

## DEAR PARENTS AND CAREGIVERS:

We recognize that you are your child's first and most important teacher and that it is our responsibility to build on your efforts by providing the rich set of learning experiences outlined in this curriculum digest.

Our curriculum follows the hundreds of pages of the Massachusetts Department of Education Curriculum Frameworks. This curriculum digest, therefore, is only a summary, but we believe the summary paints a vivid picture of the abilities and skills your child will develop this year. If you would like additional details about our curriculum expectations, please ask your child's teacher or download copies of the Massachusetts Frameworks from the Department of Education website at: <http://www.doe.mass.edu>.

As we deliver this curriculum we strive to provide all students with the skills and knowledge that they need to be successful in a complex world. We do this by providing an educational environment that is supportive of individual differences and where all people are valued and respected. Finally, we recognize how critical the parents and community members are to achieving this mission.

We look forward to communicating with you while we help your child to have a productive and rewarding year.



Daniel Mayer, Ed.D.

Assistant Superintendent of Curriculum,  
Assessment, and Instruction

## ENGLISH LANGUAGE ARTS

The focus in English Language Arts is on improving writing skills and continuing a study of literature through contemporary and classical novels as well as anthology selections.

### **Language** *Students will:*

- Understand and acquire new vocabulary and use it correctly in reading and writing..
- Apply knowledge of Standard English conventions for sentence structure, usage, punctuation, capitalization, and spelling.
- Present oral presentations that demonstrate appropriate consideration of audience, purpose, and the information to be conveyed.
- Listen to the ideas of others and contribute their own information, knowledge, ideas, and experiences.

### **Reading and Literature** *Students will:*

- Identify and analyze main ideas, supporting ideas, and details of a text.
- Interpret a character's traits, emotions, or motivation and give supporting evidence from a text.
- Identify and analyze how an author's words appeal to the senses, create imagery, suggest mood, and set tone.
- Identify, analyze, and apply knowledge of literary terms such as theme, tone, point of view, foreshadowing, and symbolism.
- Distinguish elements of fiction, nonfiction, dramatic literature, and poetry and apply these when writing for different purposes.

### **Composition** *Students will:*

- Organize ideas with a clear focus, coherent organization, and sufficient supporting details.
- Demonstrate improvement in organization, content, paragraph development, level of detail, style, tone, and word choice.
- Further develop their writing skills in the areas of narrative, descriptive, expository, and persuasive essays, journal writing, research, and poetry.

### **Media** *Students will:*

- Identify and analyze elements and techniques of film and the Internet and provide evidence from these works to support their understanding.

### **Major Projects / Events**

- Writing Exhibits
- Descriptive Writing Topics
- Persuasive Essays
- Various projects related to novels studied
- Three Writing Prompts per Year
- Select Writing Contests
- Level Reading Projects
- Author Appreciation Exhibits

## MATHEMATICS

### **Number Sense and Operations** *Students will:*

- Demonstrate an understanding of positive and negative integer exponents.
- Demonstrate an understanding of place value and be able to represent positive numbers in expanded notation.
- Identify, compare, and order integers (including negative integers), fractions, mixed numbers, decimals, and percents.
- Apply number theory concepts such as prime and composite numbers, prime factorization, greatest common factor, least common multiple, and the divisibility rules for 2, 3, 5, 6, 9, and 10 to the solution of problems.
- Select and use appropriate operations (including the Order of Operations and the inverse relationship of addition and subtraction) accurately to solve problems involving addition, subtraction, multiplication, division, positive fractions, mixed numbers, decimals, percents, and positive integer exponents.
- Demonstrate an understanding of the inverse relationship of addition and subtraction and use that understanding to simplify computation and solve problems.

### **Patterns, Relations, and Algebra** *Students will:*

- Analyze and determine the rules for extending symbolic, arithmetic, and geometric patterns and progressions.
- Replace variables with given values and evaluate.
- Represent real situations and mathematical relationships with concrete models, tables, graphs, and rules in words and symbols.
- Solve linear equations using a variety of methods such as concrete models, tables, graphs, and paper-pencil.
- Identify and describe relationships between two variables with a constant rate of change.

### **Geometry** *Students will:*

- Identify polygons and three-dimensional shapes based on their properties and identify relationships among points, lines, and planes.
- Graph points and identify coordinates on the Cartesian coordinate plane.
- Find the distance between two points.
- Predict, describe, and perform transformations on two-dimensional shapes and be able to identify types of symmetry.
- Match three-dimensional objects with their two-dimensional representations.
- Determine if two shapes are congruent by measuring sides or a combination of sides and angles as necessary; or by motions or series of motions, e.g., translations, rotations, and reflections.

### **Measurement** *Students will:*

- Apply the formulas for perimeter, area (circles, parallelograms, and triangles), circumference, volume, and surface area of rectangular prisms to solve problems.
- Identify, measure, describe, classify, and construct various angles, triangles, and quadrilaterals.
- Find the sum of the angles in simple polygons with and without measuring the angles.
- Solve problems involving proportional relationships and units of measurement.

### **Data Analysis, Statistics, and Probability** (Students will:)

- Describe and compare sets of data using the concepts of mean, median, mode, maximum, minimum, and range.
- Construct and interpret stem-and-leaf plots, line plots, and circle graphs.
- Construct tree diagrams and other models to represent outcomes of trials and analyze the outcomes.
- Predict the probability of simple experiments, test the prediction, and use appropriate ratios between 0 and 1 to represent the probability of the outcome and the likelihood of the event.

### **Major Projects / Events**

- Savings Makes Cents
- Math Buffet
- Math Olympics

## SCIENCE

### **Physical Science**

#### **Properties of Matter** *Students will:*

- Differentiate between weight and mass, recognizing that weight is the amount of gravitational pull on an object.
- Differentiate between volume and mass.
- Define density.
- Recognize that the measurement of volume and mass requires an understanding of the sensitivity of measurement tools.
- Explain and give example of how mass is conserved in a closed system.

#### **Elements, Compounds, and Mixtures** *Students will:*

- Recognize that there are more than 100 elements that combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.
- Differentiate between an atom and a molecule.
- Give basic examples of elements and compounds.
- Differentiate between mixtures and pure substances.
- Recognize that a substance (element or compound) has a melting point and a boiling point, both of which are independent of the amount of the sample.
- Differentiate between physical changes and chemical changes.

#### **Motion of Objects** *Students will:*

- Give examples of how motion of an object can be described by its position, direction of motion, and speed.
- Graph and interpret distance vs. time graphs for constant speed.

#### **Forms of Energy** *Students will:*

- Differentiate between potential and kinetic energy and identify situations where kinetic energy is transformed into potential energy and vice versa.

#### **Heat Energy** *Students will:*

- Recognize that heat is a form of energy and temperature change results from adding or taking away heat from a system.
- Explain the effect of heat on a particle in motion through a description of what happens to particles during a change in phase.
- Give examples of how heat moves in predictable ways, moving from warmer objects to cooler ones until they reach equilibrium.

### **Major Projects / Events**

- Physics Olympics

## HISTORY/SOCIAL STUDIES

### Theme: World Geography

#### Topics

- Southeastern Asia and Oceania
- Northern and Eastern Asia
- Central and Southern Asia
- Western Asia
- Africa
- South America
- Europe

#### History and Geography *Students will:*

- Use map and globe skills to interpret specialty maps.
- Understand and apply geographic terms correctly of places studied.
- Develop ability to interpret and create graphs and charts of places studied.
- Understand the significance of the five themes of geography.
- Utilize information provided in current world atlases to further comprehension.
- Identify and understand time zones globally of places studied.

#### Civics and Government *Students will:*

- Define what a nation is and give examples of how different nations are formed.
- Give examples of several international organizations and understand their purpose and functions.

#### Economics *Students will:*

- Provide examples of currencies from several countries and understand why international trade requires a system of exchange.
- Know examples of goods traded as well as barriers to trade.
- Understand the supply and demand relationship.
- Identify key elements of a market society.
- Describe how different economic systems try to answer basic economic questions of what to produce, how to produce, and for whom to produce.
- Compare the standard of living in various countries using gross domestic product per capita as an indicator.

#### Major Projects /Events

- Technology driven curriculum based projects
- Research projects

## WELLNESS

#### Physical Education *Students will:*

- Use a combination of manipulative, locomotor, and non-locomotor skills to develop movement sequences and patterns, both individually and with others.
- Participate in activities that promote physical fitness.
- Decrease sedentary lifestyle, and relieve mental and emotional tension.
- Maintain a health-enhancing level of physical fitness.
- Apply advance movement concepts and beginning game strategies to guide and improve individual and team performance.
- Demonstrate responsible personal and social behavior in physical activity settings.

#### Health *Students will:*

- Learn the basic characteristics of physical growth and development.
- Acquire the knowledge and skills necessary to make effective personal decisions that promote their emotional, sexual, and reproductive health.
- Acquire knowledge about emotions and physical health, the management of emotions, personality and character development, and social awareness.
- Learn that relationships with others are in integral part of the human life experience and the factors that contribute to healthy interpersonal relationships.
- Learn the signs, symptoms, and treatment of chronic and communicable diseases, and will gain skills related to health promotion, disease prevention, and health maintenance.
- Acquire the knowledge and skills to be competent in making health- enhancing decisions regarding the use of medications and avoidance of substances.
- Learn how their actions affect others, will understand the power that positive character traits can have in violence prevention, will avoid in engaging in violence, and identify constructive alternatives to violence.

## INFORMATION TECHNOLOGY

#### In all academic courses *students will:*

- Communicate using a variety of media and formats.
- Locate, evaluate, analyze, and use information.
- Compile, organize, analyze, and synthesize information.
- Draw conclusions and make generalizations based on information gathered.
- Collaborate and cooperate in team efforts.
- Communicate locally and globally.
- Select appropriate tools to solve problems.
- Use technology in ethical and appropriate ways.

## LIBRARY MEDIA

#### *Students will:*

- Acquire information problem-solving skills.
- Appreciate literature, fiction and non-fiction, and its ability to reflect on one's own life and one's place in the world.
- Acquire increasingly sophisticated information accessing, evaluating, and synthesizing skills from library resources- including electronic resources and the Internet.

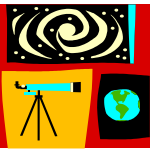
## ART

#### *Students will:*

- Demonstrate knowledge of the methods, materials, and techniques unique to the visual arts.
- Create artwork in a variety of two-dimensional (2D) and three-dimensional (3D) media.
- Expand the repertoire of 2D and 3D art processes, techniques, and materials.
- Create artwork that demonstrates an awareness of the range and purpose of tools.
- Demonstrate appropriate use of vocabulary.
- Maintain the workspace, materials, and tools responsibly and safely.

## MAYNARD PUBLIC SCHOOLS

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### A Curriculum Overview Your Child's year in SIXTH GRADE



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**Dr. Mark R. Masterson, Superintendent**  
**Dr. Daniel Mayer, Assistant Superintendent**  
**Robert Brooks, Principal, Fowler Middle School**

