

## 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

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

- Contribute knowledge to class discussions.
- Identify the meaning of common idioms, similes, figurative phrases, and playful language.
- Determine the meaning of unknown words using context.
- Identify the four basic parts of speech.
- Identify correct mechanics, usage, and sentence structure.

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

- Read grade-appropriate material with fluency and expression while focusing on comprehension skills.
- Identify the setting, characters, and plot in a story.
- Distinguish cause from effect and fact from opinion.
- Summarize main ideas and supporting details.
- Distinguish among forms of literature such as poetry, prose, fiction, nonfiction, and drama, and apply this knowledge as a strategy for reading and writing.
- Identify rhyme and rhythm, repetition, similes, metaphors, onomatopoeia, and sensory images in poems.

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

- Write stories that have a beginning, middle, and end and contain details of setting.
- Write brief summaries of information gathered through research.
- Write a brief interpretation or explanation of a literary or informational text using evidence from the text as support.
- Write an account based on personal experience that has a clear focus and sufficient supporting detail.
- Revise writing to improve level of detail and word choice.
- Write legibly in cursive, leaving space between letters in a word and between words in a sentence.
- Understand the importance of writing for a target audience.

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

- Compare stories in print with their film adaptations, describing similarities and differences in the characters, plot, and settings.

### **Major Projects/Events**

- Living Biographies
- Monthly Book Projects
- Book Publishing
- Three Writing Prompts

## MATHEMATICS

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

- Understand counting, grouping, and place value concepts to at least 100,000.
- Identify and understand the operations needed for multi-step problems using the appropriate vocabulary, numbers, and pictures.
- Apply 1-12 multiplication / division facts.
- Compute using whole numbers with at least four digits, multiply three digit numbers by two digit numbers, and divide using double digit divisor with remainders.
- Round numbers to the nearest thousand, ten thousand, and nearest whole numbers, and use estimation as strategy for reasonableness for checking a solution in addition, subtraction, multiplication, and division problems.
- Through the concept of money, students will be able to model, compare, and order decimals up to the hundredths.
- Use models to relate fractions to decimals, find equivalent fractions, and explore operations of fractions and decimals.
- Select, use, and explain the commutative, associative, and identity properties.

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

- Create, describe, explain, and extend symbolic (geometric) and numeric patterns.
- Solve problems involving proportional relationships, including unit pricing and map interpretation.
- Determine values of variables in simple equations.
- Write number sentences with variables to describe real world number sentences and be able to identify several missing parts in a group of mathematical sentences. Example:  $8 \times b = 72$

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

- Use and draw many types of 2 and 3 dimensional shapes and identify the figures by their properties.
- Classify lines, identify angles, identify symmetry, and apply transformations to determine if shapes are congruent.
- Estimate and find the perimeter and area of rectangles, triangles, and irregular shapes and be introduced to the concept of volume
- Use ordered pairs of numbers and/or letters to graph, locate, and identify points and describe paths (1<sup>st</sup> quadrant).

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

- Measure proficiently in both the American Standard and Metric System.
- Identify and use appropriate Metric and English units to estimate, measure, and solve problems involving length, area, volume, time, angle size, and temperature.

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

- Collect data and create a variety of graphs to assist in analyzing information, draw conclusions, and make predictions.
- Determine the chances that a given event will occur and/or all possible combinations.
- Explore the concepts of median, mode, mean, and range.
- Classify outcomes as certain, likely, or unlikely using concrete objects.

### **Major Projects / Events**

- Math Olympics

## SCIENCE

### **Inquiry** *Students will:*

- Ask questions and make predictions that can be tested.
- Recognize simple patterns in data and use data to create a reasonable explanation for the results of an investigation or experiment.
- Conduct multiple trials to test a prediction and compare the results of an investigation or experiment with the prediction.

### **Earth Science** *Students will:*

- Give examples of how the surface of the earth changes.
- Gain understanding that precipitation makes up the weather in a particular place and time.
- Differentiate between weather and climate.
- Describe how water on the earth cycles in different forms and locations.

### **Life Science** *Students will:*

- Classify plants and animals according to the physical characteristics that they share.

### **Physical Science** *Students will:*

- Compare and contrast solids, liquids, and gases.
- Identify the basic forms of energy.
- Recognize that electricity in circuits requires a complete loop.
- Identify and classify objects and materials that conduct electricity and objects that are insulators of electricity.
- Explain how electromagnets can be made and give examples of how they can be used.

### **Technology and Engineering** *Students will:*

- Identify materials used to accomplish a design task based on a specific property such as weight, strength, hardness, and flexibility.
- Describe different ways in which a problem can be represented, such as sketches, diagrams, graphic organizers, and lists.

## HISTORY/SOCIAL STUDIES

### Theme: North American History and Geography

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

- Use map and globe skills to determine absolute locations (latitude and longitude) of places studied: United States, Mexico, Central America, Caribbean Islands, and Canada.
- Identify the locations of the North and South Poles, the Equator, Prime Meridian, and the Northern, Southern, Eastern, and Western Hemispheres.
- Interpret a map using information from its title, compass rose, scale, and legend.
- Observe and describe national historic sites.
- Describe the topography, climate, major physical characteristics, technologies, natural resources, languages, cultures, and religions of places studied.
- Identify the states, state capitals, and major cities in each region.
- Describe influences of other cultures on America.

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

- Give examples of the major rights that immigrants have acquired as citizens of the United States.
- Give examples of the different ways immigrants can become citizens of the United States.

#### Economics *Students will:*

- Define and give examples of natural resources in the United States.
- Give examples of limited and unlimited resources and explain how scarcity compels people and communities to make choices about goods and services.
- Give examples of how the interactions of buyers and sellers influences the prices of goods and services in markets.

## MUSIC

Students will use the *Yamaha MIE* electronic keyboard system for virtually all topics listed below:

- Steady beat – Students will perform simple accompaniment.
- Register Clusters – Students will become familiar with location of notes.
- Melodic Movement – Students will learn that melody, or pitch, can move up, down, or stay the same.
- Tempo – Students will play, sing, and listen to examples of varied tempos.
- Music Alphabet – Students will learn to identify pitches symbolized on sheet music, location on keyboard, and sing in various sequences.
- Call and Response – Students will learn and play simple examples of melody.
- Legato and Staccato – Students will sing, play, and listen to various examples of each articulation whether the melody is smooth or detached.

#### Major Project / Event

- Performances for classmates
- Creation of a small scale composition project to demonstrate their understanding of topics learned. The *RECORD* mode on the keyboard will be used to show student work.

## WELLNESS

### Physical Education *Students will:*

- Perform all locomotive skills at mature levels of development and apply them to a variety of activities.
- Throw, catch, and kick at mature levels of development.
- Support, lift, and control body in a variety of movement and stationary activities.
- Identify the critical elements of motor patterns and provide feedback to a partner.
- Identify the fundamental movement components and strategies used in games and activities, e.g., give and go, moving to a space to receive a pass, etc.
- Identify and practice behaviors that contribute to physical health and wellness.
- Identify and verbalize examples of cooperation and sharing in activities.
- Accept teacher's decisions regarding personal rule infractions in a positive way.
- Use equipment and space appropriately and safely.
- Understand the concept of target heart rate in aerobic health and wellness.
- Identify muscles being used to perform a variety of movements and activities.

### Health *Students will:*

- Identify food groups within the food pyramid and their contributions to a healthy body.
- Identify appropriate activities for each component of health related fitness.
- Exhibit a physically active lifestyle by maintaining a health-enhancing level of physical fitness.

## 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.

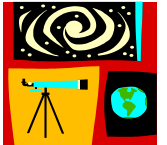
## ART

### *Students will:*

- Use a variety of materials and media (pencils, crayons, chalk, pastels, paints, clay, textiles, yarns, wood, found objects, wire, foil) to create original works of art in 2D and 3D.
- Demonstrate an understanding of the art elements of line, shape, form, color, value, and texture and how each applies to a work of art.
- Demonstrate an understanding of the art principles of balance, movement, rhythm, contrast, emphasis, pattern and unity and how each applies to a work of art.
- Learn a variety of techniques and processes unique to each media, and explore how each creates different visual effects in a work of art.
- Learn and use appropriate vocabulary related to specific art methods, materials, and techniques.

# Maynard Public Schools

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## A CURRICULUM OVERVIEW YOUR CHILD'S YEAR IN FOURTH GRADE



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

