English Language Arts

Reading Literature and Informational Text

- Read and comprehend a variety of grade level texts of appropriate complexity
- Determine key ideas/theme of text and give evidence by quoting accurately
- Understand text structures, features and elements, including how authors use symbols to enhance writing and develop theme
- Analyze how particular lines of dialogue or incidents in text propel the action, reveal aspects of a character, or provoke a decision
- Determine meaning of unknown words and phrases in text
- Compare/contrast important points, elements and key details of two or more texts

Writing

- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- Draw evidence from literary or informational texts to support written analysis, interpretation, reflection, and research and cite it appropriately
- Write narratives using effective techniques, descriptive details and clear event sequences
- Write opinion pieces supporting a point of view with logically ordered reasons that are supported by facts
- Develop and strengthen writing using the writing process

Speaking and Listening

- Engage effectively in a range of collaborative discussions
- Communicate effectively in oral presentations
- Evaluate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.

Language

- Acquire new vocabulary both from reading and from the Sadlier-Oxford Level C vocabulary program
- Use grade-level appropriate conventions in daily writing

Social Studies

United States & Massachusetts Government and Civic Life: Students will use the History & Social Science Practices to explore such focus questions as, "How have concepts of liberty and justice affected the United States democratic system of government?", "How can power be balanced in government?" and "What is the role of the individual in maintaining a healthy democracy?" Students in Grade 8 will also complete the Civics Project to meet the requirements of Chapter 296 of the Acts of 2018.

- Demonstrate civic knowledge, skills, & dispositions.
- Develop focused questions or problem statements & conduct inquiries.
- Organize information & data from multiple primary & secondary sources.
- Analyze the purpose & point of view of each source; distinguish opinion from fact.
- Evaluate the credibility, accuracy, & relevance of each source.
- Argue or explain conclusions, using valid reasoning & evidence.
- Determine next steps & take informed action, as appropriate.

Math

Mathematical Practices

All eight standards for mathematical practices are embedded throughout the curriculum. In each trimester some practices are emphasized according to the content/context of the mathematics.

- Develop and demonstrate understanding of the Pythagorean theorem and apply this theorem to the solution of problems
- Demonstrate an understanding of the concepts and apply formulas and procedures to determine the surface area and volume of spheres, cylinders, and cones
- 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
- Evaluate bivariate data using scatter plots and linear models
- Write and solve linear equations in one variable using algebraic methods, models and /or graphs and apply them to problem solving situations
- Define, compare order, estimate, and apply frequently used irrational numbers
- Solve systems of linear equations using multiple strategies
- Know and apply properties of integer exponents to include multiplication and division of scientific notation
- Apply proportional relationships to similar triangles
- Apply transformations of polygons using similarity and congruence.
- Use properties of angle measurements including interior and exterior angles and angles formed by parallel lines and transversals.
- Algebra 1 information can be found in the Grade 9 brochure

Science

The Grade 8 curriculum focuses on the following major units of study: Matter, Waves, Forces and Energy.

- Exothermic and endothermic chemical reactions and the release or absorption of thermal energy
- Develop a model that describes and predicts changes in particle motion, relative spatial arrangement
- Analyze data to describe the effect of distance and magnitude of electric charge on the strength of electric forces
- Use scientific evidence to argue that fields exist between objects with mass, between magnetic objects, and between electrically charged objects that exert a force on each other even though the objects are not in contact
- Newton's third law involving the motion of two colliding objects
- The relationship between the change in an object's speed, the sum of the forces on the object (the net force) and the mass of the object
- Kinetic and potential energy, including constructing and interpreting graphs related to energy
- Waves, their pattern, amplitude, frequency, and wavelength
- The relationship between the amplitude of a wave and the energy of the wave
- Use diagrams and other models to show that both light rays and mechanical waves are reflected, absorbed,or transmitted through various materials.

STEAM

- Utilize the Engineering Design Process to identify problems and solutions through reliable research sources, design and create prototypes, test, redesign and communicate results and findings.
- Demonstrate safe and proper use of personal protective equipment (PPE) while using various tools.
- Create and evaluate criteria and constraints for individual and group projects in the areas of Science, Technology, Engineering, and Mathematics.

World Languages

- Over the course of 7th and 8th grade, language students will complete the equivalent of the level 1 courses taught at Westford Academy and will be prepared to start in level 2 of French, German, Latin, or Spanish
- At the end of 7th grade students will be communicating at the Novice Mid proficiency level based on the ACTFL Proficiency Guidelines (American Council on the Teaching of Foreign Languages) in all 4 modes of communication: listening, reading, speaking, and writing
- Listeners can recognize and begin to understand a number of high-frequency, highly contextualized words and phrases including aural cognates and borrowed words
- Readers are able to identify a number of highly contextualized words and phrases including cognates and borrowed words
- Writers can reproduce from memory a modest number of words and phrases in context. They can supply limited information on simple forms and documents, and other basic biographical information, such as names, numbers, and nationality
- Speakers communicate minimally by using a number of isolated words and memorized phrases limited by the particular context in which the language has been learned
- By the end of 8th grade, students will be communicating at the Novice High level
- Speakers are able to express personal meaning by relying heavily on learned phrases or recombinations of these. Their language consists primarily of short and sometimes incomplete sentences in the present
- Writers are able to meet limited basic practical writing needs using lists, short messages, postcards, and simple notes. They are able to recombine learned vocabulary and structures to create simple sentences on very familiar topics
- Listeners are able to understand information from sentence-length speech in basic personal and social contexts where there is contextual support.. They are able to understand speech dealing with areas of practical need such as highly standardized messages, phrases, or instructions
- Readers can understand key words and cognates, as well as formulaic phrases across a range of highly contextualized texts. They can understand predictable language and messages such as those found on train schedules, roadmaps, and street signs.

- Thematic units for 7th and 8th grade vary among the 4 languages but include themes such as Who Am I and How Do I Describe Myself and the People Around Me, Where do I Live and What is the Weather Like Here, My Family, What Are My Favorite Pastimes, Eating Habits and Popular Foods, School Life, and Health and Wellness

Health & Physical Education

The Health and Physical Education Program integrates various aspects of wellbeing throughout the K-12 curriculum, directly impacting a student's health and physical literacy. SHAPE America defines health and physical literacy as follows:

- Health Literacy: An individual's capacity to access information, resources and services necessary to maintaining and promoting health.
- Physical Literacy: An individual's ability, confidence and desire to be physically active for life.

Health

- Understand the physical, psychological, and social impact of using alcohol and other substances, including signs of addiction.
- Explain the dangers of using marijuana, as it relates to physical and mental effects.
- Describe the negative consequences and harmful effects of alcohol use as it relates to Blood Alcohol Concentration (BAC) levels and different types of alcoholic beverages.
- Determine how to avoid using alcohol and drugs as a teenager, including strategies to handle negative peer pressure.
- Distinguish the difference between healthy and unhealthy food choices and plan healthy meals and snacks.
- Identify function and food sources of the six basic nutrients.
- Relate unhealthy eating behaviors with associated chronic diseases.
- Identify the behaviors and avenues of support for young people with disordered eating patterns.
- Identify social and media messages that promote unhealthy behaviors and negative body image concerns for teens.
- Identify the social and emotional consequences of harassment and bullying, and demonstrate empathy towards peers.
- Define and identify examples of sexual harassment and consider appropriate responses for bystanders and targets.
- Understand male and female developmental changes related to the reproductive systems.
- Identify how to protect against unwanted pregnancy and sexually transmitted infections.
- Explain the benefits of abstinence, postponing sexual behavior, and setting limits on sexual behavior.
- Recognize the importance of understanding "consent" related to intimacy and teen dating relationships.

Physical Education

- Design an individualized fitness program
- Identify lifelong activities and describe the benefits of an active lifestyle
- Demonstrate the ability to use goal-setting to enhance physical fitness
- Display the skills and safety procedures to participate in an array of activities

Integrated Arts (*Offerings Vary by Middle School*)

Art

Through a variety of art making experiences students will demonstrate the ability to:

- Create non-objective art exploring color, shape and line
- Create three-dimensional space and form on a two-dimensional surface through perspective drawing.
- Explore printmaking techniques and processes
- Analyze and discuss a variety of art and artists using appropriate visual arts vocabulary.

Theater Arts

- Explore Augusto Boal and Theater of the Oppressed.
- Integrate theatrical skills and knowledge by devising theatrical material.
- Demonstrate knowledge of performance and technical skills through group performances.

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

WESTFORD PUBLIC SCHOOLS

Curriculum Benchmarks

Grade 8

Lloyd G. Blanchard School
The Stony Brook School

"Shaping the future one child at a time"

Visit our website at: www.westfordk12.us