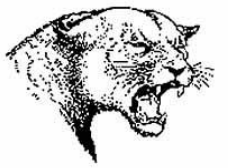

11th Grade Student Profile

ENGLISH

Throughout the year, the student will learn and demonstrate:

LISTENING/SPEAKING

- Listen critically to gain information and supporting evidence
- Understand a spoken message and interpret speaker's messages, purposes, and perspectives
- Speaks clearly and appropriately to different audiences for different purposes
- Communicates clearly by putting thoughts and feelings into spoken words

READING

- Understand culturally diverse written texts
- Analyze and critically evaluate written texts and visual representations
- Acquire extensive vocabulary through reading and systematic word study
- Use reference materials and electronic media to determine precise meanings and usage of words
- Identification of the relation of word meanings in analogies, homonymns, synonyms/antonyms, and connotation/denotation
- Identify main ideas and supporting details to summarize texts
- Respond to literary works and draw inferences using elements of text as support
- Analyze literary elements, forms, terms, and text structures
- Recognition/interpretation of poetic elements and the effect of sound on meaning in a poem
- Interpret the possible influences of the historical context on a literary work
- Analyze the characteristics of text, including structure, word choice, and intended audience
- Evaluate the credibility of information sources to determine the writer's motives
- Analysis of nonfiction texts and visual representations to determine the main idea
- Understand and interpret visual representations through an analysis of relationships, ideas, and cultures shown in various media
- Distinguish the purposes of various media forms identifying bias and other persuasive techniques

WRITING

- The ability to produce within a given context, an effective composition for a specific purpose, demonstrating a command of the conventions of spelling, capitalization, punctuation, grammar, usage, and sentence structure, as well as usiing the techniques of revision, editing, proofreading, to evaluate their work.

VIEWING/REPRESENTING

- Understand and interpret visual messages and media.
- Analyze and critique the significance of media.
- Deconstruct media to get the message's main idea
- Produce visual representation that communicates with others.

MATHEMATICS

In 11th grade your child will be given the opportunity to learn:

FOUNDATIONS FOR FUNCTIONS

- Collect and organize data, make scatterplots, fit curves to appropriate functions, interpret results
- Use matrices, factoring, and properties of exponents to simplify exxpressions and solve equations
- Use complex numbers to describe solutions to quadratic equations
- Formulate and solve systems of equations and inequalities in two or more variables
- Determine reasonableness of solutions for systems of equations or inequalities

ALGEBRA AND GEOMETRY

- Identify and sketch graphs of linear, quadratic, square root, inverse, logarithmic, and exponential functions
- Describe parameter changes in the above functions
- Recognize inverse relationships between various functions
- Describe conic sections as intersection of a plane and a cone
- Identify symmetries from graphs of conic sections
- Use the method of completing the square

QUADRATIC AND SQUARE ROOT FUNCTIONS

- Recognize quadratic functions in algebraic, tabular, graphical, and verbal forms
- Determine a quadratic function from its roots or graph
- Sketch graphs of $y=ax_2+bx+c$ and $y=a\ (x-h)_2\ +k$
- Describe and predict changes in a,hand k on the graph of y=a(x-h)2+k
- Relate algebraic, tabular, graphical, and verbal representations of square root functions
- Determine reasonable domain and range values of square root functions
- Solve square root equations and inequalities using graphs, tables, and algebraic methods
- Express inverses of quadratic functions using square root functions

RATIONAL FUNCTIONS

- Use quotients to describe the graphs of rational functions
- Describe limitations on the domain and range, and examine asymptotic behavior
- Analyze various representations of rational functions with respect to problem situations

EXPONENTIAL AND LOGARITHMIC FUNCTIONS

- Develop definition of logarithms by exploring exponential functions and their inverses
- Investigate, describe, and predict the effects of parameter changes on the graphs of exponential and logarithmic functions
- Describe limitations on the domains and ranges of exponential and logarithmic functions
- Examine asymptotic behavior created by parameter changes
- Solve exponential and logarithmic equations and inequalities using graphs, tables, and algebraic methods

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SOCIAL STUDIES

In the 11th grade World History, your teenager will learn:

HISTORY

- Identify major eras, significance of various dates, individuals, and events in History through 1877
- Compare the political, economic, and social causes of exploration and colonization, the revolutionary era, the Civil War, and the 1920s
- Understand the emergence of the U.S. as a world power between 1898-1920
- Recognizes the significance of national and international decisions and conflicts from World War II and the Cold War to the present on the U.S.

GEOGRAPHY

- Explain the effects of imperialism on the political, economic, and social development of the U.S.
- Use geographic tools to collect, analyze, and interpret data
- Understand the effects of migration and immigration on American Society
- Analyze the relationship between population growth and modernization on the physical environment

ECONOMICS

- Understand why various sections of the U.S. and the World developed different patterns of economic activity
- Identify the economic forces, including industrialization and urbanization, since the Civil War
- Understand the significant economic developments between World War I and World War II, specifically the Great Depression and the New Deal programs
- Origins and development of the free enterprise

GOVERNMENT

- Understand the foundations and beliefs of our representative government
- Recognize the principles of the U.S. Constitution and other historic documents in

our history including formal and informal changes
- Understand the impact of landmark Supreme Court cases and their decisions

CITIZENSHIP

- Understand the rights and responsibilities of citizens of the U.S.
- Recognize the importance of the expression of different points of view and effective leadership in our representative democracy
- Understand how people from various groups, including racial, ethnic, and religious groups, adapt to life in the US and contribute to our national identity

CULTURE

- Understand the relationships between and among various people of various groups including racial, ethnic, and religious groups of the US since Reconstruction
- Identify the major reform and third party movements throughout US History

SCIENCE, TECHNOLOGY, AND SOCIETY

- Describe the impact of major scientific and mathematical discoveries and technological innovations on life in the US

SOCIAL STUDIES SKILLS

- Apply age-appropriate critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes.

SCIENCE

11th grade students will learn:

LAB INVESTIGATION AND SAFETY

- Laboratory investigation and safety training in the use of lab equipment
- Conservation,disposal, and recycling of materials.

SCIENTIFIC INQUIRY

- The scientific method during field and laboratory investigation
- To collect and make measurements with precision
- To organize, analyze, evaluate, make inferences and communicate valid conclusions

CRITICAL THINKING AND PROBLEM SOLVING

- Critical thinking and scientific problem solving to make informed decisions
- To analyze, review, and critique scientific explanations, including hypotheses and theories as to their strengths and weakness using scientific evidence and

information

CHARACTERISTICS OF MATTER

- Differentiate between physical and chemical properties of matter and analyze examples of solids, liquids, and gases to determine their compressibility.

ENERGY TRANSFORMATIONS

- To identify changes in matter, determine the nature of the change, and examine the forms of energy involved
- To identify and measure energy transformations and exchanges involved in chemical reactions

ATOMIC STRUCTURE AND NUCLEAR COMPOSITION

- To describe the existence and properties of subatomic particles and analyze stable isotopes of an element to determine the relationship between the isotope's stability and its application
- To identify characteristics of atoms involved in chemical bonding
- The arrangement of atoms in molecules, ionic crystals, polymer, and metallic substances

BEHAVIOR OF GASES, SOLIDS, AND SOLUTIONS

- Interrelationships among temperatures, particle number, pressures, and volume of gases contained within a closed system
- To demonstrate and explain effects of temperature and the nature of solids solutes on the solubility of solids.
- To compare unsaturated, saturated, and supersaturated solutions
- To analyze and measure common household products using a variety of indicators to classify the products as acids or bases

SIGNIFICANCE OF NUCLEAR FISSION AND FUSION

- To investigate radioactive elemints to determine half-life

OXIDATION-REDUCTION REACTION

- To identify oxidation-reduction processes

BALANCED CHEMICAL EQUATIONS

- The rate of a chemical reaction to temperature, concentration, surface area, and presence of a catalyst