

Manassas Park City Schools

MPCS IS!

Motivated Parents

Community & Staff

INSPIRING STUDENTS

MPCS Believes...

- All things are possible.
- All children can learn.
- People make the difference.
- Empowered people make good decisions.
- Leadership embodies a mix of personal humility and professional will.
- Data drives decisions.
- Professional development is the cornerstone of our success.

Manassas Park Middle School

Course Directory

2017-2018

The purpose of this booklet is to inform all students and parents of the courses offered at Manassas Park Middle School.

Our Vision

A visitor to any building or facility within Manassas Park City School Division will find it safe, well maintained, and containing widely available technology. Each school exudes pride and energy, with teachers and administrators readily visible.

Students are held to high standards and take responsibility for their actions. Students are engaged in a wide variety of curricular and extra-curricular activities and possess a sense of belonging. Each student strives to maximize his/her potential and plans for his/her future education and ultimate career.

Personnel from each school and department collaborate to develop and implement both short and long-range plans for the division. All staff are committed to continual learning and professional growth to help achieve these goals. The school division provides considerable financial resources and scheduling flexibility for the pursuit of these endeavors.

Professional Learning Communities flourish within and among schools and community organizations. Open communication exists among all stakeholders to foster positive relationships. The entire community embraces involvement in the educational development of all students.

Mission Statement:

The faculty and staff of Manassas Park City Schools serves the social, emotional, physical, and intellectual development of each child through emphasis on academics, technology, and the arts. We foster a caring and creative learning community that enables each student to achieve at his/her highest ability level. We utilize formal and informal assessment data to drive instruction. This helps us ensure that students are engaged, have access to the proper curriculum and have the optimum opportunity to master material appropriate to their abilities. Upon departure from Manassas Park City Schools, students will have the tools necessary to continue their education and/or pursue their dreams and aspirations for the future.

Manassas Park Middle School is committed to working together with parents and community to actively engage and encourage all students in learning. An emphasis will be placed on the following 21st Century skills:

- Embracing technology in all facets of education
- Creating individuals that can be independent critical thinkers and problem solvers in all aspects of life
- Developing communication skills – speaking, listening, reading, writing

Purpose:

The purpose of Manassas Park Middle School is to provide a safe, encouraging learning environment that raises expectations and responsibilities for all aspects of students' individual learning.

Beliefs:

- Manassas Park Middle School students, with their unique abilities, diverse

- backgrounds, skills, and learning styles, have the ability to learn and be successful.
- Manassas Park Middle School students will be actively engaged as they develop academic, technological, artistic, physical, and interpersonal skills in a safe and structured environment that fosters a positive attitude necessary for success.
 - Students, parents, teachers, and community share in the responsibility for educational success.

Middle School Program Overview

Manassas Park Middle School provides a supportive learning environment for students as they transition into adolescence, increasing academic demands, and greater-than-before independence. The program takes into account the developmental needs of this stage, which are characterized by different levels of social, physical, emotional, and intellectual development. Additionally, the middle school furthers the community's desire to see that the children become responsible, productive adults, with the skills and attitudes necessary to build a rewarding life. Middle school bridges the elementary school years, which focus primarily on developing basic skills, and the high school years, which emphasize specialized preparation for post-high school education and careers.

Course Selection at the Middle School

In selecting courses for the upcoming school year, factors such as lifetime career goals and educational goals should be considered. Parents are encouraged to contact the middle school counselors to discuss student's course selections.

The course selection process for rising 6th, 7th, 8th, and 9th graders occurs in the second semester each year. The school counselors are generally responsible for this activity, but teachers are involved in making recommendations. The school counselors meet with students in the classroom setting to explain course options, recommendations, and requirements.

Using the course request form as a worksheet, students work with their parents/guardians to determine their course selections. Counselors enter the Band selection and other elective course information online for rising 6th graders. Students in 7th and 8th grade enter their course selections themselves online. To enter their course selections, students use the same username and password in Power School that they use to track their grades online.

All rising 6th, 7th, and 8th grade students are required to take language arts, math, social studies, and science. Students in 6th grade choose whether or not to take Band as an elective, and they take an array of other exploratory electives. Students in 7th and 8th grade select elective course options of their choice. Any questions concerning registration should be directed to the school counselors.

Schedule Changes

Students are expected to carefully select their courses and to follow their selections. Students may not get all of the classes that they request but consideration will be given to the top three choices made by students for electives. Only in special situations will individual requests for changes be considered. Changes will not be made if the result causes the maximum class size to be exceeded. Students will not be permitted to change a class after school has been in session for two weeks without administrative approval.

Requests must be made in writing and should include the reasons for the request as well as a telephone number where the parent can be reached. Requests for a teacher change cannot be allowed since such changes involve teaching loads and schedules. However, consideration will be given to requests from students assigned to repeat work with a teacher under whom they have previously failed. Final approval rests with the principal.

Keys to Success

Middle school can be a rewarding experience. Students who are successful have a good time in school but also realize that school is serious business, requiring commitment and hard work.

Critical to success:

- Consistent effort
- Completing assignments on time
- Attending school regularly

Advice to students:

- Participate in class
- Devote time each day to serious study and review
- Complete all assignments

Independence/Responsibility

Most middle school students often want and need to assume more responsibility for themselves, their behaviors, and their difficulties. However, they still need the involvement and guidance of their parents. Balancing the need for increasing independence with the need for parental involvement is often a tricky matter.

The school does want to hear from parents. Only when school personnel know about a problem or concern can it be addressed. The school works cooperatively with the parent and involves the student when appropriate.

Open House

Manassas Park Middle School will host an Open House evening prior to the beginning of each school year. Parents and students will have the opportunity to meet their teachers for the first time at this afternoon and evening event. Information about the dates and times will be sent in July. Parents may also visit our school web site for

more information (www.mpark.net). Laptop Deployment will occur in early August. Dates will be communicated with parents.

Standards of Learning

Success on Standards of Learning tests given in grades 6, 7, and 8 as well as End of Course high school classes depends on knowledge and skill that students have acquired through their school years.

The state of Virginia Testing Program requires that students in grades 3-8 and 11 be tested in the core academic subjects. The testing program provides information for the purposes of evaluating the effectiveness of instruction, redirecting instructional activities, and monitoring student achievement.

SOL Testing

Sixth and seventh grade students in the state of Virginia will participate in the Virginia Standards of Learning (SOL) Assessments in the following areas:

- English: Reading/Literature and Research (Reading 6 or Reading 7)
- Mathematics (Math 6, Math 7, or Math 8)
- Seventh grade students enrolled in Algebra I will also take an SOL in order to earn a high school verified credit

Eighth grade students in the state of Virginia will participate in the Virginia Standards of Learning (SOL) Assessments in the following areas:

- English: Reading/Literature and Research (Reading 8)
- English: Writing (Writing 8)
- Mathematics (Math 8, Algebra I, or Geometry)
- Science (Science 8)
- History (Civics and Economics 8)
- Eighth grade students enrolled in Algebra I or Geometry will earn a high school verified credit if they pass the class and the End of Course SOL.

The SOL assessments are designed to test the extent to which students have learned the content and skills specified in the Virginia SOL from grades 6 through 8. The Virginia Standards of Learning represent rigorous content and provide students with a solid foundation upon which to build later learning.

The English 8 Writing Composition and Multiple-Choice test is administered in early March and the rest of the multiple-choice tests are given at the end of the semester in late January or in late May/early June. Parents will receive detailed information on their child's performance on the tests after they have been administered and scored.

All students enrolled in Algebra I or Geometry will take the End-of-Course SOL test. If the student passes the SOL test and passes the course with a D or better, the student receives a "verified credit" for high school. A prescribed number of verified credits are required for a high school diploma and graduation.

Mid-Quarter and Quarter Exams

In preparation for the SOL assessments, Manassas Park Middle School has developed local benchmark exams to examine student progress prior to the state assessments.

Each middle school student will be tested twice every quarter on information in each separate subject. End of the quarter exams are 20% of a student grade for each subject.

Grading Scale

Numeric Grade	Letter Grade	Standard GPA Points
100-90	A	4.0
89-80	B	3.0
79-70	C	2.0
69-60	D	1.0
59 and below	F	0.0

Online Grading

At the beginning and throughout the school year, parents will have an opportunity to sign-up for an access code to view their child's grades online. We are utilizing the student information program called Power School, which will give parents even better access to their child's grades. Grades are uploaded each night through an automated process. Online grades are a snapshot of grades that are currently in a teacher's grade book and may not be reflective of all assignments given. Please keep in mind that individual teachers may utilize different grading rules, codes, and policies when assigning grades. Teachers are expected to enter grades at least once a week. Parents can also log on to Canvas to monitor their child's assignments and progress. Report cards are available online using PowerSchool. If you would like a paper copy of the report card, please contact the principal.

Grading System

1 st Quarter (9 weeks)	Assignments, projects, tests, quizzes, mid-quarter tests, participation	80%
	End of quarter exam	20%
2 nd Quarter (9 weeks)	Assignments, projects, tests, quizzes, mid-quarter tests, participation	80%
	End of quarter exam	20%
1 st Semester Grade	1 st Quarter Grade	50%
	2 nd Quarter Grade	50%
3 rd Quarter (9 weeks)	Assignments, projects, tests, quizzes, mid-quarter tests, participation	80%
	End of quarter exam	20%
4 th Quarter (9 weeks)	Assignments, projects, tests, quizzes, mid-quarter tests,	

	participation	80%
	End of quarter exam	20%
2 nd Semester Grade	1 st Quarter Grade	50%
	2 nd Quarter Grade	50%
FINAL GRADE	1 st Semester	50%
	2 nd Semester	50%

Parent Conferences

Parent conferences will be held for the entire school division at least once during the school year (usually in October). It is our hope that parents take advantage of the opportunity to talk with teachers concerning their child's progress in school. Parents are also urged to contact teachers when any other concerns or questions arise.

EIGHTH GRADE COURSE DESCRIPTIONS

Required Courses

Language Arts 8
Math (Math 8, Algebra I, Geometry I)
Physical Science 8
Civics & Economics 8
Physical Education/Health 8

Elective Courses

Band 8
Guitar 8
Choir 8
Spanish I
Family & Consumer Science 8
Art 8
General Music 8
Basic Programming 8
Computer Science II
Computer Solutions 8
*Math Seminar 8
GATE 8

*May be required for students not passing previous SOLs and/or by recommendation by 7th grade teachers.

Eighth Grade Required Courses

Language Arts 8 (90 minutes each day)

The eighth grade language arts curriculum focuses on student development in four main areas: oral language, reading/literature, writing, and research. Some examples of learning objectives are included in the following statements: The eighth grade student will learn and apply interviewing techniques. The student will become a skillful interpreter of the persuasive strategies used in mass media. Appreciation for literature will be stressed through a study of literary elements contained in classic works as well as contemporary selections. The student will describe themes or inferred main ideas, interpret cause-effect relationships, and draw conclusions from a variety of literary selections. The students will plan, draft, revise, and edit writing, with emphasis on narratives, exposition, and persuasion. Students will apply reading and editing skills in all subjects, such as communicating results of scientific experiments, reading and describing the relationship between subsets of the real number system, or describing the characteristics of the U.S. and Virginia constitutions. **A Standards of Learning assessment is administered in March to assess writing and grammar, and a second assessment is administered in the spring to assess reading to all students enrolled in this class.**

Math 8 (90 minutes each day)

The eighth grade math curriculum is designed to prepare students for Algebra I. The curriculum contains both content that reviews or extends concepts and skills learned in previous grades and new content that prepares students for more abstract concepts in algebra. New concepts include solving multi-step equations, graphing linear equations, applying transformations to geometric figures, and using matrices to organize and

interpret data. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies such as scientific calculators, spreadsheets, and videos. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative concepts and relationships or for proficiency in basic computations. Students will identify real-life application of the mathematical principles they are learning that can be applied to science and other disciplines they are studying. The emphasis in Math 8 will be to simplify algebraic expressions and to solve and graph algebraic equations and inequalities. The students will solve problems involving ratios, proportions, and probability. Students will also apply math formulas to perimeter, area, volume, and surface area. Students will continue to develop a wide range of problem-solving skills and strategies for solving a variety of problem types. Pre-Algebra 8 will meet every day in the middle school. **Students will take the Math 8 Standards of Learning assessment at the end of this course.**

Algebra I (90 minutes each day)

The majority of eighth grade students will take Algebra I. This course is offered for high school credit. Much consideration is given to the student's cognitive level and readiness for dealing with abstract concepts. The course includes solving first-degree equations and inequalities with one and two variables, as well as second-degree equations in one variable. A study of linear functions will include writing equations, finding slope, and graphing. Systems of linear equations will be solved both graphically and algebraically. Laws of exponents will be applied in the study of polynomials. Polynomials will be added, subtracted, multiplied, divided, and factored. Domain and range of relations and functions will be determined. Students will organize, manipulate, and analyze data using various methods including matrices and statistical techniques. Connections to problem solving will be made through practical applications. The graphing calculator and other technology will be used as tools to assist in interpretation and problem solving. **Students will take the Standards of Learning assessment for Algebra I at the end of this course.**

Geometry (90 minutes each day)

Geometry is the study of a mathematical structure whose basic elements are a set of points. Plane, solid, and coordinate geometry are studied. The course is designed to teach students to recognize terms, symbols, and figures of plane (and space) geometry, to develop certain sequences of theorems and to develop a way of thinking in a logical, mathematical manner using deductive and inductive reasoning. Formal proofs are emphasized throughout as well as applications of theorems. The students will apply basic relationships of geometry involved in congruence, similarity, parallelism, perpendicularity and area, and will perform basic geometric constructions. This course is offered for high school credit. In order to enroll, students must have successfully completed Algebra I with a pass (proficient) score on the Standards of Learning assessment in addition to a teacher recommendation. **Students will take the Standards of Learning assessment in Geometry at the end of this course.**

The following criteria must be met for teachers to recommend a student for Geometry:

- Pass (proficient) score on the Algebra I Standards of Learning assessment
- Reading and math skills above grade level
- Demonstrating above average study skills and work habits
- Displaying high motivation, maturity, positive attitude
- Willing to study and do additional homework above and beyond the 8th grade workload

Physical Science 8 (90 minutes for one semester)

In eighth grade, the students will continue to build on skills of systematic investigation with a clear focus of variables and repeated trials. Students will validate conclusions using evidence and data. Research methods will highlight practical problems and questions. Physical Science 8 will stress a more in-depth understanding of nature and structure of matter and the characteristics of energy. Major areas that are covered include the periodic table; physical and chemical changes; nuclear reactions; temperature and heat; sound; light; electricity and magnetism; and work, force, and motion. Students will be required to draw upon their knowledge of mathematics in order to solve complex equations throughout the course. This class provides the groundwork for subsequent study of chemistry and physics in high school. **Students will take the Science 8 Standards of Learning assessment at the end of this course.**

Civics & Economics 8 (90 minutes for one semester)

Standards for Civics and Economics examine the roles citizens play in the political, governmental, and economic systems in the United States. Students will examine the constitutions of Virginia and the United States, will identify the rights, duties, and responsibilities of citizens, and will describe the structure and operation of government at the local, state, and national levels. Students will investigate the process by which decisions are made in the American market economy and explain the government's role in it. The standards identify personal character traits, such as patriotism, respect for the law, willingness to perform public service, and a sense of civic duty, that facilitate thoughtful and effective active participation in the civic life of an increasingly diverse democratic society.

Civic education also must emphasize the intellectual and practical skills required for responsible citizenship. Students will practice these skills both inside and outside the classroom as they extend their understanding of the essential knowledge defined by the standards for Civics and Economics.

Students in this course will take the Standards of Learning Civics and Economics 8 exam at the end of this course.

Physical Education/Health 8 (year)

Requirements: MPMS Physical Education uniform and a notebook

Students in the 8th grade will continue to develop competence in lifetime game/sport activities. Instruction in physical education will include physical fitness, soccer, basketball, volleyball, weight training, and softball. Students will set goals, track progress,

and participate in activities that improve lifetime health-related fitness. Health 8 objectives include: personal growth and development, body systems, family life, and substance abuse. The goal is to exhibit a healthy lifestyle, interpret health information, and promote good health. Life Skills and Family Life Education are part of this course.

Eighth Grade Elective Courses

Band 8 (Brass & Percussion or Woodwinds) (year)

Students enrolled in Concert Band will continue learning the basic fundamentals of playing a band instrument with more emphasis on musical notation, sight-reading, interpretation, extended range, and continued technical skill development. It is not a beginning level class. Students will provide their own instruments through rental or purchase. Grades are based on tests, home practice, concerts, and individual improvement. Students are encouraged to participate in solo and ensemble festival.

Choir 8 (year)

Eighth grade choir presents multiple performances during the year. The class is open to all students with a strong desire to sing and requires no audition. An emphasis will be placed on the fundamentals of vocal technique, music notation, sight singing, and ensemble singing. Students will study a variety of musical styles. Members of the chorus are expected to attend several concerts and rehearsals held after school hours. All performances are required and graded. This course involves a strong commitment to music.

Guitar 8 (semester class)

Guitar 8 is designed to provide students with the basic knowledge and skills that are necessary to playing the guitar. Students will learn to read music and play the guitar in first position. Proper playing techniques such as strumming chords, flat picking, and finger-style playing will also be introduced. The class will also provide students the opportunity to create music by learning chord progressions, incorporating improvisation, and learning beginning solos. All lessons will be in accord with the Virginia Music Standards of Learning.

Spanish I (year)

Spanish I are high school classes and will be graded by high school standards. Students use the language authentically, communicating in real-life situations from the beginning of the course. They learn the sound system as well as basic grammar and vocabulary, primarily through creative use of the language in meaningful contexts. Culture and customs are an integral part of the course. Eighth grade students will receive high school credit toward graduation upon successful completion of the course. Because of this, the student must be reading above grade level, maintain at least a "B" average in reading/language arts, have better than average study skills and work habits, and be recommended by the language arts teacher. Homework will be required and extra study time is needed to achieve academic success.

Art 8 (semester class)

Students will develop skills in using various media, two and three-dimensional design, color theory, textile design, and printing. This course will infuse art production, art history, art criticism, and aesthetic critiques. The course is designed to provide students with the opportunity to develop plans and broaden the range of experiences within each media. Students will continue to develop their art portfolios.

Family & Consumer Science 8 (semester class)

This middle school course provides a foundation for management of individual, family, work, and community roles and responsibilities. Students explore concepts and practice skills related to problem solving, leadership, interpersonal relationships, ethical practices, career interests, environmental issues, and high-quality work. Mathematics, science, language, social sciences, fine arts, and technology are integrated throughout the program. Work and Family Studies is the foundation for Family and Consumer Sciences programs on the high school level.

General Music 8 (semester class)

This is a general music class for eighth grade students. This is a class that enhances musical knowledge and skills through listening activities and classroom activities. Students gain knowledge of music through the exploration of concepts and practicing skills. Students analyze musical compositions, identify sound sources, demonstrate music reading skills, develop an understanding of the history of music, and identify career opportunities related to music. Through a variety of activities, the student will experience growth in musicianship and expanded aesthetic awareness.

Computer Solutions 8 (semester class)

This course includes learning to type, word processing, database applications, and publishing. Using Windows, students will develop skills in applying technology to word processing, spreadsheets, and to learn how to properly use the keyboard to increase speed and efficiency in typing. Students will also acquire an understanding of Microsoft Office, Google, internet applications as well as safety concepts.

Basic Computer Programming 8 (semester class)

The CodeHS introduction to computer science curriculum teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills. Once students complete the CodeHS Introduction to Computer Science course, they will have learned material equivalent to a semester college introductory course in Computer Science and be able to program in JavaScript. It is a self-paced course that will challenge students' individual skill levels.

Computer Science II (*Prerequisite: completion of Computer Science I, semester class)

In each project based module, student teams create an Android® interface to solve a problem the team defines. Students learn fundamental computer science (CS) concepts

using MIT App Inventor. The course aims to develop computational thinking and build student excitement. Several days in each module are targeted to build career awareness about computing skills in all fields and to improve students' cyber hygiene.

Math Seminar 8 (teacher recommendation)

This course is required for students who were recommended by their 7th grade math teacher for extra assistance during their 8th grade year. Determination for placement in the seminar classes may also be based upon SOL scores from the previous year. The students will receive instruction and support to increase their math skills. **Seminar classes may be a requirement for students who did not pass the SOL from the previous year; therefore, this class may not be dropped.

GATE 8 (gifted identification)

This course is designed to nurture, challenge, and enhance the characteristics that gifted students already possess. Students focus on a variety of projects and topics throughout the course, and teachers take an interdisciplinary team approach. The course is centered on preparing students for the future using strategies that promote critical thinking, creativity, leadership, and 21st century skills. Determination for placement in this course is based on gifted and talented identification through the district's formal process, and the grading system is on a pass/fail basis. *This course will be offered online through Canvas.*

*Due to course availability, some students may repeat an elective in the second semester.

**Seminar classes may be a requirement for students who did not pass the SOL from the previous year; therefore, this class may not be dropped.

7th GRADE COURSE DESCRIPTIONS

Required Courses

Language Arts 7
Math (Math 7, Math 8, or Algebra I)
Life Science 7
US History II 7
Physical Education/Health 7

Elective Courses

Band 7
Choir 7
Art 7
Computer Solutions 7
General Music 7
Family & Consumer Science 7
Guitar 7
Intro to Spanish Culture 7
Basic Computer Programming 7
Computer Science I
Automation & Robotics
*Math Seminar 7
GATE 7

*May be required for students not passing previous SOLs and/or by recommendation by 6th grade teachers.

Seventh Grade Required Courses

Language Arts 7 (90 minutes each day)

The language arts program is a program of studies designed to teach the Virginia Standards of Learning, which focus on student development in four main areas: oral language, reading/literature, writing, and research. In seventh grade, the students will continue to develop oral communication skills and become more knowledgeable of verbal and nonverbal behaviors in oral communication. Fiction, nonfiction, and poetry selections will be read for comprehension and connections to other content areas. The students will continue to refine written composition skills, with special attention to word choice, organization, style, and grammar. They will compose expository, persuasive and narratives essays. Vocabulary development will be emphasized through a study of figurative language and word structure. Language Arts 7 will meet every day in the middle school. **Students will take the Reading 7: Standards of Learning assessment at the end of this course.**

Math 7 (90 minutes each day)

In seventh grade, the student will develop proficiency with integers, decimals, and fractions. Students will develop a wide range of skills and strategies for solving problems in the following areas: numbers and number sense, computation and estimation, measurement, probability and statistics, patterns, functions, and algebra. Some examples of student objectives include using proportions to solve real life situations, using the coordinate plane to manipulate an object, using algebraic words to describe math situations, finding volume or surface area of rectangular prisms and cylinders, and solving

linear equations with one variable. While learning mathematics, students will be actively engaged using concrete materials and appropriate technologies such as calculators and computers. Students will continue to develop problem-solving skills by learning additional strategies for solving a variety of problem types. Math 7 will meet every day in the middle school. **Students will take the Math 7: Standards of Learning assessment at the end of this course.**

Math 8 (90 minutes each day)

This seventh and eighth grade math curriculum is designed to prepare students for Algebra I. The curriculum contains both content that reviews or extends concepts and skills learned in previous grades and new content that prepares students for more abstract concepts in algebra. New concepts include solving multi-step equations, graphing linear equations, applying transformations to geometric figures, and using matrices to organize and interpret data. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies such as scientific calculators, spreadsheets, and videos. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative concepts and relationships or for proficiency in basic computations. Students will identify real-life application of the mathematical principles they are learning that can be applied to science and other disciplines they are studying. The emphasis in Pre-Algebra will be to simplify algebraic expressions and to solve and graph algebraic equations and inequalities. The students will solve problems involving ratios, proportions, and probability. Students will also apply math formulas to perimeter, area, volume, and surface area. Students will continue to develop a wide range of problem-solving skills and strategies for solving a variety of problem types. Pre-Algebra will meet every day in the middle school. **Students will take the Math 8: Standards of Learning assessment at the end of this course.**

Algebra I (90 minutes each day)

Seventh grade students who meet specific criteria will be allowed to take Algebra I. This course is offered for high school credit. Much consideration is given to the student's cognitive level and readiness for dealing with abstract concepts. The course includes solving first-degree equations and inequalities with one and two variables, as well as second-degree equations in one variable. A study of linear functions will include writing equations, finding slope, and graphing. Systems of linear equations will be solved both graphically and algebraically. Laws of exponents will be applied in the study of polynomials. Polynomials will be added, subtracted, multiplied, divided, and factored. Domain and range of relations and functions will be determined. Students will organize, manipulate, and analyze data using various methods including matrices and statistical techniques. Connections to problem solving will be made through practical applications. The graphing calculator and other technology will be used as tools to assist in interpretation and problem solving. **Students will take the Standards of Learning assessment for Algebra I at the end of this course.**

The following criteria must be met for teachers to recommend a student for Algebra I:

- Pass (proficient) score on the Math 6 assessment
- Reading and math skills above grade level
- Demonstrating above average study skills and work habits
- Displaying high motivation, maturity, positive attitude
- Willing to study and do additional homework above and beyond the 8th grade workload
- Teacher recommendation

Life Science 7 (90 minutes for one semester)

In Life Science 7, the students will gain an understanding of change, cycles, patterns, and relationships in the living world. Students will explore cellular organization and the classifications of organisms; the dynamic relationships among organisms, populations, communities, and ecosystems; and change as a result of transmission of genetic information from generation to generation. The students will use inquiry skills including the organization and mathematical analysis of data, manipulating variables in experimentation, and identifying sources of experimental error.

US History II 7 (90 minutes for one semester)

This class will continue to build on concepts learned during 6th grade during US History I. Students will discuss American involvement in events from the Civil War to the present, including the Industrial Revolution, World War I, the Great Depression, and World War II. Students will also cover topics related to American citizenship and economic systems, as well as current events.

Physical Education/Health 7 (year)

Requirements: MPMS Physical Education uniform and a notebook

Students in 7th grade will continue to develop competence in modified versions of game/sport, dance, and recreational activities. Instruction will include physical fitness, flag football, soccer, rhythms, basketball, volleyball, weight training, and softball. Students will analyze their skill performance and set reasonable, appropriate goals for improvement and maintenance of health-related fitness. Health 7 objectives include: basic first aid, nutrition, diseases, family life, consumer health, environmental health, and mental health. The goal is to exhibit a healthy lifestyle, interpret health information, and promote good health. Life Skills and Family Life Education are part of this course.

Seventh Grade Elective Courses

Band 7 (Beginning Band, Brass & Percussion, Woodwinds) (year)

This is the second year of band instruction. Students will provide their own instruments through rental or purchase as well as a book. Sheet music and a folder are loaned to the student from the school. Students enrolled in Band 7 will continue learning the basic fundamentals of playing a band instrument with more emphasis on musical notation, sight-reading, interpretation, extended range, and continued technical skill development.

Grades are based on tests, class participation, homework, home practice, and concerts. Concerts are an important culmination to class instruction and are required. Students are encouraged to participate in solo and ensemble festival.

Choir 7 (year)

This course is offered for any student who is interested in choral music. The class is open to all students with a strong desire to sing and requires no audition. An emphasis will be placed on the fundamentals of vocal technique, music notation, sight singing, and ensemble singing. Students will study a variety of musical styles. Members of the chorus are expected to attend several concerts and rehearsals held after school hours. This course involves a strong commitment to music.

Guitar 7 (semester class)

Guitar 7 is designed to provide students with the basic knowledge and skills that are necessary to playing the guitar. Students will learn to read music and play the guitar in first position. Proper playing techniques such as strumming chords, flat picking, and finger-style playing will also be introduced. The class will also provide students the opportunity to create music by learning chord progressions, incorporating improvisation, and learning beginning solos. All lessons will be in accord with the Virginia Music Standards of Learning.

Art 7 (semester class)

The seventh grade course infuses art production, art history, art criticism, and aesthetic techniques. This course is designed to provide students with the opportunity to develop a foundation of varied art skills, techniques, and concepts. This class will build upon drawing skills and the usage of elements and principles of design. Also, students will produce, discuss, and write about their art and that of others. The students will establish a portfolio.

Computer Solutions 7 (semester class)

This course includes learning to type, word processing, database applications, and publishing. Using Windows, students will develop skills in applying technology to word processing, spreadsheets, and to learn how to properly use the keyboard to increase speed and efficiency in typing. Students will also acquire an understanding of Microsoft Office, Google, internet applications as well as safety concepts.

Basic Computer Programming 7 (semester class)

The CodeHS introduction to computer science curriculum teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills. Once students complete the CodeHS Introduction to Computer Science course, they will have learned material equivalent to a semester college introductory course in Computer Science and be able to program in JavaScript. It is a self-paced course that will challenge students' individual skill levels.

Computer Science I (semester class)

In each project based module, student teams create an Android® interface to solve a problem the team defines. Students learn fundamental computer science (CS) concepts using MIT App Inventor. The course aims to develop computational thinking and build student excitement. Several days in each module are targeted to build career awareness about computing skills in all fields and to improve students' cyber hygiene. The modules are sequential and students will complete Computer Science 1 before moving onto Computer Science 2.

Automation and Robotics (semester class)

Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

Family & Consumer Science 7 (semester class)

This middle school course provides a foundation for management of individual, family, work, and community roles and responsibilities. Students explore concepts and practice skills related to problem solving, leadership, interpersonal relationships, ethical practices, career interests, environmental issues, and high-quality work. Mathematics, science, language, social sciences, fine arts, and technology are integrated throughout the program. Work and Family Studies is the foundation for Family and Consumer Sciences programs on the high school level.

General Music 7 (semester class)

This is a general music class for seventh grade students. This is a class that enhances musical knowledge and skills through listening activities and classroom activities. Students gain knowledge of music through the exploration of concepts and practicing skills. Students analyze musical compositions, identify sound sources, demonstrate music reading skills, develop an understanding of the history of music, and identify career opportunities related to music. Through a variety of activities, the student will experience growth in musicianship and expanded aesthetic awareness.

Intro to Spanish Culture 7 (semester class)

This course is an introduction to the culture of Spanish speaking countries around the world. Students learn about different holidays, foods, celebrations, and more.

Math Seminar 7 (teacher recommendation)

This course is required for students who were recommended by their 6th grade math teacher for extra assistance during their 7th grade year. Determination for placement in the seminar classes may also be based upon SOL scores from the previous year. The students will receive instruction and support to increase their math skills. **Seminar classes may be a requirement for students who did not pass the SOL from the previous year; therefore, this class may not be dropped.

GATE 7 (gifted identification)

This course is designed to nurture, challenge, and enhance the characteristics that gifted students already possess. Students focus on a variety of projects and topics throughout the course, and teachers take an interdisciplinary team approach. The course is centered on preparing students for the future using strategies that promote critical thinking, creativity, leadership, and 21st century skills. Determination for placement in this course is based on gifted and talented identification through the district's formal process, and the grading system is on a pass/fail basis.

*Due to course availability, some students may repeat an elective in the second semester.

**Seminar classes may be a requirement for students who did not pass the SOL from the previous year; therefore, this class may not be dropped.

6th GRADE COURSE DESCRIPTIONS

Required Courses

Language Arts 6
Math (Math 6 or Math 6 Extended)
Science 6
US History I 6
Physical Education/Health 6

Elective Courses

Band 6
Choir 6
Art 6
General Music 6
Computer Solutions 6
Intro to Spanish Language 6
Intro to STEM 6
Design & Modeling
Guitar 6
Family or Consumer Science 6
*Math Seminar 6
GATE 6

*Will be required for students not passing previous SOLs and/or by recommendation by 5th grade teachers.

Sixth Grade Required Courses

Language Arts 6 (90 minutes each day)

The language arts program is a program of studies designed to teach the Virginia Standards of Learning. The sixth-grade language arts curriculum focuses on student development in four main areas: oral language, reading/literature, writing, and research. Several objectives in each of these areas will be met. Students will be reflective participants in classroom discussions. They will present personal opinions and understand differing points of view, distinguish between fact and opinion, and analyze the effectiveness of group communication skills. The students will read a variety of fiction, nonfiction, and poetry independently for appreciation and comprehension. They will plan, draft, revise, and edit narratives, descriptions, and explanations with attention to composition and style, as well as sentence formation, usage, and mechanics. Writing will be emphasized as a learning tool in the other academic content areas. Language Arts 6 will meet every day in the middle school. **Students will take the Reading 6: Standards of Learning assessment at the end of this course.**

Math 6 (90 minutes each day)

In sixth grade, the student will develop proficiency with whole numbers, decimals, and fractions. Students will develop a wide range of skills and strategies for solving problems in the following areas: number and number sense, computation and estimation, measurement, probability and statistics, patterns, functions, and algebra. Some examples of student objectives include the use of ratios to compare data sets, making conversions within a given measurement system, making geometric constructions, classifying three dimensional figures, and solving linear equations with one variable. While learning

mathematics, students will be actively engaged, using concrete materials and appropriate technologies such as calculators and computers. The students will continue to develop problem-solving skills by learning additional strategies for solving a variety of problem types. Math 6 will meet every day in the middle school. **Students will take the Math 6: Standards of Learning assessment at the end of this course.**

Math 6 Extended (90 minutes each day)

Math 6 Extended meets all of the objectives for the sixth grade math curriculum; however, instruction is accelerated for learners whose intellectual and motivational maturity permits more challenging mathematical problem solving. The following criteria must be met for teachers to recommend a student for this class:

- Reading and math skills above grade level
- Maintaining an "A" average achievement grade in math
- Demonstrating above-average study skills and work habits
- Displaying high motivation, maturity, positive attitude
- Willing to study and do additional homework above and beyond the 6th grade workload

Math 6 Extended will meet every day in the middle school. Students who successfully complete this course will move on to Algebra I in 7th grade. **Students will take the Math 6: Standards of Learning assessment at the end of this course.**

U.S. History I 6 (90 minutes for one semester)

This course focuses on American History from pre-colonial times to pre-Civil War. The colonization of America will be discussed, as well as the events and impact of the American Revolution. Early American government and Westward Expansion will also be discussed.

Science 6 (90 minutes for one semester)

This course gives students the opportunity to learn about science as it relates to their everyday lives. In sixth grade, the students will continue to analyze data and conduct experiments. Scientific methodology will include testing the validity of predictions and conclusions. Students will state hypotheses and define independent and dependent variables. The concept of change will be explored through the study of transformations of energy and matter, both in living things and in the physical sciences. A more detailed understanding of the solar system is a focus. Natural resource management and its relationship to public policy and cost/benefit tradeoffs are introduced.

Physical Education / Health 6 (year)

Requirements: MPMS Physical Education uniform and a notebook

Students in 6th grade will combine fundamental skills into more complex movement forms in units such as physical fitness, rhythmic activities, soccer, basketball, softball, and volleyball. Students will assess their health-related fitness status and set reasonable, appropriate goals for development and improvement. Students will learn about health issues and practice health skills in the following areas: nutrition, mental health, diseases,

personal growth, family life, personal health, safety, and first aid. Life Skills and Family Life Education are part of this course.

Sixth Grade Elective Courses

Band 6 (Brass & Percussion, Woodwinds) (year)

This is the second year of band instruction. Students will have instruments provided for by Manassas Park City Schools. Sheet music and a folder are loaned to the student from the school. Students enrolled in Band 6 will continue learning the basic fundamentals of playing a band instrument with more emphasis on musical notation, sight-reading, interpretation, extended range, and continued technical skill development. Grades are based on tests, class participation, homework, home practice, and concerts. Concerts are an important culmination to class instruction and are required. Students are encouraged to participate in solo and ensemble festival. This course involves a strong commitment to music. All students must purchase a book and CD set for this course. These will be purchased through local music stores for approximately \$7.00. (Slightly higher for percussion)

It is important to realize that band is a course that receives a letter grade like other subjects. Grades in band are computed through class participation and preparedness, written class work, playing and written tests, and practice records. A weekly requirement of 100 minutes for practice has been established at Manassas Park Middle School. A signed practice chart will be due weekly. This teaches responsibility along with tracking weekly practice.

Two concerts are given in the first year of band instruction. A winter and spring concert will include mandatory participation for all band students. Private lessons are not required but are recommended as they give your child extra one-on-one attention.

Choir 6 (year)

This course is offered for any student who is interested in choral music. The class is open to all students with a strong desire to sing and requires no audition. This class offers 6th graders an opportunity to start middle school in a complete choir experience. The student must enter this class well aware that he/she is making a total commitment to learning all of the basics of good singing. This requires a lot of self-discipline. Proper vocal techniques and fundamentals of reading music will be taught. Members of the chorus are expected to attend several concerts and rehearsals held after school hours. This course involves a strong commitment to music.

Guitar 6 (semester class)

Guitar 6 is designed to provide students with the basic knowledge and skills that are necessary to playing the guitar. Students will learn to read music and play the guitar in first position. Proper playing techniques such as strumming chords, flat picking, and finger-style playing will also be introduced. The class will also provide students the

opportunity to create music by learning chord progressions, incorporating improvisation, and learning beginning solos. All lessons will be in accord with the Virginia Music Standards of Learning.

Art 6 (semester class)

The sixth grade course infuses art production, art history, art criticism, and aesthetic techniques. This course is designed to provide students with the opportunity to develop a foundation of varied art skills, techniques, and concepts. Also, students will produce, discuss, and write about their art and that of others. The students will establish a portfolio.

Computer Solutions 6 (semester class)

This course includes learning to type, word processing, database applications, and publishing. Using Windows, students will develop skills in applying technology to word processing, spreadsheets, and to learn how to properly use the keyboard to increase speed and efficiency in typing. Students will also acquire an understanding of Microsoft Office, Google, internet applications as well as safety concepts.

Intro to STEM 6 (semester class)

This course is project based where students apply interdisciplinary understanding of science, technology, engineering and math. Students will be given the opportunity to explore different STEM career paths and work on collaborative projects.

Design and Modeling (semester class)

Students discover the design process and develop an understanding of the influence of creativity and innovation in their lives.

Intro to Spanish Language 6 (semester class)

This course is an introduction, giving students the basics of the Spanish language, along with every day phrases. Students will learn how to introduce themselves, have a basic conversation, talk about the classroom, weather, and more.

Family & Consumer Science 6 (semester class)

This middle school course provides a foundation for management of individual, family, work, and community roles and responsibilities. Students explore concepts and practice skills related to problem solving, leadership, interpersonal relationships, ethical practices, career interests, environmental issues, and high-quality work. Mathematics, science, language, social sciences, fine arts, and technology are integrated throughout the program. Work and Family Studies is the foundation for Family and Consumer Sciences programs on the high school level.

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SPECIAL POPULATIONS

Special Education Students

The instruction of students with disabilities in the middle school is in accordance with federal and state regulations. Students with disabilities are placed in the least restrictive environment. Where appropriate, each student with a disability participates as a member of a teacher advisor group and/or is a member of an academic team. Individual Education Plans (IEPs) describe necessary services, accommodations and/or modifications and placement of identified students with disabilities.

Limited English Proficient Students

Students with limited English proficiency from beginning levels through advanced levels have different learning options within the middle school program. The curriculum is aligned with the State English Language Proficiency (ELP) Standards. Students identified as Level 1 or Level 2 study reading/language with an ELL teacher every day for a 90-minute block. Students are enrolled in an additional social studies, science and mathematics classes.

Students pass to the next proficiency level or exit the program to regular English based upon identified exit criteria which include criterion referenced tests, student portfolios, writing samples, and the state approved English Language Proficiency Assessment (WIDA).

Gifted Students

The middle school staff makes adjustments to meet the unique learning needs of students identified as gifted according to the Manassas Park City School identification process. For students identified gifted in academic areas, teams make provisions to provide challenge through strategies of curriculum differentiation and instructional regrouping. During team planning meetings, teachers in the core areas assign students to groups based on achievement levels and/or other criteria appropriate to the instructional activity. For students with exceptional abilities, flexibility exists to meet individual needs through various student options, including acceleration of progress through school, acceleration of progress through content and independent study. Gifted students may participate in a GATE elective in the 6th, 7th, and 8th grades.