

Social Studies

- Explain the British influences on U.S. cultural and political institutions
- Identify the original 13 colonies and the impact that climate had on their development
- Gain an understanding of the development of our government from Revolution to the Constitution.
- Understand how the U.S. Constitution works
- Summarize the major policies and political development of the new nation under the Constitution
- Describe the causes, consequences and conflicts of America's westward expansion, as well as its effect on sectionalism in the U.S.

Integrated Arts

Art

Visual Arts Education inspires students to perceive and shape the visual, spatial, and aesthetic characteristics of the world around them as well as develop their capacity for imaginative and reflective thinking. (Massachusetts Arts Curriculum Framework)

- Articulate an understanding of elements and principles of art through writing and critiques
- Demonstrate knowledge of contemporary art theories and styles (Fauvism, Surrealism, Cubism)
- Demonstrate knowledge of technology in art (graphic design)
- Demonstrate understanding of perspective and architecture

Music

- Demonstrate the development of listening skills
- Demonstrate an understanding of the influence that culture has in the development of indigenous styles
- Identify forms and styles of music indigenous to cultures

Vocal Music

- Demonstrate vocal skills involving basic singing techniques and music from many genres in a non auditioned setting
- Demonstrate advanced vocal skills in an auditioned setting involving vocal festival competitions, multiple performing venues and recording studio experiences

Health

- Recognize their strengths, values, and individual responsibilities for making personal decisions and consequences for them
- Apply communication skills including active listening techniques to classroom learning as well as to personal relationships
- List stress management techniques, which allow for optimum health
- List qualities that are important in choosing friends and maintaining healthy relationships
- Understand the physical, psychological, and social impact of alcohol and other drugs
- Understand male and female developmental changes, reproductive systems, pregnancy, abstinence, contraception, and sexually transmitted infections

Physical Education

- Design an individualized physical activity program
- Respect the physical and performance limitations of self and others
- Display the basic skills and safety procedures to participate in many activities

Family Consumer Science

- Plan and prepare healthy meals that meet dietary guidelines
- Use food labels to analyze nutritional claims and advertisements and make wise food choices
- Prepare nutrient dense snack foods in class and at home

WESTFORD PUBLIC SCHOOLS



CURRICULUM BENCHMARKS

GRADE 8

Lloyd G. Blanchard School

The Stony Brook School

Compiled by Curriculum Task Committees
under the direction of
Director of Curriculum and Instruction
Lorraine Tacconi-Moore

"Shaping the future one child at a time"
<http://westford.mec.edu/schools>

English Language Arts

- Acquire, understand, and use new vocabulary from the Sadlier Oxford Level C
- Acquire an understanding of the epic tradition and the epic hero in Greek and Roman mythology
- Begin to identify the elements of Shakespearean drama and the Elizabethan Era
- Read several novels and stories based on a "coming of age" theme
- Write a five-paragraph persuasive essay with a thesis statement and supporting details.
- Produce a five-paragraph character analysis focusing on a literary character's positive and negative qualities
- Master identification of parts of speech, subjects and predicates and noun functions
- Identify and produce complex sentences
- Write and deliver three to five minute persuasive speeches employing various propaganda techniques

Developmental Reading

- Identify and access the characteristics of the types of genres and literary elements in appropriate literatures
- Develop and apply instructional strategies necessary to analyze material in an expository text
- Develop skills that reinforce and support written language and oral expression in all academic areas
- Work in conjunction with the Language Arts class to explore the coming of age theme in literature

Math

Data analysis, statistics and probability

- Select, create, interpret and utilize various tabular and graphical representations of data (e.g., circle graphs, scatter plots, stem-and-leaf plots, box-and-whisker plots, tables and charts)
- Analyze different sets of data using appropriate measures of central tendency (mean, median, and mode)
- Describe the characteristics and limitations of a data sample. Use sampling to make conclusions about a larger population

Geometry

- Develop an understanding of the Pythagorean theorem and apply this theorem to the solution of problems
- Recognize and draw two-dimensional representations of three-dimensional objects (e.g., nets)
- Demonstrate an understanding of the concepts and apply formulas and procedures to determine the surface area and volume of rectangular prisms, cylinders, cones and spheres
- Identify the effects of varying the dimensions of rectangular prisms on volume and surface area

Patterns, relations and algebra

- Identify, represent and interpret linear relationships in tables, graphs and equations
- Identify the slope of a line as a measure of its steepness and as a constant rate of change. Apply the concept of slope to the solution of problems
- Use linear equations to model and analyze problems
- Set up and solve linear equations using algebraic methods, models and /or graphs

Accelerated

- The accelerated program is an algebra 1 course

Science

The Grade 8 curriculum focuses on the following major units of study: heat energy, climate, evolution, motion, and properties of matter.

- Explain the relationship between volume, mass, and density, and calculate the density of regular and irregular solids and liquids
- Compare and contrast physical and chemical properties and changes, and explain how mass is conserved in a closed system
- Explain the effects of adding or taking away heat on particle motion of solids, liquids, and gases, and what happens to the bonds during a phase change
- Describe how heat flows from a warmer object to a cooler object until the equilibrium point is reached
- Describe how heat is transferred during conduction, radiation, and convection
- Explain the differences in heating and cooling patterns of land and water and how this affects the climate of different regions
- Examine evidence that species have evolved over time and explain the environmental factors that led to the diversity
- Design investigations to study the factors that affect the motion, speed, and velocity of an object while gaining an understanding of gravity, weight, and friction

Technology Education

- Investigate the different parts of a bridge and its importance to the strength of the structure
- Identify, describe and visualize the three major bridge types on a computer
- Design and test a bridge on a computer
- Analyze the effects of tension, compression, torsion and bending that are displayed on the computer with a project weight capacity
- Design a bridge on a computer, then export their design to CADKEY CAD software to build a full-scale model of their creation
- Build a scale model of a bridge and strength test it in class using a hands- on approach to prototyping