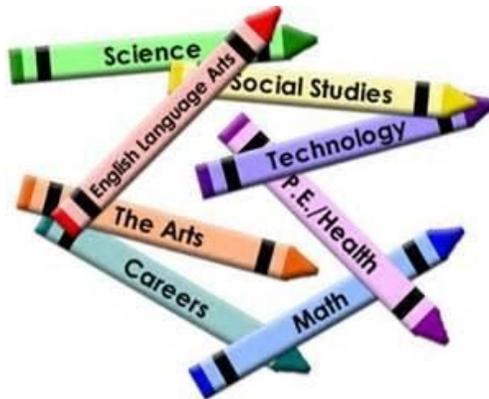


# FURNACE BROOK MIDDLE SCHOOL

## PROGRAM OF STUDIES 2021-2022

### GRADE 6



## ENGLISH LANGUAGE ARTS

Furnace Brook Middle School English classes are heterogenous, unlevleled classes.

The English department assesses student work in a variety of ways to evaluate student skills in the following areas:

- Reading
- Writing
- Speaking and Listening
- Language

Writing assignments are evaluated by rubrics or specific skills-based criteria. The English department assesses student work based on skills reflected in the [Massachusetts English Language Arts Frameworks \(2017\)](#).

Student success is identified through the following achievements:

- Students will independently read and comprehend texts which are at grade level based on the Reading Standards for Literature and Informational Texts in the [Massachusetts English Language Arts Frameworks \(2017\)](#);
- Students will write consistently at grade level based on the Writing Standards in the [Massachusetts English Language Arts Frameworks \(2017\)](#).
- Students will verbally articulate complex ideas based on the Speaking and Listening Standards in the [Massachusetts English Language Arts Frameworks \(2017\)](#).
- Students will demonstrate mastery and application of English conventions, language, and vocabulary based on the of the Language Standards in the [Massachusetts English Language Arts Frameworks \(2017\)](#).

The English program has implemented the Massachusetts Curriculum Framework that incorporates the Common Core State Standards. College and Career Readiness Anchor Standards for the reading of literature and informational texts are stressed.

The writing program focuses on supporting ideas with valid reasoning and sufficient evidence, writing clearly and accurately in informative/explanatory essays, and writing well developed narratives.

High-quality work habits and a strong work ethic developed in middle school allow students to achieve now, as well as succeed in the future at the high school.

Parents are encouraged to foster outside reading which is paramount for students to develop reading skills, as well as become accomplished speakers and writers.

Students should be encouraged to do their best on the English/Language Arts MCAS. Scores may contribute to future placement in English.

## MATHEMATICS

The FBMS Mathematics Department has aligned their curriculum to the Massachusetts Curriculum Frameworks and has incorporated the Common Core Standards.

In grade 6, instructional time will focus on 4 critical areas:

1. Connect ratio and rate to whole number multiplication and division, and use concepts of ratio and rate to solve problems,
2. Complete student understanding of division of fractions and extend the understanding of number to the system of rational numbers, which includes negative rational numbers,
3. Write, interpret, and use expressions, equations, and inequalities, and
4. Develop understanding of statistical thinking.

Grade 6 heterogeneously grouped math classes will offer a rigorous program for all learners. Student performance in grade 6 will provide valuable information that will be used to assess readiness for an intense, compacted course of study that will be offered to the more advanced learners in grades 7 and 8. Data from the following indicators will be used to identify those who are ready to accept the advanced 7/8 challenge:

- MCAS scores - Gr 5
- MCAS scores - Gr 6
- Classroom performance
- Basic Skills Tests
- Mid Year Tests
- Comprehensive End-of-year Tests
- Student Attitude: Accepting challenge, perseverance, independence
- Attendance and homework completion

In addition to this rigorous standards-based math experience, we have developed interventions that serve to support or extend each student's individual math experience. All of these offerings are designed to strengthen problem-solving and reasoning skills while reviewing grade six concepts.

- **Project Based Math:** For the 2021-22 school year, it is anticipated that Grade 6 students will take a project based class that connects the real world to the classroom. This class will create 'real-world' learning opportunities for students to develop math and problem-solving skills which will motivate them to solve problems in their day-to-day lives. It will empower learners to investigate, innovate, connect math to real life, learn and build financial literacy, and will develop skills needed for the 21st century. Some of the projects are designed to promote discussions with social, health, and world connections.

## SOCIAL STUDIES

Our middle school program has been aligned to the most recent Massachusetts State Frameworks and will also incorporate the Common Core State Standards for literacy. All classes are heterogeneously grouped (unleveled) and meet for one period each day.

Grade 6 World Geography and Ancient Civilizations I: Grades 6 and 7 form a two-year sequence in which students study regions of the world by examining physical geography, nations in the region today, and selected ancient and classical societies before 1000 CE. Students investigate guiding

questions such as “*How does geography affect how societies develop and interact?*” and “*How have human societies differed from one another across time and regions?*”

Regions for grade 6 are:

- Western Asia
- North Africa
- The Middle East
- Sub-Saharan Africa
- Central America
- The Caribbean
- South America.

The resources available to our students are numerous. They include an up-to-date text, atlas programs and a wide variety of interactive multimedia resources. Use of the internet is encouraged to enhance their learning experience. *Chromebooks* are available for student use.

The Social Studies department uses a wide variety of assessment tools. Along with homework, tests and quizzes, many teachers assign in-depth and comprehensive projects. Writing is often evaluated in the form short answers, essays, and notebook keeping skills. Class participation is an integral part of the Social Studies classroom.

## SCIENCE

### Grades 6–8 Overview of Science and Engineering Practices

Active engagement of middle school students with the science and engineering practices is critical as students generally make up their minds about whether they identify with science and engineering by the time they leave eighth grade, and whether they will pursue these fields in high school and beyond. Students must have opportunities to develop the skills necessary for a meaningful progression of development in order for them to engage in scientific and technical reasoning so critical to success in civic life, post-secondary education, and careers. Inclusion of science and engineering practices in standards only speak to the types of performances students should be able to demonstrate at the end of instruction at a particular grade; the standards do not limit what educators and students should or can be engaged in through a well-rounded curriculum.

Grades 6 through 8 standards integrate all eight science and engineering practices. Students’ understanding of and ability with each practice gets more detailed and sophisticated through middle school. For example, by the end of middle school, students can identify limitations of a particular model, including limitations of its accuracy, what features are included (or not), and limitations of what phenomena or outcomes it can predict. Students can develop models of varying levels of detail and accuracy and can identify when a situation calls for a conceptual model with little detail or a specific model with attention to accuracy, such as for making predictions of particular events.

Some examples of specific skills students should develop in these grades include:

1. define criteria and constraints of a design problem with precision;
2. develop a model to describe cycling of matter in an ecosystem; develop a model that describes and predicts changes in particle motion and spatial arrangement during phase changes; develop and/or revise a model to show the relationships among variables, including those that are not observable but predict observable phenomena;

3. conduct an investigation to show relationships among energy transfer, type of matter, and kinetic energy of particles; conduct an experiment to show that many materials are mixtures;
4. examine and interpret data to describe the role human activities have played in the rise of global temperatures over time; construct, analyze, and/or interpret graphical displays of data and/or large data sets to identify linear and nonlinear relationships; distinguish between causal and correlational relationships in data; consider limitations of data analysis;
5. describe, including the use of probability statements and proportional reasoning, the process of natural selection; use data and graphs to describe relationships among kinetic energy, mass, and speed of an object;
6. construct an explanation using evidence for how Earth's surface has changed over time; apply scientific reasoning to show why the data or evidence is adequate for the explanation;
7. construct an argument based on evidence for how environmental and genetic factors influence organism growth; respectfully provide and receive critiques about one's arguments, procedures, and models by citing relevant evidence with pertinent detail; and
8. synthesize and communicate information about artificial selection; obtain and communicate information on how past geologic events are analyzed to make future predictions.

While presented as distinct skill sets, the eight practices intentionally overlap and interconnect. Skills such as outlined above should be reflected in curriculum and instruction that engage students in an integrated use of the practices. See the Science and Engineering Practices Progression Matrix for more information, including particular skills for students in grades 6-8

## **SCIENCE (Grade 6)**

Our middle school science curriculum is an integrated, inquiry-based study of Earth, Life and Physical sciences. Each strand is divided into a unit of study with its own text and laboratory resources. The unit spirals through each strand and builds a foundation of knowledge for the next grade. All of the classes are unlevelled, inclusion-based and meet for one period every day.

### **Structure and Function**

The integration of Earth and space, life, and physical sciences with technology/engineering gives grade 6 students relevant and engaging opportunities with natural phenomena and design problems that highlight the relationship of structure and function in the world around them. Students relate structure and function through analyzing the macro and microscopic world, such as Earth features and process, the role of cells and anatomy in supporting living organisms, and properties of materials and waves. Students use models and provide evidence to make claims and explanations about structure-function relationships in different science and technology/engineering domains.

## **LIBRARY MEDIA CENTER (LMC)**

The mission of the FBMS Library Media Center (LMC) is to both educate its academic community in literacy and information-seeking skills, as well as, provide an environment conducive to supporting the middle school curriculum and learning pursuits in an individual and classroom manner. The lessons taught and programs run by the Librarian assist students in transitioning to High School and foster a love of life-long reading. The LMC provides internet resources through free online

databases which connect to the Old Colony Library Network. These resources expand our 12,000 print collections by offering electronic books and journals. We have both an audio and large print collection that accommodates a diversity of learning styles. We also have created a “books to movies” DVD collection. The Professional Development and Parent collections deliver curriculum, pedagogy and psychological knowledge to our extended community. The LMC is open Monday through Friday 7:30 AM – 2:30 PM with occasional after-school availability. The following link allows students to access the resources of the FBMS library from home: <http://libraries.mpsd.org>.

## TECHNOLOGY INTEGRATION

Furnace Brook Middle School is excited that all students will have an assigned Chromebook which offers them a personal learning device within the school day. The immediate access to technology and increased use of technology in education will have a beneficial effect on educational outcomes. We hope to bring 21st century technology to the forefront of our learning as well as engage students in critical thinking, collaboration and communication. Each student will receive a Chromebook to be used in the classroom as well as at home for educational purposes. Teachers will be using the technology to enhance instruction, assignments, projects, research and assessment.

Furnace Brook also has a technology integration specialist who works with teachers and students to integrate technology throughout all three grades. The technology integration specialist's responsibilities include:

- Collaborating with teachers to support their use of technology in delivery of curricula through a variety of instructional methods. In partnership, the technology integration specialist and the teacher will work toward integrating the use of hardware, software, and Internet resources in support of student learning.
- Creating learning resources for teachers, staff, and students. These may include Web-site tutorials, interactive programs, and databases that support teachers in integrating technology.
- Providing support to teachers in the creation of technology enhanced learning resources.

## HEALTH

**Program Objective:** Students will demonstrate ways to be physically, mentally, emotionally, and socially healthy.

**Length of Program:** One semester program meeting every other day.

**Program Description:**

The students will receive instruction on a variety of topics in health related units including effective communication, bullying prevention, general drug prevention with the main focus on vaping and tobacco use prevention. Students will review the respiratory system to create understanding about the Heimlich Maneuver and other respiratory concerns.

The program addresses the visual, auditory, and kinesthetic learner. Students will work independently, with partners, in small groups as well as with the whole class.

Students will explore topics such as communication styles, disease prevention, eating disorders, puberty, stress, and how to know common self-harm warning signs. These are done through a variety of methods including team work, activities, role playing, and independent projects.

**Assessment:**

Students will be assessed through a variety of mediums. These will include homework assignments, current events in health, class work, mini projects and tests. All assessments and projects will be assigned and graded according to a student's learning style and ability.

## PHYSICAL EDUCATION

**LENGTH OF PROGRAM:** The Physical Education program is a full-year program meeting three times per six day cycle.

**PROGRAM DESCRIPTION:** The Physical Education program provides all students the opportunity to experience a wide-variety of activities covering team sports, individual, and dual sports and the social emotional benefits associated with participation. Students will participate in fitness testing to determine current fitness levels and to create strategies for improvement.

**ASSESSMENT OF STUDENT SKILLS:** Students will be graded on daily preparation, effort, and behavior. Written forms of assessment are also included.

**Be prepared for activity** – this means the student has a shirt with his or her name on it, comfortable sweatpants or shorts (NO JEANS), and sneakers that tie.

**Effort and Participation** – all students are expected to participate in all activities, providing their best effort.

**Sportsmanship & Conduct** – all students are expected to show good sportsmanship during all activities along with maintaining good behavior and following all school and class rules.

**COMMENTS ON THE PROGRAM:** If a student is to be excused from class he/she must have a note from a physician, parent or guardian, or the school nurse. If he/she is out for an extended period of time, a physician's note may be required to return to class.

## ART

The Grade 6 Art curriculum at FBMS is a meaningful exploration into the world of the visual arts. In accordance with the Massachusetts State Frameworks for Art, it is a logical, sequential program covering the principles of design, color theory, 'seeing to draw', perspective, abstraction, creativity, and individual expression. Each class meets every other day for one semester.

The sixth grade art program focuses on the beginning of observational drawing including basic lines and shapes, line patterns, tessellated shapes, one-point perspective and 3-D forms. Students will have an understanding of the color wheel using primary, secondary, tertiary colors, tints and shades, warm/cool complementary and analogous color schemes. Students will demonstrate their knowledge of color theory through discussion, as well as in their work. Students are assessed for

their understanding of the concept being taught, the ability to follow directions, fulfilling the posted criteria, and on their level of effort and co-operation. Sixth grade students are encouraged to be open-minded and creative in finding their niche in the Art world.

## MUSIC

*Students in Grade 6 must elect one music offering from the following:*

### ***1. Music Appreciation***

How will I learn about music? What will I learn about music? Students in Music Appreciation will learn about music through activities such as reading, writing, listening, observing, analyzing, playing, composing, and sharing music.

**Length of Program:** This course meets all year, every other day.

#### **Program description**

Music Appreciation is designed with all students in mind, regardless of previous musical background or experience. There are no performing obligations outside of the school day in Music Appreciation.

Students will study various aspects of music including melody, harmony, rhythm, form, and tone color.

Students will study different eras in music history as well as different styles of music and they will explore the world of musical theater.

**Assessment of Student Skills:** Students will be graded on their class participation, class assignments, and occasional written tests or projects.

**Project Expectations:** Most projects can be completed during class time.

### ***2. Chorus***

In this class students will learn how to improve their own singing voice. Students will learn the art of performing in a group vocal ensemble.

**Length of Program:** This course meets all year, every other day.

#### **Program Description:**

This course is designed for students who enjoy singing and performing. Students learn the elements of good singing such as posture, breath management, diction, and tone quality.

Students also develop musicianship skills through music reading and sight singing. Focus in the ensemble is on independent part singing and choral blend and balance. Students will sing music representative of a range of composers, styles, and nationalities.

**Assessment of Student Skills:** Students will be graded on class participation and students will be assessed on their vocal skills and knowledge of the music in small groups or individually. Occasional written tests may be given. **Performances are considered part of the course curriculum, and attendance is required.**

**Project Expectations:** Advanced students in grades 7 and 8 also have the opportunity to audition for district and regional music festivals held outside of the school day.

### **3. Orchestra**

How do I become proficient as an individual musician and as a member of this ensemble?

**Length of Program:** This course meets every other day for the full school year.

**Program Description:** Orchestra is offered to students who have studied a string instrument (violin, viola, cello and bass) in the fifth grade or with permission of the orchestra director. Focus is upon elements of good ensemble playing as well as continued development and progress on the student's specific instrument. Students perform music, of increasing difficulty, representative of a variety of styles, composers, forms, periods, and nationalities. Orchestra is taught in a large ensemble setting. Students are encouraged, but not required, to enroll in private lessons outside of school if possible. At this level, interested and advanced students also have the opportunity to audition for district and regional music festivals held outside of the school day (grades 7 and 8 only). **Performances are considered part of the course curriculum, and attendance is required.**

**Assessment of Student Skills:** Students will be graded on their class effort/participation, their preparedness (i.e. remembering their instrument, music etc.), Small group and individual observations and announced/unannounced quizzes and tests. Additionally, all performances are mandatory and part of the basic requirements of the course.

**Project Expectations:** Individual nightly practice, as outlined by the instructor, is an ongoing expectation in this course of study.

### **4. Band**

How do I become proficient as an individual musician and as a member of this ensemble?

**Length of Program:** This course meets every other day for the full school year.

**Program Description:**

Band is offered to students who have studied a band instrument in fifth, sixth and seventh grade, or with permission of the band director. Focus is placed upon elements of good ensemble playing as well as continued development and progress on the student's specific instrument. Students perform music, of increasing difficulty, representative of a variety of styles, composers, forms, periods, and nationalities. Band is taught in a large ensemble setting. Students are encouraged, but not required, to enroll in private lessons outside of school if possible. At this level, interested and advanced students also have the opportunity to audition for district and regional music festivals held outside of the school day (grades 7 and 8 only). **Performances are considered part of the course curriculum, and attendance is required.**

**Assessment of Student Skills:** Students will be graded on their class effort/participation, their preparedness (i.e. remembering their instrument, music etc.), Small group and individual observations and announced/unannounced quizzes and tests. Additionally, all performances are mandatory and part of the basic requirements of the course.

**Project Expectations:** Individual nightly practice, as outlined by the instructor, is an ongoing expectation in this course of study.

***Performances are considered part of the course curriculum, and are required.***