

North East School District

6th Grade Program of Studies



Science

The focus of Sixth grade science is to develop enthusiasm by presenting a selection of interesting experiences along with hands-on activities to motivate aspiring young scientists. The course begins with an investigation to incorporate problem-solving through the application of the scientific method. This will include various units of study which will include plants and greenhouse, basic chemistry, planetary science, weather and water, planet Earth, physics, animals, and chick/duckling embryology.

Mathematics

This course reinforces and drills all the basic mathematical functions of whole numbers, decimals and fractions. Students will continue using measurements in the English system identifying terms and properties of simple geometric figures and interpreting simple statistical data. Ratio, proportion, percent, and integers may be introduced if time permits. Computers and calculators will be used throughout the year.



Integrated Language Arts

A blending of skill development and refinement with ample opportunities and materials to read; Students are asked to read trade books, library books, and newspapers, in addition to stories in the basal. Critical reading and thinking skills are introduced and developed through these various genres. Students are given time to practice these skills through writing and/or practice sheets.

Students review and expand their knowledge of parts of speech, sentence structure, capitalization, and punctuation. This is done through writing activities and/or skill practice sheets. In addition, units on library skills, letter writing, poetry, etc. are incorporated.

To enhance students' writing, emphasis is placed on the five-step writing process as well as the "Power Writing" program. Students are encouraged to review, revise, and edit their own works and those of their peers. Good paragraph structure and topic development are key elements of students' published work. Correct spelling and diverse vocabulary uses are required.

History & Geography

Sixth grade Students will be studying the general geography of Pennsylvania; the first Pennsylvanians, up to the Reformation using the text Pennsylvania Our Home by Susan K. Donley. Supplemental materials will be incorporated into the curriculum which included but are not limited to the World Atlas, Scholastic News, and CNN Student News on the web. Students will be involved in hands on activities using iPads, the SmartBoard, laptops and other technology in the classroom.

Health

Students will study the care and function of the body's system. They will also learn about the wellness concept and prevention of disease and disorders. They will continue "Here's Looking at You 2000," the district's substance abuse program.

Physical Education



Students will develop and display desirable social behavior in sportsmanship, cooperation, and competition. They will achieve a higher level of physical fitness with an understanding of terminology of physical fitness. They will develop skills in team, dual, and individual sports, along with the rules and game strategies. Children will work independently at various stations. They also will be prepared with their gym clothes and are encouraged to use the showers.

Chorus

The Sixth Grade Chorus is open to any interested students who like to sing and are interested in learning about reading music and singing as part of a large group. We will be learning basic vocal techniques and focusing on posture, breathing, diction, and care of the voice, as well as beginning to learn to read music and sight-sing. Unison and two-part music from various genres and time periods will be studied. Performance requirement: Choral Program Winter and Spring Concerts.



Band

Students will learn to read and identify rhythmic configurations and also be able to read and play melodic lines written in various keys. Exposure to basic meters and tempo is also essential. Literature from all the periods of music, exhibiting different styles of composing, should be included in the band repertoire. Although individual effort is paramount, the goal is the interaction of the students in order to achieve a quality musical organization.

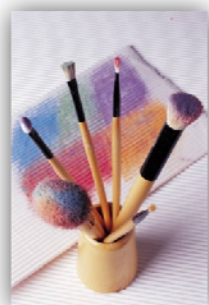


Technology Education

6th Grade The main focus in 6th grade is on Construction and Communication Technology. Students will design, build, and test an experimental structure. They will also learn mechanical drawing skills and use Computer Aided Drafting. They will also learn how to measure using the inch.

7th Grade The main focus in 7th grade is Manufacturing Technology. They will learn about the manufacturing process. The product they manufacture is a mantel clock. They will be using tools and machines to complete the project in a safe manner. They will also learn about simple machines and gears.

8th Grade The main focus in 8th Grade is Transportation Technology. Students will design, build and test a CO2 vehicle. They learn about aerodynamics, vehicle design, and the effects of CO2 on the environment. They will also experiment with plastics and create a simple plastic mold. The year is wrapped up with an introduction to technology past, present and future.



Art

Students will confidently and creatively approach new experiences in various media which will aid them in developing creative ideas, utilizing art room equipment safely, enhancing their art vocabulary, recognizing the Elements and Principles of Art, and understanding the artist's place in history and culture. (For example, students might create a sculpture, a 3D paper construction, a symmetric print, a woven wall hanging, a compass design, or a water color still life to fulfill these requirements.)

7th Grade Program of Studies

Science

Seventh grade life science is designed to develop an awareness of living things, the processes of life, and the relationships among organisms through a variety of hands on experiences and exploration. A survey of the five kingdoms allows the student the opportunity to compare and contrast various organisms. Microscope skills are taught to explore the world of living things and cellular structure. Basic chemistry is introduced through the process of photosynthesis and respiration. The concepts of life science are organized to meet the needs and interests of today's student. Current events are an integral part of the course, allowing for the development of written and oral skills. Students also engage in cooperative learning units on a regular basis to encourage the development of critical thinking skills.

Mathematics

Seventh grade math reinforces and promotes mastery of basic skills, utilizing whole numbers, decimals, fractions, ration and proportion, and basic geometry. It focuses on how and why mathematical rules work, expands math vocabulary, and encourages logical and creative thinking. Cooperative problem solving utilizing everyday situations shows relevance and application of mathematics to future course work and vocational choices. Students who are recommended by their previous teachers, based on performance criteria, may take pre-algebra in seventh grade. This course is designed to prepare the student for a continuous five-year secondary math sequence by introducing basic properties of numbers, integers, vocabulary, and problem solving skills. While strengthening basic skills, students cooperatively create and solve equations logically, stressing how and why each step is necessary. The primary emphasis of this course is to promote reasoning skills necessary for higher math.

Integrated Language Arts

Seventh grade reading has four components: literature study, reading for enjoyment, reading in the content areas, and critical reading. A variety of reading materials is used, including short stories, novels, plays, newspapers, and nonfiction articles. Lessons will be taught on how to read school textbooks effectively and how to read and take notes from reference books. Critical reading skills are taught through a study of propaganda techniques used in advertising. The school librarian works closely with the reading teacher to develop in the students a love or reading and desire to make reading a lifelong habit.

Seventh grade language arts integrate reading and English. The eight parts of speech are studied and practiced with the students' writing. Research, listening, and speaking skills are developed throughout the year. Students work on vocabulary development through reading and writing.

History and Geography

The Western Hemisphere. Seventh grade students will begin the year with a unit on geographical terms and globe and map skills. This quarter as well as the second and third will be devoted to the study of Canada and Latin America. Although geography will be emphasized, history, culture, and economic activity of these areas will be included.

Health

Seventh graders will examine life-styles that all promote the quality and longevity of life. Students will study nutrition, diet and exercise, heart disease, infection diseases, and AIDS.

Physical Education

Students in seventh grade will develop and display desirable social behavior in sportsmanship, cooperation, and competition. Students will learn the health-related and skill-related components of physical fitness. The children will evaluate their fitness levels, design an exercise program, and follow the program in a self-directed manner. Students will develop skills in team, dual, and individual sports, along with the rules and game strategies. Children will work independently at various stations.

Art

Students will confidently and creatively approach new experiences in various media which will aid them in developing creative ideas, utilizing art room equipment safely, enhancing their art vocabulary, recognizing the Elements and Principles of Art, and understanding the artist's place in history and culture. (For example, students might create a symmetric name design, an eraser print, a 3D paper construction, a sculpture, create their own color wheel, a dragon stencil or create a painted design box.)

Technology Education

The main focus in 7th grade is Manufacturing Technology. They will learn about the manufacturing process. The product they manufacture is a mantel clock. They will be using tools and machines to complete the project in a safe manner. They will also learn about simple machines and gears.

Seventh Grade Chorus

The Seventh Grade Chorus is open to any interested students, whether or not they were in chorus previously. We will continue to learn how to read music and sight-sing, as well as strengthen our basic knowledge of vocal techniques. A wide variety of music will be studied, including two-part and three-part music. **Performance**

requirement: Choral Program Winter and Spring Concerts.

8th Grade Program of Studies

Science

Students will explore the basic principles of metric measurement, motion, chemistry, light, sound, energy, and conservation of natural resources. Students are encouraged to “learn by doing” and through hands-on activities, as well as math manipulation and graphing skills, they will be able to relate concepts learned in the classroom to daily life. Current environmental issues will be researched and possible solutions explored. Through group work, the students should complete a project that will demonstrate their stewardship of the environment.

Mathematics

Pre-Algebra refines and reinforces basic computation with instruction and practice in problem-solving strategies. Through career and consumer applications, the students have an opportunity to solve real-life problems. Constructions, modeling, and manipulations reinforce basic information processing when performing operations using decimals, fractions, percents, integers, measurements, units, charts, graphs, and geometric properties.

Algebra One is an option intended for the accelerated math student who is beginning a five-year sequence of courses culminating in calculus. Qualified students must exhibit excellent study habits and assume personal responsibility for learning the basic terms, facts, and arithmetic computation skills. Entrance requirements combine performance on standardized tests, a prognosis test, grade B or better in Mathematics 7, Pre-Algebra, and teacher recommendation.

Integrated Language Arts

The reading curriculum focuses on developing a lifelong enjoyment of reading through use of material such as novels, literature books, newspapers, and various books. Students receive instruction in literal and inferential comprehension, vocabulary development, study skills, and literacy appreciation skills.

Usage and mechanics are included as well as public speaking and library research skills. The three areas of vocabulary, spelling, and grammar are united in composition focusing on narrative, descriptive, expository, and persuasive.

History & Geography

Eighth grade social studies deals with the history of the United States from 1763-1900. The students will develop, define, and compare cultures with the United States, be exposed to ideas of the democratic process, free enterprise system, social relationships, and our religious heritage. They will also learn of man’s ingenuity to change his environment in order to fulfill his future vocations. A study of the War of 1812

and the role played by the Civil War is used as a major interdisciplinary unit. Interdisciplinary Culminating Unit of Gettysburg with an overnight student field trip.

Health/Wellness

The students will learn about the wellness concept and the prevention of disease and disorders. Topics on sexual abstinence, decision making in sexuality, and sexually transmitted diseases will be studied.

Physical Education

Students will continue their development of skills, rules, and game strategies in team, dual, and individual sports. They will continue using their knowledge of the components of physical fitness and improving their levels of fitness. Students will also practice the principles of conditioning or training.

Eighth grade students will develop and display desirable social behavior, sportsmanship, cooperation, and competition. Students will participate in low organizational games and work independently at various stations. Students should be prepared with gym clothes and are encouraged to use the showers.

Art

Students will confidently and creatively approach new experiences in various media which will aid them in developing creative ideas, utilizing art room equipment safely, enhancing their art vocabulary, recognizing the Elements and Principles of Art, and understanding the artist's place in history and culture. Eighth grade students will fulfill these curricular requirements in an Art History program in which they will keep a portfolio of art period information and create an art piece in conjunction with each art period (Prehistoric, Egyptian, Greek, Roman, Middle Ages, Renaissance and "Final Four" Hundred Years).

Ceramics Students will confidently and creatively approach new experiences in clay which will aid them in developing creative ideas, utilizing art room equipment safely, enhancing their art vocabulary, recognizing the Elements and Principles of Art, and understanding the artist's place in history and culture. Students in Ceramics class will create a pinch pot, slab pot, clock, rattle, and coil pot.

Technology Education

The main focus in 8th Grade is Transportation Technology. Students will design, build and test a CO₂ vehicle. They learn about aerodynamics, vehicle design, and the effects of CO₂ on the environment. They will also experiment with plastics and create a simple plastic mold. The year is wrapped up with an introduction to technology past, present and future.

Multimedia Research

Students will review online multimedia resources such as World Book Encyclopedia, SIRS Discoverer, an online periodical database, websites and apps. Students will learn

to search, take notes and present information. This class also introduces or reviews the following:

- A review of Microsoft Word basic features
- Evaluating web pages
- Understanding search engine results
- Proper netiquette
- Internet safety including cyber-bullying