

# Chatham Middle School

-Program of Studies-

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*2016-2017*

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# GRADE 8

## CORE COURSES

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### **ENGLISH**

The focus of Eighth Grade Language Arts is to provide students with a comprehensive and integrated approach to literacy that builds on the learning they experienced in sixth and seventh grades. The course content focuses on primarily American literature and informational texts from the twentieth and twenty-first centuries.

Students discover personal and shared understandings of themes by a variety of opportunities for them to read, write, speak, listen, and view texts critically, strategically and creatively. This integrated approach utilizes a wide selection of contemporary award-winning novels, short stories, plays and informational texts through which students employ reading strategies to help them understand text. Strategic readers compare, infer, synthesize, and make connections as they construct meaning within and beyond texts. Literary and informational texts are connected to central themes and essential questions that cross content areas whenever relevant. Both literature and expository texts provide models of writing that enable students to see how author's use words, phrases and information and the basis for instruction in vocabulary and grammar. Small group experiences provide opportunities for students to collaborate, to investigate and to extend learning. Students also participate in an active independent reading program so that they may pursue texts of interest to them while also building their reading stamina, fluency and vocabulary.

Within this program students use a repertoire of writing strategies that enable them to vary form and style in order to write for different purposes, audience and contexts. Students write a range of grade appropriate prose that includes narrative elements as well as argumentative, narrative, and informative essays. The instructional focus of writing within the eighth grade includes instruction on all steps of the writing process: brainstorming, drafting, revision, editing and publishing. Within this writing process, students will develop and refine their ideas for thinking, learning, communicating and aesthetic expression. Grammar instruction focuses on the required skills as identified in the Common Core State Standards.

### **HONORS ENGLISH**

Eighth-grade Honors English is designed to enhance the Language Arts skills of students as they prepare to enter high school. The course, which moves at a pace that requires strong inferential-reading and advanced writing skills, explores twentieth century fiction and non-fiction through the study of novels, plays, short stories, poetry, articles, and essays. Students develop critical-thinking skills and learn to analyze texts in relation to each other. Homework assignments, writing pieces, vocabulary study,

class discussions, quizzes and tests are important tools of assessment and serve to shape the delivery of instruction. The expectations for this course are high, and teachers presume that the students are self-motivated, independent, and intellectually curious learners.

### **ALGEBRA I**

Algebra I is the traditional course designed to cover the essential topics necessary for subsequent mathematics courses. Strong arithmetic and reasoning skills are essential. The ability to make connections between graphs and their algebraic expressions is critical. Students will learn how to write and evaluate expressions using exponents and order of operations over the set of real numbers. Techniques for solving equations and inequalities using several transformations are a fundamental skill used throughout the year. Content covered in this course will focus on relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. Throughout the course, verbal and algebraic models and equations represent real-life situations and tables and graphs are used to represent functions. Statistical analysis also occurs continuously. Successful completion of this course is followed by Geometry in the ninth grade.

### **HONORS ALGEBRA I**

Honors Algebra I is offered to qualified eighth grade students who are highly motivated and academically advanced. This rigorous full year course requires strong quantitative reasoning skills and is intended for highly motivated students. The student should have demonstrated both superior ability and achievement in previous course work and continued evidence of effort commensurate with accelerated level work. The student truly needs outstanding study skills, intellectual curiosity and perseverance.

The Honors Algebra I course is intended to have the student develop an understanding in the following areas: relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. Problem solving and geometric models are introduced early focusing on real world applications. Upon successful completion of this course, students select Geometry or Honors Geometry for their ninth grade mathematics program.

### **ALGEBRAIC EXPRESSIONS**

This course is designated to make mathematics accessible to a wide range of students. It is an introductory course exploring algebraic concepts. Students will learn new material that is presented in graphic and text format. Students will be able to define math concepts using words and symbols and finally translate problems from English into algebraic symbols. Emphasis is placed on linear relationships.

Topics include operations with integers, graphing and writing linear equations and linear inequalities. Solving linear equations and linear inequalities require the student to

choose the sequence of transformations in the proper order. Students who successfully complete this course will select Algebra for their ninth grade mathematics program.

*\*\*Eighth grade students who have completed Algebra I as seventh graders will take an online Geometry course given through Educere.*

## **SOCIAL STUDIES**

Focused on the goal of developing informed and engaged citizens, the 8th grade Social Studies course Civics -The Individual and Society, inspires student interest through active learning activities applied to “real world” issues in order to develop a broad understanding of fundamental concepts of democracy and an appreciation of the responsibilities of citizenship in a national and global context.

### ***Curriculum Content***

8th Grade Civics builds understandings of the origins, development and exercise of power and authority in the United States. By developing their ability to develop informed questions, assumptions, and well-reasoned opinions, students recognize the importance of active citizenship, the value of critical thinking, and their own essential role in public affairs. The primary content for the course pertains to the principles, functions, and organization of various levels of government in the United States. This includes the origins of the American political system; the roles, rights, responsibilities of United States citizens; and methods of active participation in our political system. Particular attention is paid to the relationships, both individual and global, that drive public policy and the manner in which public opinion develops and changes within the 21st century marketplace of ideas.

Civics-The Individual and Society examines the foundational beliefs and structure of the government of the United States. Students investigate the Constitutional Convention and the ratification fight that followed to gain a greater appreciation of how fundamental disputes surrounding the founding of our country are persistently reflected throughout history. Further illustrating the interaction between the past and present, Civics students study how fundamental civil rights outlined in the Bill of Rights are historically applied by the justice system and the Supreme Court in landmark decisions. Employing their understanding of civil liberties, students participate in authentic learning experiences such as mock trials which explore freedoms provided in the Constitution.

Civics-The Individual and Society promotes an appreciation of the operational framework of our democracy. Students investigate the development of public opinion to recognize the role it plays in the political process. Critical thinking skills are developed as students view issues from multiple perspectives and disassemble strategies employed by politicians, political campaigns, interest groups and individuals to exercise power and authority.

## **SCIENCE**

Physical Science is the study of matter, energy and their interactions. With the introduction of the Next Generation Science Standards students will explore four core ideas in Physical Science: matter and its interactions, forces and interactions, energy and waves and their applications. Students will discover the smallest of particles, atoms and how they interact with each other. They will identify physical and chemical properties of matter and learn how they interact. Forces between objects and descriptions of how and why motions change is a core topic in this course. Electric, magnetic and gravitational forces will be discovered and explained. Connections will be made to energy and energy flow through systems. The creation of models involving waves and their interactions are explored.

Presentations of scientific evidence, explanations, building models and making connections between science content is the expectation in this course. Practical, hands-on experiments, activities, as well as projects are used to help stress and reinforce topics covered in the classroom. Students are active participants in all classroom activities. This course emphasizes processes of science, designing experiments, critical thinking and problem solving skills.

Upon completion of this course, students are placed into Concepts of Biology, Biology, or Honors Biology for their ninth grade science program.

## **WORLD LANGUAGE - SPANISH, GERMAN, FRENCH, or CHINESE**

This course is a continuation of sixth and seventh grades in the same target language. Reading, writing dialogues, working with language audios, and participating in oral drills and classroom discussions enable students to carry on elementary conversations and write basic compositions, correspondence, and notes. Technology is integrated with content in every thematic unit of study. Authentic videos, audio, and electronic media are used, often in connection with online use of technology, to facilitate the development of communication skills (interpretive, interpersonal, presentational) via diverse strategies and activities. These materials and resources also provide insight into the history, geography, and practices of target cultures. Students are expected to use the target language in all appropriate situations in the classroom.

## **INTRODUCTORY CONVERSATIONAL SPANISH**

This course is a continuation of Grades 6 and 7. It is designed for students who exhibit specific difficulty in the learning of a World Language (i.e. phonemic awareness, word retrieval and fluency, auditory processing). Students will continue working toward developing skills and an increased proficiency in aural comprehension, oral use of the target language, and written communication. A variety of instructional approaches will continue to be utilized in order to develop a student's ability to learn a World Language. Basic vocabulary will be expanded upon and more complex grammatical concepts will be introduced. Additional time will be spent on developing an appreciation of the cultural differences experienced in the Spanish-speaking world.

## **PHYSICAL EDUCATION**

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The objectives of the physical education program are to develop and maintain a suitable level of physical, social, and emotional wellness that will be a continuation from the previous grade level. In doing so, a natural progression of these objectives will target age appropriate skill levels. Furthermore, the students will be competent in body awareness through the acquisition of psychomotor, problem solving, critical thinking and cooperative learning skills. These objectives will allow the students to cultivate desirable social and ethical behaviors while developing safety skills and habits. The goals of our physical education classes are to enable students to demonstrate wholesome, lifelong activities, a positive self-image and a variety of motor skills. Students will understand and demonstrate their understanding of the rules, skills and proper use of equipment through team and individual activities. In addition, the children will be involved with more recent theories related to muscular endurance, muscular strength, cardiovascular endurance and nutrition. At the same time, the concepts of higher order thinking will be utilized during all of the daily lessons. These proficiencies will be measured by teacher observation of proper exercise and skill technique, sportsmanship and attitude, appropriate participation in class activities, as well as written quizzes and occasional homework assignments.

## **CYCLE COURSES**

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### **CONTEMPORARY SHORT STORIES: WRITING WORKSHOP**

Do you love to write fiction? Do you love composing original stories? Contemporary Short Stories: Writing offers eighth grade students an opportunity to read and write short story form. Students read, study, and evaluate short stories written by familiar authors that represent a wide range of genres. The course provides students with a practical overview of literary elements that characterizes short stories including theme, characterization, point of view, narration and other literary elements. Throughout the cycle, students engage in the writing process, developing their own short story pieces in various genres with a focus on the literary elements identified within the short story models they study. Through revision and conferencing, students learn how to develop voice and tone as recognizable elements in their own writing.

### **MEDIA PRODUCTION**

Perhaps one of the most important skills of our time is to critically read and carefully evaluate the news media. Eighth grade students in the Media Production course explore, evaluate, and generate news stories in various forms. The course examines hard news, feature writing, opinion pieces and editorial essays as well as podcasts and television news. Through studying journalistic writing traits, students practice writing articles or scripting audio or video reports for a variety of audiences and purposes. Students exercise methods for researching and interviewing and apply these skills in

their final published pieces. Students understand how to select a topic, research the topic, and write and publish a feature or opinion/editorial piece, following the stylistic guidelines of each type of writing. Students write articles, create podcasts and record video for publication on the Chatham Middle School news web page. They apply the information and skills they have learned throughout the unit to their news reporting.

### **HOLOCAUST STUDIES AND HUMAN BEHAVIOR**

This course uses an appropriate understanding of the historical context of the Holocaust to launch a wider view of the destructive effects of prejudice and intolerance. By learning of the personal lives of those who lived through the European Holocaust as well as historical examples of genocide and injustice, students will confront important themes of change and loss, courage, resourcefulness, fairness, humanity, justice and the ethical use of authority and power. Students will uncover the ways in which they can apply the lessons of the Holocaust to their own lives in the wider world.

### **GRAND DESIGN CHALLENGE**

Students will continually develop and expand upon their understandings of engineering and design by mastering the skills necessary for identifying problems, delineating criteria and constraints for solutions, and framing design briefs. Students will continually apply mathematics, science, and technological understandings to solve contextualized problems framed within the National Academy of Engineering's *Grand Challenges of Engineering*. Course work provides opportunities for community and global civic engagement and fosters a sense of responsibility and ownership of critical global issues such as making solar energy economical and providing access to clean water through promoting student choice and autonomy in problem selection and pathways to solutions.

### **DIGITAL GAME DESIGN**

This course will allow students to explore the basics of computer hardware components and develop computational thinking skills, which will assist students in problem solving through creating game applications in Scratch. Students will follow the Engineering Design process to create aspects of game design such as logic mapping, intuitive user interactions, coding, developer testing, debugging, peer critiquing, user testing, and user feedback. Students will gain proficiency in computational thinking principles while implementing "if else" statements, loops, functions, variables, and operators. The Digital Game Design course will utilize 21st-Century learning skills such as collaboration, communication, and teamwork to create solutions to real world problems.

### **TEXTILE DESIGN AND PRODUCTION**

Students will design, graph and construct a "pillow" of their choice using basic sewing skills. The second project will be chosen by the student and approved by the teacher. Examples: Peyton Manning's "Hero Capes for Kids" lounge pants, a quilt or tote.

## **ART: TRANSCENDING THE CULTURAL DIVIDE**

To further understand themselves and the world around them through art, multicultural and interdisciplinary art connections will be explored as students create unique works of art with universal connections and themes. Oil Pastel Drawing, Acrylic Painting, Ceramics, and Collage will be presented.

## **ELECTIVE COURSES**

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### **APPLIED MUSIC**

Concert Band, Orchestra and Chorus are offered to all students in grades 6-8. Each student gains musical knowledge and technical competency through rehearsal and performance of a wide variety of repertoire in an atmosphere of group cooperation. Individual and ensemble performance, skills in intonation, phrasing, blend, dynamics and articulation are stressed at each grade level. All instrumentalists receive an additional sectional lesson each week.

### **STUDIO ART (1 semester - alternate days)**

Studio art is an elective course where students are able to expand on their artistic interests and skills. Advanced topics are introduced which elaborate on techniques and materials previously covered in cycle art. Students work within guidelines to formulate individual projects that place an emphasis on the creative process.

### **THEATER AND MEDIA ARTS (1 semester - alternate days)**

This course will address the following aspects of the theater: terminology, role playing, improvisations, stage management, choreography, props, set decoration, set design, scenery art, blocking, marking, backstage crew, crew heads and students as directors. Students will utilize computer graphics and video technology in news, interview and talk show formats as well as creating and updating a video of CMS events. Students will also create and perform short plays

### **STAGECRAFT**

This course will introduce 7th and 8th grade students with an interest in behind-the-scenes performance to technical elements of theater production including lighting, sound, and set design. Theater terminology, the importance of personal safety during backstage productions, stage crew collaboration, and career opportunities will also be covered. This course will offer interested CMS students the opportunity to develop fundamental skills in stagecraft and apply them through practical experiences with the CMS All-School Production and Theater class productions.

### **EXCEL PROGRAM**

The Excel program is designed to strengthen the fundamental skills of students in the regular education program. Offered in both language arts and math in a small group setting, students take Excel in addition to their English and Math classes. The program

reinforces the prerequisite skills needed to be successful in the classroom with an emphasis on teaching strategies that they can use independently. Excel teachers present concepts and skills through methods that complement traditional teaching approaches.

Only general education students are eligible for Excel and must meet the criteria for the program. Multiple measures are used when evaluating students for the program. These measures include teacher recommendation, performance assessments, and standardized test scores.

*Language Arts* - The curriculum is centered on teaching students the skills of competent readers and writers. Major units are reading comprehension, fluency, writing, and vocabulary. The program helps students develop oral and written communication skills as well as strategies that can be used independently. Since students also have assigned reading for their English classes, short texts that cover a range of genres including non-fiction, poetry, short stories, plays, excerpts from novels, and speeches are used.

*Mathematics* - Excel targets the necessary prerequisite skills needed to be successful in the regular education math classroom. In addition, the program aims to produce confident thinkers by assisting students to develop problem-solving strategies. Major units include a) computation, b) decimals and fractions, c) ratio, proportion, and percent, d) integers and irrational numbers, e) order of operations, f) equations and inequalities, and g) graphing linear equations.

# GRADE 7

## CORE COURSES

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### **ENGLISH**

The focus of Seventh Grade Language Arts is to provide students with a comprehensive and integrated approach to literacy learning. Students discover personal and shared meaning by learning to read, write, speak, listen and view critically, strategically and creatively. The course content focuses on primarily world literature and informational texts.

As was in the sixth grade course, the seventh grade curriculum utilizes an integrated approach of language arts instruction to include a wide selection of contemporary award-winning novels, short stories, non-fiction and informational texts through which students employ good reading strategies to help them understand and investigate text. Strategic readers compare, infer, synthesize, and make connections as they construct meaning within and beyond texts. Literary and informational texts are connected to central themes that cross content areas whenever relevant. Both literature and expository texts provide models of writing that enable students to see how authors use words and phrases to establish tone and voice as well as for instruction in vocabulary and grammar. Literature circles provide opportunities for students to collaborate, to investigate and to extend learning. Students also participate in an active independent reading program so that they may pursue texts of interest to them while also building their reading stamina, fluency and vocabulary.

Within this program students use a repertoire of writing strategies that enable them to vary form and style in order to write for different purposes, audience and contexts. Students write a range of grade appropriate prose that includes narrative elements as well as argumentative and informative essays. The instructional focus of writing within the seventh grade includes instruction on all steps of the writing process: brainstorming, drafting, revision, editing and publishing. Within this writing process, students develop and refine their ideas for thinking, learning, communicating and aesthetic expression. Grammar instruction will focus on the required skills as identified in the Common Core State Standards.

### **HONORS ENGLISH**

Seventh grade Honors English blends the instruction of reading, writing, speaking and listening. Instruction is fast-paced and assumes a level of comfort with abstract thinking and analytical approaches to literature and expository texts. Honors students are expected to be independent, self-motivated, and organized learners. Their active class

participation demonstrates insight and inferential skills well beyond a literal reading of the subject matter. Since homework and outside preparation play a critical role in student success, it is expected that learners complete assignments fully and independently.

### **PRE-ALGEBRA**

The traditional seventh grade mathematics curriculum has been accelerated to a pre-algebra level. While the course always involved pre-algebra concepts, the present curriculum is designed to lead students into Algebra I in eighth grade. A more ardent text requires full commitment. The need to learn concepts and practice step-by-step procedures is stressed to prepare students for Algebra I. Cooperative group work and whole group discussion emphasize student involvement and participation to maximize understanding and achievement.

The pre-algebra curriculum focuses on problem solving application integrated with ratios and proportional relationships, the number system, expressions and equations, geometry, and statistics and probability.

### **HONORS PRE-ALGEBRA**

Students recommended for this rigorous course have demonstrated high motivation, achievement, and aptitude in the sixth grade mathematics program. A successful accelerated pre-algebra student has the determination to do the best work possible along with the maturity to comprehend higher-level abstract concepts and demonstrate excellent work habits and study skills. Fundamental operations and mathematical concepts of algebra and geometry increase in difficulty as the year progresses so that students understand the need for continuous review of structured problem solving techniques. Complex work problems require high reading and comprehension skills. Students must be committed to learning concepts and practicing algebraic procedures to be successful in Honors Algebra I in eighth grade.

The Honors Pre-Algebra curriculum focuses on problem solving application integrated with ratios and proportional relationships, the number system, expressions and equations, geometry, and statistics and probability.

*\*\*There is a select number of students who have completed Pre-Algebra as sixth graders and who will take Grade 8 Honors Algebra as seventh graders.*

### **SOCIAL STUDIES**

World Cultures and Geography is an exploratory course that promotes information gathering and critical thinking skills to provide students will effective habits of mind to succeed in the 21st Century. Using a geographic perspective, students will gain a greater sense of the world around them by investigating the people, places and environments of the world. By developing a broad understanding of the world and its people, students will be better prepared to develop as active and informed global citizens.

World Cultures and Geography requires active student learning by combining a traditional program of study with student-centered, exploratory, project-based instruction. Within each unit of study, students will first use geographic perspective and reasoning to explore the people, places and environments of a specific region. Students will then complete an inquiry-based exploratory project developing contemporary essential skills.

## **SCIENCE**

The life sciences focus on patterns, processes, and relationships of living organisms. With the introduction of the Next Generation Science Standards students will explore four core ideas in Life Science: structures and processes in organisms, ecology, heredity, and evolution. This course addresses how individual organisms are configured and how these structures function to support life, growth, behavior, and reproduction. Exploration of organisms' interactions with each other and their physical environment including obtaining resources, changing their environment, environmental factors and ecosystems they live in. Social interactions and group behavior are tied into determining the function of an ecosystem. Various organisms are explored with a focus on the flow of genetic information between generations. Changes in the traits of populations of organisms over time and the factors that account for species' unity and diversity is addressed in this course. Presentations of scientific evidence, explanations, building models and making connections between science content is the expectation in this course. Hands-on experiments, activities, projects and group work are strategies used both in class and outside of the classroom. Students are active participants in all classroom activities whether it is an individual assessment or a group project. This course emphasizes processes of science, designing experiments, critical thinking and problem solving skills.

## **WORLD LANGUAGE - SPANISH, GERMAN, FRENCH, or CHINESE**

This course is a continuation of sixth grade in the same target language. This course is designed to provide students with an opportunity to continue to develop their proficiency in the target language and to expand their knowledge of the various cultures. Reading, writing dialogues, working with language audios, and participating in oral drills and classroom discussions enable students to begin to carry on elementary conversations and write basic compositions, correspondence, and notes. Technology is integrated with content in every thematic unit of study. Authentic videos, audio, and electronic media are used, often in connection with online use of technology, to facilitate the development of communication skills (interpretive, interpersonal, presentational) via diverse strategies and activities. These materials and resources also provide insight into the history, geography, and practices of target cultures. Students will continue to develop appropriate pronunciation and develop vocabulary and are expected to use the target language in all appropriate situations in the classroom.

## **INTRODUCTORY CONVERSATIONAL SPANISH**

This course is a continuation of Grade 6. It is designed for students who exhibit specific difficulty in the learning of a World Language (i.e. phonemic awareness, word retrieval and fluency, auditory processing). Students will continue working toward developing skills and an increased proficiency in aural comprehension, oral use of the target language, and written communication. A variety of instructional approaches will continue to be utilized in order to develop a student's ability to learn a World Language. Basic vocabulary will be expanded upon and more complex grammatical concepts will be introduced. Additional time will be spent on developing an appreciation of the cultural differences experienced in the Spanish-speaking world.

## **PHYSICAL EDUCATION**

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The objectives of the physical education program are to develop and maintain a suitable level of physical, social, and emotional wellness that will be a continuation from the previous grade level. In doing so, a natural progression of these objectives will target age appropriate skill levels. Furthermore, the students will continue to become competent in body awareness through the acquisition of psychomotor, problem solving, critical thinking and cooperative learning skills. These objectives will allow the students to cultivate desirable social and ethical behaviors while developing safety skills and habits. The goals of our physical education classes are to enable students to learn more wholesome, life-long activities, increase a positive self-image and acquire an experience through a variety of motor skills. Students will go into greater detail regarding the rules, skills and proper use of equipment through team and individual activities. In addition, the children will be involved with more recent theories related to muscular endurance, muscular strength, cardiovascular endurance and nutrition. At the same time the concepts of higher order thinking will be utilized during all of the daily lessons. These proficiencies will be measured by teachers' observation of proper exercise and skill technique, sportsmanship and attitude, appropriate participation in class activities, as well as written quizzes and occasional homework assignments.

## **CYCLE COURSES**

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### **SCIENCE FICTION & FANTASY**

If you love book series such as *Divergent*, *Harry Potter* or *The Hunger Games*, you should sign up for this course! The Science Fiction and Fantasy course offers students many opportunities to read short stories and novel excerpts from these genres. Students read, discuss and evaluate authors' commentaries on society through a

careful contemplation of the themes explored in the texts. Additionally, students study how science fiction authors use dialogue, point of view, tone, perspective, and proper conventions of fictional writing. Using these professional writings as mentor texts, students compose original science fiction or fantasy tales during their writing workshops. Students brainstorm topics similar to those in the mentor texts such as utopian societies, space travel, invasions of planet Earth, life in the future, rapidly evolving computer technology, or a shift in nature. As a conclusion for the course, students compose an original science fiction or fantasy short story, using all the tools they studied.

### **SPORTS JOURNALISM**

If you love to watch and analyze sporting events, you should sign up for this course. Throughout the marking period, students read and listen to professional sports journalists, studying how they tell the stories of the games and the athletes. Students study how journalists give play-by-play and color commentary in newspaper articles, on the radio and on televisions. They also examine how journalists research and compose feature articles that highlight a particular athlete, a coach or issue. Students, then, apply what they have learned and write or deliver original reports on local or national games. Students' contributions may be featured on a Chatham Middle School sports web page.

### **DIGITAL FOOTPRINTS AND SELF AWARENESS**

Students will understand the role of technology in the learning process and how it impacts one's immediate and future life. Additionally, students will learn the various skills needed to use technology in an effective, intelligent, and responsible manner in order to research and address both global and local causes that they identify as significant. Students will select and research a global concern and evaluate the technological resources to alleviate the issue that may impact thousands of lives. The final project for this class will be for students to communicate their knowledge and findings by preparing a documentary, website, public service announcement, or campaign.

### **CREATIVITY AND INNOVATION**

This innovative class will act as a center for creativity, collaboration, free thinking, and exploration of interests for students as they connect with 7th grade curricular standards through numerous differentiated approaches. Utilizing the application of creative exercises, students will be guided to successfully implement a variety of brainstorming techniques to discover sources of inspiration, understandings, and solutions. As modern learners, each student will discover how to take initiative and find success as they explore hands-on, cross curricular experiences based on their interests and abilities. Through the process of individually exploring a combination of diverse, hands-on approaches, each student will develop a deeper understanding of the information to be investigated. Individuals will utilize the dynamics of collaborative education to further elevate their understanding and connection of ideas yielding more innovative thinking and extended problem solving as a group.

### **COMPUTER ASSISTED DRAWING (CAD)**

Modern prototyping, problem solving, and manufacturing make use of a wide variety of technologies that are available commercially, and are increasingly significant in modern enterprise and problem solving. In CAD/CAM course work, students will develop fundamental skills and understandings requisite for design, simulation, and modeling in virtual worlds and mechanisms for developing prototypes and design solutions utilizing rapid prototyping equipment. Instructional emphasis is on the principles of navigating and using CAD software and application of rapid prototyping equipment to effectively build upon a working tool kit of skills and knowledge that can be applied to a variety of problem solving situations.

### **EXPLORING THE WORLD THROUGH FOODS**

Students will relate history, geography and culture to cuisine in the United States. Each kitchen group will then choose one country to research how its history, geography and culture affect the cuisine of that country. Students will demonstrate and prepare “dishes” from each of the countries. Examples: crepes, quesadillas, fried rice and quinoa.

### **MULTI-MEDIA DESIGN**

The basic principles of design including unity, emphasis, contrast, and proportion will be explored so that students can develop meaningful communication techniques in their original artwork. Mask-making, Portrait Drawing, Ceramics, and Printmaking will be presented.

## **ELECTIVE COURSES**

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### **APPLIED MUSIC**

Concert Band, Orchestra and Chorus are offered to all students in grades 6-8. Each student gains musical knowledge and technical competency through rehearsal and performance of a wide variety of repertoire in an atmosphere of group cooperation. Individual and ensemble performance, skills in intonation, phrasing, blend, dynamics and articulation are stressed at each grade level. All instrumentalists receive an additional sectional lesson each week.

### **STUDIO ART (1 semester - alternate days)**

Studio art is an elective course where students are able to expand on their artistic interests and skills. Advanced topics are introduced which elaborate on techniques and materials previously covered in cycle art. Students work within guidelines to formulate individual projects, placing an emphasis on the creative process.

### **THEATER AND MEDIA ARTS (1 semester - alternate days)**

This course will address the following aspects of the theater: terminology, role playing, improvisations, stage management, choreography, props, set decoration, set design,

scenery art, blocking, marking, backstage crew, crew heads and students as directors. Students will utilize computer graphics and video technology in news, interview and talk show formats as well as creating and updating a CMS video of events. Students also perform monologues and short scenes.

### **STAGECRAFT**

This course will introduce 7th and 8th grade students with an interest in behind-the-scenes performance to technical elements of theater production including lighting, sound, and set design. Theater terminology, the importance of personal safety during backstage productions, stage crew collaboration, and career opportunities will also be covered. This course will offer interested CMS students the opportunity to develop fundamental skills in stagecraft and apply them through practical experiences with the CMS All-School Production and Theater class productions.

### **MAXIMIZING ACADEMIC POTENTIAL (M.A.P.)**

M.A.P. is offered to students on a teacher/team referral basis. It is available first come, first served for typical students who want to improve the management of their school work. Topics covered include Agenda Book use, study techniques, the processes involved in learning, note taking, assessment preparation, advance planning and test taking strategies. The M.A.P. program is conducted through small group instruction. Students may enter the program at any time during the year; exiting is held to the change in marking period or semester.

### **EXCEL PROGRAM**

The Excel program is designed to strengthen the fundamental skills of students in the regular education program. Offered in both language arts and math in a small group setting, students take Excel in addition to their English and Math classes. The program reinforces the prerequisite skills needed to be successful in the classroom with an emphasis on teaching strategies that they can use independently. Excel teachers present concepts and skills through methods that complement traditional teaching approaches.

Only general education students are eligible for Excel and must meet the criteria for the program. Multiple measures are used when evaluating students for the program. These measures include teacher recommendation, performance assessments, and standardized test scores.

*Language Arts* - The curriculum is centered on teaching students the skills of competent readers and writers. Major units are reading comprehension, fluency, writing, and vocabulary. The program helps students develop oral and written communication skills as well as strategies that can be used independently. Since students also have assigned reading for their English classes, short texts that cover a range of genres including non-fiction, poetry, short stories, plays, excerpts from novels, and speeches are used.

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# GRADE 6

## CORE COURSES

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### **ENGLISH**

The focus of Sixth Grade Language Arts is to provide students with a comprehensive and integrated approach to literacy learning. Students are able to discover personal and shared meaning by learning to read, write, speak, listen and view critically, strategically and creatively. The course content exposes students to a variety of genres including historical fiction, mystery, and science fiction as well as informational texts from periodicals and online sources.

This integrated approach utilizes a wide selection of contemporary award-winning novels, short stories, non-fiction and informational texts through which students employ good reading strategies to help them understand text. Strategic readers compare, infer, synthesize, and make connections as they construct meaning within and beyond texts. Literary and informational texts are connected to central themes that cross content areas whenever relevant. Both literature and expository texts provide models of writing that enable students to see how author's use words, phrases and information and the basis for instruction in vocabulary and grammar. Literature and inquiry circles provide opportunities for students to collaborate, to investigate and to extend learning. Students also participate in an active independent reading program so that they may pursue texts of interest to them while also building their reading stamina, fluency and vocabulary.

Within this program students use a repertoire of writing strategies that enable them to expand their writing skills and compose logical, evidence-based written for different purposes, audience and contexts. Students write on a range of grade appropriate topics, composing argumentative, narrative, and informative essays and responses. The instructional focus of writing within the sixth grade includes explicit instruction on all steps of the writing process: brainstorming, drafting, revision, editing and publishing. Instruction will focus primarily on using relevant text-based evidence, effectively organizing paragraphs, and transitioning ideas. Within this writing process, students will develop and refine their ideas for thinking, learning, communicating and aesthetic expression. Grammar instruction will focus on the required skills as identified in the Common Core State Standards.

### **MATHEMATICS**

Grade 6 Mathematics endeavors to produce confident thinkers and problem solvers. Lessons in this course allow students of varying ability to demonstrate mastery over a broad range of core skills. The contents of this course require critical and creative thinking, multiple strategies for problem solving and the maturational level required for the beginning of pre-algebra. Homework is given on a regular basis. The curriculum

challenges students to develop a strong foundation in skills and concepts and encourages them to investigate reason and explain. Units are tied to the Common Core Standards and include the following: Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, and Statistics and Probability.

### **HONORS MATHEMATICS**

Honors Grade 6 Mathematics is a course for students who have demonstrated high achievement and aptitude in mathematics based upon standardized testing, placement testing, and teacher recommendation. Lessons in this course are fast-paced with minimum repetition of skills. The contents of this course require critical and creative thinking, multiple strategies for problem solving, and the maturational level required to successfully handle the abstract thinking skills required for the beginning level of pre-algebra. Homework is rigorous, constant, challenging, and should be completed independently by the student. Students in this course are expected to have self-motivation, and demonstrate intellectual curiosity.

Units on Ratios and Proportional Relationships, the Number System, Expressions and Equations, Geometry, and Statistics and Probability will be covered.

*\*\*A select number of students will take Grade 7 Honors Pre-Algebra as sixth graders. Students will be chosen to take Pre-Algebra based on their performance on a placement test that evaluates algebra-readiness.*

### **SOCIAL STUDIES**

6th grade Social Studies is designed to give students a basic understanding of World civilizations from the earliest human settlements through the Middle Ages and the Renaissance. Through explorations of geography, culture, religion, and the problem-solving strategies of world civilizations, students will begin to understand how people of the past helped shape and influence the world we live in today.

Focused on “big ideas”, 6th grade Social Studies engages students through an inquiry approach that helps them ask compelling questions about the development and legacies of classical empires and the organization of societies through governments, philosophies, and religion. Students will use disciplinary concepts and tools as a lens to examine basic systems of trade, the exchange of ideas, and forces that drive conflict among peoples throughout history. In the process, they will also have foundational experience with historical inquiry, conducting research, and writing informative, narrative, and opinion essays; continuously making connections to their own lives.

In the process of gathering, analyzing and evaluating a wide range of evidence, students will begin to recognize the importance of perspective as well as source validity and reliability. Through the exercise of basic critical thinking, students will learn to test and improve their own reasoning skills. In so doing, they will understand how to identify, organize and communicate evidence to justify their conclusions.

## **SCIENCE**

This science course is the beginning of a new integrated curriculum that is recommended with the adoption of the Next Generation Science Standards. This course will encompass topics from Earth Science, Life Science and Physical Science as well as incorporating Engineering and Technology. This course takes a journey from large objects in the universe to microscopic life forms in cells. Understanding the Earth's place in our universe and predictable patterns of celestial objects are explained. This course makes connections between the energy, light waves and electromagnetic radiation coming into the Earth's atmosphere. Interactions between sunlight, oceans, ice, atmosphere and landforms and how our weather is created and changed will be discovered. This course focuses on the basis of living things, cells. The function and structure of cells and how they differ in living things as they grow and develop is a core part of the life science portion of this course. Presentations of scientific evidence, explanations, building models and making connections between science content is the expectation in this course. Hands-on experiments, activities, projects and group work are strategies used both in class and outside of the classroom. Students are active participants in all classroom activities whether it is an individual assessment or a group project. This course emphasizes processes of science, designing experiments, critical thinking and problem solving skills.

## **WORLD LANGUAGE - SPANISH, GERMAN, FRENCH, or CHINESE**

Through the use of technology, authentic materials, and traditional texts, this course is designed to provide students with an opportunity to begin to develop their proficiency in the target language and to expand their knowledge of the various cultures. Students will listen to and comprehend oral and written forms of the target language, to pronounce the target language correctly, and to express themselves orally in a variety of subjects. Reading and writing skills will be developed as well. Technology is integrated with content in every thematic unit of study. A sizable vocabulary of a practical and modern nature will be acquired by the end of the year. The course requires daily homework, class participation, oral and written quizzes, unit tests, and various projects.

## **WORLD LANGUAGE - INTRODUCTORY CONVERSATIONAL SPANISH**

This course is designed for those students who may exhibit difficulty with the learning of a World Language (i.e. phonemic awareness, word retrieval and fluency, auditory processing). Introductory Conversational Spanish 6 will expose students to the Spanish language by developing basic skills in listening, speaking, reading and writing. A variety of instructional approaches will be utilized in order to develop a student's ability to learn a World Language. Additionally, students will be evaluated using a number of different assessment types. In building basic language proficiency, students will listen to Spanish songs and conversation, participate in oral drills and skits and create projects using Spanish vocabulary. Cultural awareness will also be fostered through the study of various aspects of life in the Spanish speaking world.

## **PHYSICAL EDUCATION**

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The objectives of the physical education program are to develop and maintain a suitable level of physical, social, and emotional wellness. Furthermore, the students will become competent in body awareness through the acquisition of psychomotor, problem solving, critical thinking and cooperative learning skills. These objectives will allow the students to cultivate desirable social and ethical behaviors while developing safety skills and habits. The goals of our physical education classes are to enable students to learn wholesome, lifelong activities, develop a positive self-image and acquire an experience through a variety of motor skills. Students will be introduced to rules, skills and proper use of equipment through team and individual activities. In addition, the children will be involved with more recent theories related to muscular endurance, muscular strength, cardiovascular endurance and nutrition. At the same time the concepts of higher order thinking will be utilized during all of the daily lessons. These proficiencies will be measured by teachers' observation of proper exercise and skill technique, sportsmanship and attitude, appropriate participation in class activities, as well as written quizzes and occasional homework assignments.

## **CYCLE COURSES**

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### **GRAPHIC NOVELS**

Students who love graphic novels and comics will love this course. In sixth grade students may choose to take the Graphic Novel cycle course, one which allows them to examine the genre which interweaves visual text and language. While similar in structure to a comic book, graphic novels tackle many issues that have nothing to do with superheroes. Reading graphic novels require students to make inferences, as well as understand how to read sequentially. These skills help students to become stronger critical and analytical readers of visual and written texts. During writing workshops, students work together to craft a story line, and choose specific moments of the plot to illustrate and narrate. Additionally, students complete an independent, graphic story by the end of the course. The students choose to create a fiction or non-fiction piece and have the option to hand-draw their stories or use Comic Life. Students utilize the texts studied in class as mentor texts throughout their writing process.

### **ARGUMENT AND DEBATE**

If you enjoy exploring, researching and discussing interesting topics, then this course may be for you! The Crafting Argument course focuses on building the skills students need to construct thoughtful, evidence-based arguments that will convince audiences

that their position is the right one. While students read and write in the course, the teacher provides students specific instructions and practice to develop their speaking and listening skills. Students may choose an issue to explore, gathering research via online as well as conducting interviews and surveys. As a culminating assessment, students present their arguments to peers in a speech.

### **iSTEM**

Through the process of engaging in authentic, hands on, open-ended design challenges, students will become familiar with the steps and processes associated with successful problem solving in the context of the engineering design process. Students will gain proficiency in the application of relevant Math, Science, and Technology concepts while expanding their understanding of the human-designed world, the nature of technology and engineered systems, and the skills, knowledge and attitudes necessary to become more well-rounded and successful twenty-first century problem solvers and innovators.

### **ROBOTICS**

Control systems and an understanding of the basic hardware and software required to navigate and manipulate real world situations through programming and constructing autonomous robotic systems forms the basis of the Robotics curriculum. Students will be exposed to concepts related to energy and power systems, structures and mechanisms, control systems, and basic logical sequencing and coding frameworks. They will be challenged to apply these concepts at varying levels of complexity using the engineering design process to solve problems and to develop solutions to unique contextualized design challenges and activities.

### **EXPLORING THE ELEMENTS OF ART**

Through multi-media approaches, students will explore the basic elements of art including color, line, form, and compositional space in order to make informed aesthetic choices when creating original works of art. Printmaking, Ceramics, Charcoal Drawing, and Sculpture will be presented.

### **CMS TOP CHEF**

Students will develop basic food preparation skills by correctly following a recipe while using measurement skills and appropriate tools. Students will plan, prepare and serve healthy meals and nutritious snacks. By comparing nutrition labels on foods, students will practice making wise food choices. Examples: Fluffy French toast, Mac and Cheese, pretzels and apple crisp.

### **MUSIC TECHNOLOGY**

Students will develop an understanding of music's creative form in relation to the historical development of sound and technology. They will be introduced to creating musical compositions through Garage Band. In this class we will focus on reaching independent goals through creating simple compositions based on fundamental composing techniques used in creating music from varying genres such as Jazz,

Orchestral and Soundtrack music, and modern day Rock. Students will begin learning the fundamentals of piano/ keyboard in order to enhance their understanding of musical form. Students will be able to cite and perform various chords, scales, and rhythms as well as play simple melodies and create melodies of their own through the use of the piano keyboard.

## **ELECTIVE COURSES**

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### **APPLIED MUSIC**

Concert Band, Orchestra, and Chorus are offered to all students in grades 6-8. Each student gains musical knowledge and technical competency through rehearsal and performance of a wide variety of repertoire in an atmosphere of group cooperation. Individual and ensemble performance skills in intonation, phrasing, blend, dynamics and articulation are stressed at each grade level. All instrumentalists receive an additional sectional lesson each week.

### **STUDIO ART (1 semester - alternate days)**

Studio art is an elective course where students are able to expand on their artistic interests and skills. Advanced topics are introduced which elaborate on techniques and materials previously covered in cycle art. Students work within these guidelines to formulate individual projects, placing an emphasis on the creative process.

### **MAXIMIZING ACADEMIC POTENTIAL (M.A.P.)**

M.A.P. is offered to students on a teacher/team referral basis. It is available first come first served for typical students who want to improve the management of their school work. Topics covered include Agenda Book use, study techniques, the processes involved in learning, note taking, assessment preparation, advance planning and test taking strategies. The M.A.P. program is conducted through small group instruction. Students may enter the program at any time during the year, exiting is held to the change in marking period or semester.

### **EXCEL PROGRAM**

The Excel program is designed to strengthen the fundamental skills of students in the regular education program. Offered in both language arts and math in a small group setting, students take Excel in addition to their English and Math classes. The program reinforces the prerequisite skills needed to be successful in the classroom with an emphasis on teaching strategies that they can use independently. Excel teachers present concepts and skills through methods that complement traditional teaching approaches.

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