

Social Studies

- Identify the characteristics of a civilization
- Identify the tenets of major religions
- Critique governments for perceived strengths and weaknesses and relate the democratic principles of the USA
- Recognize the diffusion of culture through conquest, colonization, and trade
- Identify the perspective or point of view from which history is recorded
- Identify the cause and effect of the rise and fall of civilizations

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)

- Apply the elements and principles and design through the study of space, form and value
- Demonstrate knowledge of three-dimensional drawing and sculpture
- Apply math concepts to drawing assignments.
- Demonstrate knowledge of medieval art and architecture

Music

- Identify and demonstrate an understanding of how the components of music are combined to form the various musical styles
- Compare and contrast various musical styles
- Demonstrate an understanding of the relationship between cultures and their musical styles

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

- Demonstrate how to make decisions independent of groups
- Identify and acknowledge feelings and give examples of positive ways to deal with them
- Identify risk-taking behaviors and their consequences
- Describe how smoking affects the respiratory system and list diseases associated with smoking
- Recognize the effects of advertising and the media on adolescents
- Understand the influence that rest has on physical functioning, and the amount of sleep required
- Explain the steps of the menstrual cycle

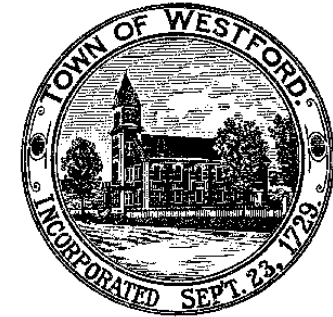
Physical Education

- Use basic offensive and defensive strategies in a modified version of a team or individual sport
- Make choices based on the safety of self and others
- Maintain a personal record of physical activity

Family Consumer Science

- Understand recipe terms and measurements in the preparation of healthy meals and snacks
- Generate a list of breakfast foods to be made in class or at home that provide morning energy
- Identify key nutrients in the food guide pyramid

WESTFORD PUBLIC SCHOOLS



CURRICULUM BENCHMARKS

GRADE 7

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 B
- Expand their understanding of literary genres including: poetry, non-fiction, drama and mythology
- Examine the literary elements of plot, conflict, climax, theme and sensory imagery
- Develop editing skills for both punctuation and usage utilizing the techniques of focused correction areas found in John Collins Writing Program
- Expand understanding of more complex sentence structure
- Review the eight parts of speech and demonstrate their understanding through grammar exercises and written compositions
- Conduct research on an interdisciplinary topic culminating in a multi-media presentation

Developmental Reading

- Develop strategies to clarify and analyze text materials enabling them to successfully make applications in test situations
- Acquire understand and use MCAS test taking vocabulary
- 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
- Respond to open-ended questions based on shared readings

Math

- Use a variety of patterns with tables, graphs, words and symbolic expressions
- Create and use symbolic expressions and relate them problem solving
- Compare, order, estimate, add, subtract, multiply, and divide integers
- Extend coordinate grids to include negative coordinate
- Use similarity and scale factor in real life problem solving
- Use ratios and proportions in the solutions of problems with unit rates and scale factor
- Select and use appropriate units of measure or scale
- Use percentages, rates, ratios and proportions to make comparisons and solve problems
- Describe characteristics and limitations of data samples
- Analyze games involving spinners, coins, and number cubes
- Create counting trees and analyze probabilities related to area

Accelerated Math

All of the above plus:

- Use arithmetic and geometric progression
- Apply the properties of congruence, parallel lines and Pythagorean Theorem to solve problems
- Compute the perimeter and circumference of geometric figures
- Use graphs and various types of plots to analyze data
- Compute mean, median, mode and range of a set of data

Science

The Grade 7 curriculum focuses on the following major units of study: Earth's history, plate tectonics, cell structure and function, genetics, and wetland study.

- Recognize that the Earth's interior is divided into layers that have different compositions
- Understand the theory of plate tectonics in relation to plate movement, and compare and contrast different plate boundaries
- Describe how the energy of an earthquake travels through the earth and identify where the Earth's volcanic regions are found
- Recognize that organisms are composed of cells and that cells vary in size, shape, and function
- Understand how one-celled organisms differ from cells of multiple celled organisms
- Describe the process of osmosis and diffusion and comparing and contrasting passive and active transport
- Recognize the interaction of organisms within pond and lake environments, and distinguish between producers and consumers
- Compare and contrast the major systems of the frog and the human body and recognize the interaction of systems within the human body
- Investigate the principles of inheritance and identify how traits are inherited
- Compare and contrast mitosis in plant and animal cells.
- Understand the stages of meiosis and compare and contrast haploid and diploid cells
- Identify the parts of a DNA molecule and describe replication
- Investigate wetlands and understand the interactions between living thing and the environment

Technology Education

- Demonstrate the importance of the automobile and how it affects our transportation system
- Design a racecar after a class discussion on aerodynamics, drag, friction and thrust
- Understand the mass production system of in the automobile industry
- Develop proficiency in the design process to create the fastest racecar out of a block of wood
- Create a two-dimensional view drawing of a racecar from a rough draft to a completed CAD drawing
- Demonstrate the safe and proper use of a ruler, awl, tri-square, drill press, band saw, scroll saw, various files, belt sander, and drum sander