



## SOCIAL STUDIES

Director of Humanities  
Bernadette Ricciardelli 781 393-9016

*Students will be able to...*

- Compare and contrast the pre-Columbian civilizations of the *New World*  
Describe the European colonization of the Americas
- Using appropriate maps, explain the influence that geography had on who settled North America and where they settled
- Discuss the causes and consequences of the English Colonization of North America
- Compare and contrast the founding and development of the first 13 colonies
- Identify and describe the social, political, and economic factors which led to the development of a quest by the English Colonies for Independence
- Discuss the role of Massachusetts in the War for Independence



## PHYSICAL EDUCATION

Supervisor, Eileen DiBattista 781 393-2292

*Through individual, group, and partner instruction students will be able to...*

- Improve balance, speed, and agility
- Perform basic tumbling and stunts on a mat
- Enhance eye-hand, eye-foot co-ordination
- Understand the importance of physical activity as it relates to healthy development
- Develop self-confidence and strengthen self-esteem
- Participate in team sports and activities



## FOREIGN LANGUAGE

Coordinator, Rita DiCarlo 781 393-2375

*Students will:*

- Acquire vocabulary through projects and stories
- Write simple sentences, to give information about oneself when asked
- Complete short writing assignments
- Explore contributions from Italian culture



## MUSIC

*Given continued training at the grade five level, music students will...*

- Respond to and understand musical pulse and meter
- Use a system of letters, numbers or syllables to read simple notation
- Understand basic terms as they relate to dynamics, tempo and articulation
- Be prepared to avail themselves of opportunities to play a band instrument
- Express valid opinions about music encountered in class
- Perform in public concerts and school assemblies



## ART

*Through continued participation in weekly art classes, students in grade five will...*

- Use a variety of materials and media including crayons, chalk, paint, paper and clay to produce different visual effects
- Create artwork in a variety of two-dimensional and three-dimensional media
- Express themselves through painting, drawing, collage, print-making, and weaving
- Use appropriate vocabulary related to methods, materials and techniques
- Generate questions to guide their investigations about art as they search for information from artworks, experts, print and electronic publications and other sources



## HEALTH

Supervisor, Eileen DiBattista 781 393-2292

The essential learnings for health are integrated with other curriculum areas and are discussed at age appropriate levels. Themes include: personal health, nutrition and fitness, drugs alcohol and tobacco, mental health, interpersonal relationships, human growth and development, family life, disease prevention, safety, violence prevention, community and consumer health.



# Medford Public Schools

Medford, Massachusetts

## GRADE 5 ESSENTIAL LEARNINGS

This guide provides an overview of what a **fifth grade** student should know and be able to do in each subject area by the completion of the school year.

The Medford Public Schools is committed to providing all students with the academic and problem-solving skills essential for personal development, responsible citizenship and life-long learning. The districtwide curriculum goals for all grades preK-12 are as follows:

- To develop high standards and expectations for all students
- To incorporate a balanced core of critical, essential learning that reflects national standards and the state curriculum frameworks for each discipline
- To develop competency in communication, thinking, problem solving research and other critical skills
- To connect learning to relevant situations and experiences outside the school setting
- To measure student learning through multiple types of assessments including the MCAS
- To integrate the curriculum, wherever possible, across subjects and grade levels
- To effectively integrate technology into the curriculum
- To recognize and respect the different needs interests and talents of all students

For additional information on the curriculum, instructional and/or assessment program of the Medford Public Schools please contact the Office of Curriculum and Instruction at (781) 393-2364

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### Medford School Committee

Mayor Michael McGlynn  
William Brady  
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Robert Skerry  
Paulette Van der Kloot  
Ann Marie Cugno



## MATHEMATICS

Director, Ms. Maureen Chapman-Fahey  
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*Through problem solving, reasoning, connections, communication, and representation, students will be able to....*

### **NUMBER SENSE & OPERATIONS**

- Represent, rename, order, and compare large numbers through millions and small numbers through thousandths; use expanded notation; identify place value; use powers of ten.
- Add, subtract, multiply, and divide whole numbers.
- Identify, compare, and order fractions, decimals, and percents; find common equivalences; add and subtract fractions, decimals, and percents.
- Apply number theory (factors, multiples, divisibility).
- Apply Order of operations.

### **PATTERNS, RELATIONS & ALGEBRA**

- Analyze, extend, and determine rules for numeric and geometric patterns.
- Evaluate and simplify expressions with variables; apply properties of equality.
- Solve problems involving proportional relationships.

### **GEOMETRY**

- Identify, describe, and compare special types of triangles and 3-D shapes; relate points and lines.
- Use ordered pairs.
- Transform 2-D shapes; identify lines of symmetry.
- Determine congruence of triangles and quadrilaterals.

### **MEASUREMENT**

- Solve problems using area, perimeter, volume, and surface area (rectangular prisms).
- Identify, measure, describe, classify and draw various angles; find sum of interior angles in triangles.

### **DATA ANALYSIS, PROBABILITY, & STATISTICS**

- Find mean, median, mode, range, maximum, and minimum.
- Construct and interpret line plots, a line, circle, and bar graphs.
- Predict outcomes of simple probability problems.



## SCIENCE

Director, Maureen Chapman-Fahey  
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### **EARTH SCIENCE:**

- Classify minerals by their physical properties.
- Identify the three categories of rocks; explain how rocks are formed and change over time.
- Describe ways in which soil is formed; identify different properties of soil.
- Describe changes in the earth's surface due to weathering, erosion, volcanoes, earthquakes, etc.
- Differentiate between the sun, stars, and planets; identify and describe constellations, comets, and meteors; understand the effect of earth's rotation and revolution on the position and movement of stars.

### **LIFE SCIENCE**

- Explain how organisms can cause changes in the environment to ensure survival and how these changes affect the ecosystem.
- Understand what an ecosystem is; describe relationships within an ecosystem.
- Explain photosynthesis.
- Describe the food chain

### **PHYSICAL SCIENCE:**

- Identify and describe light and sound as basic forms of energy; describe light and its properties; identify sources and causes of light; describe sound and its properties; relate vibration to pitch.

### **ENGINEERING/TECHNOLOGY:**

- Identify materials used to accomplish a task based on a specific property (e.g. rocks and minerals—building and electronics).
- Identify appropriate units and tools to construct a give prototype; identify design features.
- Compare and contrast simple and complex machines.



## TECHNOLOGY

Director, Richard Trotta 781 393-2279

*Through group demonstration and individual practice the student will be able to...*

- Demonstrate intermediate keyboarding skills.
- Demonstrate advanced skills in Microsoft Word.
- Demonstrate a basic understanding of the Database environment.
- Demonstrate a basic understanding of the Spreadsheet environment.
- Demonstrate basic skills in exploring and navigating the Internet.



## ENGLISH

Director of Humanities  
Bernadette Ricciardelli 781 393-2320

*In addition to reading and writing daily, students will be able to...*

- Apply language study to understand conventions: origin and meaning of common and foreign words
- Write a variety of sentences: simple, compound
- Write multiparagraph essays
- Apply appropriate usage/grammar
- Demonstrate an understanding of verb tense
- Develop a knowledge of parts of speech
- Demonstrate an understanding of conventions in writing
- Construct conventional spelling through accepted rules
- Build vocabulary by focusing on meaning
- Demonstrate an understanding of figures of speech
- Demonstrate an understanding of idioms
- Demonstrate an understanding of synonyms/antonyms/homonyms
- Demonstrate an understanding of root words, affixes, and derivatives
- Demonstrate organization in writing
- Apply figurative language: e.g., simile, metaphor, alliteration, hyperbole
- Develop a variety of kinds of essay development - reinforce gr. 1-4
- Respond to literature through writing
- Demonstrate critical reading skills through interpreting and evaluating
- Apply writing elements – revision, diction, elaboration, introduction, conclusion, theme purpose
- Develop oral language through presenting
- Develop technology skills: research



## PUPIL SERVICES

Director,, Beverly Shea 781 393-2229

The Medford Public Schools are committed to insure access to the general education curriculum for all students. The Office of Pupil Services consists of the support service departments of Special Education, Bilingual/Multicultural Education, Guidance and Title I.