

## Sixth Grade

### כיתה ו

#### ADVISORY

In sixth grade advisory, students take significant responsibility for governing their own affairs. In addition, the early part of the year is marked by many class discussions and individual check-ins concerning the student's adjustment to middle school life and expectations. These decisions are supported by a social emotional curriculum, Second Step, which focuses on topics such as growth mindset, making good decisions, and managing conflict. An important focus during advisory time is on organization of materials and time management. The students spend time adding dividers, returned assignments, worksheets and notes to their binders as well as regularly cleaning out their homework folders and lockers. Time is also spent discussing upcoming school events, schedules and homework time management. In addition, students are introduced to Google Classroom, which serves as a central location for teachers to post homework and assignments, and for students to submit assignments. Advisory class time is also used for students to update and refine their portfolios.

In connection to the TEVA trip in the fall, the sixth grade explores various Jewish perspectives on the environment and responsible behavior. Students expand their knowledge of healthy eating and living, learn how they can help fight hunger and

poverty, and examine *kashrut* laws with an eye toward ethics and morality. 6th grade students also participate in a community service project, visiting senior citizens through DOROT.

In Health classes sixth grade students learn about human development and sexuality through the lens of the Jewish values of *kevod habriot* (respect for God's creations) and *b'tselem elohim* (human beings are created in the image of God). In order to maintain a safe learning environment, for some health classes the students are divided by gender.

## ART

The sixth grade begin their study of art by observing trees. Using photos and nearby Central Park, students draw in black and white and color. Then they focus on the artist Vasily Kandinsky. He painted in three distinct styles throughout his career: colorful semi-realistic, spiritual abstract and tight geometric. Students are asked to create three works – one in each style to learn how an artist develops different styles throughout their lifetime. In conjunction with their study of history the sixth grade goes to the Metropolitan Museum of Art to see the Greek and African collections. Students choose one element/symbol from one culture and trace it to other cultures and historical time periods through a series of artworks, noting how civilizations constantly borrow from one another. The class then designs Rosh Hashanah cards as a competitive exercise. The school chooses one design to send to share with the community in the fall. Other

projects include drawings of crushed soda cans, building a gargoyle and narrative drawing.

## HEBREW עברית

Hebrew is taught on different levels to Middle School students. The beginners' curriculum – *Bishvil Ha'Ivrit* book 1 is designed for students with no or very little knowledge of Hebrew. In this program, students learn to speak in short dialogues about daily life; write paragraph-length personal narratives, memos, and assertions of opinion; and read stories, folk tales, and descriptive or informational non-fiction texts. The language structures that they learn to recognize and use include singular and plural forms; masculine and feminine forms; present tense, past tense, and infinitives; four of the seven verb patterns (*binyanim*); the basic possessive forms; prepositions; nominal clauses; and word order in sentences.

The intermediate curriculum – *Bishvil Ha'Ivrit* books 2-3 is a two/three-year sequence that is typically studied by students entering seventh and eighth grade in Jewish day schools. In this program, students learn to speak in longer dialogues about a wide range of subjects and in interviews; write letters; and read longer short stories, non-fiction texts, essays, and simple songs, poems, and biblical passages. The language structures that they learn to recognize and use include the basic future tense; all seven verb patterns (*binyanim*); declension of several prepositions; noun-adjective agreement in

gender and number; nominal, verbal, and object clauses; parts of speech; and word order.

The advanced curriculum – *Bishvil Ha'Ivrit* books 4-5 is a two/three-year sequence that is typically studied by students entering ninth and tenth grade in Jewish day schools. In this program, students learn to speak freely in conversation on any topic; read news articles in easy Hebrew, full-length short stories partially adapted to easy Hebrew, and poetry, songs, biblical verses, and *midrashim*; write multi-paragraph narratives, reports, and essays; and understand TV or radio news items. The language structures that they learn to recognize and use include the future tense in four *binyanim* (verb patterns), declension of prepositions, gerunds, past participles, possessives, suffixes, and conditional clauses.

## HUMANITIES

The theme of the sixth grade humanities core curriculum is “Big Ideas that Shaped Civilization.” The year begins with a study of democracy, which focuses mainly on Ancient Greece. Prior to situating the study in the ancient world, students briefly explore elements of contemporary American democracy to contextualize their study in a more familiar setting. The study of Ancient Greece is both literary and historical, with particular emphasis on Athens as a center of direct democracy and on Greek culture and mythology. Students also learn about other forms of government, such as oligarchy and tyranny. They simulate an Ecclesia and construct Greek temples in small groups, adopting the value system of a particular type of government. Exploring both primary

documents and secondary sources, the students culminate the trimester by writing their own original Greek myths and essays comparing and contrasting two forms of Ancient Greek government.

The second big idea which students explore is narrative, and the context within which it is examined are folktales. Students encounter narratives from different cultures, including African, Jewish, and Native American among others and glean from them some of the key elements of their life, culture, and beliefs. The wealth of aesthetic forms that folktales take is presented, including oral storytelling, song, written stories, and museum artifacts. Authentic examples of these are studied by the class as a whole, and students learn to identify the common features that all narrative forms share, as well as features unique to each of the forms. For the concluding project, students write a folk tale with a creative component, such as a drawing or a three-dimensional display, that highlights an implicit point in their narrative. In addition, they select one of the civilizations studied and create a visual presentation using a range of different analytical tools, such as timeline or pictorial collage.

In the spring, the focus shifts to a third big idea, religion. After briefly examining the history of several world religions, students undertake a more in-depth study of Europe in the Middle Ages, which is one of the prime examples in human history of a society in which religion served as a central organizing principle. Reconstructing the daily life experience of different social groups in medieval Europe, they explore the role of the individual in the community. Through reading, role plays, and artistic study, students

come to appreciate the pervasive role of Christianity in the feudal society of medieval Europe.

Much of the reading and writing students do is connected with the main themes, for example, Greek mythology and an extended African narrative entitled Facing the Lion.. These readings and associated writing are complemented by many additional experiences with literature and language. Throughout the year, each student continues the habit of independent reading. In addition, the class as a whole reads newspaper and magazine articles and a play ("The Miracle Worker," by William Gibson), and students regularly respond in writing to their reading. All of these reading experiences take place within a supportive setting in which students and the teacher talk about, share, and learn from their own and each other's reading experiences. As well as gaining practice in formal academic writing of varying lengths, students continue to write using the writing process. The curriculum also incorporates regular, continuous, holistic instruction in grammar, spelling, and vocabulary building.

As part of a cross-curricular unit with Jewish studies, sixth grade students study the Holocaust with a focus on the rise of Nazism, the imposition of anti-Jewish laws and restrictions on the Jews of Germany, and the responses of German Jewry, culminating in Kristallnacht. Students explore the history through a close reading of essays as well as a memoir read in book clubs.

## **JEWISH STUDIES**

The sixth grade Torah curriculum picks up the Exodus narrative with the night of the first Passover, continues through the crossing of the Red Sea and the war against Amalek, and ends with the assembly at Mount Sinai and the giving of the Ten Commandments. Students work in study pairs (*chevruta*) and small groups to study the text, analyze it, question it, write their own commentaries, and compare them with traditional commentaries that also address the class's questions. They share their insights, questions, and interpretations with their classmates and progressively become more independent in their ability to comprehend and work with the biblical text as they become increasingly proficient in biblical vocabulary and grammar.

Sixth grade marks the start of students' formal study of Talmud. Building on skills and concepts they learned in *Mishnah* in their upper elementary years, the passages that comprise the curriculum early in the sixth grade consist primarily of *baraitot*, texts that are similar to *mishnayot* in length, language, structure, and style of argumentation. The first several Talmud passages are written in Hebrew and incorporate only isolated words and brief phrases of Aramaic. They are selected from *Tractate B'rachot*, whose subject matter is already familiar to students from their general knowledge of *t'filah* and from their study of *Mishnah*; the specific content, however, is new to them. Students prepare the text in study pairs (*chevruta*) with the aid of worksheets, which help them to understand vocabulary and the meaning of each line and to analyze the passage into stages or steps. Pooling the insights of the class in a subsequent discussion helps bring the principles, the flow, and the thematic development of the Talmudic discussion

into focus. Review activities and end-of-unit assessments help students solidify their understanding and gradually expand their text attack skills.

Sixth grade are also exposed to thematic units in Jewish History on the Shoah, Medieval Jewish life in Europe and history of the modern State of Israel through historic speeches, documents, and song.

In *t'filah*, the sixth graders continue to add new prayers to their daily liturgy, including additional chapters of psalms from *p'sukei d'zimra*. However, the main focus of the curriculum is on *d'varim shebik'dushah*, the parts of the service that are recited only with a *minyan*: *kaddish*, *bar'chu*, and *k'dushah*. Students' inquiry into the meaning of new *t'filot* becomes more sophisticated as their text skills improve; they often trace the origins of new prayers in the *Tanach* (Hebrew Bible) and other sources. Sixth grade students also learn *ta'amei hamikra* (Torah cantillation), which they put to use by reading from the Torah scroll in the middle school *minyan* on Mondays and Thursdays. As their bat or *bar mitzvah* approaches, they begin to put on *talit* and *t'filin* daily.

In the spring of sixth grade, students begin to prepare for their Jewish Studies exhibition. They explore their attitudes about becoming bar or *bat mitzvah*; investigate the concept of *mitzvah* in the Torah as understood by Maimonides, *Sefer Hachinuch*, and other authorities; and research a chosen *mitzvah*, which they also incorporate in their personal practice and keep a journal to help them reflect on the experience. The *mitzvah* project culminates in an exhibition in which students write an extensive paper



and make an oral presentation to members of the wider school community. They then defend their presentations by responding to questions from the learning community.

The sixth grade *chagim* (Jewish holidays) curriculum focuses on Talmudic sources for all major holidays. In many cases, students study the classic *sugyot* (passages) out of which key concepts of the holiday first arise. For example, they discover the concept of *itzumo shel yom m'chaper* (the power of *Yom Kippur* to atone, with or without repentance), the classic dispute over the number of *Chanukah* candles to be lit each night, and the essence of the *mitzvah* of *sipur y'tziat Mitzrayim* (telling the exodus story) on seder night.

## MATH

In math, sixth graders deepen their conceptual thinking and strengthen and extend their skill mastery. To reinforce their skills, they review numerical operations and apply them to fractions and decimals with rational numbers. To support their understanding, they analyze data sets, make use of estimation, especially as a check of accuracy, and use tangible objects in geometrical calculations.

The program is responsive to student needs: students work in small groups that change frequently based on interest and ability. In addition to working in groups, students often work independently. A premium is placed on students' ability to assess their own needs.

Key focal points for the year include: Developing an understanding of number theory and multiplication and division of fractions and decimals; Developing an understanding of two-dimensional measurement; Modeling situations with tables, graphs and equations.

The following topics are studied in sixth grade:

- Factors and multiples
- Statistics – data analysis
- Fractions, decimals, and percents with rational numbers
- Adding, subtracting, multiplying, and dividing fractions and decimals
- Solving percent problems
- Measurement
- Geometry – polygons (especially triangles, quadrilaterals, and circles), angles, and transversals
- Geometry – finding the areas and perimeters of two-dimensional shapes
- Algebra -- modeling situations with tables, graphs and equations
- Test preparation and test-taking skills

## **CODING**

Students in sixth grade use physical and computer-based tools to explore the world of functional coding. The coding curriculum builds upon their knowledge of the main elements and structures of code, such as sequence, conditionals, variables, and loops, and functions. Students develop and rehearse their skills through “unplugged” activities and computer-based exercises. From there, students explore practical applications for computer programming, such as website building, game design, and programming microcontrollers (MicroBits and Arduino boards). Students expand their knowledge of circuitry through breadboarding. Students learn how to connect lights, motors, and sensors to these devices and program them to create electronic projects and robots that respond to real world problems. Students use both block based and text based-programming and explore languages such as JavaScript and C++.

## **SCIENCE**

The sixth grade science curriculum is comprised of 3 in-depth units, each corresponding with a different branch of science: life, physical, and earth. In each of the 3 units, students use the scientific method to design and carry-out experiments to test their hypotheses and deepen their understanding of the topics of study. In addition, they also

complete a variety of STEAM and engineering challenges to explore these topics through different lenses.

Topics in the sixth grade science curriculum include:

- Cells and Microorganisms

- Physics of Motion and Energy

- Plate Tectonics and Engineering for Disasters

Sixth grade science begins with the unit Cells and Microorganisms, during which students learn about cell structure and function, cell theory, how to use a microscope, and the characteristics and roles of microorganisms. This unit culminates with an exhibition project. For the exhibition, each student uses the scientific method to design and carry-out an experiment relating to microorganisms.

In the Physics of Motion and Energy Unit, students learn about Newton's Laws of Motion and design and conduct a series of experiments to test these laws. Students learn about potential and kinetic energy, friction, acceleration, and gravity. The unit

concludes with a roller coaster design project where students apply the principles they learned to their creations.

In the Plate Tectonics and Engineering for Disasters unit, students learn about the Theory of Plate Tectonics and the formation and effect of volcanoes and earthquakes. They learn about viscosity of lava, different types of faults, and how earthquakes are measured. Finally, they complete an engineering project where they design and construct both a shake table to test building stability and a building that can withstand the energy release from earthquakes.

Each unit encourages active learning through observation, deductive reasoning based on observation, experiment, research, hypothesis formation and testing, and scientific writing.

In addition to the content, skills, and processes addressed in these units of study, students also participate in a long-term interdisciplinary STEAM (science, technology, engineering, art, and math) project. Throughout the process, students are asked to identify real world problems, and then research, plan, build, test, and revise their solutions. Skills and values addressed through this project are empathy, the engineering design process, and designing with a client in mind.

## MUSIC

The sixth grade instrumental program builds on the basics of keyboard playing that were taught in fifth grade. Students work solo or in pairs on pieces suited to their own levels.

As a class, they learn to play major scales and melodies, with emphasis on correct fingering and rhythm. The highlight of the instrumental program is the annual keyboard recital, in which students, individually and in pairs, perform their chosen pieces before the entire middle school.

In music theory, students review musical notation, including the treble clef, placement of notes, sharps and flats, and basic intervals. In addition, they work on sight singing and ear-training exercises. In music appreciation, they listen to a wide variety of musical excerpts and discuss characteristics of a variety of the different musical styles and composers, with particular emphasis on rhythm.

They continue to expand their repertoire of Israeli songs and American folk and show tunes, refining four or five of the songs for performance opportunities at the Zimriyah in

December and the school concert in the spring. The focus of the singing program is on dynamics, pitch accuracy, memorizing lyrics, and song delivery.

## **PHYSICAL EDUCATION**

Sixth grade PE is mostly competitive play and repetition. Students now focus on the “conditioning” aspect of sports. There is a greater emphasis placed on endurance and strength training as well as character building. Students are encouraged to use their voices as well as their bodies for the greater good of the game. Developing a mature player, who demonstrates knowledge and control of the equipment and self, is the main focus.