

Mt. Lebanon School District  
Middle Schools

2021-2022  
Course Catalog

Mt. Lebanon School District



Thomas Jefferson Middle School  
21 Moffett Street  
Pittsburgh, PA 15243  
412-344-2120

Andrew Mellon Middle School  
11 Castle Shannon Boulevard  
Pittsburgh, PA 15228  
412-344-2122

In the Mt. Lebanon School District, middle school is sixth, seventh and eighth grades.

This booklet describes the required and elective courses  
for Jefferson Middle School and Mellon Middle School.

**Mt. Lebanon School District  
7 Horsman Drive  
Pittsburgh, PA 15228**

Dr. Timothy Steinhauer, Superintendent  
412-344-2077

Dr. Ron Davis, Assistant Superintendent  
412-344-2027

Dr. Marybeth Irvin, Assistant Superintendent  
412-344-2027

Jefferson Middle School  
21 Moffett Street  
Pittsburgh, PA 15243

Dr. Sarah Shaw, Principal .....	412-344-2120
Ms. Katelyn Deet, Assistant Principal .....	412-233-1087
Mr. Peter Berg, Counselor .....	412-344-2025
Mrs. Allison Levison, Counselor .....	412-344-2125

Mellon Middle School  
11 Castle Shannon Boulevard  
Pittsburgh, PA 15228

Mr. Christopher Wolfson, Principal .....	412-344-2122
Mr. Benjamin Canan, Assistant Principal .....	412-344-0561
Mrs. Kara Gillespie, Counselor .....	412-344-2132
Ms. Amy Whealdon, Counselor .....	412-344-2126

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According to the Association for Middle Level Education, a middle school is an educational response to the needs and characteristics of youngsters during early adolescence and, as such, deals with the full range of intellectual and developmental needs.

Our middle level instructional program is delivered through an interdisciplinary team format which stresses subject matter as well as pupil development. This interdisciplinary team organization assists the students in successfully traversing the period of time between the elementary and high school years.

The Mt. Lebanon School District has developed a rigorous core curriculum supplemented by broad and varied applied and fine arts curricular experiences. The pages that follow in this book outline the scope and sequence of courses offered in the middle school program.

The middle school administrators and counselors will make every effort to give students the courses they request. Occasionally, lack of enrollment or resources will cause a change in the offerings. Parents and students will be notified as early as possible of these situations. We encourage parents and students using this booklet to plan together in course selection. If you would like additional information after reading what is included here, please call the school.

We look forward to working with your children and encourage you to join in partnership with us to provide the best possible experiences for middle level children in Mt. Lebanon.

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# PROGRAM OF STUDIES

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## CORE CURRICULUM SUBJECTS

6 <sup>TH</sup> GRADE	7 <sup>TH</sup> GRADE	8 <sup>TH</sup> GRADE
English	English	Language Arts
Literature	Literature	Mathematics
Mathematics	Mathematics	Social Studies
Social Studies	Social Studies	Conceptual Physics
Science	Science	

## APPLIED CURRICULUM SUBJECTS

6 <sup>TH</sup> GRADE	7 <sup>TH</sup> GRADE	8 <sup>TH</sup> GRADE
World Language: French German Spanish	World Language: French German Spanish	World Language: French German Spanish
Unified Arts (9 week rotation): Art Health Business Information Technology Academic Lab	Unified Arts (9 week rotation): Art Technology and Engineering Business Information Technology Family and Consumer Sciences	Unified Arts (9 week rotation): Art Health Technology and Engineering Family and Consumer Sciences
Music: Band Orchestra Chorus	Music: Band Orchestra Chorus General Music	Electives: Band Orchestra Chorus Art Enrichment FCS Enrichment* Technology & Engineering Enrichment* Business Information Technology Enrichment*
Physical Education	Physical Education	Physical Education

*\*Please note that only one section of each of these courses (Technology and Engineering Enrichment, Information Technology Enrichment, and FCS Enrichment.) is available with a maximum enrollment of 24 students for each section. A lottery will be conducted if more than 24 students request these courses.*

## LANGUAGE ARTS DEPARTMENT

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### English 6

60100

What purpose does writing serve? How does a writer construct a piece for a specific audience? How does a writer effectively convey an opinion to the reader? How does word choice influence the way the audience views an argument?

The sixth grade English course is a one-year program that reinforces the use of language mechanics and grammar in the development of writing skills. Students will write in complete sentences that avoid the common pitfalls of sentence fragments and run-ons. Varied sentence types are introduced, and students incorporate this awareness in their practice of several writing modes: description, exposition, narration, and persuasion. Focusing on the development of single to multi-paragraphing, students practice the steps of the writing process: pre-writing, drafting, conferencing, revising, editing, and presenting or publishing. In addition to writing, speaking and listening skills are also reinforced. Assessment in English 6 consists of formal and informal writing assignments, oral presentations, projects, quizzes and tests. The students are required to maintain a personal portfolio of their writing.

### Literature 6

60150

What defines fine literature? How can the understanding of literary elements enhance the discussion and understanding of award-winning early adolescent novels? What is the difference between inferential and literal understanding?

Students will interpret, evaluate, and enjoy fine literature through the application of basic literary elements. New concepts of literary analysis will be sequenced through the study of novels, short stories, and poetry. In addition, students acquire and apply research skills to explore the life and work of award-winning authors or other self reflected topics. Through written responses, visual presentations, projects, and tests, students will be assessed on the proficiency of their reading, writing, speaking and listening skills. The Literature 6 course fosters an appreciation of literature and celebrates the desire to read independently.

## English 7

70100

How can language adapt to different purposes? What makes a good story? How can narrative stories reflect human nature? For what purposes do we persuade? What makes an argument convincing? What are the differences between formal and informal language? How do writers adhere to the conventions of standard English grammar, usage, and mechanics? How can writers use punctuation to convey ideas precisely—and, at times, for effect?

The seventh grade English course is a one-year program designed to expand each student's proficiency in thinking writing, research, and oral communication. Students engage in the writing process through informative, narrative and argumentative pieces. Further, students incorporate technology to enhance their communication skills, as well as apply language conventions to all forms of communication. Course evaluation consists of formal and informal writing assignments, oral presentations, projects, quizzes, and tests. In addition, students maintain a portfolio of their writing.

## Literature 7

70150

What is strength? What are the different types of strength? Who or what survives and why? Whose needs are more important – those of the individual or those of the community?

The Literature 7 course is a one-year program designed to build upon the critical thinking skills developed in Literature 6 and enhance the skills in literary analysis that are introduced in that course. Students will practice and develop their analysis and interpretation of texts, build vocabulary and write in a variety of forms and styles. Through the study of various literary genres, including novels, short stories, poetry, plays and essays, students will explore and interact with the literature. Students will share their insights about these different texts using discussion, group work, dramatic activities, as well as various written formats.

## Language Arts 8

80100

Does literature shape or reflect identity, culture, and values? How and why do writers decide to write what they do? How does the process of writing help one to discover one's own identity, culture and values? How can discussions about literature and writing help to shape and/or challenge one's identity, culture and values?

Language Arts 8 explores these questions and encourages students to reflect upon their culture, identity, and values through the modes of reading, writing, speaking, and listening. Through formal and informal writing assignments, speeches, reading, projects and discussion, students will explore how culture shapes identity and values. Analysis of the literature, which includes novels, works of non-fiction, poetry, short stories and essays, will help students to reflect upon what they value and how they came to value it.

## MATHEMATICS DEPARTMENT

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The mathematics program is a sequential program which integrates algebra, geometry, measurement, logical reasoning, probability, statistics, discrete mathematics, and function strands throughout each course. The program is designed to help students explore and solve mathematical problems, think critically and make decisions, work cooperatively with others, and communicate ideas clearly. The mathematics course offerings 6-12 comprise a substantive program of study designed to provide all students with the skills and knowledge necessary for life-long learning in a rapidly changing global society. Each middle school mathematics course provides opportunities for students to be actively involved in doing meaningful mathematics through problem solving and decision making using technology to explore ideas and methods, participating in group projects and activities, and using manipulatives to model connections between concrete and abstract concepts. Each course is organized on two academic levels to provide opportunity for each student to be challenged according to his/her ability. Evaluation consists of unit tests and quizzes and may include individual or group projects, assignments, notebooks and journals, portfolios, and class participation.

*Students typically select one of the following courses of study. They may move between levels if performance indicates such movement is appropriate and class size allows. Students are also encouraged to select one or more computer science or computer application electives during their middle school and high school years.*

Honors:

(H) Math 6            (H) Math 7            (H) Math 8

Academic:

Math 6                Math 7                Math 8

### Mathematics 6

Math 6 – 60300

Honors Math 6 – 60350

During this full year course, students will understand rational numbers (fractions, decimals, percents, ratios, and rates), operations with rational numbers, pre-algebra concepts, principles of two-dimensional and three-dimensional geometry including area, surface area, and volume, as well as data analysis and statistics. The course is designed as a problem-based approach to mathematics, meaning that the students are presented with real-world situations from which the mathematical concepts emerge naturally.

## Mathematics 7

Math 7 – 70300

Honors Math 7 – 70350

Mathematics 7 more fully explores and extends algebraic and geometric topics from Mathematics 6. Students' understanding of whole numbers, decimals, and fractions is expanded to include the study of integers and negative decimals and fractions (rational numbers). Students construct, use, and explain procedures for computing and estimating with rational numbers. Understanding and applications of ratio, proportions, similarity, and percent are developed. Geometry topics explored include classification of polygons, area, surface area and volume. Knowledge of equations and graphing in the coordinate plane are connected. Throughout the course problem solving, reasoning, and communication of mathematical ideas are emphasized.

## Mathematics 8

Math 8 – 80300

Honors Math 8 – 80350

Mathematics 8 continues to explore algebraic and geometric concepts utilizing real-world applications to enhance the development of a concept. The algebra strand is the primary focus of the course and includes topics such as linear equations, linear inequalities, systems of equations, factoring expressions, and introduces quadratic functions and their graphs. Students explore the concept of functions and begin their analysis of slope. Within the geometry strand, foundational concepts such as the Pythagorean Theorem, distance, and transformations are introduced. Students also investigate probability, proportional reasoning applications, and data analysis in the statistics strand.

## SCIENCE DEPARTMENT

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The middle school science program emphasizes a “hands-on, minds-on” approach that introduces students to scientific inquiry as well as to new and expanded science content. The strands (Science as Inquiry, Physical Science, Life Science, Earth and Space Science, Science and Technology, Science in Personal and Social Perspectives, History and Nature of Science, Unifying Concepts and Processes) suggested by current science curriculum projects such as *Project 2061* and the *National Science Standards* permeate throughout the courses in grades 6, 7 and 8.

### Science 6

60400

Science 6 is an introductory earth and space science course consisting of five units:

In the *Erosion and Deposition* unit students explore the earth processes that move rocks and soil and how these processes shape the land over geological time. Students study *Plate Tectonics* by investigating volcanoes, earthquakes, and mountain formation to learn about the changes to the earth’s surface that take place over geological time as a result of plate movement. *Weather and Atmosphere* allows students the opportunity to analyze weather and climate, as well as to determine factors that affect them. In the *Earth and Space* unit, students investigate the cause of the day/night cycle, the year and the seasons. Students also investigate changes in the phases of the moon and its effect on the oceans’ tides. Ultimately, students relate these changes in the position of the earth and the moon in space to the way people measure time. Finally, students investigate objects in space, their proximity to Earth, and the ways people explore outer space in the *Exploring our Solar System* unit.

### Science 7

70400

Seventh Grade Science is an introductory course. It presents fundamental life science concepts and basic investigative skills. The purpose of this course is to develop an awareness of the unique relationship among organisms and their interactions with the environment. All hands-on activities stress the scientific method of problem solving and allow students to see how experimentation and observation are the bases of scientific inquiry. Course evaluation consists of tests, quizzes laboratory work, worksheets and assignments.

## Conceptual Physics 8 80400

Eighth Grade Science is a full year course which focuses on fundamental physics concepts.

The content of the course includes concepts dealing with motion and energy. It includes topics such as waves, magnetism and electricity, and forces and motion.

Hands-on laboratory-style activities will be used during the course to develop process skills. Course evaluation may consist of tests and quizzes, laboratory reports, written assignments, science journals, long term projects and performance assessments.

## SOCIAL STUDIES DEPARTMENT

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The social studies program is a comprehensive program which integrates the disciplines of history, geography, economics and citizenship education throughout the entire scope and sequence. The courses at the middle level are designed to continue the content and skill development from the elementary and prepare the students for the curriculum at the high school. The program K-12 is designed to provide students with the knowledge and skills to be informed and participating citizens.

*The following is the required sequence of courses within grades 6-11. Electives, which focus on specific content, and A.P. courses are also available in the high school curriculum.*

*6<sup>th</sup> – The World and Its People*

*7<sup>th</sup> – World History*

*8<sup>th</sup> – United States History*

*9<sup>th</sup> – American Political and Economic Systems (semester)*

*History of Western Culture I (semester)*

*10<sup>th</sup> – World Cultures*

*11<sup>th</sup> – United States History*

### The World and Its People

60200

This course is a two-semester study of the world and its people, beginning with learning the world in spatial terms. This will include learning map skills and geographical terms, reading charts and graphs and identifying different people, places and environments of the world. The curriculum helps students look at issues facing the world's people in the following regions: Europe, Russia and the Independent Republics, Asia, Africa, and Latin America. The studies of these regions will include physical geography, culture, history, economics, and government. Students' performance throughout this course will be evaluated through written assignments, reports, homework, quizzes and tests.

## World History

70200

World History 70200 This course is a two-semester study of the development of world civilization through lenses of balanced cultural comparisons, convergent histories, and societal interdependence. The course traces the development of human civilization from prehistory through the middle ages, emphasizing archaeology, patterns of migration, agrarian advancement, human/environment interaction, cultural diffusion, social structure, belief-value system, trade, government, conflict, conquest, and innovation.

Throughout the course, students are introduced to historical thinking skills by examining and understanding changes over time, recognizing various perspectives, evaluating historical sources, analyzing complex causes, and critiquing central historical arguments. These goals are accomplished by emphasizing and mastering skills, engaging in substantive conversation about people and events, and facilitating students' abilities to connect the past to today and their daily lives.

## United States History

80200

This is a two-semester course which explores the major developments in United States and Pennsylvania History from the Founding Era through the end of the 19th Century. The major emphasis is upon the economic, social, and political structure of the nation. Certain critical concepts are developed, among which are an examination of colonialism, the early United States and its expansion, sectionalism and the basic causes and results of the Civil War and Reconstruction, industrialization and the emergence of the United States as a world power. Special attention is given to the role of our own state and region in our nation's history. Each student will be introduced to learning/innovation skills, information/media/technology skills, and life/career skills through their exploration of history. Course evaluations may consist of essay and objective tests and quizzes, notebooks, oral and written reports, and/or individual and group projects aimed at stimulating creative expression on the part of the student.

## WORLD LANGUAGES

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### 6<sup>th</sup> – 8<sup>th</sup> Grade

60520-60540

70520-70540

80520-80540

The World Language curriculum is designed to stimulate language development by fostering skills of communication in real-life situations and by introducing the students to the study of relevant cultural topics. The middle school World Language program is a well-integrated, three-year sequential, skill-building program. The courses from grades 6 through 8 provide opportunities for all students to acquire language proficiency at varied rates.

Students may choose to continue Spanish from elementary school, or begin French or German. The students will study this language daily for ½ periods in 6<sup>th</sup> and 7<sup>th</sup> grades, and for an entire class period in 8<sup>th</sup> grade. Students who successfully complete the middle school World Language program will be prepared to enroll in Level 2 in high school.

## FINE ARTS DEPARTMENT

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The art and music offerings in the Mt. Lebanon middle schools reflect the seriousness of purpose and the joy of arts education. As a prelude to the Senior High Fine Arts Department offerings, the middle school program offers a variety of sequential programs in Visual Arts and in Music (Band, Chorus, Orchestra, and General Music).

Starting in sixth grade and building each year, the Visual Arts courses are concept-based, hands-on developmental programs utilizing cultural and historical references while building the students' capabilities through positive awareness, comprehension and application of skills. As the students move from one grade level to the next, their thinking skills are employed in more sophisticated creative processes of art production. Unique offerings of 2-D and 3-D art experiences in the Unified Arts program advance in each year of the middle school program. In eighth grade students may choose the year-long Art Enrichment course which explores in-depth artistic processes and unique media or the year-long Visual Culture course which gives students the tools to understand art's past and contextualize the countless visual stimuli thrust upon them in our modern culture.

Throughout the middle school art program students are exposed to the study of art history and learn constructive art criticism as they participate in discussions and critiques. The Mt. Lebanon visual arts courses nurture creativity, offering students the opportunity to find multiple solutions to a single problem. Middle school art students learn to make and observe connections while satisfying humankind's inherent need to create. Through creating art, students represent that which cannot easily be communicated and surrender to unforeseen opportunities as their work unfolds. Art students develop their ability to describe, interpret, evaluate, and respond to visual culture in a media-rich setting. The middle school arts program fosters in students a lifelong relationship with the visual arts. By the end of 8<sup>th</sup> grade students have completed a portfolio representative of higher level artwork. The Mt. Lebanon middle school Visual Arts program incorporates and exceeds all the state and national standards for the Arts in equipment, program and instruction and offers the Mt. Lebanon middle level students the best in art education.

The highly-regarded, developmental music program in the middle schools offers eleven courses of instruction over grades 6, 7 and 8. Each course is designed and taught to provide the opportunity, the musical stimulation, the hands-on knowledge and experiences, and the support for all students to succeed in music education. The middle schools offer sequential programs in Band, Orchestra and Chorus. As the students move from one grade level to the next, they incorporate higher-level skills, concepts, knowledge, and enjoyment through class instruction and public performances. The Mt. Lebanon middle schools' Music programs are enhanced with excellent facilities, equipment, and instruction making every Mt. Lebanon middle school student successful in the music program. The Mt. Lebanon middle school Music program incorporates and exceeds all the state and national standards for the Arts in equipment, program and instruction and offers the Mt. Lebanon middle level students the best in music education.

The art and music programs in the middle schools continue the long-standing reputation of *Excellence in Education* in Mt. Lebanon and contribute to providing the best education possible for each and every student.

## Art Enrichment 8

80790

Eighth grade Art Enrichment is a year-long elective which art-interested students may select. This unique opportunity offers students an in-depth extended art experience, investigating a wide variety of materials and ideas. Students will develop skill and increase their capacities for self-expression. They will build on their knowledge of making art and they will build creative confidence in a community of friends. Some media that may be explored include; painting, drawing, ceramics, wheel thrown pottery, sculpture, photography, film, animation, and various mixed media. Through a visit to a local museum, students will investigate works of art and the meaning of art in our lives. Art Enrichment, which does not have a prerequisite, is a chance to investigate the creative possibilities of materials by making art every day.

## Band 6

60710 – 60760

Band is a two-semester elective course. It is designed to provide the opportunity, the stimulation, the guidance and the encouragement necessary for each student to experience overall music enjoyment. This course fulfills the 6<sup>th</sup> grade music requirement.

Concepts to be developed include tone, melody, rhythm, style, notation and auditory perception and discrimination. The major skills to be developed and refined include major and minor scales, fingerings, playing techniques, rhythmic patterns and baton responses. Course evaluation includes instrumental performances (individual and small groups).

*Students must have at least one full school year of study on the instrument they will be playing in the 6<sup>th</sup> grade band before selecting band in middle school. Any student with less than one year of instrumental instruction must schedule an audition with the middle school band director. In that audition, students will need to demonstrate proficiency in the following areas:*

*Winds and Brass – Ability to perform scales and exercises in the concert keys of Bb, Eb, F as well as a chromatic scale.*

*Percussion – Ability to perform on snare drum (single paradiddle, flam rudiments and rudimental rolls) and mallet experience as well.*

## Band 7 & Band 8

70710 – 70760

80710 – 80760

Band 7 is a two-semester elective course that fulfills the 7<sup>th</sup> grade music requirement. Band 8 is a two-semester elective course that may be taken as an 8<sup>th</sup> grade elective.

It is designed to provide the opportunity, the stimulation, the guidance and the encouragement necessary for each student to experience overall musical enjoyment. Concepts to be developed include tone, melody, rhythm, style, notation and auditory perception and discrimination. The major skills to be developed and refined include major and minor scales, fingerings, rhythmic patterns and baton responses. Student evaluation includes instrumental performances (individual and small groups), and rehearsal technique.

*Students must have had some instrumental instruction before selecting band in middle school.*

## Chorus 6

60780

Chorus is a two-semester elective course. This course fulfills the 6<sup>th</sup> grade music requirement. The choral music curriculum is designed to broaden students' musical knowledge through the enjoyment of singing. Students learn to sing with appropriate technique in two or three parts using a variety of song literature. Basic musical concepts, including rhythmic and pitch notation, are presented and explored. Students will learn the vocal vital signs (posture, embouchure, and breath support), and how to apply each to produce a proper choral sound. Evaluation is based on class participation, written assessment, vocal assessment, small-group performances, rehearsal techniques and public performances in school and in the community.

## Chorus 7

70780

Chorus 7 is a two-semester elective that fulfills the seventh grade music requirement. The choral music curriculum is designed to broaden the students' musical knowledge through the enjoyment of singing. Students learn to sing with appropriate technique in two or three parts using a variety of song literature. Basic musical concepts, including rhythmic and pitch notation, are presented and explored. Students will learn the vocal vital signs (posture, embouchure, and breath support), and how to apply each to produce a proper choral sound. Evaluation is based upon class participation, written assessment, vocal assessment, small-group performances, rehearsal techniques and public performances in school and the community.

## Chorus 8 80780

Eighth grade chorus is a two-semester elective course designed to develop each student's vocal skills for the enjoyment of singing in three or four-part harmony. Students will refine the singing skills developed in the seventh grade chorus. Students will learn the vocal vital signs (posture, embouchure, and breath support), and how to apply each to produce a proper choral sound. Evaluation is based on class participation, written assessment, vocal assessment, small-group performances, rehearsal techniques and public performances in school and in the community.

## General Music 7 70790

This two-semester elective course fulfills the 7<sup>th</sup> grade music requirement. General Music 7 provides a practical approach to the elements of music through introductory level group instruction in keyboard and acoustical guitar as well as academic (non-instrumental) studies "Music in Our Lives" and "Language of Music". Students will be exposed to four equal units of study: 1) Language of Music (including active and critical listening, fundamentals in reading and counting rhythm and reading music in treble and bass clefs); 2) basic group piano instruction (including music composition); 3) Music of our Lives (including discussion of current issues in music and culture, music as it relates to us as individuals, core components of music history, and study of music in our culture); and 4) basic group guitar instruction (including chords, bass parts, melody and harmony playing centered around learning songs and sound fundamentals, and tablature). Evaluation will be based on homework, tests, class participation, daily assignments and small-group/individual performances.

## Orchestra 6 – 8 60770-60773 70770-70773 80770-80773

Orchestra is a two-semester elective course that fulfills the middle school music requirement. It is designed to provide the opportunity, the stimulation, the guidance and the encouragement necessary for each student to experience overall musical enjoyment. Concepts to be developed include tone, melody, rhythm, style, notation and auditory perception and discrimination. The major skills to be developed and refined include major and minor scales, fingerings, rhythmic patterns, baton responses and various bowing techniques. Student evaluation includes instrumental performances (individual and small groups), and rehearsal techniques.

*Students must have had some instrumental instruction before selecting orchestra.*

## PHYSICAL EDUCATION

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### Physical Education 6 – 8

60800

70800

80800

Physical Education in the Middle School years is designed to expose students to a variety of activities that help them understand and value physical activity and its contribution toward a healthy lifestyle. The curriculum includes a program of comprehensive and physiologically sound activities oriented personal wellness. It is varied in scope with opportunities for students to participate in areas of physical fitness, team sports, and lifetime activities. Activities are chosen to encourage students to sequentially develop skills appropriate to their ability and confidence level in an appropriate learning environment. Students participate in activities in which the major focus is to develop personal wellness and basic movement skills.

Currently, Physical Education classes are scheduled twice a week for the entire school year. Physical Education uses a standard grading scale: 100-90% = A; 89-80% = B; 79-70% = C; 69-60% = D, 59% or below = E. Grades are determined by the students' participation/effort, sportsmanship/behavior, and class preparation/dress.

## PRACTICAL ARTS

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### Business Information Technology Enrichment 8

80970

Business Information Technology Enrichment is an 8th grade year-long elective offering the students an opportunity to engage in a variety of technologies, software, and tools. Topics include, but are not limited to graphic design, computer science, and game design. Students will be exposed to many experiences in our makerspace where they will be able to create, solve problems, and become familiar with the latest trends in technology to become a 21st century learners, problem solvers, and design thinkers.

*\*Please note that only one section of each of these courses is available with a maximum enrollment of 24.*

### Technology and Engineering Enrichment 8

80960

In this year-long 8th grade STEM Course, students will have access to Matt's Maker Space each day to develop and apply their STEM skills by utilizing the Engineering Design Process, The Universal Systems Model, The Design Thinking Model or Scientific Investigation to solve real world problems utilizing tools, machines, and materials in Matt's Maker Space. After being introduced to the use of equipment, materials and tools within the makerspace as well as safety procedures, students will have an opportunity to work on approved projects of choice throughout the year and participate in engineering design challenges.

*These projects and challenges may include:*

- Robotics (EV3)
- Coding (Microbits, Hummingbirds)
- 3D Design & Additive Manufacturing (3D Printing)
- Design & Construction
- Electronics
- Laser Engraving
- Designing for the Cricut Machine and Vinyl Cutting
- Transportation: Air, Land, & Sea
- Invention and Innovation

*\*Please note that only one section of each of these courses is available with a maximum enrollment of 24.*

## FAMILY AND CONSUMER SCIENCES

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### FCS Enrichment 8

80975

This is an exploratory based curriculum consisting of four units: Food Science, Entrepreneurship, Sewing, and Interior Design. Food Science is a food-lab-based unit where students will explore current food issues facing Americans today, including modern-day food production and processing, food technology, and nutrition. Students will prepare a variety of 'Farm to Table' recipes as they evaluate the discrepancies between mass-produced and home-cooked foods and compete for the title of Master Chef. Within these concepts, students will explore entrepreneurial learning, developing their own FCS companies. These companies will authentically develop, market, and produce their own unique products. Throughout the sewing unit, students will acquire basic hand sewing techniques as they produce an oversized pillow. Lastly, the Interior Design unit teaches students about the basic elements of design, color, and space that will be applied as they design and create their own dream house.

*\*Please note that only one section of this course is available with a maximum enrollment of 24 students.*

# UNIFIED ARTS

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## 6<sup>TH</sup> Grade

### Art 6 60010

The sixth grade art curriculum is a developmental program which provides for the understanding and application of art concepts and their formal elements. In sixth grade, the basis for student work revolves around two key themes: Stories and Play. By introducing students to an expanded foundation of the elementary art experience, the sixth grade art program builds the student's awareness, comprehension, and application of skills to a more in-depth process. Cultural and historical influences provide for interdisciplinary experiences when appropriate. Students will be involved in a hands-on approach to creative problem solving. Evaluation of student work will be based on the demonstration of stated objectives and classroom participation. A comprehensive arts program (concepts based) raises the quality of student art production, as well as contributing to the improvement of cognitive development and learning in general.

### Health 6 60020

In this nine week section of unified arts, 6<sup>th</sup> grade students will learn about several topics of personal health and wellness including: non-communicable diseases, the effects of gateway drugs such as alcohol, tobacco, inhalants, and marijuana, and also how the body grows and changes. Health is a dynamic class that explores current health topics and offers a scope and sequence progression of units in 6<sup>th</sup> and 8<sup>th</sup> grade. The nine week course strengthens its curriculum by utilizing community professionals and has a partnership with the MTL police department education resource officers. Students will be exposed to health information from a variety of resources including textbooks, published literature, guest speakers, videos and other multimedia format.

### Business Information Technology 6 60050

Students will be introduced to the following:

- Basic computer concepts using Google Tools
- Artificial intelligence using beginner Amazon Alexa Skill Blueprints
- Computer programming using CodeMonkey.com that integrates both block based and javascript
- Basic Graphic design using Adobe Photoshop allowing students to create products.
- Students will experience these hands on learning concepts through problem solving and design thinking as they invent and create throughout our makerspace space environment.

## Academic Lab 6

60060

The Academic Lab consists of a series of three mini-courses presented by some of our program specialists at the middle level. The Writing Clinician will present a mini course on creative writing. The Librarian will present a mini course on research skills and understanding non-fiction texts. The Counselors will present a mini course on study skills, social skills and organizational skills. Counselors also help students to begin exploring future careers and the world of work through the use of dynamic web based college and career readiness software. All of the remaining time in this course is utilized for additional study time or silent sustained reading (SSR) time under the supervision of a teacher.

## 7<sup>th</sup> Grade

### Art 7

70010

The seventh grade art program synthesizes and challenges students to use abstract thinking and build upon previously learned, key skills & knowledge. A more sophisticated creative process to art production is explored. In seventh grade, the basis for student work revolves around two key themes: Humor and Identity. Students will discuss, create, and explore works of art around said themes through integrative lessons and the application of a particular artist or style as well as historic references and influences. Participation in a *comprehensive* art program raises the quality of student production, improves articulation during critiques, and enhances aesthetic awareness, as well as contributes to the improvement of cognitive development and student learning in general. Evaluation of student work is based upon demonstration of stated objectives and classroom participation.

### Business Information Technology 7

70050

Students will build from their 6th grade experience and expand their focus on the following concepts:

- Intermediate computer concepts using Google Tools
- Artificial intelligence using advanced Amazon Alexa Skill Blueprints and an introduction to the ethics of AI.
- Computer programming using the CMU CS Academy that integrates Python
- Intermediate Graphic design using Photoshop that will allow students to advance their skills and create more complex designs and products.
- Web Page Development using Google Sites and HTML

Students will continue to experience hands on learning, logic skills, and design thinking as they broaden their experiences in our makerspace. Students will be challenged to create various designs to solve real world problems.

## Technology and Engineering 7

70040

In the 7th grade course of study, students will be introduced to how the ideas and products of the Technology and Engineering disciplines affect their everyday lives. After being introduced to topics such as STEM, the Universal Systems Model, and the Engineering Design Process; a series of Technology, Engineering, and Problem Solving challenges will be presented to the students in the Middle School Matt's Makerspace. The students will also utilize previously learned knowledge and skills gained from their Science and Mathematics courses to help solve these problems and to solidify understanding of the subject matter. This class will prepare them for the more complex and abstract challenges presented in the 8th grade Technology and Engineering 9-week course.

Specific Units of study can include:

- Primitive Technology
- Technical Drawing
- Design and Construction
- Electricity and Magnetism
- Introduction to Electronics
- Introduction to Robotics and Programming

## Family & Consumer Sciences 7

70030

The Family and Consumer Sciences curriculum at this level is an introduction to the discipline which combines aspects of consumer sciences, family economics and resource management, balancing responsibilities, and child development. The consumer economics units will incorporate activities revolving around the economic system and basic consumerism. Students will learn how to separate factual information from marketing "hype" to make informed consumer choices. In addition, students will develop budgeting and personal finance skills through a 'Real Life' authentic role-play project. The units in balancing family and community responsibilities will include practical reasoning and effective communication. Child development units will include an introduction to the stages of development, play, safety, and children's literature.

## 8<sup>th</sup> Grade

### Art 8 80010

For many eighth grade unified arts students, this will be their last visual arts class. Thus, the eighth grade program of study focuses on fostering a very personal and lifelong relationship with Visual Arts. Applying their visual and technical skills, the students will work toward the development and creation of personal works of art that focus on the themes of Memory, Time & Place. All of the required PA Standards for the Arts and Humanities serve as the foundation for creating and understanding visual art based on aesthetics and personal experience. The study of art history is used to enhance the relationship between art and self-interpretation practiced inquiry and creativity. Evaluation of student work is based on the demonstration of stated objectives and classroom participation. At the succession of the course, students will have completed an aesthetically-rich, media-diverse portfolio representative of higher level artwork.

### Technology and Engineering 8 80040

In the 8th grade course of study, students will experience a more advanced study of the ideas and products of the Technology and Engineering disciplines. The learning objectives for the required 9-week courses are achieved through a STEM (Science, Technology, Engineering, and Mathematics) based program. Within the Matt's Makerspace, a series of Technology, Engineering, and Problem Solving challenges will be presented to the students that will require the application of the Engineering Design Process as well as knowledge and skills previously gained from 7th grade Tech. Ed. and their Science and Mathematics courses.

Specific Units of study can include:

- Additive Manufacturing (3D Printing)
- Electronics 2: Understanding logic gates
- Artificial Intelligence: Understanding Bias in Machine Learning
- Robotics and AI: Programming Cosmo robots with machine learning capabilities
- Design and construction

## Health 8

80020

Health is a 9 weeks course of study.

The units covered are:

- Mental and Emotional Health
- Reproduction
- Disease Prevention/Communicable Diseases including STD's, HIV and AIDS
- Project Alert – Alcohol and Drug Abuse Education/Refusal Skill Training

Health is a dynamic class that explores current health topics and offers a scope and sequence progression of units in 6<sup>th</sup> and 8<sup>th</sup> grade. The nine week course strengthens its curriculum by utilizing community professionals and has a partnership with the MTL police department education resource officers. Students will be exposed to health information from a variety of resources including textbooks, published literature, guest speakers, videos and other multimedia format.

## Family & Consumer Sciences 8

80030

The food and nutrition units will emphasize proper measurement techniques, principles of food safety basic nutrition, time management skills and the use of current technology in food preparation. The course will emphasize good nutrition and its relationship to a healthy body. Good nutrition, health food and kitchen safety are topics explored. Experiences in food preparation appropriate to today's lifestyles are offered. Lab experiences will be included.