Social Studies

7th Grade

World History to Modern Age, United States History to 1820

- Age of Exploration & Enlightenment
- Colonial Period
- American Revolution– Economic & Political Implications
- Civics/Constitution
- Introduction to Economics

8th Grade

United States History 1820 - 1900

- Westward Expansion
- Industrial Revolution
- Civil War
- Reconstruction
- Frontier West
- Railroads
- Age of Inventions
- Immigration of the 1800's/Impact of Cities
- Holocaust – Mini-Unit

Current events and editorial cartoons are intertwined with each grade level's curriculum.

Science

7th Grade

Life Sciences, Biology, Ecology

- Scientific method
- Characteristics of Living Things
- Origin of the species (theories)
- Classification/6 Kingdoms of Living Things
- Ecology
- River Project
- Heredity/Genetics

8th Grade

Physical Sciences, Chemistry

- Motion & Forces
- Energy Transformations
- Nature of Matter – Structure/Properties
- Diversity & Interaction of Matter– Physical & Chemical Reactions
- Robotics
- Middle School Design Challenge

Art

The Art Program is skill-based, encompassing self-expression, historical connections, aesthetic awareness and technical competence.

- Creation of complex works of art in the areas of ceramics, water colors, acrylic painting, color and design
- Emphasis on varying artistic expressions and methods within other cultures
- Focus on art history
- Process of critique

Physical Education

The Physical Education Program is designed to promote and maintain individual fitness, foster cooperative learning and sportsmanship, and further develop team sport skills.

- Physical Fitness exercises and activities
- Safety Concepts
- Self and peer evaluation of skills
- Game rules and strategies
- Dance

Music

The Music program is grounded in voluntary participation in the instrumental and vocal disciplines.

- Independent development of musical talents
- Jazz Band
- Choral elements of pitch, harmony and diction
- School musical

Students at all grade levels will be exposed to an array of concepts and skills through a wide variety of media. The acquisition of skills is a dynamic process influenced by many factors, including readiness and capability of the learner and student motivation.

Lebanon Township
School District
70 Bunnvale Road
Califon, N.J. 07830
www.lebtwpk8.org

Lebanon Township School District

Grades 7 & 8

Curriculum Guide

Mission Statement

The mission of the Lebanon Township School District, in partnership with the community, is to provide a safe, nurturing, child centered environment that challenges each child to maximize potential. Our students will acquire skills and knowledge which will enable them to become independent, respectful, responsible citizens who strive for personal excellence and embrace learning as fundamental in order to successfully adapt and succeed in our ever-changing global community.

Mathematics

The Middle School Math Program is a comprehensive, thematic approach that balances direct instruction and skill practice with problem-solving/analytical/critical thinking activities. Visual/spatial perception skills, two- and three-dimensional space, abstract mathematical concepts and discrete mathematical topics such as graph theory and cryptology are integrated throughout the curriculum and/or as part of mathematical quarter courses.

The math continuum is designed so that all students receive the necessary core curriculum standards and concepts at their appropriate pace and skill level. To ensure that all students maximize their potential, algebra and geometry courses are made available as part of Woodglen's diverse mathematical offerings.

7th & 8th Grade General Math Program

Four unifying concepts of proportional reasoning, multiple representations, patterns and generalizations, and modeling are employed throughout the coursework to enable students to make connections and build mathematical skills and concepts.

Major Content Areas

Grade 7

- Algorithms with integers, fractions & decimals
- Scientific Notation/Exponents
- Unit Rates, Proportions
- Equations with fractions & decimals
- Coordinate Graphing/Functions/Equations
- Discrete Math – probability, permutations & combinations
- Geometry – polygons/ polyhedrons, transformations, tessellations
- Geometry – translations & dilations, 3-D
- Data Analysis/Statistics

Grade 8

- Integer Operations – rational & irrational #'s
- Exponents
- Equations with fractions & decimals
- Inequalities
- Discrete Math –theoretical and experimental probability, permutations & combinations, patterns/fractals
- Coordinate Grids
- Geometry – translations & dilations, 3-D figures and their properties
- Data Analysis/Statistics

Pre-Algebra

The Pre-Algebra Program applies strategies of problem solving using multiple modes of learning (concrete, visual and abstract) to all content areas with emphasis on verbal and algebraic models and the connection among graphs, linear equations and tables.

Major Content Areas

- Number Patterns, Investigations, Operations and Theories– Integers, Rational & Irrational #'s, Decimals & Fractions
- Rates, ratios and percents
- Algebraic Properties– Equations and Inequalities
- Coordinate Planes, Graphing, Data Representations
- Discrete Math – Number Theory, Probability, Data & Graphs
- Geometric Concepts, Patterns and Spatial Reasoning

Algebra

The Algebra Program uses symbolic language to express mathematical relationships, and focuses on understanding the relationship between the equation and the graph, and on developing conceptual understanding of graphic representations and their real-life connections.

Major Content Areas

- Understand and apply properties of numbers and operations
- Solve and graph linear equations and inequalities
- Solve systems of linear equations
- Exponents
- Factoring (trinomials and polynomials)
- Quadratic equations, functions and relations
- Graphing Calculator Applications

Integrated Language Arts

The Language Arts Curriculum incorporates all the elements of a comprehensive literacy program. Language components are introduced in grades 5 and 6 and reinforced in grades 7 and 8. Students grow as both readers and writers on individual levels while receiving direct and guided instruction to aid their development.

Writing

Writing is a balance between writing activities and grammar skills. Students learn and practice the mechanics of language in order to creative authentic forms of writing. During the writing process emphasis is placed on the following:

- Use of Standard English conventions in all writing
- Writing for different purposes and different audiences
- Use of checklists and rubrics for editing, revising, and self-assessment
- Publishing final products in a variety of genre – i.e. persuasive, expository, narrative

Reading Program

Continued development of reading comprehension and fluency skills with focus on the following:

- Literal, interpretative comprehension
- Evaluative analysis
- Critical response
- Use of prior knowledge to anticipate and construe meaning
- Advanced decoding skills
- Vocabulary and concept development
- Literary Conventions
- Independent/Recreational Reading

Speaking, Listening, and Media Literacy:
Use of visuals, formal presentations, questioning techniques, debates, credibility of texts and resources, and technology are all components of the Integrated Language Arts Program, as are critical response and evaluation of all media-print, nonprint, and electronic.

World Languages

Students acquire cultural awareness and expand knowledge of conversation and language conventions through a Spanish Language Curriculum.