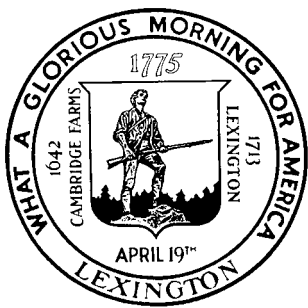


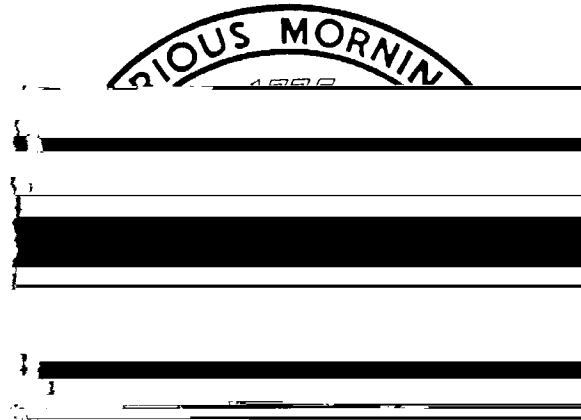
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Middle School Benchmarks



Jonas Clarke Middle School
William Diamond Middle School

Lexington Public Schools – Lexington, Massachusetts

August 2003

In an effort to raise the achievement level of all students, the Education Reform Act of 1993, enacted by the Commonwealth of Massachusetts, called for the establishment of statewide learning standards for all students, educators, schools, and districts in ALL academic subjects. As a result of this legislation, the Massachusetts Curriculum Frameworks were developed by statewide teams consisting of teachers, parents, and program specialists. The Curriculum Frameworks have, in effect, become the blueprint for content standards and serve as the foundation for the development of more specific curriculum. They can be viewed in their entirety on line at <www.doe.mass.edu>.

The Lexington Public Schools, along with all other districts in the Commonwealth, have been hard at work aligning our own curriculum standards with those outlined by the state. This handbook represents the evolution of that work and focuses specifically on the academic program in our Middle Schools.

During the 2002-2003 school year, Lexington Public Schools' curriculum leaders met regularly to develop learning benchmarks for all students in each of the Middle School subject areas. This document, the *Middle School Benchmarks* handbook, represents a collective effort on the part of district program leaders and Middle School educators to portray, in a consistent and clear format, the standards and their accompanying benchmarks. What are benchmarks? Simply stated, benchmarks are learning objectives that help to clarify content standards. They serve as indicators of student performance along various developmental levels. You will notice that for purposes of this document, the benchmarks have been organized by grade level(s). Benchmarks identify thresholds that are achieved by most students and may be surpassed by others. As is true of all curricula, benchmarks, too, are ever-evolving. They are reviewed and revised on a regular basis.

In creating a rich and valuable learning experience for all students, it is important to maintain a unified view of curriculum. The benchmarks comprise a single piece of that bigger picture. We cannot and should not minimize the significance of our collective responsibility in educating the 'whole' student, on the path to becoming a lifelong learner.

The philosophy underlying the work of the

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education in Massachusetts is to “provide each and every child with the values, knowledge and skills needed to achieve full potential in his or her personal and work life and to contribute actively to the civic and economic life of our diverse and changing democratic society.”

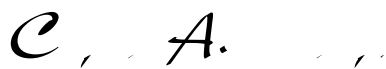
The Lexington Public Schools subscribes wholeheartedly to this mission statement and believes that all children can become lifelong learners and meet high standards. This guiding principle is the basis for establishing high expectations for teaching and learning within our district.

As stated by the Massachusetts Board of Education, the following are the principles and beliefs that should form the Basis of the Common Core of Learning if students are to succeed in the 21st century and meet the future’s challenge:

- *They must recognize the importance of education as a lifelong effort.*
- *They will need to communicate effectively with others through reading, writing, speaking, computing, the arts and technology.*
- *They will need to respect and understand people of different backgrounds in our diverse society.*
- *They will need to understand environmental and other issues with worldwide implications.*
- *They will need to make informed decisions for themselves, their families, their communities, and our country.*
- *They will need to contribute to our society.*
- *They will need to take responsibility for their own behavior.*

With this overarching mission in mind, I invite you to review this *Middle School Benchmarks* handbook. For specific Middle School course descriptions, please refer to the *Middle School Program of Studies* available at each of our Middle Schools. For further information on each of the particular academic programs, you may contact the appropriate Middle School Department Chairperson listed on the following page.

Sincerely,



Carol A. Pilarski
Assistant to the Superintendent
Lexington Public Schools

Should you be in need of further information, please contact the appropriate individual listed below:

Jonas Clarke Middle School

781-861-2450

Principal

Pamela Houlares

Assistant Principals

David Daviau
Stephen Ralston

English Language Arts

Richard Gilman, Department Chair

Foreign Language

Maureen Bennani, Department Chair

Library and Information Technology

Arden Velej, Library Media Specialist

Mathematics

Loretta McCormack, Department Chair

Science

Richard Thibeault, Department Chair

Social Studies

Beverly Dougherty, Department Chair

William Diamond Middle School

781-861-2460

Principal

Joanne Hennessy

Assistant Principals

Barbara Haughey
Shane Wilson

English Language Arts

Barbara Beckett, Department Chair

Foreign Language

Cheryl Kolodziej, Department Chair

Library and Information Technology

Harriet Wallen, Library Media Specialist

Mathematics

Evagrio Mosca, Department Chair

Science

Laura Krich, Department Chair

Social Studies

Herbert Gowen, Department Chair

Fine and Performing Arts

Walter Pavasaris, Coordinator K-12

781-861-2320, ext. 2175

Health Education

Jennifer Wolfrum, Coordinator K-12

781-861-2320, ext. 2180

Instructional Technology

Shelley Chamberlain, Coordinator K-12

781-861-2320, ext. 2174

Physical Education

Anthony Porter, Coordinator K-12

781-861-2320, ext. 1022

The Lexington Public Schools gratefully acknowledges the expertise and efforts of the following individuals for their work in the development of this handbook:

Assistant to the Superintendent
Carol A. Pilarski

Clarke Middle School Principal
Pamela Houlares

Diamond Middle School Principal
Joanne Hennessy

English/Language Arts

Scott Webber, Lexington High School, former Department Head
Barbara Beckett, Diamond Middle School, Department Chair
Richard Gilman, Clarke Middle School, Department Chair

Fine and Performing Arts

Walter Pavasaris, Coordinator K-12

Foreign Languages

Mary Alice Samii, Coordinator 3-12
Maureen Bennani, Clarke Middle School, Department Chair
Cheryl Kolodziej, Diamond Middle School, Department Chair

Health Education

Jennifer Wolfrum, Coordinator K-12

Instructional Technology

Shelley Chamberlain, Coordinator K-12
Susan Collins, Technology Integration Specialist

Library and Informational Technology

Susan Lum, Lexington High School, Lead Librarian

Mathematics

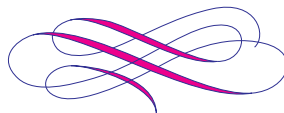
Gary Simon, Lexington High School, Department Head
Loretta McCormack, Clarke Middle School, Department Chair
Evagrio Mosca, Diamond Middle, Department Chair

Physical Education

Anthony Porter, Coordinator K-12

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Middle School English Language Arts Program

Overview The purpose of the English Language Arts curriculum is to provide students with daily or regular practice in developing skills and strategies in

cause/effect, sequence and examples—and employing them in compositions intended for a specific purpose. In grade eight, composition work, concentrating on character descriptions, the use of comparison and contrast, the documentation of sources and the making of judgments based on textual evidence, reflects and nurtures students' emerging power of abstract reasoning.

Oral expression and listening skills are developed through class discussions, classroom presentations, interactive writing groups and/or drama activities so that students have an opportunity to develop all of the requisite language skills, achieving increased precision, economy and sophistication in both speech and written composition.

All of these skills, strategies and processes reflect our commitment to helping the children of Lexington to be effective readers, sound thinkers, and articulate communicators of their thoughts, feelings, and concerns. These goals and methodologies, compatible with those of the Massachusetts State Framework in English Language Arts, represent best practices and are consistent with those of our program in our elementary schools as well as with those in our high school.

Thematic Units in Grade Six

- multicultural issues
- developing a sense of fairness
- building bridges
- personal growth and self reflection
- friendship
- coping with injustice

Thematic Units in Grade Seven

- survival
- anti-racism
- prejudice
- intergenerational issues
- the emerging adolescent

Thematic Units in Grade Eight

- moral or ethical dilemma
- family issues
- gender issues
- war and peace
- multicultural issues
- coming of age
- disabilities and handicaps

Speaking and Listening

Classroom Discussions

Students will be able to:

- employ formal rules of discussion which include turn taking, responding to the previous speaker, and asking for clarification
- gather relevant information for a research project or composition through interview techniques.

Oral presentations

Students will be able to:

- present oral reports to their class/team about the non-fiction work of selected authors
- make oral presentations based on fables, myths, short stories, plays and novels
- present similar content to various audiences for different purposes
- demonstrate their understanding of informal and formal language through role playing

Grammar, Usage

Reading/Literature

Reading

Students will be able to:

- use word recognition and context clues to read fluently
- use knowledge of punctuation to assist in comprehension
- use table of contents and indexes to locate information
- use text features such as headings, captions, and titles, to understand and interpret informational text
- recognize organizational patterns such as cause/effect and chronological order including their signal words
- distinguish between fact and opinion
- separate relevant and non-relevant information and details
- recognize author's purpose
- identify main ideas, make inferences, and draw conclusions from a variety of reading materials, both fiction and non fiction
- connect experience, prior reading, knowledge, and observations in response to a text
- self-select appropriately interesting, diverse, and challenging books for independent reading
- use appropriate comprehension strategies before, during and after reading, in order to understand text
- locate and use school and public library resources, with some direction, to acquire information
- adjust reading rate according to purpose for reading

Reading/Literature

Literature

Students will be able to:

- identify and define the characteristics of various genres (fiction, non-fiction, poetry and drama)
- identify and explain elements of setting, plot, character, conflict and theme
- retell the events of a story in light of the story's main idea or theme
- apply the knowledge to which the concept theme refers to the main idea and meaning of a selection, whether it is stated or implied
- analyze and evaluate similar themes across a variety of selections, distinguishing theme from topic
- respond to and analyze the effects of sound in poetry (alliteration, assonance, consonance, onomatopoeia and rhyme scheme)
- identify and analyze sensory details and figurative language
- identify and analyze author's use of dialogue and description
- compare traditional literature from different cultures
- identify and analyze structural elements particular to dramatic literature in the plays they read, view, write, and perform
- identify and analyze the similarities and differences between a narrative text and its film or play version
- develop characters through the use of basic acting skills.

Research Skills

Students will be able to:

- generate questions related to their topics and create a plan for their study
- produce a product in answer to one of their self-generated questions
- organize their reports according to a teacher-department-created format

Writing/Composition

Writing Process

Students will be able to:

- use the steps in the writing process (prewriting, drafting, revising, editing, and publishing)
- consider audience and purpose when writing
- use the appropriate genre to achieve a rhetorical purpose (persuasive, informational, or expressive)
- develop and organize compositions with a clear focus and supporting ideas
- revise writing to improve organization and diction
- order ideas and use vocabulary with precision
- edit writing using their understanding of grammar, usage, and spelling
- evaluate writing using prescribed criteria

Writing Products

Students will be able to:

- compose descriptive, persuasive, expository, and narrative paragraphs
- compose a friendly letter, review, or a news story
- compose research reports or informational presentations using graphic organizers
- keep a journal
- write a persuasive essay on any subject
- write a personal essay or narrative using details
- write a folk tale, tall tale, poem or story
- write paragraphs utilizing a variety of methods (e.g., chronological, cause and effect, definition)
- develop multi-paragraph responses to open-ended questions

Media

**Evaluating and Citing
Sources**

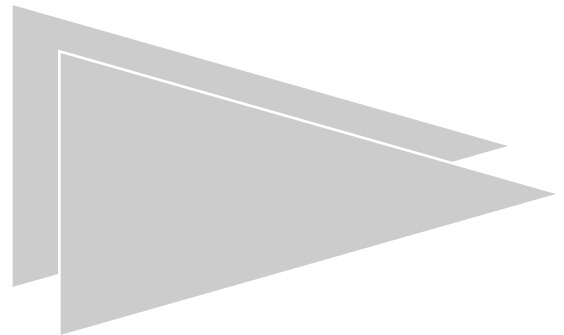
Students will be able to:

- search for and collect data from print and electronic media for research, using resources that are both traditional and computerized
- demonstrate their ability to navigate through electronic data sites, and store data on a computer disc, hard drive, or school server
- explain what constitutes plagiarism from both print and electronic sources, and be aware of its academic consequences
- distinguish factual and reliable sources from embellished, unreliable or misleading sources

**Creating Media
Presentations**

Students will be able to:

- evaluate the appropriate use of different presentations of literature through such means as dramatic presentations, music, sound effects, and/or the use of graphics
- create media presentations using effective images, sound effects, text, music and graphics
- use media to demonstrate their understanding of a particular text



Language

Media

Students will be able to:

- use a variety of media such as computerized card catalogs, online data bases, and electronic almanacs and encyclopedia for research
- use different kinds of images--music, sound effects, graphics, or visuals--to create an effective audio visual production
- analyze how different media--newspapers, radio, and television--cover the same event, noting the use of words, sounds and images in each medium
- analyze the effect on the reader, viewer, or listener of the use of camera angles, montage and/or sound effects in radio and television, and the use of graphics in print journalism
- identify the different techniques used by different media to achieve emotional effects and convey meaning
- distinguish factual and reliable sources from embellished, unreliable or misleading sources
- demonstrate their understanding of a particular literary text through both electronic and traditional media



Middle School Fine and Performing Arts Program

Overview The arts, a basic form of human communication, provide an outlet for creativity and serve as a source of aesthetic satisfaction. Through the arts, people can explore, express, and understand thoughts, emotions and feelings. They provide a means for the enrichment of life through self-expression and response to the expression of others. However one participates in the arts, they are a source of great enjoyment, contributing significantly to the quality of life.

The inclusion of the Fine and Performing Arts within the basic curriculum of every child is essential. The arts stand alone not only for their intrinsic value, but as a way of perpetuating our heritage and culture. As children work in the arts, they also develop self-discipline, self-esteem, critical and creative thinking skills and motivation. The arts enhance the student's ability to analyze emotional and intuitive responses, to problem solve, and to develop communication skills.

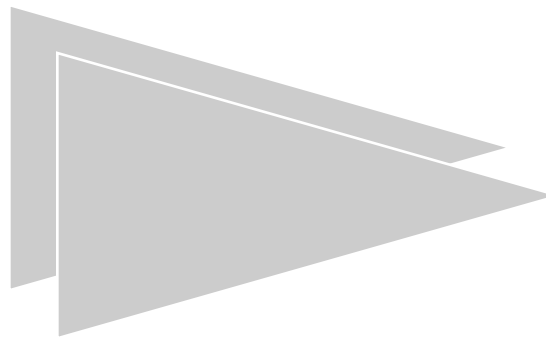
The basis of arts education is to provide experiences which will develop the ability of children to express themselves through the arts and perceive the arts at increasingly deeper levels of meaning. Education in the fine and performing arts must also provide for the development of literacy in using signs, symbols, and terminology of the arts. This knowledge is required to describe, analyze and interpret the arts. Finally, learning in the arts should provide students with a knowledge of their cultural heritage as well as an awareness of the role and function of the arts within our society and other cultures of the world.

Students in the Lexington Public Schools experience drama, music and the visual arts through a comprehensive, sequential, longitudinal curriculum taught by arts specialists. The core concepts of the curriculum include performance, creating and responding, critical and reflective thinking and understanding the historical and cultural contexts of music.

In grades 6-8, students learn by doing. Through the drama curriculum students learn about life through actions and consequences as well as through exploring customs and beliefs. They develop techniques, approaches and habits for applying knowledge and skills beyond school. Students experiment with improvisation as they broaden their knowledge of their immediate world and other cultures. They are encouraged to share their work with others and to be creative as they develop skills in observation, interpretation and evaluation.

In the music curriculum, students learn singing, playing instruments, and moving to music. By creating music, children acquire musical skills and knowledge that can be developed in no other way. Learning to read and notate music gives children a skill with which to explore music independently and with others. Listening to, analyzing, and evaluating music are important building blocks for musical growth. Furthermore, to participate in a diverse, global society, students must understand their own historical and cultural heritage and those of others within their communities.

In the visual arts curriculum, students learn the skills and concepts by using a wide range of subject matter, meaningful images, and visual expressions to reflect their ideas, feelings and emotions. Students also develop techniques, approaches and habits for applying knowledge and skills in the visual arts to the world beyond school. Students experiment with art materials and investigate the ideas presented to them through visual arts instruction. They are encouraged to make and share their work with others. Students are encouraged and nurtured to be creative as they develop skills in observation, interpretation and evaluation.



Creating and Performing

Script Writing

Students will be able to:

- write script based on personal experience, heritage or imagination
- individually and in groups, create characters, environment, and actions and create tension and suspense
- refine and record dialogue and action

Acting

Students will be able to:

- analyze descriptions, dialogue, and actions to discover, articulate, and

Perceiving and Understanding

Design Improvised and Scripted Scenes

Students will be able to:

- explain functions of scenery, properties, lighting, sound, costumes and makeup
- analyze improvised and scripted scene for technical requirements
- develop focused ideas for the environment using visual elements and principles
- work collaboratively to select and create different elements

Research by Using Cultural and Historical Information to Support Improvised and Scripted Scenes

Students will be able to:

- apply research from print and non-print sources to script writing, acting, design, and directing

Compare Art Forms by Analyzing Methods of Presentation and Audience Responses for Theatre, Dramatic Media and Other Art Forms

Students will be able to:

- describe and compare characteristics of characters, environments, actions and other media
- incorporate elements of music, dance, and visual arts to express ideas in scripts
- compare personal reactions to several different art forms

Creating and Performing

Sing Alone and with Others a Varied Repertoire of Music

Students will be able to:

- sing accurately and with good breath control throughout singing range, alone and with ensembles
- sing appropriate vocal literature with expression and technical accuracy
- sing music representing diverse genre and cultures
- sing music written in two and three parts

Perform on Instruments Alone with Others a Varied Repertoire of Music

Students will be able to:

- perform on at least one instrument accurately and independently, alone and in small and large ensembles with good posture, playing position and good breath, bow or stick technique
- perform with expression and technical accuracy, on at least one instrument, a repertoire of instrumental literature with a level 2 (out of 6) difficulty
- perform literature representing diverse genres and cultures
- perform with expression and technical accuracy a varied repertoire of instrumental ensemble literature

Improvise Melodies, Variations, and Accompaniments

Students will be able to:

- improvise simple harmonic accompaniments
- improvise simple melodic and rhythmic variations on pentatonic melodies and major keys
- improvise short melodies with consistent style, meter and tonality

Creating and Performing

Compose and Arrange Music

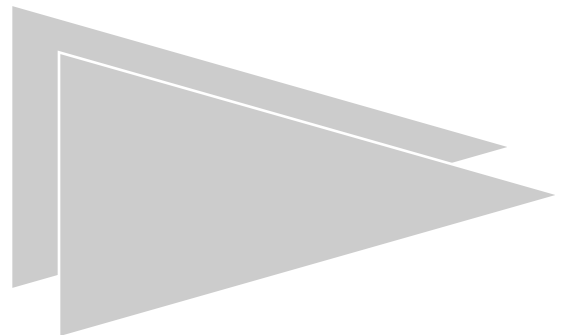
Students will be able to:

- compose short pieces within given guidelines, demonstrating such elements as unity, variety, tension, release and balance
- arrange simple pieces for voices or instruments other than those for which the pieces were written
- use a variety of traditional and non-traditional sound sources and electronic media when composing or arranging

Read and Notate Music

Students will be able to:

- read whole, half, quarter, eighth, sixteenth, and dotted notes and rests in a variety of meters
- read simple melodies in both treble and bass clefs
- record musical ideas using standard notation
- identify and define standard notation symbols for pitch, rhythm, dynamics, tempo, articulation, and expression



**Listen to and
Analyze Music****Perceiving and Understanding**

Students will be able to:

- describe specific musical events such as form, style, etc. using appropriate terminology
- analyze the uses of different musical elements by representing different genres and cultures

Creating

Materials and Tools

Students will be able to:

- increase skill and understanding of properties, capabilities, and understanding of drawing materials
- demonstrate skills in using a variety of paints
- understand the use of exacto knives
- demonstrate the effective use of tools and equipment for painting and drawing

Using Knowledge of Structures and Functions

Students will be able to:

- demonstrate an understanding of the concept of balance and organize content, shapes, and forms
- use a variety of compositional techniques to create a focal point or center of interest in artwork to include size relationships, contrasting visual elements, sight lines, and location
- organize art elements and subject matter so that the eye is directed around compositional high-points
- use contrasting materials, subject matter, and art elements to create variety in artworks

Responding and Creating

Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas

Students will be able to:

- use subjects, themes, and symbols that demonstrate knowledge of contexts, values, and aesthetics that communicate intended meaning of artwork
- observe and accurately draw the contours of objects
- use lines and colors to create increasingly realistic figures
- use complimentary colors to alter color schemes
- draw the human figure relatively accurately

Understand the Visual Arts in Relation to History and Culture

Students will be able to:

- know and compare the characteristics of artwork from various eras and cultures
- describe and place a variety of art objects in historical and cultural contexts
- analyze, describe, and demonstrate how factors of time and place influence visual characteristics of works of art
- analyze contemporary and historic meanings of specific artworks through cultural and aesthetic inquiry
- describe and compare individual responses to their own artworks, and those from other eras and cultures

Reflect and Assess the Merits of Their Work

Students will be able to:

- compare multiple purposes of creating works of art
- identify important standards or criteria to evaluate artwork
- self-evaluate artwork in terms of imagination and/or originality
- self-evaluate the overall design quality of artwork and how the work could be improved

Make Connections with Others

Students will be able to:

- compare the characteristics of works in two or more art forms that share similar matter, historical periods, or cultural context
- describe ways in which the principles and subject matter of other disciplines interrelate with the visual arts

Middle School Foreign Languages Program

Overview

The mission of the Foreign Languages Department is to provide programs that begin early enough to allow for the development of proficiency in at least one language. At the middle-school level, the program allows students a choice between two foreign languages (French and Spanish) and uses a variety of instructional strategies to promote their success. The target program is immersed in cultural experiences for each language.

The curriculum is organized into strands supporting the Massachusetts Foreign Languages Curriculum Framework. Students use interpersonal, interpretive, and presentation communication in applying the language in the classroom and beyond the school setting. They gain an appreciation of the target culture through understanding traditions, practices, and perspectives, increasing their sensitivity to diverse histories and ethnic differences. Comparing their own language with the foreign language helps students develop an insight into the nature of the language being studied. Through connections and communities, the students expand their knowledge of other disciplines using the foreign language.

The Foreign Languages Department offers a program that stresses the active involvement of students, creates multiple opportunities for the students to speak foreign language, and focuses the entire effort of instruction on the development of proficiency. The levels of instruction allow for individual interests, learning styles, and abilities. It gives opportunities for students to participate in cultural and exchange programs in the appropriate countries in the secondary schools.

Content in Grade Six

- numbers
- color
- weather
- seasons
- calendar (days, months, date)
- time,
- self, family, home
- travel and transportation
- hobbies
- clothing
- occupations
- simple food
- recreation
- shopping
- geography
- art and music

Content in Grade Seven

- extension of grade six content
- friends
- health
- classroom
- sports
- entertainment
- countries and nationalities
- seasonal activities
- directions
- parts of the body
- places in the city

Content in Grade Eight

- extension of grade seven content
- leisure
- food
- clothing
- fashion
- cultural activities
- camping
- restaurant dining
- vacation planning
- shopping abroad
- weekend activities
- literature

Communication

Students will be able to use the skills of speaking, listening, reading and writing.

Students will be able to:

- greet and respond to greetings
- introduce and respond to introductions
- ask simple questions in the present tense
- answer simple questions in the present tense in the content areas
- use present tense to make simple requests
- respond appropriately to teacher requests
- use present tense to express likes and dislikes in reference to the content areas
- respond appropriately to a wide array of classroom commands used by the teacher on a regular basis
- provide information using simple sentences in the present tense in the content areas
- ask for information using simple questions in the present tense in the content areas
- use present tense and correct adjective agreement to describe places or events
- write lists
- read and interpret signs and simple informational texts
- understand some ideas and familiar details when listening to the target language

Culture

Students will be able to gain knowledge and understanding of other cultures.

Students will be able to:

- identify some countries where the target language is spoken
- identify some distinctive cultural products such as toys, clothes, musical instruments, and foods from the target culture
- use appropriate expressions of courtesy: *please, thank you, you're welcome, excuse me, I'm sorry*
- explain some cultural contributions of the countries where the target language is spoken
- sing songs from the target language
- participate in activities, such as games, crafts, storytelling, celebrations, and dramatizations

Communities

Students will be able to participate in communities at home and around the world in other languages.

Students will be able to:

- apply knowledge of the target language and culture beyond the classroom setting

Comparisons

Students will be able to develop insight into the nature of language and culture by comparing their own language and culture to another.

Students will be able to:

- give examples of ways in which the target language differs from or is similar to English
- give examples of borrowed or loaned works
- describe some patterns of behavior of the target culture such as celebrations and compare/contrast them with similar behaviors of their own culture
- describe some cultural beliefs and perspectives relating to family, school, and play in both the target culture and their own

Connections

Students will be able to make connections with other subject areas and acquire information.

Students will be able to:

- use the target language to reinforce and expand their knowledge of other disciplines and to acquire new information and knowledge
- find and share information (in the target language about a variety of topics related to other curricular areas) from various sources
- relate works of art to the study of the target language

Communication

Students will be able to use the skills of speaking, listening, reading and writing.

Students will be able to:

- greet and respond to greetings
- introduce and respond to introductions
- ask simple questions in the present tense
- answer simple questions in the present tense in the content areas
- use present tense to make simple requests
- respond appropriately to teacher requests
- use present tense to express likes and dislikes in reference to the content areas
- respond appropriately to a wide array of classroom commands used by the teacher on a regular basis
- provide information using simple sentences in the present tense in the content areas
- ask for information using simple questions in the present tense in the content areas
- use present tense and correct adjective agreement to describe places or events
- write lists
- read and interpret signs and simple informational texts
- understand some ideas and familiar details when listening to the target language

Cultures

Students will be able to gain knowledge and understanding of other cultures.

Students will be able to:

- interact appropriately in a social situation
- explain cultural contributions of diverse groups
- identify aspects of culture presented in photographs, plays or films
- identify major geographic features of the target culture, such as rivers, mountains, cities, climate
- sing songs, perform dances, recite poems from the target language
- explain appropriate gestures and expressions for greetings, leave-takings, and daily classroom interactions

Communication

Students will be able to use the skills of speaking, listening, reading and writing.

Students will be able to:

- greet and respond to greetings
- introduce and respond to introductions
- ask simple questions in the present, near future, and past tenses using learned expressions and/or vocabulary from the content area
- use present tense to make requests
- respond appropriately to teacher requests
- use present tense to express likes and dislikes in reference to the content areas
- use present tense to describe feelings (happy, sad, worried, etc.) and states of being (tired, cold, hungry)
- use present tense to express needs
- follow directions
- provide information using simple sentences in the present, near future, and past tenses in the content areas
- provide information and knowledge using simple questions in the present, near future and past tenses in the content areas
- use present tense and correct adjective agreement to describe people, objects, places or events
- write lists and short notes in the present, near future, and past tenses using short sentences and learned expressions in the content areas
- read and interpret signs, simple stories, poems, and informational texts
- present information in a brief report

Cultures

Students will be able to gain knowledge and understanding of other cultures.

Students will be able to:

- interact appropriately in a social situation
- explain cultural contributions of diverse groups
- identify aspects of culture presented in photographs, plays, films, or museums
- identify major geographic features of the target culture, such as rivers, mountains, cities, climate
- sing songs, perform dances, recite poems from the target language
- explain appropriate gestures and expressions for greetings, leave-takings, and daily classroom interactions

Communities

Students will be able to participate in communities at home and around the world in other languages.

Students will be able to:

- apply knowledge of the target language and culture beyond the classroom setting

Comparisons

Students will be able to develop insight into the nature of language and culture by comparing their own language and culture to another.

Students will be able to:

- ask and answer questions regarding similar or different phonetic or writing systems used in the target language
- identify linguistic characteristics of the target language and compare and contrast them with English linguistic characteristics
- describe more patterns of behavior of the target culture such as celebrations and compare/contrast them with similar behaviors of their own culture
- describe more cultural beliefs and perspectives relating to family, school, and play in both the target culture and their own
- make a presentation comparing cultural characteristics

Connections

Students will be able to make connections with other subject areas and acquire information.

Students will be able to:

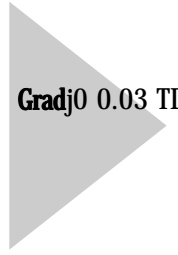
- use the target language to reinforce and expand their knowledge of other disciplines and to acquire new information and knowledge
- find and share information (in the target language about a variety of topics related to other curricular areas) from various sources
- use multimedia sources to obtain information and knowledge
- relate works of art and age-appropriate literature to the study of the target language
- present relevant information acquired from print and non-print materials and other informational sources

Middle School Comprehensive Health Education Program

Overview The core purpose of the Comprehensive Health Education program is to develop and nurture “resiliency” in students, defined as the ability to thrive, persevere and maintain a positive attitude. Comprehensive health education teaches students to avoid problems such as substance abuse and contagious diseases and to understand and demonstrate the responsibility they share as individuals, family members and citizens to act in ways that enhance health for themselves and others.

Three core concepts: health literacy, healthy self management and health

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Personal and Community Health

Consumer Health and Resource Management

Students will be able to:

- obtain health information from a variety of resources and demonstrate how to evaluate it for accuracy
- explain where a person can go to seek help for health-related issues and problems
- review and evaluate articles and websites containing health information

Community and Public Health

Students will be able to:

- describe the characteristics of a healthy school community
- explain the role good communication plays in keeping a school safe

Physical Health

Growth and Development

Students will be able to:

- identify the different stages of development through the life cycle
- describe at least two markers for each stage of development
- explain why it is important to have a plan for a healthy lifestyle
- describe how different choices and decisions can lead to good or bad outcomes

Physical Health

Nutrition

Students will be able to:

- describe a nutritionally-balanced diet
- describe how a well-balanced diet maintains good health
- explain how healthful eating and regular exercise affects overall appearance
- explain why food is the best source of nutrients
- explain how food translates into energy for the body and how exercise utilizes this stored energy
- explain how balancing food intake and energy output results in a healthy weight
- eat a nutritionally-balanced diet and make healthy choices about eating
- describe eating disorders and their effects
- avoid disordered eating behaviors

Reproduction/Sexuality

Students will be able to:

- identify at least five physical changes of puberty and relate those changes to one's self
- identify parts of the male and female reproductive anatomy and describe their functions
- describe the wide range of "normal" experienced by individuals as they go through puberty
- differentiate between factual information relating to puberty and popular myths and misconceptions
- increase their comfort level when discussing issues relating to sexuality and relationships
- identify the factors involved in making informed and responsible choices in matters relating to sexual activity

Safety and Prevention

Tobacco, Alcohol and Other Substance Use/Abuse Prevention

Students will be able to:

- identify and describe a minimum of three short-term and three long-term health effects of smoking and/or chew
- identify and describe a minimum of three short term and three long-term health effects of drinking alcohol
- identify and describe a minimum of three short term and three long-term health effects of smoking marijuana
- explain the connections between smoking and/or the use of chew and serious health consequences
- describe the difference between occasional, moderate, and heavy drinking
- describe the variety of health consequences that can result from smoking marijuana
- abstain from smoking or using chew
- abstain from the use of alcohol until they are of a legal age, at which point, continue to abstain or drink moderately
- abstain from smoking marijuana

Violence Prevention

Students will be able to:

- describe the difference between flirting and sexual harassment
- discuss and identify at least two consequences of sexual harassment
- understand and describe different forms of harassment
- explain the Lexington Public School's policy regarding harassment

Technical Skills

Basic Operations

Students will be able to use input and output devices

- save and retrieve a file to the server
- identify and report common hardware and software problems (e.g., frozen screen, disk error, printing problems)
- demonstrate printing protocol and demonstrate efficiency (e.g., printing selected text and graphics using NetPrint)
- begin to use various peripherals and explore their applications (e.g., camera, scanner, camcorder)
- apply concept of connectivity and networking
- use correct terminology in speaking about electronic communications (e.g., browser, search engine, online)

Communications Tools

Students will be able to use a variety of media to communicate information and ideas to multiple audiences

- create a slide show (e.g., Claris SlideShow, PowerPoint)
- create a multimedia presentation (e.g., HyperStudio, PowerPoint)
- create a published product (e.g., brochure, flier, newsletter)

Instructional Tools

Students will be able to use technology tools to enhance learning and increase productivity

Word processor

- use editing and formatting features (e.g. centering, line spacing, margins, cut and paste, fonts, styles, spelling)

Spreadsheet

- create an original spreadsheet, entering simple formulas
- use basic structure of spreadsheet (cells, rows, columns) and apply formatting features
- produce simple charts draw
- use functions of draw applications as appropriate for class projects

Database

- use a database (e.g., record, field)
- create a database (e.g., record, field)

Graphic organizer for concept mapping

- create organizer

Slideshow tool (Claris SlideShow, PowerPoint)

- create and present a slideshow multimedia tool (HyperStudio, PowerPoint, iMovie)
- create a presentation

Content specific tools

- select appropriate technology tool for a problem-solving task:
 - simulation software
 - environmental probes
 - measuring devices
 - dynamic geometry software

Research Tools

Students will be able to use technology to locate, collect and process information from a variety of sources

- locate information on the Internet
- use browser features effectively (including bookmarking, go, back)
- use search engines and directories
- make effective use of online databases
- evaluate online resources for authenticity, objectivity, accuracy, currency
- write correct citations for text and images gathered from electronic sources

**Social and Ethical
Issues**

Students will be able to practice responsible use of technology systems

- protect personal identification
- follow classroom rules for responsible use of computers
- abide by Lexington Public School's Acceptable Use Policy and know the consequences of violating that policy
- explain user's responsibility to cite all electronic sources
- demonstrate ethical and legal behavior in copying files, applications and media

Technical Skills

Basic Operations

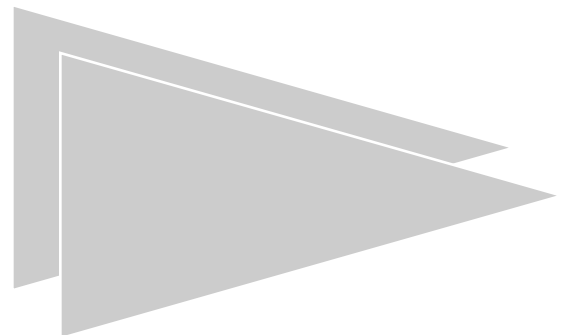
Students will be able to use input and output devices use computers for learning activities

- save and retrieve a file to the server
- identify and report common hardware and software problems (e.g., frozen screen, disk error, printing problems)
- follow printing protocol and demonstrate efficiency (e.g., printing selected text and graphics using NetPrint)
- use various peripherals and their applications (e.g., camera, scanner, camcorder)
- apply concept of connectivity and networking
- use correct terminology in speaking about electronic communications (e.g., browser, search engine, online)

Communications Tools

Students will be able to use a variety of media to communicate information and ideas to multiple audiences

- create a slide show (e.g., AppleWorks Slide Show, PowerPoint)
- create a multimedia presentation (e.g., HyperStudio, PowerPoint)
- create a published product (e.g., brochure, flier, newsletter)



Instructional Tools

Students will be able to use technology tools to enhance learning and increase productivity

Word processor

- use editing and formatting features (e.g., centering, line spacing, margins, cut and paste, fonts, styles, spelling)
- insert and manipulate images (e.g., graphics, clip art, tables from other files into document)
- format a bibliography

Spreadsheet

- create an original spreadsheet, entering simple formulas
- use basic structure of spreadsheet (e.g., cells, rows, columns) and apply formatting features
- product simple charts
- use more advanced functions of spreadsheet (Grade 8)

Draw

- use functions of draw applications as appropriate for class projects
- use a database (e.g., record, field)
- create a database (e.g., record, field)
- know the difference between draw and paint (Grade 8)
- introduce basic paint techniques (Grade 8)
- use more advanced draw functions as appropriate for class projects (Grade 8)

Database

- use a database (e.g., record, field) (Grade 8)
- create a database (e.g., record, field) (Grade 8)

Graphic organizer for concept mapping

- create organizer slideshow tool (e.g., AppleWorks Slide Show, PowerPoint)
- design with master page multimedia tool (e.g., HyperStudio, PowerPoint, iMovie)
- import graphics, sound, text
- select appropriate technology tool for a problem-solving task:
 - simulation software
 - environmental probes
 - measuring devices
 - dynamic geometry software

Content specific tools

- select appropriate technology tool for a problem-solving task (Grade 8):
 - simulation software
 - environmental probes
 - measuring devices
 - dynamic geometry software

Graphing Calculator

- use scientific calculator functions and operations
- use graphing capabilities (Y= menu, windows, zoom and trace scatterplots)
- use regression calculation feature
- use simple ERROR troubleshooting

Research Tools

Students will be able to use technology to locate, collect and process information from a variety of sources

- locate information on the Internet
- use browser features effectively (including bookmarking, go, back)
- use search engines and directories
- research using online databases
- evaluate online resources for authenticity, objectivity, accuracy, currency
- write correct citations for text and images gathered from electronic sources
- use key word searching and other search strategies effectively to find appropriate information

Social and Ethical Issues

Students will be able to practice responsible use of technology systems

- protect personal identification
- follow classroom rules for responsible use of computers
- abide by Lexington Public School's Acceptable Use Policy, and know the consequences of violating that policy
- cite all electronic sources
- demonstrate ethical and legal behavior in copying files, applications and media



Middle School Library and Information Technology Program

Overview

The goal of the Department of Libraries and Information Technologies is to develop productive, socially responsible lifelong learners, who value the richness of diversity in their lives. This goal is based on our beliefs that every student has the capacity to learn and the right to open and easy access to information and ideas. Such students contribute positively to the learning community and to society because they are information literate and recognize the importance of learning to a democratic society. The three strands of this curriculum are Life-Long Learning, Research Skills and Literacy Appreciation. In a sense, Research Skills and Literary Appreciation are sub-sets of Life-Long Learning, but they are separated here so the skills can be specifically related to other curricula. Students become lifelong learners when they transfer and develop the skills of research and literary appreciation, acquired in formal, academic settings, to their daily lives. As they develop these skills they grow in their abilities to reflect critically, to construct knowledge and to communicate ideas. They seek out information from a diversity of viewpoints, cultural perspective and scholarly traditions in an attempt to arrive at a reasoned and informed understanding of issues. The students realize that equitable access to information from a range of sources and all formats is a fundamental right of democracy. When students become life-long learners they actively and independently seek information to enrich their understandings of career, community, health, leisure and other personal situations.

The habits of lifelong learning, which grow from internalizing the skills of research and literary appreciation, lead to continuing personal growth and an increasing awareness of social responsibility. The needs for critical and creative thinking, developing productive capabilities, and valuing community and diversity are intrinsic to both strands.

Life-Long Learning

Students will be able to develop a critical approach to information and ideas.

- recognize that more than one point of view can be valid
- recognize that authors may present their point of view or opinion
- evaluate person or organization responsible for publication
- look for evidence to support claims

Students will be able to grow in ability to use information resources independently.

Research Skills

Students will be able to identify the information needed to solve a problem or answer a question.

- read for overview
- identify questions to ask
- refine questions with more research

Students will be able to use the variety of resources that are available for research.

- books
- periodicals
- electronic sources

Students will be able to use strategies for locating each resource.

- use of library online catalog
- use of reference materials—print and online
- use of online periodical databases
- use of Internet, school web pages and search engines

Students will be able to use search techniques.

- broaden or narrow search terms
- use key words and subject headings
- use subheadings
- use cross references
- use specialized searching techniques, e.g., truncation, parentheses, quotation marks, and, or, not
- cite sources appropriately

Students will be able to evaluate information.

- for reliability and validity
- differentiate between fact and opinion
- recognize different points of view on topic may be valid
- justify selection or rejection of ideas

Students will be able to evaluate the research process.

Literary Appreciation

Grade 6

Students will be able to:

- focus on the attributes of:
 - Fantasy
 - Science Fiction
 - Biography
 - Mythology
- select and use quality recreational reading materials appropriate to reading comprehension levels
- explore various genres
- expand skills, understanding and interest
- supplement specific areas of classroom work

Grade 7

Students will be able to:

- focus on the attributes of :
 - Poetry
 - Historical fiction
- select and use quality recreational reading materials appropriate to reading comprehension levels
- explore various genres
- expand skills, understanding and interests
- supplement specific areas of classroom work

Grade 8

Students will be able to:

- focus on the attributes of:
 - Drama
 - Short Stories
- select and use quality recreational reading materials appropriate to reading and comprehension levels
- explore various genres
- expand skills, understanding and interests
- supplement specific areas of classroom work

Middle School Mathematics Program

Overview The “Standards” and the “Frameworks”

The Lexington Public Schools’ Middle School Mathematics Program is directly aligned with the *Massachusetts Mathematics Curriculum Framework* (November 2000) <<http://www.doe.mass.edu/frameworks/math/>>. The Framework draws heavily from the National Council of Teachers of Mathematics (NCTM) *Principles and Standards for Mathematical Practice* (<standards.nctm.org/>. Because of the similar vision for the teaching of mathematics that informed the mathematics standards, the Framework, in turn, the Lexington Public Schools’ Middle School Mathematics pedagogy describes a variety of instructional practices that develop students’ mathematical proficiency.

The overall goal of the Standards for Mathematical Practice is to ensure that all students are engaged in mathematical practices that develop their mathematical proficiency.

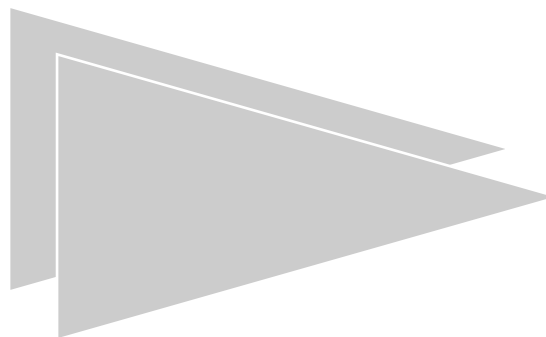
Process Standards

(as stated in NCTM Standards)

Students will be able to:

Connect

- recognize and use connections among mathematical ideas
- understand how mathematical ideas interconnect and build on one



Stu

Number Sense and Operations

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- apply the order of operations
- use multiple algorithms for $+$, $-$, \times , and \div and choose one algorithm that will be developed for automaticity and efficiency for each operation
- use various problem-solving strategies
- use powers and exponents in expressions
- identify prime and composite numbers
- apply divisibility rules
- find prime factorization of a composite number
- use prime factorization to find GCF and LCM/LCD
- find squares of numbers and square roots of perfect squares
- recognize and extend arithmetic, geometric, and other numerical and visual patterns including fractals
- demonstrate a functional understanding of the inter-relationship between decimals, fractions, and percentages:
 - apply algorithms for $+$, $-$, \times , and \div
 - compare and order
 - round and estimate
 - comprehend and apply scientific notation
 - convert metric to metric units
 - recognize and apply decimal equivalents of fractions and percentages
 - determine unit rates/prices
 - express ratios as fractions and determine whether two ratios are equivalent
 - express fractions and ratios in simplest form
 - solve proportions using mental math and cross products
 - find percent of a number
 - apply a given percent of increase and decrease
- integers:
 - read, write, compare and order
 - find opposites and absolute values
 - $+$, $-$, \times , and \div with integers

Patterns, Relations, and Algebra

Students will be able to:

Understand patterns, relations, and functions

Represent and analyze mathematical situations and structures using algebraic symbols

Use mathematical models to represent and analyze mathematical situations and structures

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- identify, analyze and extend numerical patterns
- identify and construct geometric patterns including fractals
- use mathematical models
- translate verbal phrases into algebraic expressions and equations
- evaluate simple algebraic expressions and equations
- solve one and two-step variable equations using mental math, guess and check, and inverse operations
- solve equations with two variables (x,y) and graph the solution
- solve inequalities
- represent functions as ordered pairs
- use a function rule to find the output of a function
- graph linear functions



Geometry and Measurement

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- classify relationships among types of two- and three-dimensional objects
- identify relationships among angles, side lengths, perimeters, areas, and volumes of geometric objects

- identify and locate points and axes in the Cartesian coordinate plane

- describe sizes, positions, and orientations of shapes under informal transformations such as flips, turns, slides, and scaling
- determine the congruence, similarity, and line or rotational symmetry of objects using transformations

- draw geometric objects with specified properties, such as side lengths or angle measures
- use two-dimensional representations of three-dimensional objects to

Patterns, Relations and Algebra

Students will be able to:

Understand patterns, relations, and functions

Represent and analyze mathematical situations and structures using algebraic symbols

Use mathematical models to represent and understand quantitative relationships

Analyze change in various contexts

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- represent, analyze, and generalize a variety of patterns with tables, graphs, words, and, when possible, symbolic rules
- develop an initial conceptual understanding of variables
- use symbolic algebra to represent situations and to solve problems
- recognize, generate and simplify simple algebraic expressions
- solve linear equations and inequalities
- model and solve contextualized problems using various representations, such as graphs, tables, and equations
- use graphs to analyze changes in quantities in relationships
- create, read, and analyze graphs

Data Analysis, Statistics and Probability

Students will be able to:

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them

- formulate questions, design studies, and collect and analyze data
- select, create, and use appropriate graphical representations of data

Select and use appropriate statistical methods to analyze data

- find, use, and interpret measures of central tendency, including mean, median, and mode
- discuss and analyze the correspondence between data sets and their graphical representations

Develop and evaluate inferences and predictions that are based on data

- use observations about differences between two or more samples to make conjectures about the populations from which the samples were taken

Understand and apply basic concepts of probability

- explain the difference between theoretical and experimental probability
- use proportionality to make and test conjectures about the results of experiments and simulations
- compute probabilities using such methods as organized lists, tree diagrams, and area models

Number Sense and Operations

Students will be able to.03 0.03 Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- work flexibly with real numbers to solve problems
- use ratios and proportions to represent quantitative relationships
- use exponential, scientific, and calculator notation appropriately
- compare and contrast the properties of numbers and number systems, including the rational and real numbers

- use the properties of real number operations to simplify computations - commutative, associative, distributive, identity, and inverses

- select appropriate methods and tools for computing with real numbers
- develop and use strategies to estimate the results of rational-number computations and judge the reasonableness of the results
- compute fluently with algorithms

Geometry and Measurement

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:

- understand and extend relationships among the angles, side lengths, perimeters, areas, and volumes of similar objects
- create and critique inductive and deductive arguments concerning geometric ideas and relationships
- use coordinate geometry to examine and analyze special geometric shapes and situations using a Cartesian coordinate system
- examine the congruence, similarity, and line or rotational symmetry of objects using transformations
- use visual tools to represent and solve problems
- use geometric models to represent and explain numerical and algebraic relationships
- understand, select, and use units of appropriate size and type to measure angles, perimeter, area, surface area, and volume
- make decisions about units and scales that are appropriate for problem situations involving measurement
- develop and use formulas to calculate linear, area, and volume
- use unit analysis to check measurement computations

Patterns, Relations and Algebra

Students engage in problem solving, communicating, reasoning, connecting, and representing as they:



Middle School Physical Education Program

Overview

The physical education program provides the child with an educational experience which uses movement as a medium of learning and expression. A correlation exists between the development of a sound body, which is one product of the physical education process, and the development of a sound mind. A correlation exists between the development of a sound body, which is one product of the physical education process, and the development of a sound mind. A correlation exists between the development of a sound body, which is one product of the physical education process, and the development of a sound mind.

Topics in Grades 6, 7, 8

The middle school program develops the following topics for grades 6, 7, and 8. Below is a list of those activities covered under these topics and reinforced throughout the program.

Fitness

- physical best fitness assessment
- proper warm up/stretching instruction
- proper cool down/stretching instruction
- understand how body changes affect movement

Healthy Life Styles

- understand how body changes affect movement
- understand the importance of physical activity and how it applies to long term fitness
- develop knowledge of healthy fitness activities

Motor Skill Development

- develop basic skills in individual, dual team sports, and leisure activities
- develop knowledge of rules, terminologies, strategies and etiquette of individual, dual team sports, and leisure activities
- improve upon your knowledge

Personal and Social Competency

- learn to accept different abilities of classmates
- learn good sportsmanship
- learn the importance of team work
- develop leadership skills

Fitness

Students will be able to:

- assess personal fitness through participation in the Physical Best Fitness Program
- apply basic principles of training and appropriate guidelines of exercise to improve immediate and long-term physical fitness
- demonstrate a knowledge of health related components of fitness such as: cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition
- participate in activities that promote physical fitness, decrease sedentary lifestyle, and relieve mental and emotional tension
- demonstrate a knowledge of the skill related components of physical fitness such as: agility, balance, coordination, power, reaction time, and speed

Healthy Life Style

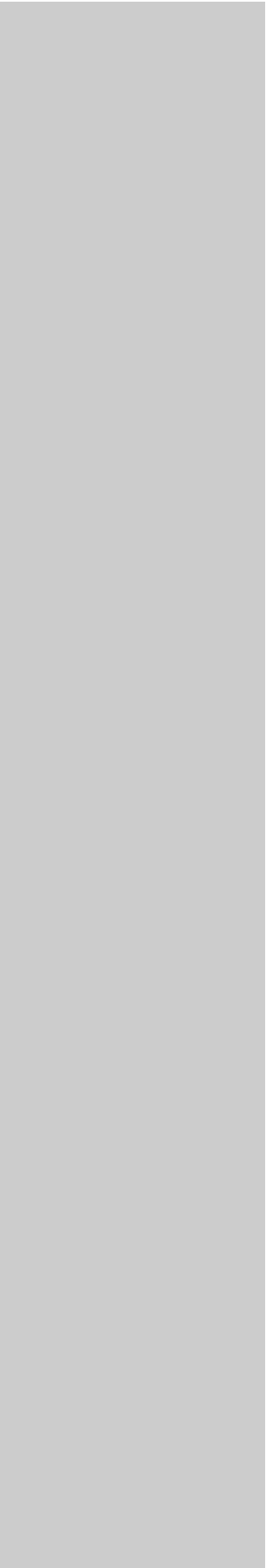
Students will be able to:

- obtain a level of fitness appropriate to their own capabilities
- show mental, social, and emotional growth through physical activities
- attain a basic workable knowledge and understanding of various sports and activities
- participate in carry over activities as well as to appreciate sports and activities

Motor Skill Development

Students will be able to:

- use combinations of manipulative, locomotor, and non-locomotor skills to develop movement sequences and patterns, both individually and with others
- demonstrate developmentally appropriate basic manipulative and advanced specialized physical skills, including throwing and catching, batting, striking, kicking, redirecting, and tracking objects in space
- perform rhythm routines that combine traveling, rolling, balancing, change of direction, and transfers of weight
- develop and apply competency in activities that may include but are not limited to the following: basketball, field hockey, floor hockey, football, lacrosse, racquet skills, rhythmic, soccer, tofTm(MoeavpdLvitn &, fiel,r)TjT* streng





Middle School Science Program

Overview Inquiring minds are scientific minds. They ask questions relating to experience with the surrounding world. Whether the questions are phrased as “why?”, “when?”, “which one?”, “how much?”, “where?” or “what is the pattern?” there is a method used by scientists to go about determining appropriate answers. This method requires the skills to observe, organize, classify, speculate, make and test hypotheses, and analyze the resulting data. Often one question leads to many more. When the results are meaningful and verifiable they will be reviewed and shared within a community of peers.

Our students arrive inquisitive and they are already natural scientists as a consequence of their elementary science experiences. Our primary middle school goal is to nurture these incoming budding scientists with experiences appropriate to their level of development. At the same time they actively model the methods of professional scientists. We aim to send our students to the high school with the same inquisitiveness and a solid conceptual basis for continuing higher level scientific explorations.

The curriculum for each grade contains common topics of study which provide unity in the program. The continuing theme of inquiry allows students and teachers to follow their interest and personalize their work within the common framework of the curriculum. Individual and group laboratory reports, construction projects, model building, oral presentations, and posters incorporating written expression, numerical analysis, and graphic visualization aim to develop proficiency in the important area of communication.

At the completion of middle school, the hope and goal of the science program is for students to, in the words of a former student “See the world in a different way.”

Inquiry Skills

Students will be able to:

- identify, make and record observations needed to carry out their research
- use appropriate references to form independent questions for research
- design charts, tables, graphs and other tools or devices which will assist in conducting and expanding their research
- use existing techniques or design unique ones to obtain additional information required to extend or refine their explanations
- analyze and interpret the data collected to answer the research question
- represent, present and defend their explanations
- work cooperatively and collaboratively

Process Skills

Students will be able to:

- follow safety procedures during laboratory and classroom activities
- accurately and appropriately use: metric rulers, balances, stopwatches, graduated cylinders, thermometers, spring scales and Bunsen burners
- use appropriate units for measured or calculated values
- recognize and analyze patterns and trends
- identify cause and effect relationships
- read, interpret and follow written laboratory instructions
- recognize, select and use tools and materials appropriate to the task
- use indicators and interpret results
- classify objects and organisms according to appropriate standards
- collect data using electronic and non-electronic devices
- use computers and appropriate software to analyze data
- extract meaning from expository text
- present scientific information in multiple formats consistent with acceptable scientific practices
- build and interpret models, charts and graphs
- use a compound microscope to observe living and nonliving organisms
- prepare a wet mount slide for examination
- use electronic probes with computer based data analysis

Content

Earth in Space

Students will be able to:

- explain daily, monthly, and seasonal changes on earth

Earth

Students will be able to:

- explain how the atmosphere (air), hydrosphere (water), and lithosphere (land) interact, evolve, and change
- describe volcano and earthquake patterns, the rock cycle, and weather and climate changes

Matter

Students will be able to:

- observe and describe properties of materials
- develop their own mental models to explain common chemical reactions and changes in states of matter

Energy

Students will be able to:

- observe and describe heating and cooling events

Force and Motion

Students will be able to:

- describe different patterns of motion of objects
- observe, describe and compare effects of forces on the motion of objects

Content

Matter

Students will be able to:

- distinguish between chemical and physical changes
- explain the properties of materials in terms of the arrangement and properties of the atoms that compose them
- use atomic and molecular models to explain common chemical reactions
- apply the principle of conservation of mass to chemical reactions
- explain chemical bonding in terms of the behavior of electrons

Energy

Students will be able to:

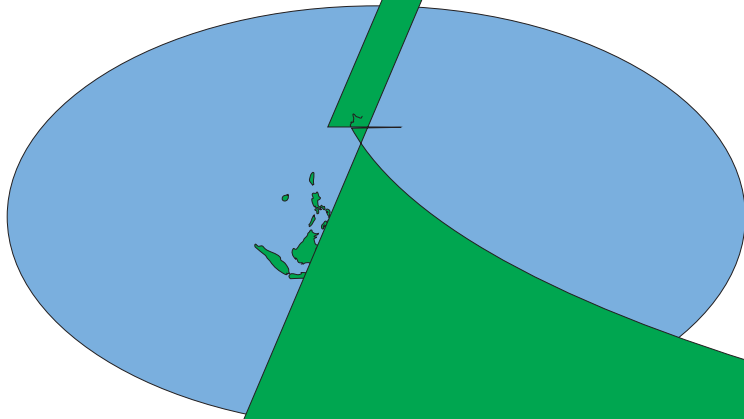
- describe forms of energy and transformations of energy
- observe and describe energy changes as related to chemical reactions
- observe and describe the properties of sound, light, magnetism, and electricity
- describe situations that support the principle of conservation of energy
- explain heat in terms of kinetic molecular theory

Forces and Motion

Students will be able to:

- observe and describe the effects of forces (gravitational, electrical, magnetic, and mechanical) on the motion of objects
- describe how forces can operate across distances
- explain and predict different patterns of motion of objects

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Over

The Lexington Public Schools Social Studies curriculum reflects the reality of our lives, that everything we learn and know is interconnected. The study includes both the common characteristics and relations among people, places, and environments, as well as their unique features. This inclusive curriculum promotes a deeper understanding of social studies by examining a variety of perspectives. Its multi-cultural approach also fosters personal connectedness. The goal is to engender in students empathy, understanding, cooperation, and an honoring of diversity.

Middle School Courses

Grade 6 - Units of Study

- Archaeology
- Early Humans
- Ancient River Civilizations
- Sumer
- Greece
- Rome
- Research Paper

Grade 7 - Units of Study

- Cartography
- Physical Geography
- World Regions
- North Africa and the Middle East
- Sub-Saharan Africa
- East Asia, South Asia, Southeast Asia
- Latin America
- Europe

Grade 8 - Units of Study

- The Rationale for Studying History
- Colonization and Settlement (1585 - 1763)
- Revolution (1763 - 1783)
- The New Nation (1783 - 1815)
- Expansion and Reform (1815 - 1850)
- Civil War and Reconstruction (1850 - 1877)

Civics and Government

Students will learn how ancient civilizations were organized and governed.

Students will be able to:

- examine recurring issues involving the rights, roles, and status of the individual
- describe the purpose of government and how its powers are acquired, used, and justified
- define and use correctly words and terms relating to government such as city-state, dynasty, kingdom, empire, republic, civic duty, and rule of law
- identify characteristics of civilizations such as the presence of political institutions and systems of record keeping
- describe important contributions to the development of law explain why the government of ancient Athens is considered the beginning of democracy and explain the democratic political concepts developed in ancient Greece
- describe the contribution of Roman civilization to law

Economics

Students will learn about the growth and development of economic systems common to ancient civilizations.

Students will be able to:

- define and apply economic concepts such as producers, consumers, goods, services, buyers, sellers, natural resources, taxes, specialization of labor, savings, prices, markets, scarcity, trade, barter, money, medium of exchange, supply, and demand
- identify economic characteristics of civilizations such as the production of goods and food surpluses
- describe the role of specialization of labor and supply and demand in the economic process

Geography

Students will learn absolute and relative location.

Students will be able to:

- locate the Ancient River Civilizations (Nile, Indus/Ganges, China, and Mesopotamia), Sumer, Greece, and the Roman Empire on appropriate historical maps
- identify the geographic characteristics of civilizations (geographic boundaries and population distribution and density)

Students will understand the culture and contributions of ancient civilizations.

Students will be able to:

- identify polytheism as a religious belief of people in ancient civilizations
- describe the myths and stories of ancient civilizations and give examples of gods, goddesses, heroes, and events
- describe the contributions of Greek and Roman civilization
- identify and describe ways regional, ethnic, and national cultures influence individuals' daily lives
- compare similarities and differences in the ways societies and cultures meet human needs
- explain and give examples of how language, literature, the arts, architecture, other artifacts, traditions, beliefs, values, and behaviors contribute to the growth of culture
- identify cultural characteristics of civilizations such as the existence of social classes and the development of religion, learning, art, and architecture

Students will learn the process of Geographic Inquiry (Research, Analysis, and Interpretation).

Students will be able to:

- identify information shown on historical maps
- explain how the geographic location of ancient civilizations contributed to their growth and development

History

Students will understand time, chronology, and cause/effect relationships

Students will be able to:

- construct and interpret timelines of events and civilizations studied
- identify multiple causes and effects when explaining historical events
- demonstrate an understanding of chronology, causality and conflict to explain connections among patterns of historical change and continuity
- describe the great climate and environmental changes that shaped the earth and eventually permitted the growth of human life
- explain the importance of the invention of metallurgy and agriculture.
- describe how the invention of agriculture and domestication of animals related to settlement, population growth, and the emergence of civilization
- describe how irrigation, metalsmithing, slavery, and inventions and technology contributed to the growth of the ancient civilizations studied
- analyze the causes, and consequences of seminal ancient conflicts

Students will learn the process of Historical Inquiry

Students will be able to:

- identify and use processes important to reconstructing and reinterpreting the past
- distinguish between primary and secondary sources and describe how each kind of source is used in interpreting history
- describe ways of interpreting archaeological evidence from societies leaving no written record
- describe the kinds of evidence that have been used by archaeologists and historians to draw conclusions about the social and economic characteristics of the ancient civilizations studied
- compare and contrast life in the different ancient civilizations studied

Students will understand important cultural and historical periods or dates of ancient civilizations.

Students will be able to:

- use correctly the words or abbreviations for identifying time periods or dates in historical narratives (decade, age, era, century, millennium, AD/CE, BC/BCE, and circa)
- identify in BC/BCE dates that the higher number indicates the older year (that is, 3000 BC/BCE is earlier than 2000 BC/BCE)
- identify the characteristics of early human societies and their successor civilizations
- describe and summarize the achievements of Ancient River Civilizations (Nile, Indus/Ganges, China, and Mesopotamia), Sumer, Greece, and Rome.
- describe the status of women and slaves in the civilizations studied
- describe and be able to cite examples of cultural diffusion in ancient societies and civilizations

Civics and Government

Students will learn how the United States was organized and then understand the workings of the United States Constitution.

Students will be able to:

- define and use appropriate vocabulary which pertains to the history and function of United States government
- practice forms of civic discussion consistent with the ideals of citizenship
- demonstrate an understanding of race, gender, and social class in describing the interactions of individuals and social groups
- analyze the weaknesses of the Articles of Confederation and describe the crucial events leading up to the Constitutional Convention
- explain the intellectual and historical influences on the formation and framework of the American government.
- describe the major debates at the Constitutional Convention and explain their resolution
- trace the influence and ideas of Supreme Court Chief Justice John Marshall and the importance of the doctrine of judicial review
- describe the purpose and functions of the United States government under the Constitution
- explain the concepts of popular sovereignty and constitutional government such as representative government, federalism, separation of powers, shared powers, checks and balances, and individual rights
- explain the varying roles and responsibilities of federal, state and local governments in the United States
- explain the rights and responsibilities of citizenship
- explain the evolution and function of political parties
- describe how decisions are made in a democracy, including the role of legislatures, courts, executives, and the public

Economics

Students will learn about the growth and development of the economic system in the United States.

Students will be able to:

- describe a range of examples of the various institutions that make up economic systems such as business firms, banks, and government agencies
- describe the role of specialization and supply and demand in the economic process
- explain the basic economic functions of the government in the economy explain the agencies

History

Students will understand time, chronology, and cause/effect relationships

Students will be able to:

- interpret and construct timelines that show how events and eras are related to one another
- explain how a cause and effect relationship is different from a sequence or correlation of events
- distinguish between long-term and short-term cause and effect relationships
- identify and use key concepts such as chronology, causality and conflict to explain connections among patterns of historical change and continuity
- distinguish intended from unintended consequences

History

Students will understand important cultural and historical aspects of United States History

Students will be able to:

- explain the role of Massachusetts in the American Revolution. explain the intellectual and historical influences on the American Revolution
- summarize the major policies and political developments that took place through 1877
- explain the emergence, growth, and importance of the Industrial Revolution
- describe emergence of American ideas as evidenced by the reform movements of the first half of the 19th century
- explain the importance of the transportation revolution of the 19th century
- describe the different economies and cultures of the North and South
- summarize the political developments leading to the Civil War
- describe the roles and leadership policies of various Civil War leaders
- describe the social, cultural, technological, and economic changes resulting from the Civil War
- explain the policies and consequences of Reconstruction

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