

# Ann and Nate Levine Academy Middle School Curriculum Guide

The academic programs at Ann and Nate Levine Academy are second-to-none. Every child receives personalized attention as he or she is guided through a continuum of study that covers basic skills for success as well as in-depth studies and hands-on learning opportunities. Our small classroom sizes and tried-and-true methodologies have continually produced graduates that have proven to be well-equipped for success in high school, college, and beyond.

The Middle School curriculum balances academic challenges, social awareness, ethical values, and the developmental realities of childhood. Language Arts, Social Studies, and Jewish Studies offer challenging analytical and application opportunities, while delving into novels, poetry, and writing. Science, Math, and Hebrew language focus on the steps necessary to solve life's puzzles: following the scientific method, algorithms, and the requirements of thinking in a foreign language.

The physical education program provides an opportunity to refine skills and compete within appropriate guidelines, while the choir, band, art, and technology departments provide an outlet for the more creative side of our students.

Social service is an important part of the Levine Academy program. In Middle School, students have mandatory minimum individual community service requirements, in addition to the service completed within the school day. With numerous larger school opportunities being offered within a smaller school setting, leadership opportunities abound for the Levine Middle School student.



## Middle School Overview

### Language Arts

Emphasizing the principles of the Levine Academy Ethical Covenant, our Middle School Language Arts curriculum focuses on theme-based aspects of communication. Students read a variety of genres to build reading comprehension strategies and appreciate the value of literary concepts and figures of speech. The majority of vocabulary is taught in the context of literature. Outside reading assessments occur through individualized projects. Through immersion in both the “Six Traits of Writing Approach” and the reading of excellent models of literature, students learn elements of style, grammar, and usage. Classes emphasize the significance of fine oral and written communication in preparing the mind and soul of our future leaders.

### Social Studies

Middle School Social Studies at Levine Academy starts with a global awareness and then narrows its lens to the United States, and finally Israel. Geography, history, cultures, economics, and civics/sociopolitical arenas are explored with an eye on what caused major events and changes in our world’s experiences.

### Math

Mathematics is an integral part of everyday life. Everyday activities from the time the clock wakes you up, until the time you must go to bed involves the application of mathematical principles. Even Noah had to know how to use math concepts to get his assignment done; building the Ark. It is the goal of the Middle School Math program to ensure that students realize no matter what you do in life, the more math you understand, the better you will do your job.

### Science

Middle School Science involves directed teaching, laboratories, and project work to cover all areas of scientific study. The scientific method is used on a daily basis while students explore the wonders of their world: present, past and future. They learn how to be scientists themselves, in a safe, orderly environment, and how to apply knowledge from one area to another.

# Middle School

## Fifth Grade

### Language Arts

Fifth grade Language Arts centers on a balanced and comprehensive literature based curriculum. Students gain mastery of the language arts processes of reading, listening, and speaking through an integrated literary approach based on the “Six Traits of Writing” and the study of various genres of literature. The focus of each genre relates thematically and includes a challenging study of literary elements. Students develop reading comprehension skills by utilizing strategies focusing on vocabulary, structure, and author’s craft. Students demonstrate proficiency in the writing of reader response journals, multi-paragraph essays, and an extensive study of grammar and spelling. Students participate in numerous projects that build with increasing complexity throughout the year including Outside Reading, Academic Fair and Speech Contest. Individual writing portfolios are continually updated allowing students to see themselves as active communicators and allow for self-evaluation.

### Social Studies

The curriculum in fifth grade Social Studies is World Cultures, with geography, global awareness, and current events being the main areas of focus. The curriculum is research based, with group and individual projects culminating each unit. The year begins with the study of geography and the geographic features that make up our earth. Next is the study of the ancient civilizations of Egypt, Greece and Rome, followed by a brief study of the Middle Ages and life during medieval times. The second half of the year focuses on the study of each continent and the unique countries and cultures that make up our world.

### Math

The fifth grade Math program incorporates the introduction of mathematical concepts, reteaching, practice and enrichment activities into each lesson. These are applied to the basic operations of addition, subtraction, multiplication, and division of whole numbers, fractions, decimals, percents and geometry. The students utilize a variety of math manipulatives, games, whiteboards and markers, protractors, and calculators to enhance their learning.

### Integrated Science

Success in science will be determined by the student’s ability to process skills such as observing; classifying; measuring/using numbers; communicating; inferring; predicting; collecting, recording, and interpreting data; identifying and controlling variables; defining operationally; making hypothesis; experimenting; and making and using models. Success will also be determined by the student’s ability to use critical thinking skills and scientific reasoning skills. In fifth grade the students will learn specifically about life processes, the solar system, matter and energy, populations and ecosystems, the solid earth, and light and sound.

### Jewish Studies

Students move into more advanced levels of Torah study in the book of Exodus, utilizing Rashi’s commentary, as well as historical and archaeological context. They also learn practical synagogue skills and deeper meanings of the prayers.

### Hebrew

“Haverim B’Ivrit” - “Friends in Hebrew” curriculum focuses on the daily life and concerns of Jewish children, such as family, friendship, birthdays, field trips, Israel, Jewish Holidays and more. The program includes wide variety of texts, poems, folk tales, biblical and historical passages, games and language activities. Hebrew studies emphasize continued proficiency in reading and writing, and conversational Hebrew. Hebrew language also includes the continued study and identification of fundamental aspects of grammar.

# Middle School

## Sixth Grade

### Language Arts

Sixth grade Language Arts aims for complete immersion in language so that students become increasingly confident in all forms of communication. The students read from many genres while learning to pay close attention to detail and to form deeper insight into written pieces. The reading of various genres also serves as models of excellent writing. As developing writers, the students further refine their personal voice while also acquiring stronger grammatical skills and a more polished voice. They review extensively the rules of grammar and punctuation and learn many new sentence structures. In addition to other creative and expository writing assignments, journals are due twice each month. A writing workshop is a core component of the class. Students also explore many works of literature together, ranging from poems to novels to non-fiction, and do many projects based on this reading. They complete a book card twice each month based on outside reading, and twice each year, they participate in an outside reading extravaganza.

### Social Studies

The sixth grade Social Studies curriculum focuses on relationships and independence. Study begins with an overview of basic map skills and geography concepts, with a focus on United States geography. Students explore the history of our nation (Native Americans, European Exploration, the interaction between explorers and Native Americans) they encountered, Colonization of North America, the American Revolution, our country's government, and westward expansion. Finally, we discover how differences between the northern and southern states leading to the Civil War.

### Math

The sixth grade math program incorporates an introduction, review and reteaching, practice and enrichment activities in order to expand on all the topics taught to them in the previous year. The concepts are applied to all four basic mathematical operations including fractions, decimals, percents, and topics in geometry. The students continue to use manipulatives, games, whiteboards and markers, protractors and calculators to enhance their learning.

### Integrated Science

Success in science will be determined by the student's ability to process skills such as observing; classifying; measuring/using numbers; communicating; inferring; predicting; collecting, recording, and interpreting data; identifying and controlling variables; defining operationally; making hypothesis; experimenting; and making and using models. Success will also be determined by the student's ability to use critical thinking skills and scientific reasoning skills. In sixth grade students will learn specifically about cells and microbes, the changing earth, nature of matter, oceanography, and forces and motion.

### Jewish Studies

Students are introduced to the study of Prophets, continuing to utilize the Hebrew text and Rashi commentary. They also learn practical synagogue skills and deeper meanings of the prayers.

### Hebrew

Students begin the NETA Hebrew language curriculum which is an innovative approach to Hebrew language immersion. NETA is a dynamic Hebrew language curriculum that integrates the four major language-acquisition skills (listening, speaking, reading and writing) by immersing students in everything from classical Hebrew texts to Israeli music, and from historical documents to poetry and drama. Students encounter materials and exercises of increasing complexity as they progress toward proficiency in Hebrew. The curriculum is sequential and based on a structured linguistic progression.

## Seventh Grade

### Language Arts

Seventh grade Language Arts represents a literature-based curriculum that emphasizes oral and written communication. Just as the students are experiencing the difficult transition from childhood into adolescence, so the theme for the year stresses the individual's place in the universe. The approach to the readings (short story, drama, novel, and poetry) extends beyond comprehension and application to evaluation of concepts. Topics range from literary terms, figures of speech, and public speaking, to grammar, writing, and vocabulary. All material is related to the literature studied at the time. By the end of the year, students will be able to do so much more than merely retell the plot of a story; they will also develop a sense of pride in their own voice.

### Social Studies

The seventh grade history course includes a brief review of the Reconstruction Era and the closing of the frontier. The focus is upon United States developments in the twentieth century with emphasis on industrialization, immigration, growth of cities, World War I, isolationism, the Depression, World War II, the Cold War and current United States national and international issues. Global geography and economics are areas of special concentration. There is a strong emphasis on writing, critical thinking, and problem solving.

### Math

Pre-Algebra students are taught effective strategies to make the transition from arithmetic to Algebra. The areas of study include integers, rational numbers, linear equations, inequalities and functions, polynomials, and application of these concepts to geometry. The students use on line resources, calculators, whiteboards and markers, and rulers to assist them in their pre-Algebra studies.

### Science: Life Science & Introduction To Chemistry

Students of Life Science acquire knowledge and appreciation of the living Earth and its many diverse life forms. Students study the structure, chemical interactions and processes of cells, as well as the morphology of all major taxonomic classifications and the evolution of characteristics in organisms. Chemistry introduces students to the basic composition of life and the interactions of fundamental elements that have caused the evolution of life on Earth. Students explore particles that compose matter, changes of state and physical and chemical changes. Students learn the Periodic Table of Elements and the physical properties of the groups and periods, and study atomic bonding, chemical reactions and organic chemistry. Knowledge of the use of scientific tools and evaluation methods is developed, and hands-on activities include labs, experiments, dissections, demonstrations, special projects and learning games as a class, in groups and individually.

### Jewish Studies

Students focus on two separate areas: major aspects of Jewish life, such as Shabbat, Kashrut, and life cycles; and the introduction to Mishnah and Talmud, especially Pirkei Avot (The Moral Lessons of the Sages) as they study the Rabbinic period of Jewish history.

### Hebrew

Students continue the NETA Hebrew language curriculum which is an innovative approach to Hebrew language immersion. NETA is a dynamic Hebrew language curriculum that integrates the four major language-acquisition skills (listening, speaking, reading and writing) by immersing students in everything from classical Hebrew texts to Israeli music, and from historical documents to poetry and drama. Students encounter materials and exercises of increasing complexity as they progress toward proficiency in Hebrew. The curriculum is sequential and based on a structured linguistic progression.

# Middle School

## Eighth Grade

### Language Arts

Eighth grade Language Arts offers a literature-based curriculum that emphasizes oral and written communication as a preparation for high school. It stresses the theme of the individual going against the odds. Utilizing an analytical approach of the readings (novel, drama, memoir, short story, and poetry), students not only comprehend the material, but also discover how it relates to their own world. Literary concepts, figures of speech, grammar, writing principles, public speaking, and vocabulary are a natural outgrowth of the literature. By the end of the year, students apply all the principles learned in the production of *Visions*, our school's literary magazine.

### Social Studies

In eighth grade Social Studies, students learn about the history and development of modern Israel from the early years of Zionism to the present. Topics include the Five Aliyot, the Balfour Declaration and World War I, the Holocaust, the establishment of the state of Israel, Israel's wars and leaders, and the Arab/Israeli conflict. There is a strong emphasis on analysis, discussion, problem solving, and writing.

### Math

In Algebra the students embark on a course of study that lays the foundation for virtually all of higher mathematics. They are building this foundation by learning the basics of Algebra. The content of the Algebra curriculum includes axioms and properties, factoring polynomials, the use of the quadratic formula, graphing multi-variable equations, solving systems of equations, rational and radical Algebraic expressions, and inequalities. Typically the students utilize whiteboards, markers, and calculators as they master the Algebra skills.

### Science: Earth Science & Introduction To Physics

Students of Earth Science acquire knowledge and appreciation of the physical Earth, its history, formation, composition, surface and internal forces, and its place in the universe. Students learn how to read and utilize various types of maps, study the formation and physical properties of minerals and rocks, and learn about geologic time and the formation and uses of fossils. Students examine plate tectonics, surface erosion and deposition, Earth's atmosphere, weather and climate and theories concerning the formation and future of the universe. Physics acquaints students with the nature of energy, motion and force, and how these interact and affect matter. Hands-on applications include labs, modules, demonstrations, modeling, special projects, learning games and class activities as a class, in groups and individually, and students increase their skill in the use of scientific tools and evaluation methods during various laboratory experiences and projects.

### Jewish Studies

Students continue their studies in Jewish history up to the modern era which ties into their Social Studies curriculum, while continuing study of rabbinic literature in Mishnah and Talmud which emphasize key moral concepts including those established in our Ethical Covenant. They also do a thesis project on their own Jewish area of interest which includes an in-class presentation to their peers summarizing their research and studies.

### Hebrew

Students continue the NETA Hebrew language curriculum which is an innovative approach to Hebrew language immersion. NETA is a dynamic Hebrew language curriculum that integrates the four major language-acquisition skills (listening, speaking, reading and writing) by immersing students in everything from classical Hebrew texts to Israeli music, and from historical documents to poetry and drama. Students encounter materials and exercises of increasing complexity as they progress toward proficiency in Hebrew. The curriculum is sequential and based on a structured linguistic progression.

# Middle School

## Music

The primary focus of the Music curriculum is to help students learn how to enjoy and use the power of music wisely throughout their lives. Students are exposed to many different styles of music, including classical and pop, so they can develop their own personal preferences, be able to recognize “world-class” excellence when they see or hear it, and choose music and entertainment that reinforces positive values and behaviors. Students are encouraged to become life-long music makers, even if it is just singing or playing a musical instrument for their own personal enjoyment. Opportunities are provided to enable students to express themselves creatively with special music projects or by writing their own original songs, which can be incredibly fulfilling and developed just like any other talent or skill.

Students in Middle School have the option of taking General Music or Band for their music component. Band consists of one weekly rehearsal with other grade level students during the school day. When students reach the seventh grade, after two years of Concert Band, they have the option of remaining in the band program and entering the Honor Band. Additionally, seventh and eighth grade students have the option of auditioning for the Lab Band, a smaller elite group that plays jazz, rock and fusion music using a more contemporary instrumentation. The Concert Band, Honor Band and Lab Bands perform for athletic events, concerts, regional competitions and special events for the school. All band students are required to take an additional private lesson during the week, scheduled beyond the school day. Students have the choice of playing flute, clarinet, saxophone, coronet/trumpet, trombone, tuba and percussion (drums). Students in the band programs, not only learn how to read and perform music, they learn how to work together as a group. Discipline is a key factor in their success. Upperclassmen learn to become leaders and bring the underclassmen along in becoming good musicians and leaders.

For many of our students, general music class is a welcome “change of pace” from their normal academic routine. They get to experience a variety of fun activities that include speaking, acting, singing, reading music, counting, clapping, conducting, moving, dancing, and playing instruments. Fun drills and “boys vs girls” competitions are used to help them learn the fundamentals of music in a creative, enjoyable way. All students have the opportunity to participate in exciting and memorable performances each year whether it be in the annual Zimriyah Song Festival, talent show, spring revue, school band, jazz-rock combo, or show choirs.

## Physical Education

The Physical Education curriculum takes a whole child approach to physical fitness. Students have the opportunity to experience a wide range of team sports, enhance skill development, engage in teamwork, experience a competitive environment, build self-esteem, develop appropriate sportsmanship, and instill a life-long enjoyment of physical activity.

Middle School P. E. builds on what was learned in Lower School, continuing the development of gross motor skills and coordination, and targeting specific skills needed in team sports. Team work, appropriate sportsmanship, an understanding of the rules of the game, and the spirit of competition are integrated into each sports unit. Students are encouraged to push themselves to go beyond their individual limits, at whatever level that might be, and achieve goals for themselves that they never thought were possible. Fifth and sixth grade students may continue play on the after school intramural teams or try out, beginning in sixth grade, for a varsity sports team.

# Middle School

## Information Technology

Information Technology at Levine Academy focuses on having students think creatively, develop innovative products using technology, and build upon their knowledge as they move from skill to skill. Students utilize existing knowledge to generate new ideas and products, creatively express themselves, use systems thinking to explore complex systems, and work toward identifying trends and forecasting possibilities.

Students use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others. They collaborate, publish, and interact with peers, experts, and others employing a variety of digital media and formats.

It is important for our students to communicate information and ideas effectively to multiple audiences utilizing a variety of media and formats. They must develop a cultural understanding and global awareness by engaging with learners of other cultures and contribute to project teams to produce original works.

Research and information retrieval is an essential part of the curriculum, requiring that students access, retrieve, manage, and evaluate information using digital tools. They locate, organize, analyze, evaluate, synthesize, and use information from a variety of sources and media. Additionally, students learn to evaluate and select information sources and technological tools based on the appropriateness to specific tasks. Finally, they process data and report results.

Critical thinking, problem-solving and decision-making are all parts of the information technology curriculum. Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate technology tools. They also identify and define authentic problems and significant questions for investigation and plan strategies to guided inquiry, plan and manage activities to develop solutions and complete projects, collect and analyze data to identify solutions and make informed decisions, and use multiple processes and diverse perspectives to explore alternative solutions.

As a Jewish Day School, Levine Academy insists that students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. We advocate and practice safe, responsible use of information and technology, exhibit positive attitudes toward technology uses that support collaboration, learning, and productivity, demonstrate personal responsibility for lifelong learning, and exercise proactive leadership for digital citizenship.

## Art

Levine Academy Fine Arts curriculum is based on national art education standards, art history, cross curriculum, and the creative process. Students are taught about famous artists, genres, history, and mixed media art. Vincent Van Gogh, Chuck Close, Leonardo Da Vinci, Marc Chagall are just a few of the many artists students study. They are shown examples of famous artworks, and often recreate artworks in their own imaginative way. Emphasis is placed on creativity, learning how to use supplies, and the actual process to create a work of art. Students spend several weeks working on one project to fruition. The goal is to encourage students to have a meaningful relationship with the arts throughout their lives.