Tewksbury Public Schools
Science Curriculum
Grade 5

Fifth grade students are naturally curious! The Grade Five Science Curriculum is designed to cater to this natural curiosity. Students will utilize their observation skills, problem-solving skills, engage in directed discussion of their findings, and make connections to real-world applications.

The current curriculum directs each student to practice these necessary skills in the areas of Earth Science (Changing Earth, Exploring Space, and Investigating Weather Systems), and Physical Science (Floating and Sinking), and Technology & Engineering (Simple Machines kit), and Life Science (Microworlds kit). These extensive, exploratory units also have a focus on various aspects of the Technology/Engineering components found in the MA Science Curriculum Frameworks.

I. Earth Science

In **Changing Earth** (erosion), the students learn how the surface of the earth changes due to slow and rapid processes. The **Exploring Space** unit offers students the opportunity to look at the Earth as part of a system comprised of planets, stars, and constellations. The **Weather** unit teaches the students that the sun is the driving force behind the weather. During this unit, students will also learn about states of matter, while learning about the water cycle.

II. Physical Science

In the **Floating and Sinking** unit, students explore the properties that cause objects to float or sink. Students engage in a hands-on exploration of materials while utilizing both scientific and critical thinking processes, thus enabling them to effectively build science concepts.

III. Technology & Engineering

In the **Simple Machines** unit, students learn that appropriate materials, tools, and machines extend our ability to solve problems and invent. Our capacity to see and invent relationships between effort and work produced through simple machines has led us into a world that is becoming more technologically oriented. Additionally, throughout the year teachers often expand the curriculum to enhance student learning by constructing clay and foil boats space probes and weather stations.

IV. Life Science

In **Microworlds**, the students have the opportunity to develop an interest in exploring microscopic specimens through the use of simple microscopes. Students must use all of the expertise they have developed in order to successfully view their new specimens.