied in with the history of the Holocaust?

Independent Reading

- ★ How do readers pick "just right" books so that reading is a joy and a pleasure?
- ★ How can we become active readers?
- ★ How can I increase my reading stamina?
- ★ How can I use a text to deepen my own experience and to peer through a window to a world outside my own experience?



Language Arts, Writing

7th Grade

Grammar and Mechanics

- ★ How do I write effectively for different audiences and to different purposes?
- ★ Why is it important to become masterful and creative users of the English language? What is the importance of using the English language correctly and thoughtfully?
- ★ How does studying the mechanics of a language help a writer to write in a clean, concise, and organized manner?
- ★ What are all the parts of speech and parts of a sentence?
- ★ How do I fix run-on sentences and very my sentence length?

Yom HaShoah Tekes: Creating a Community Commemoration

- How do we synthesize what we learned and decide what is important and appropriate to teach to the whole school?
- ★ How can we make really difficult content digestible for younger children without doing a disservice to history?
- ★ How do writers write non-fiction without plagiarizing from other sources?
- ★ How can we use our emotional reaction to events from history to write powerful poetry?

Formal Response to Literature

- ★ How do writers answer interpretive questions with analysis, not with summary?
- ★ How do writers craft organized, formal paragraphs?
- ★ How do writers synthesize information from a variety of sources to form and articulate an opinion?

Creative Writing: Fantasy Narrative

- ★ How do writers craft a fantasy story from ideation, drafting, revising, editing, and publishing?
- ★ How do writers create a rich, vibrant fantasy world using descriptive and figurative language?
- ★ How do writers use dialogue to advance the story and develop characters?
- ★ How do writers use impeccable mechanics to make their stories easy to read, understand, and enjoy?





Hebrew

Conversational Hebrew שיחה בעברית

Developing acute listening comprehension; using words we have learned in every-day speech; expressing ourselves in Hebrew; Using newly-learned vocabulary in conversation; asking questions, making presentations in Hebrew, conveying a message.

Reading קריאה

Honing letter and sound recognition; reading words and sentences smoothly;
Strengthening reading comprehension;
Reading and analyzing books, poems & stories across types of genres; Reading with and without vowels, reading for pleasure, reading logs.

Writing כתיבה

Mastering letter formation in both print and script; sounding words out correctly, forming sentences; Writing paragraphs, stories and poetry; Answering questions in writing; typing in Hebrew, including writing emails, texts, letters & blogs

Vocabulary אוצר מילים

Expanding vocabulary to allow for simple conversation; gaining target vocabulary for subjects learned; learning vocabulary through context; finding to shoresh (root) and understanding vocabulary through word families; using the dictionary; Implementing newly learned vocabulary in conversation and writing

Grammar דקדוק

Making habits of correct sentence formation; utilizing male-female, singular-plural & putting elements together in a sentence never heard before; Using Shorashim (roots), binyanim, word families, parts of speech, beged kefet letters, and grammar absorbed through conversation & writing

Israeli Culture תרבות ישראלית

Familiarizing with important people in Israeli history including writers, leaders, composers & humanitarians; Learning Israeli games, songs, folk dances, Israeli food, expressions, phrases & slang; Creating ceremonies memorializing holidays

Literature & Poetry oerin ושירה

Analysing hebrew literature & poetry; learning about the great Hebrew authors, poets and composers; noticing rhymes, foreshadowing, imagery, metaphors, motifs, similes, onomatopoeia & personification; Writing our own stories and poems.

Physical Education

7th Grade



Flag Football

Rules, fundamental skills: passing, catching, running, flag pulling, general structure of the game. Strategic concepts.



Soccer

Basic fundamentals: passing, dribbling, movement without the ball. Strategic attacking & positioning



Basketball

Rules, fundamental skills: passing, dribbling, shooting, rebounding, defensive positioning, structure of the game. Advanced strategic concepts



Olympic Handball

Fundamentals of the game. Similarities to American sports? Differences? Intersport strategic implementation.



Field Games

Application of skills required for common field games such as Capture the Flag.. Familiarization of fundamental tactics.



Team Building

Skills both social & physical required to work effectively as a team through activities designed to increase motivation and promote cooperation



Street Hockey

Basic fundamentals: passing, shooting, puck-handling. Movement without the puck. Strategic positioning



Obstacle Course

Combination of all skills and activities learned throughout the school year. Weaves into Lag B'omer



Music Curriculum: Middle School





Course Overview: Performance, Writing, Composition & Production

The middle school music curriculum goals are to facilitate leadership and creativity, and to empower students to be active musical leaders in the community. In addition, by completing the K-5 music program, this middle school curriculum aims to form a sustainable music education program at school where students express their learning as music leaders in service of the community.

Ensembles & Classes:

Modern Bands Jewish Bands African Drum Ensemble Choir Production Music Appreciation Music Appreciation Music Theatre	Music Composition & Songwriting	Jewish Songleading
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