



2022-2023 MIDDLE SCHOOL CURRICULUM NARRATIVES THIRD TERM

GRADE FIVE

Advisory 5

The third term Advisory period gave students a few chances to work on team building activities where they demonstrated the results they can achieve when they work together. In mid February, and as a way to celebrate Random Acts of Kindness Day (February 17th), students created letters to friends or family members letting them know they appreciate them. March was dedicated to acknowledging Women's History Month. Students created comic strips where the characters were women who made substantial contributions to the areas of STEM.

English 5

Third term began with a focus on building writing skills, and students learned how to organize and write a compare and contrast paragraph. Students practiced identifying and summarizing the similarities and differences between informational texts about historical figures, such as Rosa Parks and Claudette Colvin. Students then began their novel study of *"The Westing Game"* by Ellen Raskin by exploring the genre of mystery and its components, including clues, alibis, motive, foreshadowing/suspense, red herrings, evidence, suspects, and victims. As students read, they followed specific characters and tracked evidence from the text to periodically make predictions about their characters and events from the story. In their writing units, students were introduced to the T.A.P. approach to breaking down a writing prompt in order to understand the task, audience, and purpose of writing. Students also used their understanding of narrative structure and elements to practice writing an ending to an existing story by matching point of view, tone, dialogue, character development, and conflict. Students continued to review and apply their knowledge and understanding of common grammar errors and decoding unfamiliar words (using prefixes, roots, and suffixes) from previous terms to their own writing through the editing and revision processes.

Mathematics 5

At the beginning of the third term, students reviewed the commutative, associative, distributive, identity, and zero properties of multiplication. Students also used the Order of Operations or PEMDAS, to solve equations. Then students expanded their knowledge of fractions and worked on all fraction operations. For addition and subtraction, students worked on finding a least common denominator and least common multiples. They learned to create equivalent fractions based on the Identity Property of Multiplication. They applied these skills to mixed numbers and learned to convert improper fractions to mixed numbers, and then back again, and were introduced to the concept of "borrowing." Students also learned how to multiply fractions and mixed numbers, and how to simplify during the process. With each operation we used estimation to check the reasonableness of the work and used models to represent the problems. They applied these fraction skills by solving word problems.

Physical Education

In the first term of grade five Physical Education, students worked daily on improving their cardiovascular and muscular fitness by running laps/jump roping, doing push-ups, sit-ups, and planks. Students participated in the first round of fitness testing to measure endurance and muscular strength at the start of the term and will be completing another round of fitness testing at the end of the semester to measure growth. Team handball was the first unit of the term. Students worked on throwing, catching, and defense skills during the team handball unit and then played games. After team handball was the floor hockey unit. Students were introduced to stick handling, shooting, and passing skills. Floor hockey rules and positional movement were introduced and the unit ended with students using their skills to play games. The last unit of the term was pickleball. After practicing forehand, backhands, and serves, most students played modified games while some played by official game rules based on skill proficiency.

Science 5

The third term started with students learning about rotation, revolution, weather, and climate as part of Unit III. The end of this unit included a review of solar and lunar eclipses as well as tides and their connection to the phases of the moon. During the second half of the third term and as part of Unit IV, students started learning about plants. They grew a bean plant and were able to see the different structures being formed at different times. They also learned about photosynthesis. The term ended with a short in-class assignment on plant adaptations where students had to use reliable sources of information to find two adaptations of specific plants.

Social Studies 5

Students began the third term by practicing their writing skills by composing narratives about the Boston Tea Party. They went through the writing process of first drafts, self-editing, peer-editing, and final drafts. Students then learned about the first battles of the Revolutionary War and analyzed primary sources, such as the Olive Branch Petition and Thomas Paine's *Common Sense*. They worked collaboratively with their classmates to write their own petition to King George using key vocabulary words from the unit. The term ended with students learning about the Declaration of Independence. They analyzed the document and put themselves in Thomas Jefferson's shoes by creating their own list of grievances against Great Britain.

STEM

The third term kicked off with group stop motion projects and a dive into visual engineering. STEM explorers then took a trip to Brazil that accidentally landed in the Amazon where they had to work as a team to map out their route, build shelters, purify water, weigh supplies and prepare for an interview. Once rescued, we returned to clean up oil spills (quite sticky) and discovered their environmental impact on our oceans and waterways. Our engineers transitioned into block coding mini robots and animations as well as building algorithms for their human-computer partners. Finally STEM mathematicians are developing surveys and compiling data on their peers. Special event lessons included finding pi using diameter and circumference, engaging with women in STEM and designing strategic leprechaun traps.

GRADE SIX

Advisory 6

The Advisory curriculum in grade six for the third term continued with a number of Community Building activities, such as Random Acts of Kindness Day, along with time focused on practicing organizational skills. Early in the term, students gathered for a once-a-month whole grade meeting to highlight the many examples by students of hard work and positive behaviors happening within the grade. For March and Women's History Month, we learned about and discussed the case of Jocelyn Bell, a astronomer

who discovered a unique type of star, but did not get credit for her work. Finally, we used some advisory time to create motivational posters to stay positive and get into a good mindset for MCAS testing.

Dance & Theatre

At the beginning of term three, grade six students started Dance and Theatre class with a basic introduction to the question “What is Theatre?”. They did exercises to help build the feeling of ensemble and work on teamwork skills. The first unit students started off with was on Puppetry. They learned about the different types of puppetry by starting off with an informal performance using shadow puppets and ending with a larger, polished performance using sock puppets of their own creation. For Dance, students have been slowly introduced to the basic warm-ups of a dancer as well as beginner dance steps ranging from grapevines to pivot turns. Assessments this term include classwork and performances.

English 6

During term three, students in grade 6 ELA continued to practice evidence-based writing in order to write an effective response to literature. They read *Esperanza Rising*, a historical fiction novel by Pam Muñoz Ryan, to build on the skills of annotation and writing as they explored the essential question, “How do experiences change who we are?” Students prepared for MCAS using close reading strategies, identifying the main idea and supporting details of texts, and finding the right evidence to support a claim. Students were then able to effectively use the framework for writing literary analysis paragraphs based on their reading of extracts from various genres. Daily language skills in grammar and punctuation, spelling, and vocabulary were built into their warm ups for lessons. Finally, students studied a biography, autobiography, or memoir for their Independent Reading Book Project.

Humanities

In third term, students learned about the Hero’s Journey as a pattern in Greek myths. They examined myths and focused on the motif of the journey, as set forth by the well-known scholar Joseph Campbell. In particular, students read the myths of Theseus and Perseus, which involve the Minotaur and Medusa, respectively. To demonstrate their understanding, students created a Google slides presentation which required analysis and synthesis of the myths of Theseus and Perseus. As part of their daily work, students also focused on essential grammatical skills. Students worked diligently on identifying independent and dependent clauses in writing and using the correct punctuation in complex sentences which contain both dependent and independent clauses. Further, students focused on using apostrophes correctly. Every day students use and develop their writing skills as they create responses to their daily *Do Now* questions. Students complete a *Ticket to Leave* daily to demonstrate their understanding of the skills and knowledge learned each day.

Individualized English 6

This term the students worked on developing various writing strategies. The students were introduced to and practiced pre-writing strategies. The class read the book *Esperanza Rising* by Pam Munoz Ryan. The students wrote an essay comparing and contrasting the life of the main character, past and present. They also wrote an essay comparing and contrasting the events of the strike that was depicted in the book *Esperanza Rising* and the major strikes that occurred in U.S. History. The students worked on identifying character traits, using figurative language, and incorporating the basic rules of writing. The students also compared genres and generated graphic organizers comparing main characters and the transformation of the character in each piece of writing.

Individualized Math

Math 6 In the beginning of the term, students continued working on solving problems with fractions, where they were adding, subtracting, multiplying and dividing. Students practiced converting improper fractions into mixed numbers and mixed numbers into improper fractions. The students then worked on multiplying and dividing decimals. The following unit introduced students to concepts in Geometry. Students solved for area and perimeter on regular and irregular shapes. Students were introduced to solving for circumference, radius and diameter. The term culminated with a project where the students designed a space that aligned with an individual interest. The students needed to incorporate a variety of geometric shapes. The students were then asked to solve for area, perimeter, circumference, diameter and radius.

Mathematics 6

During the third term, grade six students focused on understanding and using ratios and rates in real world problems. Throughout the term, students learned the concepts of what ratios and rates are, and the different ways they can be manipulated and used to solve problems. Students learned how to graph and compare ratios and rates, and continued with applying rates and unit rates to scenarios to solve word problems. Finally, students learned the customary and metric systems, and how rates can be used to convert units within and across systems. Each week, students took a small, five question quiz, as a learning check to measure progress and understanding during the term.

Science 6

For the third term, students investigated our expanding universe and then began to zoom in on our solar system. Students used different types of models to help understand the scale and structure of the solar system, such as a model exploring the main planet-building concept of accretion and how we can collect different materials, such as nails, rocks, ice and cotton balls, to build an inner or outer planet. We concluded the unit with a planet poster project. Activities such as these gave students opportunities to develop their skills with visual & kinetic understanding along with explaining concepts through diagrams and writing.

Social Studies 6

During the third term, grade six students explored 2.5 million years of human history. From our earliest ancestors that emerged from Africa's Great Rift Valley to the dawn of civilization in the Fertile Crescent of Mesopotamia: Students concluded their prehistoric unit with a "virtual field trip" to France's Lascaux cave, where students explored the ancient cave in a 3D environment. They examined and reproduced Neanderthal artwork which they used to transform the classroom into a full-scale replica of Lascaux. Transitioning from prehistory, students next analyzed the critical characteristics of complex human societies. They collectively constructed a GRAPES model framework which they will use to examine all the ancient civilizations they will study in grades six and seven. Finally, students applied this model to analyze and compare the city-states and empires of Mesopotamia (Sumer, Akkad, Babylon, Assyria). Next, they explored Mesopotamian culture through humanity's earliest literary works, the Epic of Gilgamesh and the Code of Hammurabi. Finally, students concluded the unit with a Socratic debate, arguing which of the many Mesopotamian cultural innovations (writing, the wheel, lunar calendar, base-60 time system) has had the greatest impact on human civilization.

GRADE SEVEN

Advisory 7

In Advisory this term, Grade Seven had activities surrounding Black History Month and Random Acts of Kindness Day. They also learned about different prominent women and made fact sheets to share with their peers for Women's History Month.

English 7

In the third term, students read *The Giver* by Lois Lowry, and worked on strengthening their reading comprehension and analysis skills by focusing on character development, theme, and symbolism. They learned about the characteristics of dystopian and utopian societies, and then discussed why it was important for a society to have choices, history, equality, and fairness. The students completed assignments about identifying themes and important symbols, and analyzing character development. After finishing the novel, the students spent several weeks reading, analyzing, and writing different types of poetry.

Individualized Math 7

The third term began with the continuation of the chapter focusing on ratios, rates, and proportions and how they relate to the real world. Topics in this chapter included finding unit rates, using rate of change tables, and solving proportions. Students also reviewed converting between percents, decimals, and fractions. Next, students began to investigate the chapter involving percentages. In this chapter, students were taught how to find the percent of a number, the percent proportion, and the percent change. Students were also taught strategies to estimate percentages and how to find sales tax, discount, and simple interest amounts. We then applied these skills by going on a shopping spree project based learning activity. Students were assessed through classwork, participation, and two quizzes and a project based learning activity.

Latin IA

In the third term, students deepened their knowledge of verbs and conjugations. They learned how to use the infinitive to identify conjugation and how to conjugate present tense verbs across all four conjugations. They worked to understand perspective and number of verbs and also learned about the complementary infinitive. Students built fluency by adding new vocabulary, and they gained proficiency with declining nouns of the first, second, and third declensions. The students also explored the social and domestic lives of ancient Romans by studying Roman Villae and Bath houses. In addition, students started their exploration of the Roman Empire during the Flavian dynasty in their geography unit.

Mathematics 7

During the third term, students wrote and evaluated algebraic expressions. Students worked to understand expressions through simplifying, expanding, and factoring. They also worked on adding and subtracting expressions using the Properties of Operations and then investigated equations and inequalities using real-life examples and numerical and algebraic expressions. Students applied Properties of Operations in solutions, and graphed and interpreted graphs for solutions of inequalities. Students explored populations and samples and learned how to generate a random sample. They investigated how random samples of the same population can differ, and used random samples to draw inferences about populations.

Pre-Algebra

During the third term, Pre-Algebra students expanded their use of the properties of operations, generating equivalent expressions. Students wrote and evaluated algebraic expressions. Students worked to understand expressions through simplifying, expanding, and factoring. They also worked on adding and subtracting expressions using the properties of operations. Students investigated equations and inequalities by working with real-life mathematical problems and by using numerical and algebraic expressions. Students applied Properties of Operations in solutions, and graphed and interpreted graphs for solutions of inequalities and linear equations. Students applied the concept of combining like terms to simplify and solve equations and inequalities, as well as proportional reasoning using ratios, unit rates, and tables to determine the relationship of different quantities. Students also investigated the proportional relationships to graph linear equations in the form of $y=mx$ and determined slope of a line.

Students discussed probability models and examined how likely an event is to occur by incorporating proportional reasoning.

Science 7

In the third term, students have been studying the ocean environments. They started by exploring the Eastern Seaboard with the Cadets from the Massachusetts Maritime Academy and their *Follow the Voyage* Project. After exploring the local connections to estuaries and the shore, the focus moved out to the ocean. Ocean zones, salinity levels, density, and pressure within the water column were explored. Students studied buoyancy and how different characteristics and properties can be manipulated to make different objects change buoyancy. Students created objects and then changed the properties of those objects. Students continue to organize information, apply new knowledge and experiment with new brain games. During the term students practiced their Self-Directed Learner skills and aimed to explain their thinking to a greater extent than in the other two terms.

Social Studies 7

In the third term students learned about the development of ancient Greek civilization. We began our Greece unit with a virtual field trip to the Palace of Knossos on the Island of Crete. There students explored ancient ruins and connected artifacts to the mythological story of Theseus and the Minotaur. Students then read and analyzed the story of the Trojan War by reading excerpts of the Iliad to discover ancient views on honor, heroism, fate, and much more. We then examined the development of Greek democracy in ancient Athens and the militaristic social structures of ancient Sparta. Students did a deep dive into the achievements of the Greeks by presenting their accomplishments in science, math, philosophy, art, sport, and more. All of this background study culminated in an examination on the Greco-Persian Wars and the battle strategies of great leaders like King Leonidas or the Themistocles.

Visual Art 7

Grade seven students began their semester of Visual Art with a focused review of the technical “best practices” of drawing. This term, students practiced drawing in three different modes: from **observation**, from **memory**, and from their **imagininations**. Working from life, students learned to use observational drawing strategies to control the scale, location and shape of the subjects in their compositions and ultimately increase the realism in their work. Students applied the concepts of **structure**, **proportion**, and **contour** to their drawings of various subjects. Additionally, students continued to develop their compositional skills of spatial arrangement (overlapping forms, depth etc.) through their practice of **one-point** and **two-point linear perspective drawing**.

GRADE EIGHT

Advisory 8

Grade eight advisory consisted of activities surrounding Black History Month in February and Women's History Month in March. On February 17th, students learned about Random Acts of Kindness day. They began a kindness challenge that helped spotlight different activities students could do for acts of kindness in their daily lives. Grade eight students also completed the social-emotional learning survey.

Algebra I

In the third term of Algebra I, students applied their knowledge of exponent rules to graph exponential functions, explored various growth and decay functions, and calculated compound interest and applied this knowledge to real-world situations. Students began the study of polynomial functions, where they learned to classify and identify types of polynomials, including special cases of polynomials, and how to complete operations with polynomials. Students learned to factor polynomial expression using a variety of methods. Once students mastered factoring polynomial expressions, they began graphing quadratic

equations in both Standard Form and Vertex Form. Students discovered the graph of a quadratic function is a parabola, and they explored the various transformations that occur from the parent function.

English 8

In the beginning of the third term, students wrote an argumentative essay where they were given the opportunity to argue for or against a controversial issue. In this assignment, students were expected to outline, write, and revise their work to develop a well-constructed argument. Students then delved into a study of the classic novel, *Lord of the Flies* by William Golding. Throughout the term, students explored various aspects of the text and completed multiple comparative text analyses, which allowed students to gain a deeper understanding of the themes and characters in the novel. To further prepare students for the upcoming standardized test in April, they completed two MCAS practice essays. These essays were designed to help students to hone analytical writing skills and to build confidence when tasked with on demand writing. Throughout the term, students also completed multiple Independent reading journals to encourage students to keep up with the practice of reading independently outside of school assigned texts.

Individualized Math 8

During the third term, students continued to develop their skills with linear equations with a focus on inequalities and an introduction to the systems of equations. Students were then introduced to a unit involving associations on data. They investigated how to construct and interpret scatter plots for bivariate data, create a line of best fit and use its equation to make predictions. Students reviewed percentages and how to find sales tax, discount, and simple interest amounts. They combined the data unit with their knowledge of percentages and investigated, through project based learning, how the two can be used together in the real world. As the term came to close the students were beginning the unit on Geometry. Students were assessed through classwork, participation, and two quizzes and a project based learning activity.

Latin IB

In Latin this term students reviewed the agreement of adjectives and the nouns that they describe, while also learning about adjective endings and their connections to first, second, and third declension noun endings. They learned about the perfect tense of verbs and continued to develop their translation skills with a focus on translating with greater efficiency while maintaining accuracy. Culturally, students put significant time and effort into learning about the landmarks of ancient Rome while also practicing their research and presentation skills. In addition, they practiced for and successfully completed the 2023 National Latin Exam.

Mathematics 8

In the third term of Mathematics, students concluded their work with solving systems of linear through different solving methods, which included graphing, substitution, and elimination. Students began the Geometry Unit, where they explored transformations of two-dimensional shapes on the coordinate plane. This included analyzing translations, reflections, rotations, dilations, and they worked to compose transformations. Students learned to identify and prove congruence and similarity between shapes through angles and side lengths. Next, students explored the relationship between angles that is created when a transversal intersects two parallel lines, and practiced identifying the measures of angles. To end the term, students began exploring the Pythagorean Theorem.

Music 8

The semester began with a review of fundamental concepts covered in Grade 6 Music, such as beat, rhythms, and bars/measures. Students applied these to their reading and writing of music, and continually applied these to composing their own music. Their knowledge and understanding was also

reinforced through their playing skills on percussion instruments, as well as group improvisational exercises and jam sessions. Students practiced and discussed good playing technique and how to play with a group. The class also began discussing American music history, including the role of African American music from slavery to the Civil Rights Movement, and the American tradition of Protest Music. Students were assessed on the accuracy of their written work, and by the quality of their participation during class discussions and playing.

Science 8

In the third term of Science, students continued with the Physical Science frameworks. In the Physics unit, students learned about forces and motion and how the application of mathematical formulas help deepen the understanding of the forces involved. Students then created paper roller coasters to analyze how the forces relate to a marble as it traveled through the coaster! Students transitioned into the Chemistry unit, focusing on matter and its interactions. Students learned about the different types of matter and the differences between pure substances and mixtures. They explored the characteristic properties of matter, and applied mathematical formulas to measure matter. Daily presentations also continued throughout term three; the theme was biotechnology. Students applied their Self-Directed Learner skills to read high-interest articles related to their topic, answered assigned questions, then prepared and presented a brief oral presentation for their classmates. Students also answered peer questions related to the topic.

Social Studies 8

In the third term of Civics, students finished learning about the three branches of government, including activities centered around the roles and responsibilities of each branch. Additionally, students learned about the Bill of Rights and how it has been and continues to be interpreted. Students examined court cases, discussed the significance of the decisions, and created a Netflix series outline for one of the landmark Supreme Court cases in pairs, focusing on Collaborator skills. Students continued to work on constructing thesis statements and using evidence from a provided text. In addition to the Bill of Rights, students continued to hone their Self-Directed Learner skills by preparing for quizzes on the relevant material.