

# MLCA NEWSLETTER Academic Edition 

February 2021


Cantor Portnoy captured this glorious new day dawning over Main Line Classical Academy.

## A MESSAGE FROM OUR BOARD

## Dear All,

For a school that has always been studiously unplugged by design, the necessity of shifting to remote learning last spring and for the first few weeks of this fall was jarring. The miraculous technology platforms that enabled our rich academic life to persevere even amidst lockdown also left at our doors the dross we had until then largely managed to stave off: online gaming, social media, YouTube videos, et al. In recent weeks, our school community has been discussing how to take action together to repair the bulwarks and hold back the floodwaters that have left so much of this teenage generation besotted and glassy-eyed. We are a strong community. I know that we will be successful in protecting what we hold dear while still making use of the very best aspects of modernity.

What are the perils we so dread? It is not just the predators and perversions, not simply the unwholesomeness and vulgarity. It's the persistent erosion of truth. Tech content machines serve up a steady stream of self-affirmation, not challenge. With critical judgment so
addled, we lose the ability to distinguish what is "real" from what is "fake" and truth becomes a matter of personal prerogative.

While there is no silver bullet, I like to think that our vision of education is itself a strong start. In an age when "deep fake" video evidence can be fabricated to bear false witness with increasing ease, the great works we study have an obdurate constancy, a beauty that defies synthetic manufacture. In an age long on data and short on facts, we drill each day on mental math because numeracy holds the keys to discernment. In an age when videos and online gaming define a lowest-common-denominator culture, our new-formed book club proposes a higher standard. In an age of widening chasms in civil discourse, our canon anchors us with a common frame of reference.

And so we persist, despite all challenges. It has been an icy winter, but spring is but a month away.

Love, Mat

To ensure high academic standards, MLCA follows a high school-style format from the very first, with every academic subject taught by a specialist teacher. Up to eight different specialist teachers interact with every grade in the course of a day, teaching mostly in 45 -min blocks (shorter for Gym and longer for Science lab, and Art Studio). The various subjects are thus led by teachers accomplished in their respective fields and possessing the presence and zeal to inspire their charges. We hope you enjoy this summary review of what the children have been studying this winter.

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# KINDERGARTEN 

## Teacher: Mr. Chllbert <br> Subject: Engush

Our Kindergarten English students have learned 5 poems that they can recite by heart: "At the Seaside" by Robert Louis Stevenson, "The Swing" by Robert Louis Stevenson, "Stopping by Woods on a Snowy Evening" by Robert Frost, "Something Told the Wild Geese" by Rachel Field, and "The Tyger" by William Blake.

In phonics, we have been working hard on learning the short vowel sounds. Each student is already able to make the sounds of each individual consonant letter. Now, with the help of memorizing a few sight words, each student is able to read short sentences such as, "Mag has the mop." After mastering short vowel sounds, the students will begin working on consonant letter blends like the ones we see in words like, "trip, plan, trap..." The current list of sight words is: "The, a, is, I, see, go, no, he, she."

This Winter, we have explored the Ancient Egyptian pantheon as well as some of their most essential stories. Your children would love to tell you about the following gods and goddesses: Ra, Nut, Tefnut, Shu, Geb, Isis, Osiris, Set, Horus, and Thoth. We discussed Egyptian culture and religion, their architectural techniques, and their landscape. We also spent some time discussing the role of the Pharaoh in the Egyptian Empire, giving our special attention to the Ptolemaic family which ended with Cleopatra, the Queen.

After exploring Egypt, we sailed north to the islands of Ancient Greece. We have been studying its rich mythology and pantheon since mid december. The students should be able to tell you about the creation of the world and its founders, the story of Zeus' birth and his becoming the Lord of Olympus, and a few stories of the following gods and goddesses: Hera, Hephaestus, Aphrodite, Ares, Poseidon, Athena, Apollo, Artemis, and Hermes. Only three more and they will know all 12 major gods and goddesses!

## Teacher: Ms. Woo Subiect: Storytime

Over the past few months, the Kindergarteners have had so much fun during Story Time exploring the classic Greek Myths (from the Classic Starts series). We have learned all about King Midas' golden touch, Jason and the Argonauts' quest for the golden fleece, Pandora and her box, and Daedalus and Icarus' escape from the labyrinth, just to name a few stories! To supplement the stories, we have made various crafts- paper boats for the Argo, Pandora's box, and Daedalus' wings - and sculpted play dough like the sculptor Pygmalion. In December, we learned about Snowflake Bentley, the man who first photographed snowflakes, and made many paper snowflakes to decorate the classroom. Recently, we started reading Winnie the Pooh by A. A. Milne and are invested in Winnie-the-Pooh themed crafts and activities.


## Subject: Math

The kindergarten math program continues to focus on several key foundational areas - counting and number recognition and arithmetic skills.

## ARITHMETIC

Addition: Our kindergarten students have gotten very good at adding several single-digit numbers and, more importantly, figuring out convenient ways to do so. We continue to master this skill through the game of peek and see, where I lay out a pattern of circles on the board, show it to the students for a few seconds, and ask them to tell me how many circles they saw and how they figured it out.

Subtraction: We have been practicing subtraction by playing Splat!, where we start out with a set of circles on the board (e.g. 9), and some of them get covered by a splat. Our goal is to figure out how many circles got covered. Here is an example:


## Teacher: Cantor Portnoy Subject: Music Theory

The kindergarten class has mastered quarter, half and whole note rhythms, and have just begun to tackle skips and steps in the treble clef. They are nearly all comfortable with the staff, and can orally replicate the rhythm of quarter notes, quarter rests and whole notes. One or two can even take dictation on the treble clef staff. Most of the children can accurately differentiate ascending, descending and repeated notes, which we continue to practice.

Their favorite song has been "If I Had a Hammer", and they have enthusiastically begun "The Aba Daba Honeymoon" in honor of Valentine's Day. This class has also enjoyed wonderful story books which promote the love of playing, singing and listening to music.

Counting and number recognition: Since returning from winter break, we have been using our Base 10 blocks and our 100 charts to practice naming, comparing and understanding patterns in two-digit numbers. We have slowly been mastering the concept of place value - our students are learning to understand that 52 has 5 tens and 2 ones, whereas 25 has 2 tens and 5 ones, making them different numbers with the same digits. We will continue working on this topic throughout the rest of the year, and progress to three digit numbers later in the spring.

We have been practicing finding numbers on the 100 chart and using it to skip-count by $10 \mathrm{~s}, 5 \mathrm{~s}$ and 2 s . We use laminated charts and transparent colorful circles, which the kids find to be a treat!

Games and special topics: We have been practicing our spatial reasoning skills and learning to follow directions by playing robots. It's impressive how much harder the kids will work to follow instructions if they're pretending to be robots following a set of commands. We play both on paper (illustrated above) and with our whole bodies by moving in a socially distanced way around the classroom.


Calvin Krellner-Oathes displays a favorite Math manipulative.


## Teacher: Mme. Nselel Subject: French

Since our first newsletter in November, students in Kindergarten have been working hard at continuing learning a new language! As I type this newsletter, they just completed lesson 9 of the Symtalk method Français 2 (this book contains 15 lessons).

Throughout this book, they continue to encounter familiar characters (Antoine, Brigitte, Sylvie, ect..) and animals (le chien, le chat, etc..) but are also introduced to new foods (les bananes, la glace) 6 other colors, different objects (le vélo, les chaussures, la voiture, le livre, etc...). With these characters, they've learned to describe and repeat actions like eating, drinking, playing, going places (au parc, à la maison), looking at, buying and taking objects using French verbs conjugated at the 3rd person of the singular form.

This textbook doesn't include numbers over 10 but in class we've counted to 70 already a few times. Very impressive!

The goal of French Kindergarten is developing speaking skills and listening comprehension as well; therefore, in addition to say/repeat words associated

Madame Nselel reads to her Kindergarten students.
with the pictures in their book, students have been listening to my words and pointing to the matching picture. Now they can even come up with their own sentence using a subject, a verb and a complement.

This textbook offers the opportunity to practice handwriting and spelling as well on a few pages. This skill will be much more developed in the following textbook.

This trimester, we have added 8 French songs/nursery rhymes to our repertoire: 3 Petits Chats and Prom-enons-nous dans les Bois were the most popular in this class. Please ask your student to sing to you!

In addition to our regular 4 weekly classes, I get to see most of the students in French Enrichment. This is an opportunity for reinforcing the vocabulary learned through games like I Spy, Pictionnary, Memory game, etc.. Students also get a chance to illustrate the lyrics of the songs learned the past weeks.

We also continue practicing what I call "class routines" such as how to say in French "can I go to the bathroom?", "can I drink some water?", " can I sharpen my pencil?", etc...

## Teacher: Mr. Darer Subject: Science

In Kindergarten Science class, we started out the trimester by exploring the concept of sound. The students noticed that they were able to get different notes out of a rubber band depending on how tightly they stretched it or how thick the rubber band was. We expanded this idea to talk about how sound is the result of vibrations and then talked about how sound travels from the object to our ears.

We then discussed different types of energy (electrical, heat, light, and movement), gave examples of each type, and then noticed how one type of energy can change into another type. We continued this introduction into Physics topics by learning about forces through worksheets and classroom experiments. We rolled a toy car down three ramps each with a different incline to see which ramp would result in the car traveling the farthest distance. While doing this experiment, the students practiced making hypotheses and recording data (distance traveled). We also talked about the importance of multiple trials in an experiment (especially since one time the toy car flipped over and didn't travel so far).

Continuing this exploration into forces, we built a rocket balloon (blown up balloon taped to a straw that has a string threaded through it) and "launched" the rocket on the string track. We noticed when the balloon was fully inflated it was able to travel across the entire distance of the classroom! We then had some conceptual discussions of Newtown's 1 st and 3rd laws of motion in relation to the rocket balloon.

Most recently the students have learned about Kinetic Energy and Potential Energy though observing pendulums, building a catapult out of pencils, and building a hot wheels roller coaster track.


## Teacher: Ms. Woo <br> Subject: Christian Studies

The K/2 Christian Studies class has had so much fun learning about the Bible. After studying the main stories and characters in Genesis and Exodus, we continued through our survey of the Bible with stories from the books Joshua, Judges, and 1 and 2 Samuel. To supplement the Bible lesson, the students have also been memorizing the books of the bible, making crafts, and playing review games. Some activities we completed include building the tabernacle, making a paper torch for the story of Gideon, and creating David's "slingshot" out of popsicle sticks and a pipe cleaner. Thanks to the parents for getting the students onto zoom twice a week for the class!


MLCA Kindergarteners Elea Portier (left) and Eva Mencin (above) know how to dress for the weather in order to take advantage of snowy outdoor recesses.

## Teacher: Mr. Gormley

Subject: History \& Geography

This trimester we learned of Bacon's Rebellion, William Penn and his acquisition of Pennsylvania, the Salem witch trials, Washington's boyhood, rules of etiquette, and early adventures surveying. We continued with stories of Franklin's childhood and a discussion of his inventions and effort to acquire virtue. We even attempted to work on our own virtues or qualities that we would wish to see improved in our own lives, although I would guess that the notecards upon which students were to keep track vanished along with their effort... In any case, the similarity in the early lives of Franklin and Washington are noteworthy for many reasons, but I tried to make special note of their efforts at shaping their own lives for the better in the way each saw fit. If there is still a desire for excellence, it seems to have to begin at an early age if it is to come to be.

More recently we've been discussing the quarrel between the French and English that played itself out in the New World under the name of the French and Indian War. We learned of Braddock's defeat for failing to understand the changes in warfare and Wolfe's success at Quebec against Montcalm.

We're on the verge of the really exciting parts of the revolution - the Boston Massacre and Tea Party, Lexington and Concord, Nathan Hale, Valley Forge, etc.

While we continue working through the history of the time, we're learning a few key dates that the children have mostly memorized by now. I've listed them below. In addition we're working on learning the Declaration of Independence from the start to about mid-second paragraph. Quiz your children on the following:

1492 - Columbus came to the New World
1534 - Jaques Cartier explored Canada
1585 - Roanoke was settled
1607 - Jamestown was settled
1620 - the Pilgrims came to Plymouth
1664 - New Amsterdam became New York
1692 - Salem witch trials
1733 - Georgia became a territory
1754 - the start of the French and Indian War
1765 - Stamp Act


Kindergartener Eva Mencin works carefully with blocks. Building at their own desks with individual sets of blocks is one way MLCA Kindergarteners have adapted to Covid protocols.


Covi Hungerford, Calvin Krellner-Oathes and Eva Mencin lead the Kindergarten on an exploration of the Nature Trail, tracking animal visitors.

## Teacher: Mr. Darer Subject: Hands on Skills

In Hands On Skills class, the Kindergarten has been practicing identifying animal footprints around the school. We discussed characteristics of the animal tracks that can help us tell them apart. We talked about common similarities among different tracks as well as some subtle differences. In general, the students learned how to identify deer, rabbit, bear, fox, coyote, bobcat, and mountain lion tracks. We set up a wildlife trail camera in the woods and have been enjoying watching the videos of foxes, deer, rabbits, birds, racoons, and squirrels that inhabit the discovery trail woods! The students have also been continuing to review the birds they learned last trimester: downy woodpecker, white breasted nuthatch, tufted titmouse, robin, cardinal, blue jay, house sparrow, bald eagle, crow, black capped chickadee, and turkey vulture. We also began a unit on knot tying and most students are now able to tie an overhand knot and a figure eight knot with their eyes closed.

## Teacher: Cantor Portnoy Subject: Hebrew

We have learned just under half the alphabet, both printed and cursive letters, and the children can converse in simple sentences. More and more, they can identify simple objects in Hebrew, greet one another, and express simple verbs, e.g., "I am walking", "I am sitting", in masculine and feminine singular, and masculine plural, in the present tense. Doubtless our most delightful time together is with stories and games, "Habibi and Yow" being a particular favorite.

## Teacher: Mrs. Butterworth Subject: Violin Ensemble

In Violin Ensemble the Kindergarteners work well as a team. They like to improve their skills, they ask for corrections to be sure they are doing things right, and they understand the teacher's explanations. Although it is not very comfortable to play violin in snowboarding costumes(!), most of the students hold their position pretty well. The children all play songs accurately on open strings with the bow, so we started to use 4 fingers. For now, they play short songs with 4 fingers pizzicato and we are planning to connect fingers and bow soon!

## Teacher: Morah Crammer Bar-Tuv Subject: Judaic Studies

Throughout the trimester we continued to learn Torah, completing main stories from Chumash Bereshit. We learned about the Avot: Avraham, Yitzchak and Yaakov; and the Mothers: Sara, Rivka, Rachel and Leah. We learned about their descendants. The studentslistened to Midrashim and spoke about the family tree of Avraham. We also talked about our own family trees, trying to see how we too are the children of the three fathers and four mothers.

In addition, we learned about Shabbat, Chanukkah, and Tu-B'Shvat chronologically as the year progressed. We learned about the different traditions that are performed on each of these holidays. For Chanukkah, the students prepared a special play. For Tu-B'Shvat, they learned about Shivat Haminim (seven species of Israel), and completed a project about the blessings of the trees and the land. The $K$ students are an integral part of the Gur Aryeh program. They took a significant part in the Rosh Chodesh prayers, in the Tu-B'Shvat seder, and in the Chanukkah party.

A big piece of our classes is learning the skill of connecting the things that we learn in class to the paragraphs that we say during Tefillah, and knowing how to connect the new material that is taught in class to their prior knowledge. Every day, we recite the morning prayer while adding new parts and discussing their meaning. The students learn new words and useful sentences in Hebrew through brief conversations, Tefillah, and songs in Hebrew. It truly brings me joy to see the progress of the students, the way they participate in class, and hearing their own original ideas.


## Teacher: Mrs. Butterworth

## Subject: Studio Art

In an Art studio the Kindergarteners learn how to draw difficult objects in an easy way by finding simple shapes in those objects. We always try to show some perspective by drawing far away objects higher and smaller, and close by objects bigger, lower and brighter. Our most successful subjects were "The Clown", "Hot Air Balloons", and "Winter Activities". We also drew a portrait, and a still life with the children's violins. We had fun drawing illustrations to "Three Little Pigs" and "The Brave Tin Soldier". Another useful exercise was our "City" where we showed one-point perspective. It is fun to see how the kids draw objects more and more recognizably and color them more accurately, learning to use their 45 minutes productively.

## Teachers: Mrs. Butterworth \&

 Mrs. Voznaia Subject: PianoFrom Kindergarten through third grade, every MLCA student has piano twice a week as part of our regular curriculum. Students in Kindergarten and first grade start by learning to recognize notes on the keyboard. We introduce them to playing forte (loud sound) and piano (soft sound), and to the dynamic terms crescendo (gradually louder) and diminuendo (gradually softer). In this way, from the very beginning, the children are made familiar with these terms of music as an art, not just a practice.

Kindergarteners also learn to read sheet music including signs such as a treble or bass clef; time signatures; notes in the music staff; quarter, half and whole notes ( 1 st graders also learn eighth notes); sharp, flat and natural signs; whole and half, quarter, eighth rests; the repeat sign, fermata sign, and slur sign; and some nuances like staccato, legato, and non legato.

Also from the beginning, we work with posture including proper hand and finger position. Similarly, we work from the start on playing a whole piece at the same pace with good rhythm, counting, coordination between right and left hands, and with the appropriate sound. When the students start to play with all the fingers, they continue this work at home every night with playing the numbers of the fingers correctly.

## FIRST GRADE

## Teacher: Mr. Darer <br> Subject: Science

In First Grade Science class, we started out the trimester by exploring the concept of sound. The students noticed that they were able to get different notes out of a rubber band depending on how tightly they stretched it or how thick the rubber band was. We expanded this idea to talk about how sound is the result of vibrations and then talked about how sound travels from the object to our ears.

From here, we used the anchor phenomena of the Atacama Desert to study air pressure, the water cycle, weather patterns, and eventually learn about rain shadow deserts. The students were trying to figure out why the Atacama Desert in Chile has so little precipitation yet on the other side of the Andes there is a lot of precipitation. And after we finished discussing this topic, they were able to solve this mystery! We then built a barometer using a mason jar, balloon, straw, and tape to help us predict if it will be sunny or rainy the following day.

Next, we built catapults out of pencils, rubber bands, and a spoon to explore the topic of Kinetic Energy and Potential Energy and the connection between the two. The students noticed that in order to launch their objects the farthest, they had to pull the spoon all the way back. We continued our exploration of Physics topics by next building parachutes for lego figures and conducting an experiment to figure out why parachutes allow for softer landings. During this activity, the students learned how to draw force diagrams and label gravity, air resistance, and speed in their sketches. While doing this experiment, the students practiced making hypotheses, recording data (distance traveled), and using multiple trials in an experiment. At the end of the project, the students then designed and built their own parachutes for the lego figures and launched them off of the playground.

Continuing this exploration into forces, we built a rocket balloon (blown up balloon taped to a straw that has a string threaded through it) and "launched" the
rocket on the string track. We noticed when the balloon was fully inflated it was able to travel across the entire distance of the classroom! We then had some conceptual discussions of Newtown's 1 st and 3rd law of motion in relation to the rocket balloon.

Most recently, we completed a few snow experiments such as determining how much water is in snow, figuring out if salt, sugar, or baking soda melts snow the fastest, and building a volcano out of snow and watching it erupt (with baking soda and vinegar for lava).

## Teacher: Mr. Darer Subject: Hands on Skills

In Hands On Skills class, we have been practicing identifying animal footprints around the school. We discussed characteristics of the animal tracks that can help us tell them apart. We talked about common similarities among different tracks as well as some subtle differences. In general, the students learned how to identify deer, rabbit, bear, fox, coyote, bobcat, and mountain lion. We set up a wildlife trail camera in the woods and have been enjoying watching the videos of foxes, deer, rabbits, birds, racoons, and squirrels that inhabit the discovery trail woods! The students have also been continuing to review the birds they learned last trimester: downy woodpecker, white breasted nuthatch, tufted titmouse, robin, cardinal, blue jay, house sparrow, bald eagle, crow, black capped chickadee, and turkey vulture.

We also began a unit on knot tying and most students are now able to tie an overhand knot and a figure eight knot with their eyes closed. We're learning to tie a square knot to connect two ropes together. A real-life application of the square knot is tying one's shoes. The students have been practicing tying their shoes using the looped square knot!

## Teacher: Mme. Nselel

## Subject: French

Since my previous newsletter, students in First grade have not only continued to practice their speaking and listening skills but also worked hard at spelling in French. They get to practice many times by writing words on their own white board before writing them again in their book. This is still challenging as French spelling is difficult but I'm pleased with their work.

We are currently studying lesson 19 of the Symtalk method Français 3 and in addition to reviewing words learned in books 1 and 2 last year, the new vocabulary covered so far this trimester includes drinks, languages, times of the day and days of the week.

Students continue using the 1 st and 2 nd person of the singular form of verbs ( $\mathrm{je} / \mathrm{i}^{\prime}$ and tu) in addition to the 3 rd (il/elle). Some of the new verbs this trimester describe actions like reading, wearing, wanting, listening, etc.. Every time a new verb is introduced, we try to memorize and recite its conjugation of the singular form.

We also started practicing negative sentences and more interrogative ones as well.

We have added 5 French songs/nursery rhymes to our repertoire and the students continue to enjoy this ritual a lot! Vive le Vent and Compère Guilleri were probably the most popular in this class.

In addition to our regular 4 weekly classes, I get to see the students in French Enrichment. This is an opportunity for reinforcing the vocabulary learned through games and activities such as I Spy, Pictionnary, Memory game, words search, etc.. I added a "dice game" where each student rolls his own dice and each number is a category (animal/color/verb/place/..) they need to find a word for. Students also get a chance to illustrate the lyrics of the songs learned the past weeks. Another focus of Enrichment is practicing "class routines" to make common requests in French.


Starting in Kindergarten, Madame Nselel uses the Symtalk system to provide her students with a rapid immersion in French language.


Mr. Gormley illustrates a lesson for his young students. From an early age, MLCA students develop a comfort with maps as a tool to aid their understanding of History unfolding.

## Teacher: Mr. Gormley

## Subject: History \& Geography

This trimester we learned of Bacon's Rebellion, William Penn and his acquisition of Pennsylvania, the Salem witch trials, Washington's boyhood, rules of etiquette, and early adventures surveying. We continued with stories of Franklin's childhood and a discussion of his inventions and effort to acquire virtue. We even attempted to work on our own virtues or qualities that we would wish to see improved in our own lives, although I would guess that the notecards upon which students were to keep track vanished along with their effort... In any case, the similarity in the early lives of Franklin and Washington are noteworthy for many reasons, but I tried to make special note of their efforts at shaping their own lives for the better in the way each saw fit. If there is still a desire for excellence, it seems to have to begin at an early age if it is to come to be.

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> 1765 - Stamp Act


First grade hasn't let the winter weather stop them from constructing forts in the woods around our school. (from left: Ediz Gokkas, Evereft Yu, Sasha Weiner, and Rosie LaRue)

## Teacher: Mr. Chllbert

## Subject: English

Since the fall, the first graders have made great progress in phonics, poetics, and penmanship. Here are the following sounds we have added to our phonetic toolbelt: "ai, ee, r, ng, -ing, ar, or, long a, long o, long e, long i, long $u$, aw, ck, oa, igh, ir." Our class readings have begun growing from a few sentences to long paragraphs. Below, you may find our updated sight words list:
'The, is, see, why, a, go, no, he, she, was, were, her, them, one, two, has, I, me, look, where, there, of, that, are, you, too, for, here,do, does, your, son, daughter, very, good, what, they, seems, some, woman, women, moon, white, off, house, mouse, sometimes, orange, tree, to, like, school, come, from, been, because, yellow, have, small, please, great, build, both, behind, any, when, then, none, says, girl, boy, their, through, most, juice, fruit, father, mother, Mrs. Mr., said, put, whole, brother sister, aunt, uncle, always, birthday, lion, zoo, once, shoe, desert, four, eleven eight, twelve, I'm, you're, he's, she's, it's, we're, they're, isn't, aren't, doesn't, don't,
won't, hasn't, haven't, water, heard, done"
In poetics, we have studied the following terms: 'iambic', 'trohaic', 'stanza', 'verse', 'foot', and 'speaker'. We have nearly memorized our third poem, "The Arrow and the Song", by Henry Wadsworth Longfellow and we are working on our new poem, "Going Downhill on a Bicycle" by Henry Charles Beeching. These poems have brought up rich vocabulary terms such as "swiftly, keen, poised, dart, aught, bliss, shod, slackens, scarce, vale, and toil."

In Penmanship, we have continued our work with italic print. So far we have continued studying the rules: 1) Leave you pencil on the page for as long as possible, 2) have slightly slanted letters, 3) make counter-clockwise circles, 4) create parallel lines, and 5) create consistent space between letters. We have practice every English letter at this point in the year and are able to complete a page of penmanship almost every class.


## Teacher: Mrs. Butterworth Subject: Violin Ensemble

In Violin Ensemble the First Graders work very well as a team. They have mastered a lot of difficult songs and exercises. For now, we spend a big part of the lesson on easy exercises, so that everyone can reach the same level and improve the quality of their sound.


Rosie LaRue and Everett Yu examine a world map using the compass they constructed in Hands on Skills class this spring by magnetizing a needle and floating it on a guitar pic.


First grade starts their day with Cantor Portnoy by singing "The Star Spangled Banner."

## Teacher: Ms. Woo <br> Subject: Storytime

The First Grade finished both parts of Tales from the Odyssey by Mary Pope Osborne, which retells Homer's Odyssey, as well as The lliad from the Classic Starts Series, which retells Homer's lliad. The first graders loved listening to and retelling the journey of brave Odysseus and the fierce battle between the Greeks and the Trojans. We reinforced the story by playing review games and making crafts. Over the past few months, we have built a model battlefield of the Trojan War, armor out of cardboard and brown bags, and a chariot out of paper and a cereal box. I continue to be amazed that the first graders are captivated by stories that are almost 3000 years old!

## Teacher: Dr. Fradkin Subject: Math

The first graders started the second trimester with exploring different methods of adding 2-digit numbers. First they used base-10 blocks to help them with the task; they'd make the two numbers out of the blocks separately, combine the two groups, and finally figure out what number is made by the total set of blocks. They also learned how to use the 100 s chart (a chart with the numbers 1-100 listed in rows of 10) to help them add 2 -digit numbers. Since going down a column adds 10 and going across a row adds 1, adding 23 is equivalent to going 2 steps down and 3 steps across. Finally, they practiced adding the numbers just on paper, by handling the tens and the ones separately and then combining. For example, $46+35$ would be broken up into 40 $+30=70$ and $6+5=11$, and then they'd add 70+11 to find the original sum.

Our second unit of the trimester dealt with some topics in geometry. We talked about polygons by first looking at many examples of polygons and non-polygons and then coming up with a definition (we first did this for squares and triangles). They then worked on problems that involved counting the number of triangles or rectangles in a picture. These were quite tricky as some triangles were made up of others and were not always easy to spot!

After some geometry, the first graders went back to arithmetic and explored the concepts of multiplication and division. They solved many different problems that involved equal sized groups, either counting the total number in all groups for multiplication or dividing into such groups for division. We discussed how skip-counting, something that we have been doing a lot of since the beginning of the year, can be used to solve both multiplication and division problems.

The final topic that the first graders covered during the second trimester was money. The students learned about the different types of coins and bills that are used in the USA. They then solved many problems and riddles involving money and became comfortable with recognizing the coins, as well as putting them together to make various amounts.

## Teacher: Cantor Portnoy Subject: Music Theory

The first and second graders have mastered lines and spaces in the treble and bass clefs, and are now in the process of identifying and manipulating quarter, half and whole notes, and quarter, half and whole rests. With help, they are able to sightsing, and to execute on the keyboard, rhythms in that limited range with great accuracy.

These grades learn one new song every week, and their favorites have been "This Land Is Your Land" and "Lift Every Voice and Sing". Close behind have been "If I Had a Hammer" and "We Shall Overcome"!

## Teacher: Mrs. Butterworth Subject: Studio Art

In an Art studio the First Graders learn how to draw difficult objects by finding simple shapes in those objects. We always try to show some perspective by drawing far away objects higher and smaller, and close by objects bigger, lower and brighter. Our most successful subjects were "The Clown", "Hot Air Balloons", and "Winter Activities". We also drew a portrait, and a still life with the children's violins. The kids practiced drawing some interior spaces using rulers, and even if some lines were not perfectly together, the pictures looked like 3D! Another useful exercise was our "City" where we showed onepoint perspective. It is fun to see how the kids draw objects more and more recognizably and color them more accurately, learning to use their 45 minutes productively.

Teachers: Mrs. Butterworth \& Mrs. Voznaia

## Subject: Piano

From Kindergarten through third grade, every MLCA student has piano twice a week and promises to practice nightly as part of our regular curriculum. Students in Kindergarten and first grade start by learning to recognize notes on the keyboard. We introduce them to playing forte (loud sound) and piano (soft sound), and to the dynamic terms crescendo (gradually louder) and diminuendo (gradually softer). In this way, from the very beginning, the children are made familiar with these terms of music as an art, not just a practice.

Kindergarteners also learn to read sheet music including signs such as a treble or bass clef; time signatures; notes in the music staff; quarter, half and whole notes (1st graders also learn eighth notes); sharp, flat and natural signs; whole and half, quarter, eighth rests; the repeat sign, fermata sign, and slur sign; and some nuances like staccato, legato, and non legato.

Also from the beginning, we work with posture including proper hand and finger position. Similarly, we work from the start on playing a whole piece at the same pace with good rhythm, counting, coordination between right and left hands, and with the appropriate sound. When the students start to play with all the fingers, they continue this work at home every night with playing the numbers of the fingers correctly.

(above) Cantor Portnoy works with his third grade Music Theory class.

## SECOND GRADE

Teacher: Mr. Walter<br>Subject: English

Handwriting: This trimester students finished studying the connections between the various lower case letters in cursive italic (swing-up, diagonal, shoulder, etc.) and went on to the "fancy" capitals that students like making the most (because they are fancy).

Poetry: Poetry is always a highlight of the sec-ond-grade class. Students were able to capture the humor behind Robert Frost's poem "Gathering Leaves," and most understood how the language and rhetoric underscore that humor, such as the use of hyperbole (exaggeration), ploce (repetition of words in a line of poetry with intervening words), rhetorical questions, and anaphora (the repetition of beginning words). In reading the four stanzas below, can you also see how the Frost's use of poetic devices (mentioned above) brings out the speaker's frustration of raking a huge yard of leaves?

But the mountains I raise Elude my embrace, Flowing over my arms
And into my face.
I may load and unload
Again and again Till I fill the whole shed, And what have I then?
Next to nothing for weight;
And since they grew duller
From contact with earth,
Next to nothing for color.
Next to nothing for use.
But a crop is a crop, And who's to say where
The harvest shall stop?

The second graders also memorized and discussed Christina Rossetti's poem "Bitter for Sweet" and reviewed similar poetic devices, including alliteration, epanalepsis and other Greek words that are very hard to pronounce! I was very pleased with the students' work for poetry night and want to thank parents for all of their work in preparing and filming for the video.

Reading, Phonics and Vocabulary: The second graders went over various letter combinations, including the soft c sound, old, ea, ough, oo, le mb, kn, wr, tion, wh, ies, and ss. The reading included selections from literature and history, such as a story about ancient Greek painters; poetry by Isaac Watts and William Wordsworth; mythology; a story about children getting ready for the coming of a king; a translation of one of Jean de La Fontaine's French fables; and material about and by Abraham Lincoln, including an autobiographical letter, a letter to a woman (Mrs. Bixby), whose five sons died in the Civil War, and a humorous anecdote told by Abraham that vents his frustration with his generals.


MLCA third graders still enioy a good harvest of crispy leaves!


MLCA second grader, Agnes Sigelman, showing off her Hebrew work.

## Teacher: Morah Crammer Bar-Tuv Subject: Hebrew

During the trimester we used the TalAm program to promote the students' level in Hebrew. Through this program we are studying during the year two main topics: myself in class and at home, and the Hebrew holidays. They also learned in Hebrew about special dates and Jewish customs, as the Hebrew class is an integral part of the Gur Aryeh program. They learned about the circle of the day by making a personal project, they learned about Rosh Chodesh, Shabbat, Hanukkah, and Tu Beshvat by preparing a play, creating pictures, illustrating a book, and learning songs and stories - all in Hebrew.

The students continued strengthening their understanding of Hebrew grammar by learning the distinction between male and female, singular and plural. They improved in their understanding of question words and instructions. They have expanded their vocabulary and practiced the proper use of verbs both in writing and speech. Students also extended their understanding of Hebrew and vocabulary through games, songs, stories, and creative work in relation to topics we learned.

Students in second grade build on the foundation of their earlier training, continuing that work, but they become more familiar with the concepts of dynamics, piano and forte, and more focused on their sheet music. The most capable students will begin sight reading sheet music in second grade.

In second grade we work on starting from different places in a piece, not only from the beginning. When the second graders practice at home, it is very important that they work on the parts where they have some problem, focusing on finger position and correct counting and rhythm. It is less important for them to play the piece from the beginning to the end automatically and keep score of how many times they did this (although sometimes that's important too, to help them feel the piece as the whole form)! The most important thing is for them to develop the places where they struggle. That struggle helps our students to grow as musicians.

## Teacher: Cantor Portnoy Subject: Judaic Studies

This delightful group undertakes prayer daily, both from an academic and conceptual perspective. We read the prayers with close attention to correct articulation of "Siddur" Hebrew, and we discuss the important lessons behind each prayer. Ths class is very musical, and we learn dozens of songs for each Jewish holiday; this trimester was particularly fun with Chanukah, Tu Bishvat and Purim. Rounding out our time together are many stories and games revolving around Jewish life, and the Portion of the Week.


2-3 Hebrew students Agnes Sigelman and Raphael Sommer are preparing Purim decorations.


Second graders burrow into a snow bank during a sunny reces, looking for all the world like a village of prairie dogs. (from left: Asha Ponnuru, Claire Farwell, June Winfield and Francesco Grigoli)

## Teacher: Mme. Nselel Subject: French

Since my last newsletter students in Second grade have completed 11 lessons of the Symtalk method Book D (Gérard et ses copains). We continue to focus on speaking and listening skills as well as spelling. Students use their own white board to practice spelling words before writing them again in their book.

These lessons introduced/reviewed school supplies, familiar objects, foods, different types of stores, being thirsty/hungry/cold/hot, etc...

Many new verbs provided opportunities for practicing interrogative sentences and their answers. Students also get to use negative sentences every time a new verb is introduced or reviewed. Verbs practiced since November were to have, to need, to write, to read, to work, to use, to do/make, to take, to come. In addition to using those when describing what the characters from the book are doing, I dialogue more and more with the stu-
dent by asking him or her in French the same questions (Do you have a backpack? Do you work at home? Do you make crêpes ?...)

We added another fable to our "repertoire" : La Grenouille qui veut se faire aussi grosse que le Boeuf by Jean de La Fontaine. I'm very pleased with how much the class was able to memorize and recite.

In addition to our regular 4 weekly classes, I get to see the students in French Enrichment. This is an opportunity for reinforcing the vocabulary learned through games and activities such as I Spy, Pictionnary, Memory game, words search, hangman etc.. I added a "dice game" where each student rolls his own dice and each number is a category (animal/color/verb/place/object..) they need to find a word for. Students also get a chance to illustrate the lyrics of the songs learned the past weeks.

## Teacher: Mr. Darer <br> Subject: Science

In 2nd grade Science, we started out the trimester by using the anchor phenomena of the Atacama Desert to study air pressure, the water cycle, weather patterns, and eventually learn about rain shadow deserts. The students were trying to figure out why the Atacama Desert in Chile has so little precipitation yet on the other side of the Andes there is a lot of precipitation. And after we finished discussing this topic, they were able to solve this mystery! We then built a barometer using a mason jar, balloon, straw, and tape to help us predict if it will be sunny or rainy the following day.

From here, we began a unit on Earth and Space Science. The students first learned how to make and read maps. We looked at maps of cities, nature preserves, and world maps and then practiced making maps of the classroom making sure each map had a key and compass directions so they would actually be useful.

Next, we explored the phenomena of how shadows change throughout the day and the sun's apparent path in the sky. To help reinforce what we learned, we played several games to guess what time of day it must be depending on a shadow's length and orientation. From here, we discussed day/night cycle of earth's rotation as well as its orbit around the sun. The students were able to figure out how one might be able to tell time from the sun and the shadow an object casts. Next, we talked about why there are different time zones and then answered problems together such as "Imagine you're in New Orleans, and your friend in Denver asked you to call her at 4:00 pm Mountain time. What time will it be in New Orleans when you call?"

In continuing our exploration of cycles in Earth and Space Science, we're now discussing our observations of the apparent changing shape of the moon and will be learning about moon phases next.

We also had a birthday themed class where we tested what liquids (oil, water, vinegar) will dissolve skittles the fastest, blew up a balloon using only yeast, sugar, and water, learned about invisible ink made from lemon juice, and blew out a candle using carbon dioxide produced from a vinegar-baking soda reaction.

## Teacher: Mr. Darer Subject: Hands on Skills

In Hands On Skills class, we have been practicing identifying animal footprints around the school. We discussed characteristics of the animal tracks that can help us tell them apart. We talked about common similarities among different tracks as well as some subtle differences. In general, the students learned how to identify deer, rabbit, bear, fox, coyote, bobcat, and mountain lion tracks.

We set up a wildlife trail camera in the woods and have been enjoying watching the videos of foxes, deer, rabbits, birds, racoons, and squirrels that inhabit the discovery trail woods!

The students have also been continuing to review the birds they learned last trimester: downy woodpecker, white breasted nuthatch, tufted titmouse, robin, cardinal, blue jay, house sparrow, bald eagle, crow, black capped chickadee, and turkey vulture.

The students have also been learning how to tie different types of knots. So far, they learned the overhand, figure eight, bowline, square knot, and sheet bend. We also discussed the uses for these types of knots. Stopper knots (overhand, figure eight) are tied at the end of a rope to prevent the rope from slipping through a small opening. Bends (square knot, sheet bend) are used to tie two ropes together to form one longer piece of rope. And Loops (bowline) have many practical uses.


A busy fox makes a brisk get away with his supper, caught on film on our Discovery Trail!


Mrs. Butterworth, warming up with second grade Violin Ensemble

## Teacher: Mrs. Butterworth Subject: Violin Ensemble

In Violin Ensemble, the Second Graders work well as a team. They have mastered a few songs and exercises with low and high second finger, and they use slurs. They play one by one with accompaniment as well, and we are almost ready to record a video!

## Teacher: Ms. Woo Subject: Christian Studies

The K/2 Christian Studies class has had so much fun learning about the Bible, After studying the main stories and characters in Genesis and Exodus, we continved through our survey of the Bible with stories from the books Joshua, Judges, and 1 and 2 Samuel. To supplement the Bible lesson, the students have also been memorizing the books of the bible, making crafts, and playing review games. Some activities we completed include building the tabernacle, making a paper torch for the story of Gideon, and creating David's "slingshot" out of popsicle sticks and a pipe cleaner. I thank the parents for getting the students onto zoom twice a week for the class!

Teacher: Dr. Fradkin Subject: Math

After finishing up the chapter on addition, the second grade students spent most of the trimester working on different strategies for doing 2- and 3-digit subtraction. First they learned the method of subtracting the hundreds, the tens and the ones separately, regrouping a ten or a hundred if necessary. Then they practiced solving subtraction problems by turning it into an addition problem with a missing addend (eg, to solve 120-85, figure out how much you need to add to 85 to get 120). A third method involved subtracting a little extra to make the subtraction easier and then adding back the extra (72-38 = 72-40+2), and a related method of shifting the difference (72-38=74-40). We also spent a lot of time discussing which problems are best approached by which methods.

This trimester, the second graders also started actively practicing their mental math skills by having regular mental math quizzes. These include problems not only on the topic that the students are currently covering, but all of the arithmetic topics covered so far.


## Teacher: Mr. Gormley Subject: History \& Geography

This trimester, second grade has been learning about the Phoenicians and all of their trades as well as Queen Dido's mythological founding of Carthage. We didn't cut a bull's hide into tiny strips as she had, but we cut paper around the edges to see who could make the longest single strip. We learned of the Minoans and their mysterious disappearance as well as the myths of Minos, Daidalos, Theseus, and the Minotaur. From there we began our discussion on the ancient Greeks prior to their dark ages after the invasion of the so-called sea peoples. The children were so eager to hear of the story of the Iliad and the Odyssey, we spent a little time reading directly from portions of both of those, noting the findings of Shliemann along the way.

We'll continue with Greece for a time, although not with the same depth that they'll get next year. After that, we'll move on to an overview of ancient Rome.

The children are also working on memorizing several key dates. Feel free to quiz them on the following:

7000 B.C. (roughly) - nomads begin to settle in Mesopotamia

3000 B.C. (roughly) - Upper and Lower Egypt were united by King Narmer

2334 B.C. - Sargon of Akkad usurps power at Kish.
1792 B.C. - Hammurabi's rule of Babylon begins.
1710 B.C. - Middle Kingdom of Egypt ends
1570 B.C. - New Kingdom of Egypt begins
1550 B.C. - Hyksos expelled from Egypt
1200 B.C. - Phoenician civilization begins to rise to prominence

## Teacher: Mrs. Butterworth <br> Subject: Studio Art

In Art Studio the second graders are learning how to draw difficult objects in an easy way by finding simple shapes in those objects.

We always try to show some perspective by drawing far away objects higher and smaller, and close by objects bigger, lower and brighter. Our most successful subjects were "The Clown", "Hot Air Balloons", and "Winter Activities". We also drew a portrait, and a still life with the children's violins. We had fun drawing illustrations to "The Brave Tin Soldier" and "Tom Sawyer".

One of the most exciting topics is interior spaces in frontal perspective; we drew a living room, a dining room and a subway station. The kids were using rulers, and even if some lines were not perfectly together, the pictures looked like 3D! It is exciting to see how the kids draw objects more and more recognizably and color them more accurately, learning to use their 45 minutes productively.

Proud artists June Winfield and Asha Ponnuru pose with their still life drawings of violins



## Teacher: Cantor Portnoy Subject: Music Theory

The second and graders have mastered lines and spaces in the treble and bass clefs, and are now in the process of identifying and manipulating quarter, half and whole notes, and quarter, half and whole rests. With help, they are able to sightsing, and to execute on the keyboard, rhythms in that limited range with great accuracy.

These grades learn one new song every week, and their favorites have been "This Land Is Your Land" and "Lift Every Voice and Sing". Close behind have been "If I Had a Hammer" and "We Shall Overcome"!

## Teacher: Ms. Woo <br> Subject: Storytime

The Second Graders finished reading Stuart Little by E.B. White as well as Mr. Popper's Penguins by Richard and Florence Atwater. They have greatly enjoyed listening to these stories as well as participating in activities such as review games and themed crafts. Over the past month, we have made penguins out of paper cups, learned many penguin facts, and had a 'penguin party' to celebrate the end of the novel. Recently, we have jumped into Mary Poppins by P. L. Travers and the students have loved getting to know this magical nanny!

## THIRD GRADE



## Teacher: Dr. Fradkin Subject: Math

(clockwise from top) Third graders Fausto Ferreira, Rio Singh, Zoe Fradkin and Raphael Sommer display snowflakes they made in Math class. Next year they will delve deeper into the principles of rotational symmetry.

The third grade math class started off the trimester with exploring multiplication. The students practiced multiplying numbers up to 10 by solving a variety of problems and puzzles. They also learned to multiply numbers that end in one or more zero. We then discussed the commutative and associative properties of multiplication and how to use them to simplify certain computations.

After becoming comfortable with single-digit multiplication, the third graders learned about the distributive property. The main focus was on exploring how one can use the property to help with certain more complicated computations. The students quickly became comfortable with breaking up $18 \times 7$ into $10 \times 7$ and $8 \times 7$ and then adding the partial products. However, they had a somewhat harder time seeing how to use the distributive property in the other direction. For example, in order to compute how much money I have if I have 19 quarters and 25
pennies, it is much more work to figure out $19 \times 25$ and then add 25 than just notice that 25 pennies gives us another quarter and so the answer is $20 \times 25$ cents or $\$ 5.00$. Similarly, when we're computing $17 \times 8+17 \times 12$, we want to simplify our computation by using the distributive property and rewriting the computation as $17 \times 20$.

The final unit of the trimester was about exploring the concept of variables. The students simplified and evaluated many expressions involving variables, solved equations, and even some simple systems of two equations. They worked on problems that involved translating words into "math language". An example is, "Nine-ty-seven is fifty-nine more than the number of pandakeets. How many pandakeets are there?" They also worked on puzzles and problems involving balance scales.


The third grade wishes a Happy Birthday to Mozart, complete with cupcakes, balloons and party hats!

## Teacher: Cantor Portnoy Subject: Music Theory

Doubtless one of the highlights of my year at MLCA was to witness more than one student in this class come to the piano and, with the tools they had learned from sightsinging, play a portion of "My Country 'Tis of Thee" completely by ear. The class has been doing solfeggio for some months now, but to see it applied in this way was truly thrilling. Based on their progress, I would not be surprised if, a year or two from now, some will be able to pick up a piece of sheet music and sing much of it without reference to a keyboard or any instrument!

The class has learned many songs for the holiday season, and then patriotic and freedom songs. We studied the origin of "The Star-Spangled Banner", and every student can sing "My Country 'Tis of Thee" with solfeggio. We recently began a month of love songs to celebrate Valentine's Day.

The big highlight of this past marking period was Mozart's 265th birthday. With help, the students sightsang one of the composer's most famous melodies before devouring cupcakes in record time.

Teachers: Mrs. Butterworth \& Mrs. Voznaia

## Subject: Piano

In third grade, all the foundational work of thinking about their music, developing proper form and muscle memory in their fingers is brought to the big problem of really playing music with understanding and feeling, even when a piece is encountered for the first time.

This year we introduce new terms like accent, tenuto (hold) and marcato (marked). We continue to work on sound and hands position, but give more attention to coordination between right and left hand, and to different nuances in right and left ( like for example, "legato in right and non legato in left"). All of this contributes to flexible moving in the phrases and melodies and developing a musical ear as we work on details and add dynamics.

Third graders read the music sheets and do all of the above, adding sixteenth notes to their repertoire. The most capable students work more with the sound and musical technical skills, but everyone works on scales, arpeggios and chords in a different keys, playing studies, and increasing their pace. After third grade, with teacher approval individual students may continue piano as part of their regular MLCA education.

## Teacher: Mr. Chilbert

Subject: English

Phonics and Spelling: We have covered seven review lessons of phonics sounds since the beginning of the year. Each lesson has included reading practice with each of these sounds. We have also encountered informative reading selections about ancient people and characters such as Aesop, Socrates, Alexander the Great, and Damocles. We have begun our first round of spelling practice and quizzes. As the students may have shared with you at home, I give them several exercises to choose from in order to fulfill their quota of spelling practice.

Poetry and Poetics: With Rossetti, Tennyson, and Stevenson to help us, we have given our attention to the many poetic elements apparent in great poetry. After memorizing our class poems, we discuss where things like "alliteration, repetition, and personification arise." Together we have memorized "Hunting Song of the Seeonee Pack," by Rudyard Kipling and "The Owl," by Alfred Tennyson. Soon, I will assign new individual poems for the students to begin memorizing for the Spring Poetry Night.

Grammar and Punctuation: We have spent a great deal of time studying the rules of quotation marks. By the end of winter, the students should be able to write a dia-logue-heavy paragraph with the correct usage of commas, quotation marks, capitalization, and end marks.

Penmanship: We have continued our working in italic cursive handwriting. Students who are new to this find that it is a simple and rewarding way of transitioning from italic print. We will continue working on the various connections required of students who will be writing a lot in class this year.

Story Time: I am lucky enough to have one block of Story time with the Third Graders on Thursdays. We have been exploring the vast mythology of the Norsemen. We are using D'Aulaire's Norse Myths in class. We have learned about the creation of the universe, gods, and realms. We have learned that midgard is protected by the Aesir gods from the treacherous ice giants from Nifelheim and that valiant mortal warriors are taken up to Asgard to enjoy an eternal feast. We have also learned that, unlike any other mythology from Western

Civilization, the Aesir Gods are mortal and are in constant expectation of their own deaths. It has been a delight to dive into this dark, but rich mythological world with the students.

Each week, every MLCA student receives three periods of instruction in the techniques of classical drawing. This shading exercise of geometric solids was produced by third grader Alex Weinstein.


## Teacher: Morah Crammer Bar-Tuv Subject: Hebrew

During the trimester we used the TalAm program to promote the students' level in Hebrew. Through this program we are studying during the year two main topics: myself in class and at home, and the Hebrew holidays. They also learned in Hebrew about special dates and Jewish customs, as the Hebrew class is an integral part of the Gur Aryeh program. They learned about the circle of the day by making a personal project, they learned about Rosh Chodesh, Shabbat, Hanukkah, and Tu Beshvat by preparing a play, creating pictures, illustrating a book, and learning songs and stories - all in Hebrew.

The students continued strengthening their understanding of Hebrew grammar by learning the distinction between male and female, singular and plural. They improved in their understanding of question words and instructions. They have expanded their vocabulary and practiced the proper use of verbs both in writing and speech. Students also extended their understanding of Hebrew and vocabulary through games, songs, stories, and creative work in relation to topics we learned.

## Teacher: Mme. Nselel

## Subject: French

Since my previous newsletter, students in Third grade have completed 7 lessons of the Symtalk method Book E (Le Français en images). Like in previous years, students work on their speaking, listening and writing/spelling skills equally. The differences are the length and structure of the sentences: longer and more complex. For instance, they practice using "parce que" (because) and "mais" (but) to explain or nuance a character's action (or when they are talking about themselves). They also just learned to make hypothetical sentences using "si" (if).

New vocabulary learned this trimester includes clothing and accessories, school supplies, modes of transportation, etc... Students have memorized or reviewed 15 verbs, many of them with irregular conjugation (avoir, savoir, devoir, comprendre). I regularly quiz them on the memorization of these verbs. We recently worked on how to say the time in French (quelle heure est-il?).

We added another poem to our "repertoire" : Heureux qui comme Ulysse; a beautiful alexandrine by Joa-

chim Du Bellay who spent many years in prestigious Rome and was longing for the simplicity and tranquility of his rural birthplace in France.

In addition to our regular 4 weekly classes, I get to see the students in French Enrichment once a week. This is an opportunity for reinforcing the vocabulary learned through games and activities such as Memory game, words search, hangman, crossword puzzles, etc.. This trimester I added the game of "I'intrus": I give the class a list of 4 words and they need to find the one that doesn' $\dagger$ belong with the rest. Another recent activity was to make a sentence by putting words back in the correct order. Students also get a chance to illustrate the lyrics of the songs/poem learned the past weeks. Once they are finished with their drawing, they have to describe it to the class.

Another part of Enrichment is reviewing what I call "class routines" such as how to say in French "can I go to the bathroom?", "can I drink some water?", " can I sharpen my pencil?", etc...

(left) Studying aerodynamics with paper planes has been a highlight of third grade Science this year. (above) Ms. Woo is introducing third graders to Jean Craighead George's environmental classic, My Side of the Mountain during storytime.


This year's Covid protocols have mandated separate recess periods for each grade, and the third grade has risen to the occasion, creating their own adventures in the school yard. Pictured from left: Evelyn Carpenter, Alex Weinstein, Zoe Fradkin, Fausto Ferreira, Alexander Bull, Raphael Sommer, Nadiya Posner and Elijah Mencin

## Teacher: Mrs. Butterworth Subject: Violin Ensemble

In Violin Ensemble the Third Grade is one class that has two groups: hard workers and fun makers. The lack of discipline in this class slows us down. Nevertheless, all of them tested well, showing an understanding of their songs. They can play one by one with accompaniment and are almost ready to record video. Now they are working on "Piece" by Hayden and "Slovak Polka", songs that require high and low second finger, slurs and syncope.

## Teacher: Ms. Woo Subject: Storytime

The Third Graders have finished The Voyages of Doctor Dolittle by Hugh Lofting. The third graders have been greatly invested in this story of the animal-lan-guage-speaking Doctor and his adventures to Spidermonkey Island. Along the way, we have been reinforcing the story by playing review games, in which I ask the students questions about what happened in the story. For a final project, I have asked the students to create a book jacket for the book, on which they have been working hard. I am very glad the students have enjoyed the story and I look forward to reading another book with them!

## Teacher: Dr. Nagelberg Subject: Science

For our third graders, the pull of the airplane has remained strong, and we are continuing to make our way through Quentin Reynolds' The Wright Brothers: Pioneers of American Aviation in class. Reynolds' telling of the Wright brothers' story highlights the influence of their mother, Susan Wright, on their work, and gives her the evocative quote, "If you get it right on paper, it'll be right when you build it." While in the book these words express the importance of planning in mechanical work and engineering, for our class, they may be interpreted differently: the third graders have become masters at literally constructing their airplanes out of paper.

(above) Elijah Mencin, Nadiya Posner and Eva Mencin check on the progress of the Hands on Skills class' maple syrup collection.

## Teacher: Mr. Darer

## Subject: Hands on Skills

In Hands On Skills class, we have been learning to identify constellations in the night sky. We started out with Orion and then using Orion as a reference point, we learned how to identify Gemini, Taurus, Canis Major, and Auriga. We also learned how to use the big dipper in the constellation Ursa Major to find the North Star (in the constellation Ursa Minor).

We recently began learning how to make maple syrup from sugar maple trees and started this process on campus. Late winter (January into February) is the best time of year to tap the trees since the sap flows when daytime temperatures are above freezing and nighttime temperatures are below freezing. We drilled a small hole in the trees, inserted a spile (spout) and hung our sap buckets. Each week we venture to the trees to collect our sap to bring inside to boil down on the stove in large pots. Most of the water in the sap evaporates while the sugar remains behind. It takes about thirty-five gallons of maple sap to produce one gallon of maple syrup. So far this year the students collected about four gallons of sap.

We have also been watching wildlife videos recorded from the trail camera in the discovery trail woods by school. In these videos, the students have seen foxes, deer, rabbits, birds, racoons, and squirrels that inhabit the discovery trail woods! Next we will start practicing identifying animal footprints around the school and discuss characteristics of the animal tracks that can help us tell them apart.

The students also have been excited to see TrailCam evidence of the wild animals who inhabit "their" woods after school hours.


## Teacher: Cantor Portnoy Subject: Judaic Studies

Grades 2-4 Jewish Studies. This delightful group undertakes prayer daily, both from an academic and conceptual perspective. We read the prayers with close attention to correct articulation of "Siddur" Hebrew, and we discuss the important lessons behind each prayer. Ths class is very musical, and we learn dozens of songs for each Jewish holiday; this trimester was particularly fun with Chanukah, Tu Bishvat and Purim. Rounding out our time together are many stories and games revolving around Jewish life, and the Portion of the Week.

## Teacher: Ms. Woo

## Subject: Christian Studies

The Third Grade Christian Studies class has been studying stories from the book of Mark, which chronicles the life of Jesus Christ. The students have learned many stories of Jesus' miracles, teaching, and love for others. To supplement the Bible lesson, the students have also been memorizing the books of the New Testament (using a song!), making crafts, and playing review games. In December, we had a Christmas party. I am always grateful for the time we get to spend together!


## Teacher: Mr. Gormley Subject: History \& Geography

So far this trimester, we've spent a fair amount of time on the Persians, following Herodotus who seems to want us to know how mighty an empire they had, perhaps so that we may see the eventual Greek victory as all the more outstanding. Whatever the case, it has provided us with a number of opportunities to contrast the Greek way of life with that of the Persians. The backdrop to Herodotus' whole account is the question Croesus poses to Solon, to wit, who is the most fortunate man? A reader is confronted with alternative after alternative, but whenever one seems to look like a good model, we find that misfortune strikes time and again, reminding us of Solon's advice to always look to the end in such matters. As we enter the Persian Wars in our narrative, perhaps we'll find one who leads the fortunate life of which Croesus inquired.

After the Persian Wars, we'll move along into the Peloponnesian Wars and end the year with Alexander the Great, relying on Thucydides, Xenophon, and Plutarch for their accounts.
(left) Croesus on the pyre, Attic red-figure amphora, 500-490 BC, Louvre

## FOURTH GRADE



## Teacher: Mr. Cialini Subject: Latin

In the second trimester we concluded our review of fundamental concepts of English grammar and proceeded to Latin itself. Now with a working vocabulary of just over one hundred Latin words, the 4th grade can translate basic English sentences into Latin, and can themselves construct simple Latin sentences-an achievement of which they are particularly proud. This trimester we learned the following:

Latin verbs (Present, indicative of the 1 st and 2 nd conjugation)

Latin nouns of the 1 st and 2 nd declensions
Latin sentences: subject and predicate
Translation of English verbs into Latin
Interrogative sentences
Latin numbers (1-10)
Direct objects (In English and Latin)
Word order in English and Latin
Latin adjectives
Latin adverbs

English and Latin prepositions
Object of the preposition
Prepositional phrases
English \& Latin pronouns in 1 st, 2nd, and 3rd person Persons of the verb and Latin verb endings
Conjunctions and Interjections
The irregular verb "to be"
Transitive and intransitive verbs
We had two tests this trimester; one focused on translating Latin sentences into English, the other focused on Latin pronouns. To strengthen the students' command of vocabulary, we occasionally have a Latin Bee. 4th grade takes these competitions very seriously, and Bees are frequently requested. The class has also begun accustoming their ears to the language through the reading of Lingua Latina, a book entirely in Latin designed to teach the language through simple narratives. This, too, has been a popular request.

## Teacher: Mr. Gormley

## Subject: History and Geography

This trimester we learned of the emperor Justinian and his empress Theodora. We read from Prokopios' account from his work The Wars of Justinian and a redacted version of his Secret History. His account in the former seems to laud the leadership of Justinian and his top general Belisarios, yet interestingly, his account in the latter speaks of nothing but their scandals, murders, and corruption. The interesting part for us was to try to look for evidence in favor or against either of those depictions. In general, Prokopios' Secret History, although it begins with believable accounts of the deeds of the royal couple, it ends with implausible claims, which works for our purposes to learn to discern the difference.

From there we've moved on to Gregory of Tours account of the early Franks during the Merovingian dynasty. HIs style is notably similar to Prokopios. We'll move on to Einhard and Notker the Stammerer's account of Charlemagne in short order. After that we'll begin with the age of Vikings and the conflict on the British Isles with Alfred the Great.

Contemporary tile mosaic portraits of Emperor Justinian and Empress Theodora in the Church of San Vitale, Ravenna Italy.


## Teacher: Cantor Portnoy Subject: History of Art

Following an examination of Egyptian art and the norms that governed its design, we spent time on Minoan art and culture. We learned that the art of any civilization is often rooted in the folkways and myths commonly shared in that particular venue. This is certainly true of the magnificent art of Crete, which represents a marked departure from the highly stylized art of Egypt. For example, Its preoccupation with the bull as a sort of national symbol is directly related to the myth of the Minotaur. Since whatever painting that may have existed has disintegrated or been destroyed, we saw the expressive creativity of Minoan art in its architecture, its pottery and its frescoes.

We also spent some time on geography and art terminology. The students mapped the major countries of North Africa and Southern Europe, and discussed the importance of water as a predictor of national greatness. We learned the terms "negative space", "fresco" and "mural".

Many members of this class have demonstrated particular acumen in identifying artistic features of works we have examined, and many more seem to be developing their note-taking skills. They are a pleasure to teach and to learn from.


## Teacher: Dr. Fradkin

## Subject: Math

The fourth grade math class started off the second trimester with exploring some concepts in geometry. The first half of the unit was devoted to the study of angles. Students learned to measure and draw angles using a protractor. They also discovered that the degrees of the angles in a triangle add up to 180 and solved problems where they had to use this fact. The second half of the unit was devoted to the study of symmetry. Students learned about reflectional and rotational symmetry and worked on some tricky problems involving both. For example, they classified all the letters in the English alphabet according to the types of symmetries that they had.

The second unit of the trimester was devoted to multiplication. However, this time around the students delved much deeper into the concept than they had last year. The fourth graders learned how to use the distributive property to multiply multi-digit numbers and solved many word problems involving the concept. They also worked on tricky puzzles that involved missing digits in the factors and the products.

The final unit of the trimester was all about playing with exponents. In addition to performing computations with exponents, students solved problems such as: "A biffo is a fuzzy creature that every midnight turns into two biffos identical to the original. Alex brought home one biffo on Monday morning. How many biffos will he have the following Monday? What about the Monday after that?" After solving such problems, students get a good sense for exponential growth. They also learned about binary numbers and the role that exponents play in any place-value number system.

## Teacher: Cantor Portnoy Subject: Judaic Studies

Grades 2-4 Jewish Studies. This delightful group undertakes prayer daily, both from an academic and conceptual perspective. We read the prayers with close attention to correct articulation of "Siddur" Hebrew, and we discuss the important lessons behind each prayer. Ths class is very musical, and we learn dozens of songs for each Jewish holiday; this trimester was particularly fun with Chanukah, Tu Bishvat and Purim. Rounding out our time together are many stories and games revolving around Jewish life, and the Portion of the Week.


Rachel Sommer, Alana Hegde and Abigail Vuernick work on the fourth grade's snow volcano.

## Teacher: Dr. Nagelberg Subject: Science

In fourth grade this trimester, we are using Science Comics: Rocks and Minerals: Geology from Caverns to the Cosmos by Andy Hirsch as a jumping off point for diving more deeply into topics in chemistry. Students have explored the concepts of mass, volume, density, heat and pressure, and are beginning to relate these concepts to their exploration of the periodic table. Most recently we have turned our attention to "explosions" caused by the rapid escape of carbon dioxide gas--first in adding Mentos to Diet Coke, and later in adding vinegar to baking soda to make a snow volcano.

## Teacher: M. Portier Subject: French

The 4th grade French class has successfully completed the short story, Rémi et le Mystère de St-Péray, the story of two young detectives zho discover some illegal activities in the small village. We explored the vocabulary of wayfinding and specific expressions from the French countryside. At the same time, we studied the near future and the near past verb tenses, the pronominal verbs, and they learned a poem by Victor Hugo about the mourning of his daughter. Through our studying a tale of Perrault, the class is now developing their skills of description, with a focus on pictorial representation.

Poetry and Poetics: The fourth graders memorized Robert Frost's "The Pasture" this semester, a poem that really makes absolutely no sense unless one reads it in its original context. The poem originally appeared as an introduction to From North of Boston, published in 1915. In the poem, the speaker invites his readers to "go out and clean the pasture spring"-something that the fourth graders and I do not want to do on a cold December morning. However, the invitation really is for us to go with Frost on a poetic excursion, which he intends to be as natural and common as a farmhand task!

In addition to talking about Frost's biography and love for poetry, and the fact that a college advisor of mine had been taught by Frost (He regaled me with at least one anecdote of a class which he attended outdoors: Frost sat on a rock and just read his poetry while he and the rest of the class listened.), we discussed the literary devices of the poem. We also memorized poetry by Alfred Tennyson and John Greenleaf Whittier. Students also studied poetics presented systematically in their textbook, reviewing such topics as scansion, two-syllable and three-syllable feet, catalectic and acatalectic lines, and stanza forms.

Literature and Reading: The fourth grade class read works by John Bunyan, Sarah Orne Jewett, Russel Conwell, and Benjamin Franklin, and read an adaptation of King Lear. The students had a lot of background knowledge to offer regarding the story of King Lear, as our literature course nicely dovetailed with Mr. Gormley's history course. Before they read the adapted Lear, they were already familiar with, for example, Geoffrey of Monmouth's history of the Celtic king and therefore were able to compare Shakespeare's tragic rendering with the supposed history written byMonmouth. After reading Lear, we discussed the theme of domestic affections, and focused on Lear's relationship with his eldest two daughters. Because of his volatile temper and favoring Cordelia over her older sisters, Lear was at least partly responsible for his poor relationship with eldest two daughters, a relationship that brings about the tragic ending of the story. The class then discussed the Aristotelian definition of the flawed tragic hero-the protagonist of tragedy that is neither completely innocent nor completely villainous-and applied that definition
to Lear. Lear himself says he was "more sinned against than sinning," a statement that reflects the grand theme of Greek tragedy, such as Sophocles' Oedipus Rex.

Writing: Students wrote extensively this trimester, writing a dialog, an expository composition and a persuasive essay. At this point, the focus of the writing is organization and structure, and although writing might seem to them rather formulaic now, these aspects of writing are so essential in organizing their thoughts. Soon we will expand our class discussions to more subtle, and I think more interesting, aspects of writing.

Grammar: This trimester, the students covered voice, subjective mood, noun and subject-verb agreement, personal pronouns, adjectives, adverbs, pronoun agreement, prepositions, coordinating conjunctions and subordinating conjunctions.


Still life by fifth grader, Emilio Chissell. Every MLCA student receives several periods of fine arts instruction each week.

## Teacher: Mrs. Butterworth Subject: Violin Ensemble

In Violin Ensemble, the Fourth Graders work well as a team. They have a large repertoire of songs with different finger patterns, slurs and syncope. Sometimes, we repeat old songs to improve position, sound and intonation. We recently started the duet, "Take Five", for which the students learn both parts, easy and more complicated.


Students maintain their Art History notes in special Truth, Beauty and Goodness journals. Here, 5th grader Matteo Posner and Art History teacher Jessica Todd Harper display his sketch and notes on The Last Supper.

## Teacher: Mrs. Ter-Saakov Subject: Math

5th grade students have worked through the whole book of Beast Academy 5A in the course of these two months. Students studied 3D Solids, exploring pyramids, prisms, and Platonic solids. Through the sequence of accessible questions students were led to discover the formulas for the number of vertices, faces and edges in pyramids and prisms. Students used their previous knowledge of plane geometry to find the surface area and volume of various shapes. We also revisited Integers on a more advanced level, with emphasis on the order of operations. Then followed the chapter on Expressions and Equations. Students were introduced to the vocabulary of algebra, such as "like terms". We'll revisit this topic many times, as these will be our main tools in math for years to come. Students are now starting their study of Statistics.

## Teacher: Mrs. Harper Subject: History of Art

Building on our earlier study of proto-Renaissance artists, we are now entering the territory of the High Renaissance starting with Leonardo da Vinci. The children have drawn The Last Supper and I have been reading to them Diane Stanley's book about Leonardo's life. A great inventor and scientist who designed a wide variety of objects, Leonardo's fascinating life has been a fun way to enter a discussion about the re-invention of linear perspective, the importance of math and other ideas from Classical Antiquity. The children noticed right away that the figures in The Last Supper have an individuality that is different from the static figures of the medieval period, and it is a joy to see the expressiveness of these characters conveyed in the children's copies in their blue books. We have continued to explore the purpose of art and how to talk about it in terms of its value. How do we evaluate what is depicted in these great paintings and how do we know that it is done well? By understanding the cultural and textual contexts in which they were created, we better understand their worth.

Poetry and Poetics: This trimester the students finished memorizing Blake's poem "The Echoing Green," and while we did our class memory work, I went over poetics and discussed the poet's biography by telling some interesting anecdotes. These anecdotes basically put Blake in the context of other Romantic poets who were "visionaries." One anecdote that I find most engaging is the time that he ran home to tell his father-a practical, level-headed man, who was a hosier-that he saw angels sitting in a tree. His father threatened to punish him for telling lies, but Blake actually believed that he saw angels sitting in a tree. Throughout his life, William Blake constantly was conversing with invisible entities (which, he said, gave him ideas for his art and poetry). Blake was accused of being mad, but he responded by saying something to this effect: Who is mad-the one who sees angels sitting in a tree or a society that endangers children's lives in factories?

We also went over the poetry of William Wordsworth and are currently going over Isaac Watts, who, in fact, had an influence on Blake's poetry, which is childlike, like Watts' Divine and Moral Songs for Children. One lines of the Wordsworth poem we just memorized read: "The cattle are grazing/Their heads never raising/There are forty feeding like one," but from Dorothy

Wordsoworth's journal entry we know that Wordsworth counted wrong, or at least was using poetic license. You can ask your child how many cows Wordsworth actually saw grazing in the pasture? He (or she) should be able to answer you!

Literature and Reading: I am so pleased to say that the students loved going over one of my favorite story poems-Tennyson's Enoch Arden. The poem's appeal and pathos come from the poet's use of literary devices such as dramatic irony, situational irony (reversal), recognition and foreshadowing. We read the work in class, and when the class ended but the story remained unfinished, the students all cried aloud, "Aw!" Their reaction was to me evidence that the great classics still speak powerfully to us today despite the gap of time. Wordsworth said that great literature is "man speaking to man," and as long as man has a heart to feel, the classics will continue to speak to younger people.

Grammar, Spelling and Writing: In grammar students are currently studying tense and the progressive form. Each week students are quizzed on a spelling list. Students wrote a comparison this trimester, a ballad, a book report, a persuasive essay, and are currently working on a mock epic.


Enoch Arden by George Goodwin Kilburne, watercolor on paper, 1924.


Fifth graders Emilio Chissell, Anne Martindale and Tiago Ferreira burrow into the snow bank outside their classroom window.

## Teacher: Mr. Cialini Subject: Latin

Despite the long break in the second trimester in addition to the growing difficulty of the material fifth grade Latin has continued to make progress. While in the first trimester the students were able to move quickly through the book's initial chapters, in the second we have been compelled to slow the pace as the grammar is now more demanding. Students have also struggled to retain new, unfamiliar vocabulary. Thus, we have spent more time chanting declension endings, verb endings, principal parts of verbs, and reviewing grammar and vocabulary. Despite slowing down, we remain on track to complete our goal of 20 chapters this year.

The class continues to enjoy translating. They remain lively (especially in the morning) and enthusiastic about learning the language. Like last trimester, we have a quiz each chapter and a test every four chapters.

This trimester we learned the following:
-er adjectives of the first and second declension
Imperfect and future of Sum
Ablative of Means
Adverbs
The formation of adverbs from adjectives of the first and second declension
Principal parts of verbs
Interrogative particles
The Perfect tense

## Teacher: Dr. Nagelberg Subject: Science

In fifth grade we have also been influenced by the Science Comics series, reading Science Comics: Dogs: From Predator to Protector by Andy Hirsch, which we most recently used as a jumping off point for a review of Mendelian genetics and exploration of the genetics of blood type. Students have also begun writing and illustrating their own Science Comics, each exploring a topic of their choice. Currently, we are working on topics in engineering, with a recent focus on the design, construction and analysis of simple machines.

## Teacher: Mrs. Butterworth Subject: Violin Ensemble

In Violin Ensemble, the Fifth Graders work well as a team. For now we are repeating easy exercises and songs so that everyone can reach the same level and improve the quality of their sound. Also, we are preparing the trio "Take Five" for 2 violins and piano. All the students have to learn both the easy and the more complicated violin parts, and already we have heard some compliments!

## Teacher: M. Portier

## Subject: French

The 5th grade French class has been following the Count of Monte Cristo in his dramatic escape from prison, discovering a famous treasure from the Borgia era, saving a young man from a terrible Italian bandit in Venice, and finally making plans to catch the people who betrayed him in his young age. In following this story, the class has been learning to use relative pronouns, the conjugations of the imperative, and many other grammatical details. Reading this book has been an opportunity for each scholar to learn more vocabulary and practice their ability to respond to various questions in French. We are also studying a poem by Dumas that was certainly an inspiration for the novel.


The Count of Monte Cristo was originally serialized from 1844 to 1846. This antique cover is from the end of that period.


## Teacher: Mr. Cialini Subject: History \& Geography

In the second trimester we entered the Dark Ages. We began with readings from The History of the Franks by Gregory of Tours, in which we learnt of Clovis, the first Germanic king to convert to Western Christianity in AD 496, and the evolution of his tribe, the Franks, into the protectorate of the papacy in a time when it was threatened by enemies from within and without. Some lectures focused on the establishment of Islam in the Levant, North Africa, and Spain, ending with the Battle of Tours in AD 732. Nithard's Carolingian Chronicle led us into the world of the late Merovingian dynasty. We met the "Mayors of the Palace" in Francia-those Frankish administrators of state who, in the line of Charles Martel, deposed the last Merovingian king, Childeric, and set themselves up as kings of the Franks. We then spent a considerable amount of time reading The Two Lives of Charlemagne, the first written by Einhard, the second by Notker the Stammerer. These sources offered us a vivid picture of Charlemagne's myriad wars as well as his personal habits. More importantly, however, the sources centered on Charlemagne's project to make the liberal arts available to as many people in his kingdom as possible. He founded secular (non-monastic) schools across his kingdom and summoned scholars from across Western Europe to his court. We ended the trimester jumping forward to the 14th century with a reading of David Macaulay's Cathedral: The Story of its Construction, which tells the imaginary story of the building of a cathedral in medieval France.

## SIXTH GRADE



Sixth graders Mara Ankenman, Ari Shpilman, Antonella Tarr, Newsa Butterworth, Lilly Sigelman and Caleb Sigelman construct a snow fort with our school house in the background.

## Teacher: Rabbi Sinensky Subject: Hebrew

4th and 6th grade Hebrew focuses on both spoken and biblical Hebrew through conversational Hebrew, direct instruction, writing and speaking in modern Hebrew, and in-depth study of the Bible, the canonical He-brew-language text of the Judeo-Christian tradition.

This year the class is studying the narratives of Abraham, focusing on the parshiot of Lekh Lekha and VaYera in the book of Genesis.

As a cornerstone of the class' approach, each verse is read aloud by either the entire class or an individual student in the traditional cantillation. This enhances student enjoyment of the learning process, comprehension, and retention. Next, we translate each term, identifying the root, any prefixes or suffixes, and any broader principles of biblical Hebrew grammar that help to explain the meaning of the verse.

Class notes are accordingly divided into a chart that comprises three sections: words and roots; principles of the language; and basic knowledge, which generally includes a summary of the verse. Notes are written in Hebrew. 6th grade students are now able to read, translate, and summarize most verses entirely on their own.

Additionally, 4th graders are studying a set of classic biblical roots, as well as practicing formulating verbs in various parts of speech. Each day, they review an additional ten vocabulary words, providing them with a firm foundation in both modern and biblical Hebrew.

Sixth graders have nearly mastered the cantillation, and are moving at an excellent pace of approximately five verses each class. They celebrated the completion of Parshat Lekh Lekha, including the pivotal passage in which God grants new names to Abraham and Sarah.


## Teacher: Mr. Gormley Subject: History \& Geography

As we approach the modern era in European history for the upper grades, it becomes increasingly difficult to move with any kind of speed, because there is so much happening. We've been working through the complexities of the Hundred Years' War, which in large part has to do with the fact that the Normans of France, who were originally of viking descent, conquered England. This in turn is compounded by inter-marriage among the nobles of both nations so there seems never to be a shortage of confusing, intricate plots or reasons for war.

Along the way, we've used Froissart's account of the era of Richard II, the Jacquerie, and the madness of Charles VI of France. From there we've been relying on Raphael Holinshed's Chronicles for Henry IV and V which Shakespeare used as his sources for his plays on the topic. We read Joan of Arc's first biography and an eye-witness account of the battle of Castillon, where cannons played a part like never before. Shortly, we'll return to Holinshed for the War of the Roses and move to Machiavelli and Gucciardini's chronicles of the Medici and the alliance-shifting city states of Italy in the 15th16th century.

## Teacher: M. Portier

## Subject: French

The Sixth grade French students have been exploring the deep sea with captain Nemo and his mysterious expedition. Even if the mystery remains, the 6th grade scholars will soon discover the reason for Nemo's quest. This has been a great opportunity to learn new and unique vocabulary, including the categories and names of many underwater creatures. In addition to our rigorous advancement in grammar, each student works on their verbal expression with a new topic every week and individual meetings. I am proud to say we have also organized interesting weekly debates on different topics.
(left) This 1871 illustration shows Verne's Captain Nemo observing an octopus through the window of his Nautilus submarine. (below) Sixth grader Connor McManus copies the plan for one of the war machines Leonardo da Vinci designed for the Duke of Milan.


## Teacher: Mr. Walter <br> Subject: English

Poetry and Poetics: Students memorized two beautiful poems in class this trimester, including Girard Manley Hopkins' poem "Binsey Poplars." I was pleased to hear that Mr. Chilbert actually visited the site which occasioned the poem when he was studying abroad. In addition to memorizing the poem, we discussed Hopkins' philosophy of inscape and instress, ideas that much of his poetry reflects, such as "Binsey Poplars." The inscape of things is the particular individuality of things that reflect God's power of creation, and the instress basically is our ability to sense the individuality of things. The poem mourns the fact that a grove of trees has been felled, a "sweet especial scene" that will no longer reflect its Creator. We also went over Hopkins' extensive use of rhetorical devices, such as ploce, alliteration and epizeuxis to accentuate his point: "All felled, felled, are all felled;/Of a fresh and following folded rank/Not spared, not one . ." Students also memorized Shelley's "Ozymandias," and got to look at another rendition of the same subject (an inferior one) by Shelley's friend Horace Smith by the same title. The students found Horace Smith's "Ozymandias" rather funny. I do, too, and if you are familiar with Shelley's version, perhaps you would let out a chuckle as well: In Egypt's sandy silence, all alone,/ Stands a gigantic Leg, which far off throws/ The only shadow that the Desart knows. . ."

Grammar and Spelling: Students are studying a spelling list once a week and a chapter in Wombley's Grammar Notes once every two weeks, and have gone over principal parts, tense, and voice, among other things. There is a coterie of students who have been inducted into the "LLL" club. To become a member of this exclusive club, a student has to prove that he or she knows how to use the verbs lie and lay appropriately. Do you know which of the following are correct and incorrect? (The LLL club members do!) I should have laid down after the strenuous exercise. Did your brother lie down when he got the nose bleed? The little child lay down on the grass face up to look at the clouds go by.

Literature: As was stated last trimester, we are doing a chronological survey of English literature this year. We are now finishing up the Elizabethan Period, which includes the following works from the Elizabethan and Stuart Periods:


Poplars, End of Autumn by Claude Monet, oil on canvas, 1891, currently housed at the Philadelphia Museum of Art. This is one of a series of twenty-four paintings Monet made of the poplar trees along the River Epte near his home in Ginverney, France. Like Hopkins, Monet considered the fleeting beauty of nature, in this case by painting the same trees at different seasons and times of day

Sonnets by William Shakespeare Macbeth by William Shakespeare Selected Poems by George Herbert
"Peace" by Henry Vaughan
"Ask Not for Whom the Bell Tolls" by John Donne
"Holy Sonnet IV" by John Donne Selected Works by John Milton
"The Great Fire of London" by Samuel Pepys.

Writing: Students wrote several compositions at home and in class, including a book report and an essay comparing the Hobbit and Beowulf. Tolkien was a professor of Old and Middle English Literature at Oxford and his exposure to Anglo-Saxon literature greatly influenced his writing of the Hobbit.

## Teacher: Mr. Cialini <br> Subject: Latin

The long breaks alongside new material which the students had not yet encountered, resulted in a slower pace this trimester. Additionally, more focus needed to be placed on the areas where students were struggling. First, homework was not consistently completed, and so more class time was set aside for students to correctly copy their assignments. We also discussed what study habits would best ensure that homework would be completed and brought to school the following day.

Second, interruptions and side conversations during class were occuring more frequently. Quelling these interruptions and having to use class time to relearn better learning habits, also has taken time.

Third, as we encountered new material, some students struggled with vocabulary and translation. For instance, a pop quiz revealed that while students can memorize masterfully, they had notable difficulty putting those memorization skills into use when looking at Latin sentences on-the-spot. Thus, much greater emphasis has
been put on independent translation rather than classwide translation in order that students' memories are strengthened by the difficult but more fruifful practice of systematically working through Latin sentences without relying on classmates. On account of that, assessments are now designed to discern not only what students understand from the present lesson but also what they have retained from the previous lessons. We continue to have a quiz each chapter and a test every four chapters.

This trimester we covered the following:
Formation of Adverbs
Perfect Tense
Pluperfect Tense
Future Perfect Tense
Imperative Mood
Vocative Case
Third Declension:
Masculine, Feminine, Neuter, and i-stems


Sixth grade fills a rainy recess with a few rounds of "Math 24 " in which students are challenged to reach the total " 24 ": "You can add, subtract, multiply and divide. Use all four numbers on the card, but use each number only once." For instance, using 1,2,3,4, you could run 3 $x 4=12,12 \times 2=24,24$ divided by $1=24$. For a harder puzzle, try it with $6,6,9,2$ or $1,3,4,8$ !


Original manuscript of the commentary on the Mishnah, Order of Mo'ed Egypt, ofter 1168 Handwritten in ink on paper Jerusalem, National Library of Israel, Heb. $4^{\circ} 5703$.

## Teacher: Rabbi Sinensky Subject: Judaic Studies

Sixth grade Judaic Studies combines prayer with advanced study of the holidays, weekly Torah portion, and close text study of rabbinic texts.

Prayer runs for approximately 20-25 minutes, and comprises an engaging mix of joint recitation, singing, reading with the cantillation, and silent recitation of the Amidah (standing) prayer.

Following prayer, on Monday through Thursday, we rotate units between the holidays and rabbinics. The study of Jewish holidays is designed to ensure that students have a comprehensive understanding of the central themes and Jewish practices of each holiday. Notes are structured in a clear, tight outline form to facilitate comprehension and retention.

In our study of Mishnah (the foundation for Talmud,
the central text of the rabbinic canon), which we began studying following the High Holidays, students have now completed five full chapters of the tractate, and are on pace to complete the tractate by the end of the academic year.

Each Friday we review the weekly Torah portion, summarizing the content of each chapter. Recently, for instance, students reviewed and considered the content and larger significance of the Ten Commandments. This weekly study enables students to develop a comprehensive understanding of not only each portion but also the continuity of subject matter of each chapter. Each week $a, t$ least one aspect of the Torah portion is reviewed in greater depth, with an eye toward fostering engaging conversation at home with family over Shabbat.

Instruction as well as class discussion is conducted overwhelmingly in Hebrew, and the students have continued developing their conversational Hebrew skills at an advanced pace.

## Teacher: Dr. Nagelberg Subject: Science

The sixth graders have continued to explore topics in physics, recently using the Science Comics: Rockets: Defying Gravity by Anne and Jerzy Drozd as inspiration for exploring Newton's Laws. Students have continued to practice using algebra and graphs to help them solve physics problems, and have used computer programs and labs to explore physics topics as well.

## Teacher: Mrs. Ter-Saakov <br> Subject: Math

Students continue to revisit familiar topics on the new level. Ratios and Proportions are familiar since level 5 of Beast Academy, but this time problems required more extensive use of algebra tools. We also revisited Percent, this time touching up such cases as bank investments. The notions of simple interest and compounded interest were introduced.

Currently students are working on the topic of Exponents, including such important use as scientific notation.


(left) This still life was drawn by 6th grader Antonella Tarr during the weekly Studio Art lesson that is part of every MLCA student's regular curriculum. To help us weather the pandemic, MLCA introduced chromebooks for use in the event of Covid related absences and, in grades 4-8, for Programming class. (above) Science teacher Dr. Danielle Nagelberg puts the sixth graders' programming skills to work to explore a topic in Physics class. These students were using this online software (https://universeandmore.com/motion-mapper/) to explore the meaning of velocity and acceleration and common ways each is depicted graphically

## Teacher: Mrs. Rice

## Subject: Art History

One of the (many) wonderful things about studying Art History is that, because "a picture speaks a thousand words", the art that we study speaks to different students in different ways. This semester the sixth grade's study moved into the High Renaissance, and we have spent several weeks considering the artistic genius of Leonardo da Vinci and Michelangelo Buonarotti. It has been a visual and intellectual feast!

We had talked a good bit about the influence of the Medici on quattrocento Florence, so da Vinci's pragmatic move to Milan made sense. In addition to acknowledging the practical concerns of the artist, we dove deep into the fire that drove his work. The fruit of da Vinci's quest to know the inner meaning of things is apparent in his notebooks, and the breadth of his inquiry is breath-taking--it is easy to see why this person is widely regarded as the prototypical "Renaissance Man".


Conversely, studying da Vinci's work can help students understand the paradigm shift that defined the Renaissance as the dawn of a new era in Western Europe. Drawing from both the classical past and the "age of faith", Renaissance man fiercely claimed his place as one made "in the image and likeness of God." This unprecedented confidence in man's ability to master the world, disciplined by respect for scientific method, birthed the modern age.

One of my favorite art teacher exercises is a compositional study of da Vinci's Last Supper. Using elementary principles of geometry, students can recreate the spatial divisions and perspective lines that compel
the viewer to focus his eyes where the artist wants them. From a tiny nail hole over Christ's ear, we can confirm that da Vinci stretched strings from the vanishing point to the edges of the image, and so know that for a few moments we are following directly in the steps of the master.

The career of Michelangelo Buonarotti forms a perfect bridge between Florence and Rome, and we started our study with Michelangeo's David, commissioned by the city of Florence. The anecdote that Michelangelo's father beat him in response to the news that Michelangelo wanted to become a sculptor throws into sharp relief the meteoric rise in the status of the artist during this period. Years later, when his contemporaries first saw Michelangelo's frescoes on the ceiling of the Sistine Chapel, they began commonly referring to him as "the Divine". On that recommendation, we spent most of our time staring at the ceiling.

We started with an overview of the composition, acknowledging Michelangelo's design as an unabashed manifesto of the mission and destiny of the Catholic Church at the height of its power.

If da Vinci sought to understand man by investigating the whole world, Michelangelo painted as if he could contain the entire universe in the human figure. For him, the physical power of the human body is not just a metaphor, but an manifestation of spiritual strength. Ever a sculptor, Michelangelo drew his vision of the ideal form from the Belvedere torso, unearthed shortly before he came to Rome. This classical fragment most likely represents a semi-divine hero, maybe Ajax or Hercules, and this points us back to Greek ideals of beauty and power.


## 7TH \& 8TH GRADE

Teacher: Mr. Walter Subject: English

Poetry and Poetics: In addition to the poetry that they recited on Poetry Night, students finished memorizing John Keats' long ode "To Autumn" and recited it in class. Students are now memorizing Tennyson's "Crossing the Bar," a poem about passing away.

Literature and Reading: Students are continuing to study symbolic literature using their textbook, Speaking in Symbols. Not all literature, as you know, is symbolic and it is important for young students to be able to make the distinction between, say, the novels of Jane Austen and the novels of Franz Kafka and Hawthorne. We are currently studying fantasy, adventure, and science fiction works and drawing connections between the genres. The following Fantasy works have already been or will soon be studied:

[^0]Again, before reading and studying the works, students take extensive notes on the biographies of the authors. One of my highlights this semester was going over

Tennyson's "Gareth and Lynette" a narrative poem written in iambic pentameter that deals with national ideals, the cynicism that develops as a culture loses faith in those ideals, and the resultant downward spiral of that culture.

Grammar and Writing: Students are making great strides in their study of grammar, and have now been given the tools to diagram just about any sentence. In the past weeks we have gone over relative clauses, noun clauses and subordinating clauses and are currently going over sentence types: simple, complex, compound and compound-complex sentences. The students finished a very involved book report on a novel that they read independently and wrote a several critical essays in the past few months.


With multiple recess periods every day, this winter has afforded all our students ample opportunity to enjoy the snowy outdoors.

## Teacher: Mrs. Ter-Saakov

## Subject: Math

Students are getting more comfortable with the several aspects of the class. It's getting easier for them to distinguish relevant parts of pictures. They are better at following through with the logic of the proofs. Students are learning to use the index and the glossary of the textbook. Their knowledge of parallel lines and congruent triangles was applied to study Quadrilaterals and Inequalities. Students are about to start the fundamental topic of Similar Polygons.

Seventh grader Noah Posner provided this example of the geometric proofs that the 7th and 8th graders are tackling in Math class.


## Teacher: Dr. Nagelberg <br> Subject: Science

The seventh and eighth graders have been exploring the biochemical basis of how we are who we are. Practically this recently has meant exploring the structure of DNA, ATP and proteins. Recent labs have included DNA extraction and gel electrophoresis. Students are currently working to research a scientific topic of their own choice in order to write a short, informative article for possible publication.

Johannes Vermeer, Young Woman with a Water Pitcher, oil on canvas, c. 1662. Copy by Hugh Nicholson, Eighth grade.


## Teacher: Mrs. Harper

## Subject: History of Art

We have continued to spend time in 17th century Holland. The children wrote papers on a Vermeer painting of their choice and analized how his composition, symbolism and style reflected this very important time and place that saw the dawn of capitalism in the flourishing of the Dutch East India Company and an accompanying artistic Golden Age. In addition to considering the economic influences, students wrote about Enlightenment ideas of agency, freedom of thought and an appreciation for an empirical analysis of observable phenomena in the works they chose. Now we are beginning to study Rembrandt and his fresh expressive style...

## Teacher: Mr. Cialini

## Subject: Latin A

Midway through the trimester, all four students wished to take a test of all the lessons between themselves and group $B$ in order to join the latter. Two students moved to group $B$ and two remain in group $A$. For those who remain in group $A$, the following arenas need to be strengthened:

1) Vocabulary. Not knowing the vocabulary is the primary obstacle keeping the students from moving forward. Considerable attention must be paid each day to learning the vocabulary-even on days they do not have Latin class.
2) Not skipping sentences that are difficult but pushing through to render some meaning. When viewing the homework for the day, students frequently do not have all the sentences completed, but leave those blank which confuse them. When doing the work together in class, it was perhaps one or two words which really had them confused. The best learning happens when the sentences get confusing.
3) Attentiveness. Being attentive to the lesson would save one from the confusion he or she faces in the homework. Moreover, the more attentiveness that students can muster in class, the deeper the learning and the faster we can proceed.

With these three areas in mind, group A will continue to slowly work through a chapter a week. For the possibility of joining group B to be realized, students will need to make a concerted effort to improve in these three areas and will also have to work ahead in the text. This trimester we covered the following:

## Numerals

Demonstrative Pronouns: Is, Hic, Ille
Ablative of Time
Personal Pronouns \& Relative Pronouns
Interrogative Pronouns and Interrogative Adjectives
Fourth and Fifth Declensions
Partitives
Fourth Conjugation
Accusative of Extent of Space
Accusative of Duration of Time
Adverbs of the 3rd Declension
Regular and Irregular Comparison of Adjectives


Starting in fourth grade every MLCA student takes Latin four days a week. Intensive language training is central to the classical education Main Line Classical Academy provides.

## Congratulations to our Mathletes Coaches: Mrs. Ter-Saakov and Dr. Fradkin

Several weeks ago, fourteen MLCA students participated in the MathCounts chapter (county level) competition. This competition is for students in grades 6-8, with the same set of challenging problems for everyone.

Our chapter had 62 participants this year. These were the top students from several schools in Delaware County (including Radnor Middle School and Episcopal Academy). Usually, eighth grade students end up representing their schools.

Congratulations to Ronan Myers for qualifying to the Chapter Invitational Competition (the next level)!

Further congratulations go to Ari Shpilman, Marshall Zafiriou, Katie Fradkin, and Daniel Fedorov for placing in the top half of this elite group of participants, despite being younger than most.

## Teacher: Mr. Gormley <br> Subject: History \& Geography

As we approach the modern era in European history for the upper grades, it becomes increasingly difficult to move with any kind of speed, because there is so much happening. We've been working through the complexities of the Hundred Years' War, which in large part has to do with the fact that the Normans of France, who were originally of viking descent, conquered England. This in turn is compounded by inter-marriage among the nobles of both nations so there seems never to be a shortage of confusing, intricate plots or reasons for war.

Along the way, we've used Froissart's account of the era of Richard II, the Jacquerie, and the madness of Charles VI of France. From there we've been relying on Raphael Holinshed's Chronicles for Henry IV and V which Shakespeare used as his sources for his plays on the topic. We read Joan of Arc's first biography and an eye-witness account of the battle of Castillon, where cannons played a part like never before. Shortly, we'll return to Holinshed for the War of the Roses and move to Machiavelli and Gucciardini's chronicles of the Medici and the alliance-shifting city states of Italy in the 15th16th century.

## Teacher: M. Portier Subject: French

The 7th and 8th grade French class is close to completing their reading of the Abridged version of Cyrano de Bergerac, by Edmond Rostand. They discovered the complexity of the main characters in the play, expanding their vocabulary and literary consciousness. We have been practicing the use of the present conditional verb tense and the concordance des temps of the past tense. In addition to our rigorous advancement in writing, each student works on their verbal expression with a new topic every week and individual meetings. I am proud to say that we have also organized successful weekly debates where their immense progress shines.


Seventh graders Izzie Greenfield, Katie Fradkin, and Nicky Zafiriou pause in their construction of tunnels through the snow berms plowed up when the driveway was cleared.

## Teacher: Mr. Cialini

Subject: Latin B
The long break in the second trimester, in addition to a few extra days off here and there, meant we covered fewer chapters than in the first trimester. We covered the following in six chapters:

The irregular verbs, Inquam and possum
Complementary Infinitives
Subjective and Objective Infinitives
Regular and Irregular Comparison of Adjectives: Positive, Comparative, and Superlative Comparison of Adverbs
Ablative of Degree of Difference
Ablative of Specification Temporal and Causal Clauses
Demonstratives Ipse and Idem
Irregular Adjectives
As we progressed, it became evident that some vocabulary had fallen through the cracks and that students were out of practice with some of the grammar-for example, relative, interrogative, and personal pronouns. Thus, two assessments included vocabulary and grammar from many chapters ago. The results demonstrated that additional time spent reviewing the material from earlier in the year would be most fruifful. The class continues to be highly attentive and disciplined. Like the first trimester, we have had a quiz each chapter and a test every four chapters.


[^0]:    "The Mock Turtle's Story" by Lewis Carroll; "The Lion" by Edgar Rice Burroughs
    "Gareth and Lynette" by Alfred Tennyson; "The Hunger Artist" by Franz Kafka
    "The Enmity between Two Parties and Nations" (Excerpt from Gulliver's Travels) by Jonathan Swift

    The Science Fiction Genre
    "The Birthmark" by Nathaniel Hawthorne
    "When I Grow Up" by Richard E. Lowe
    "One Out of Ten" by J. Anthony Ferlaine
    "The Next Logical Step" by Benjamin William Bova
    "Toy Shop" by Henry Maxwell Dempsey
    "Earthmen Bearing Gifts" and "Keep Out" by Frederic Brown
    "The Star" and "The Story of the Late Mr. Elvesham" by H.G. Wells

    Ayn Rand, Anthem

