

CURRICULUM GUIDE

2009 – 2010



COMMUNITY SCHOOL

Newark is our home Education is our work The World is our future

MISSION STATEMENT

Link Community School seeks to provide an outstanding independent middle school education for Newark adolescents of all academic abilities from economically disadvantaged families. Link endeavors to create a powerful learning community built on a collective commitment to excellence and enduring Core Values. By building a strong academic foundation and instilling life long values, Link aims to develop students who will be successful in higher education and responsible and resourceful citizens who give back to others.

CORE VALUES

RESPECT
RESPONSIBILITY
HONESTY
FOLLOWING DIRECTIONS
DOING ONE'S BEST
CARING

LINK COMMUNITY SCHOOL

Curriculum Guide

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EDUCATIONAL PROGRAM

Link Community school's curriculum reflects the belief that students learn best when they are actively engaged and have the opportunity to showcase new learning in a variety of ways. Grounded in the philosophies of differentiated instruction and multiple intelligences, Link aims to develop the individual talents and intellectual capacity of each student both in and outside of the classroom.

Link has a vigorous academic program, committed to graduating students who think critically, appreciate diversity, demonstrate character, and give back to others. Link recognizes technology as a powerful learning tool, utilizing SmartBoards and web resources to achieve curricular goals and expand students' knowledge of the world.

Committed to nurturing all aspects of a child's development, Link provides a variety of learning experiences beyond the classroom, including Outdoor Education, Science Expeditions, Community Service, opportunities, Summer Camps and Career Days.

English, Grade 7 Overview

Link students are taught English through a comprehensive and interactive focus on the core skills and elements of literature, composition, grammar, vocabulary, and oral expression. A variety of genres are explored including drama, novels, short stories, poetry, media, and non-fiction works. Heavy emphasis is placed on developing the ability to express ideas well through writing and discussion as well as on strengthening the ability to identify and analyze different perspectives and styles. Ample time is devoted to the recognition and analysis of literary terms and literary devices, critical reading and analysis skills.

STRAND: ORAL LANGUAGE

Standard E7.1.Q1: Oral communication

The student will give and seek information in conversations, in group discussions, and in oral presentations.

- a) Communicate ideas and information orally in an organized and succinct manner.
- b) Ask probing questions to seek elaboration and clarification of ideas.
- c) Make supportive statements to communicate agreement with or acceptance of others' ideas.
- d) Use grammatically correct language and vocabulary appropriate to audience, topic, and purpose.
- e) Use oral vocabulary and style appropriate for listeners.

Standard E7.2.Q1: Verbal and nonverbal messages

The student will identify the relationship between a speaker's verbal and nonverbal messages.

- a) Use verbal communication skills, such as word choice, pitch, feeling, tone, and voice.
- b) Use nonverbal communication skills, such as eye contact, posture, and gestures.
- c) Compare/contrast a speaker's verbal and nonverbal messages.

STRAND: READING

Standard E7.4.Q1: Adaptive reading

The student will read to determine the meanings and pronunciations of unfamiliar words and phrases.

- a) Use roots and affixes to expand vocabulary.
- b) Recognize analogies and figurative language.
- c) Identify connotations.

Standard E7.5.Q1/2/3/4: Reading creative texts

The student will read and demonstrate comprehension of a variety of fiction, narrative nonfiction, and poetry.

- a) Describe setting, character development, plot structure, theme, and conflict. (Q1)
- b) Compare and contrast forms, including short stories, novels, plays, folk literature, poetry, essays, and biographies. (Q1)
- c) Describe the impact of word choice, imagery, and poetic devices. (Q2)
- d) Explain how forms, including rhyme, rhythm, repetition, line structure, and punctuation, conveys the mood and meaning of a poem. (Q2)
- e) Draw conclusions based on explicit and implied information. (Q3)
- f) Make inferences based on explicit and implied information. (Q3)
- g) Summarize text. (Q4)

Standard E7.6.Q1: Reading informational texts

The student will read and demonstrate comprehension of a variety of informational texts.

- a) Use knowledge of text structures to aid comprehension.
- b) Use knowledge of words and phrases that signal an author's organizational pattern to aid comprehension.
- c) Distinguish fact from opinion in newspapers, magazines, and other print media.
- d) Identify the source, viewpoint, and purpose of texts.
- e) Describe how word choice and language structure convey an author's viewpoint.
- f) Summarize what is read.
- g) Organize and synthesize information for use in written and oral presentations.

STRAND: WRITING**Standard E7.8.Q2/3/4: Modes of writing**

The student will develop narrative, expository, and persuasive writing.

- a) Apply knowledge of prewriting strategies.
- b) Elaborate the central idea in an organized manner.
- c) Choose vocabulary and information that will create voice and tone.
- d) Use clauses and phrases to vary sentences.
- e) Revise writing for clarity and effect.
- f) Use a word processor to plan, draft, revise, edit, and publish selected writings.

Standard E7.9.Q1/2: Editing and proofreading

The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

- a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
- b) Demonstrate understanding of sentence formation by identifying the eight parts of speech and their functions in sentences.
- c) Choose pronouns to agree with antecedents.
- d) Use subject-verb agreement with intervening phrases and clauses.
- e) Edit for verb tense consistency.

English, Grade 8 Overview

Link students are taught English through a comprehensive and interactive focus on the core skills and elements of literature, composition, grammar, vocabulary, and oral expression. A variety of genres are explored including drama, novels, short stories, poetry, media, and non-fiction works. Heavy emphasis is placed on developing the ability to express ideas well through writing and discussion as well as on strengthening the ability to identify and analyze different perspectives and styles. Ample time is devoted to **the recognition and analysis of literary terms and literary devices, vocabulary, critical reading and analysis skills. Students also examine the historical, cultural, and social contexts relevant to each reading.**

Standard E8.2.Q3: Oral presentations

The student will develop and deliver oral presentations in groups and individually.

- a) Choose topic and purpose appropriate to the audience.
- b) Choose vocabulary and tone appropriate to the audience, topic, and purpose.
- c) Use appropriate verbal and nonverbal presentation skills.
- d) Respond to audience questions and comments.
- e) Use grammatically correct language.
- f) Critique oral presentations.

STRAND: READING

Standard E8.4.Q1/2/3/4: Etymology and figurative language

The student will apply knowledge of word origins, derivations, inflections, analogies, and figurative language to extend vocabulary development.

- a) Identify simile, metaphor, personification, hyperbole, and analogy.
- b) Use context, structure, and connotations to determine meaning of words and phrases.

Standard E8.5.Q1/2/3: Reading creative texts

The student will read and analyze a variety of narrative and poetic forms.

- a) Explain the use of symbols and figurative language.
- b) Describe inferred main ideas or themes, using evidence from the text as support.
- c) Describe how authors use characters, conflict, point of view, and tone to create meaning.
- d) Compare and contrast the use of the poetic elements of word choice, dialogue, form, rhyme, rhythm, and voice.
- e) Compare and contrast authors' styles.

Standard E8.6.Q3/4: Reading informational sources

The student will read, comprehend, and analyze a variety of informational sources.

- a) Draw on background knowledge and knowledge of text structure to understand selections.
- b) Analyze the author's credentials, viewpoint, and impact.
- c) Analyze the author's use of text structure and word choice.
- d) Analyze details for relevance and accuracy.
- e) Read and follow instructions to complete an assigned task.
- f) Summarize and critique text.
- g) Evaluate and synthesize information to apply in written and oral presentations.
- h) Draw conclusions based on explicit and implied information.
- i) Make inferences based on explicit and implied information.

STRAND: WRITING

Standard E8.7.Q1/2/3/4: Modes of writing

The student will write in a variety of forms, including narrative, expository, persuasive, and informational.

- a) Use prewriting strategies to generate and organize ideas.
- b) Organize details to elaborate the central idea.
- c) Select specific vocabulary and information.
- d) Revise writing for word choice, sentence variety, and transitions among paragraphs.
- e) Use available technology.

Standard E8.8.Q2/3: Editing and proofreading

The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

- a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
- b) Use and punctuate correctly varied sentence structures to include conjunctions and transition words.
- c) Choose the correct case and number for pronouns in prepositional phrases with compound objects.
- d) Maintain consistent verb tense across paragraphs.
- e) Use comparative and superlative degrees in adverbs and adjectives.

US History I, Grade 7 Overview

Seventh grade American history covers the history of the United States from the original settlement of the North American continent to the Civil War. The major units covered are geography, Native Americans, European explorers, African heritage and slavery, the 13 colonies, the Revolutionary War, U.S. Constitution, Westward Expansion and the Civil War and Reconstruction. Students are encouraged to view history from multiple perspectives and recognize the contributions of all people.

Standard US7.1.Q1: History and geography skills

The student will develop skills for historical and geographical analysis.

- a) Identification and interpretation of primary and secondary source documents to increase understanding of events and life in United States history to 1877.
- b) Making connections between the past and the present.
- c) Sequencing events in United States history from pre-Columbian times to 1877.
- d) Interpreting ideas and events from different historical perspectives.
- e) Evaluating and discussing issues orally and in writing.
- f) Analyzing and interpreting maps to explain relationships among landforms, water features, climatic characteristics, and historical events.
- g) Distinguishing between parallels of latitude and meridians of longitude.
- h) Interpreting patriotic slogans and excerpts from notable speeches and documents.

Standard US7.2.Q1: Geography

The student will use maps, globes, photographs, pictures, and tables to locate and describe key geographic areas.

- a) Locating the seven continents.
- b) Locating and describing the location of the geographic regions of North America: Coastal Plain, Appalachian Mountains, Canadian Shield, Interior Lowlands, Great Plains, Rocky Mountains, Basin and Range, and Coastal Range.
- c) Locating and identifying the water features important to the early history of the United States: Great Lakes, Mississippi River, Missouri River, Ohio River, Columbia River, Colorado River, Rio Grande, Atlantic Ocean, Pacific Ocean, and Gulf of Mexico.

Standard US7.3.Q1: Native Americans

The student will demonstrate knowledge of how early cultures developed in North America.

- a) Locating where the American Indians (First Americans) settled, with emphasis on Arctic (Inuit), Northwest (Kwakiutl), Plains (Sioux), Southwest (Pueblo), and Eastern Woodland (Iroquois).
- b) Describing how the American Indians (First Americans) used their environment to obtain food, clothing, and shelter.

Standard US7.4.Q1: European exploration

The student will demonstrate knowledge of European exploration in North America and West Africa.

- a) Describing the motivations, obstacles, and accomplishments of the Spanish, French, Portuguese, and English explorations.
- b) Describing cultural interactions between Europeans and American Indians (First Americans) that led to cooperation and conflict.
- c) Identifying the location and describing the characteristics of West African societies (Ghana, Mali, and Songhai) and their interactions with traders.

Standard US7.5.Q2: Colonial America

The student will demonstrate knowledge of the factors that shaped colonial America.

- a) Describing the religious and economic events and conditions that led to the colonization of America.
- b) Comparing and contrasting life in the New England, Mid-Atlantic, and Southern colonies, with emphasis on how people interacted with their environment.
- c) Describing colonial life in America from the perspectives of large landowners, farmers, artisans, women, indentured servants, and slaves.
- d) Identifying the political and economic relationships between the colonies and England.

Standard US7.6.Q2: The American Revolution

The student will demonstrate knowledge of the causes and results of the American Revolution.

- a) Identifying the issues of dissatisfaction that led to the American Revolution.
- b) Identifying how political ideas shaped the revolutionary movement in America and led to the Declaration of Independence, with emphasis on the ideas of John Locke.
- c) Describing key events and the roles of key individuals in the American Revolution, with emphasis on George Washington, Benjamin Franklin, Thomas Jefferson, Patrick Henry, and Thomas Paine.
- d) Explaining reasons why the colonies were able to defeat Britain.

Standard US7.7.Q3: The Constitution

The student will demonstrate knowledge of the challenges faced by the new nation.

- a) Identifying the weaknesses of the government established by the Articles of Confederation.
- b) Identifying the basic principles of the new government established by the Constitution of the United States of America and the Bill of Rights.
- c) Identifying the conflicts that resulted in the emergence of two political parties.
- d) Describing the major accomplishments of the first five presidents of the United States.

Standard US7.8.Q3: Westward expansion

The student will demonstrate knowledge of westward expansion and reform in America from 1801 to 1861.

- a) Describing territorial expansion and how it affected the political map of the United States, with emphasis on the Louisiana Purchase, the Lewis and Clark expedition, and the acquisitions of Florida, Texas, Oregon, and California.
- b) Identifying the geographic and economic factors that influenced the westward movement of settlers.
- c) Describing the impact of inventions, including the cotton gin, the reaper, the steamboat, and the steam locomotive, on life in America.
- d) Identifying the main ideas of the abolitionist and suffrage movements.

Standard US7.9.Q4: The Civil War

The student will demonstrate knowledge of the causes, major events, and effects of the Civil War.

- a) Describing the cultural, economic, and constitutional issues that divided the nation.
- b) Explaining how the issues of states' rights and slavery increased sectional tensions.
- c) Identifying on a map the states that seceded from the Union and those that remained in the Union.
- d) Describing the roles of Abraham Lincoln, Jefferson Davis, Ulysses S. Grant, Robert E. Lee, Thomas "Stonewall" Jackson, and Frederick Douglass in events leading to and during the war.
- e) Using maps to explain critical developments in the war, including major battles.
- f) Describing the effects of war from the perspectives of Union and Confederate soldiers (including black soldiers), women, and slaves.

Standard US7.10.Q4: Reconstruction

The student will demonstrate knowledge of the effects of Reconstruction on American life.

- a) Identifying the provisions of the 13th, 14th, and 15th Amendments to the Constitution of the United States of America and their impact on the expansion of freedom in America.
- b) Describing the impact of Reconstruction policies on the South.

Standard US7. (E7.3).Q3: Persuasive messages

The student will describe persuasive messages in non-print media, including television, radio, and video.

- a) Identify persuasive technique used.
- b) Distinguish between fact and opinion.
- c) Describe how word choice conveys viewpoint.

Standard US7. (E7.7).Q3/4: Reference materials

The student will apply knowledge of appropriate reference materials.

- a) Use print and electronic sources to locate information in books and articles.
- b) Use graphic organizers to organize information.
- c) Synthesize information from multiple sources.
- d) Credit primary and secondary sources.

US History II, Grade 8 Overview

The 8th grade History course covers the early development of the United States the Post-Reconstruction to the Modern Era. Students will spend the year examining history through multiple perspectives as they focus on what it means to be American and how one person can make a difference. The major units covered are geography, World War I & II, Vietnam, Cold War and the Civil Rights Movement. Additionally, eighth grade students are also required to submit a research paper.

Standard US8.1.Q1: History and geography skills

The student will demonstrate skills for historical and geographical analysis.

- a) Analyze and interpret primary and secondary source documents to increase understanding of events and life in United States history from 1877 to the present.
- b) Make connections between past and present.
- c) Sequence events in United States history from 1877 to the present.
- d) Interpret ideas and events from different historical perspectives.
- e) Evaluate and debate issues orally and in writing.
- f) Analyze and interpret maps that include major physical features.
- g) Use parallels of latitude and meridians of longitude to describe hemispheric location.
- h) Interpret patriotic slogans and excerpts from notable speeches and documents.

Standard US8.2.Q1: Geography

The student will use maps, globes, photographs, pictures, and tables.

- a) Explaining how physical features and climate influenced the movement of people westward.
- b) Explaining relationships among natural resources, transportation, and industrial development after 1877.
- c) Locating the 50 states and the cities most significant to the historical development of the United States.

Standard US8.3.Q1: Post-Reconstruction America

The student will demonstrate knowledge of how life changed after the Civil War.

- a) Identifying the reasons for westward expansion.
- b) Explaining the reasons for the increase in immigration, growth of cities, new inventions, and challenges arising from this expansion.
- c) Describing racial segregation, the rise of "Jim Crow," and other constraints faced by African Americans in the post-Reconstruction South.
- d) Explaining the rise of big business, the growth of industry, and life on American farms.
- e) Describing the impact of the Progressive Movement on child labor, working conditions, the rise of organized labor, women's suffrage, and the temperance movement.

Standard US8.4.Q2: America's changing role in world affairs

The student will demonstrate knowledge of the changing role of the United States from the late nineteenth century through World War I.

- a) Explaining the reasons for and results of the Spanish American War.
- b) Explaining the reasons for the United States' involvement in World War I and its leadership role at the conclusion of the war.

Standard US8.5.Q2: Post-World War I change and turmoil

The student will demonstrate knowledge of the social, economic, and technological changes of the early twentieth century.

- a) Explaining how developments in transportation (including the use of the automobile), communication, and rural electrification changed American life.
- b) Describing the social changes that took place, including prohibition, and the Great Migration north.
- c) Examining art, literature, and music from the 1920s and 1930s, emphasizing Langston Hughes, Duke Ellington, and Georgia O'Keeffe and including the Harlem Renaissance.
- d) Identifying the causes of the Great Depression, its impact on Americans, and the major features of Franklin D. Roosevelt's New Deal.

Standard US8.6.Q3: World War II

The student will demonstrate knowledge of the major causes and effects of American involvement in World War II.

- a) Identifying the causes and events that led to American involvement in the war, including the attack on Pearl Harbor.
- b) Describing the major events and turning points of the war in Europe and the Pacific.
- c) Describing the impact of World War II on the home front.

Standard US8.7.Q3: The post-World War II transformation

The student will demonstrate knowledge of the economic, social, and political transformation of the United States and the world between the end of World War II and the present.

- a) Describing the rebuilding of Europe and Japan after World War II, the emergence of the United States as a superpower, and the establishment of the United Nations.
- b) Describing the conversion from a wartime to a peacetime economy.
- c) Identifying the role of America's military and veterans in defending freedom during the Cold War, including the wars in Korea and Vietnam, the Cuban missile crisis, the collapse of communism in Europe, and the rise of new challenges.
- d) Describing the changing patterns of society, including expanded educational and economic opportunities for military veterans, women, and minorities.

Standard US8. (E8.3).Q3: Mass media

The student will analyze mass media messages.

- a) Evaluate the persuasive technique being used.
- b) Describe the possible cause-effect relationships between mass media coverage and public opinion trends.
- c) Evaluate sources, including advertisements, editorials, and feature stories, for relationships between intent and factual content.

Standard US8.8.Q4: Modern America

The student will demonstrate knowledge of the key domestic issues during the second half of the twentieth century.

- a) Examining the Civil Rights Movement and the changing role of women.
- b) Describing the development of new technologies and their impact on American life.

Standard US8. (E8.1).Q4: Interviewing

The student will use interviewing techniques to gain information.

- a) Prepare and ask relevant questions for the interview.
- b) Make notes of responses.
- c) Compile and report responses.
- d) Evaluate the effectiveness of the interview

Mathematics, Grade 7 Overview

In this course problem-solving strategies will be taught and strengthened, basic math facts will be reinforced and foundational concepts (fractions, percentages, whole numbers and their properties, basic geometry, basic algebra, and measurement) will be explored. Assessments will include quizzes, investigations, projects, tests and quarterly exams.

STRAND: RELATIONSHIPS

Standard M7.1.Q1: Relationships between rational numbers

The student will compare, order, and determine equivalent relationships between fractions, decimals, and percents, including use of scientific notation for numbers greater than 10.

Standard M7.2.Q1: Simplifying expressions with rational numbers

The student will simplify expressions that contain rational numbers (whole numbers, fractions, and decimals) and positive exponents, using order of operations, mental mathematics, and appropriate tools.

Standard M7.3.Q1: Properties of real numbers

The student will identify and apply the following properties of operations with real numbers:

- a) the commutative and associative properties for addition and multiplication;
- b) the distributive property;
- c) the additive and multiplicative identity properties;
- d) the additive and multiplicative inverse properties; and
- e) the multiplicative property of zero.

STRAND: COMPUTATION AND ESTIMATION

Standard M7.4.Q1: Real-life applications of rational numbers

The student will

- a) solve practical problems using rational numbers (whole numbers, fractions, decimals) and percents
- b) solve consumer-application problems involving tips, discounts, sales tax, and simple interest.

Standard M7.5.Q1: Solving problems with integers

The student will formulate rules for and solve practical problems involving basic operations (addition, subtraction, multiplication, and division) with integers.

Standard M7.6.Q1: Solving problems with rational numbers

The student will use proportions to solve practical problems, which may include scale drawings that contain rational numbers (whole numbers, fractions, and decimals) and percents.

STRAND: MEASUREMENT

Standard: M7.7.Q2: Measuring area and perimeter

The student, given appropriate dimensions, will

- a) estimate and find the area of polygons by subdividing them into rectangles and right triangles
- b) apply perimeter and area formulas in practical situations.

Standard M7.8.Q2: Measuring surface area and volume

The student will investigate and solve problems involving the volume and surface area of rectangular prisms and cylinders, using concrete materials and practical situations to develop formulas.

STRAND: GEOMETRY**Standard M7.9.Q2: Quadrilaterals**

The student will compare and contrast the following quadrilaterals: a parallelogram, rectangle, square, rhombus, and trapezoid. Deductive reasoning and inference will be used to classify quadrilaterals.

Standard M7.10.Q2: Polygons

The student will identify and draw the following polygons: pentagon, hexagon, heptagon, octagon, nonagon, and decagon.

Standard M7.11.Q2: Relationships between geometric figures

The student will determine if geometric figures — quadrilaterals and triangles — are similar and write proportions to express the relationships between corresponding parts of similar figures.

Standard M7.12.Q2: Introduction to the coordinate plane

The student will identify and graph ordered pairs in the four quadrants of a coordinate plane.

Standard M7.13.Q2: Transformations

The student, given a polygon in the coordinate plane, will represent transformations — rotation and translation — by graphing the coordinates of the vertices of the transformed polygon and sketching the resulting figure.

STRAND: PROBABILITY AND STATISTICS**Standard M7.14.Q3: Theoretical probability**

The student will investigate and describe the difference between the probability of an event found through simulation versus the theoretical probability of that same event.

Standard M7.15.Q3: The Fundamental Counting Principle

The student will identify and describe the number of possible arrangements of several objects, using a tree diagram or the Fundamental (Basic) Counting Principle.

Standard M7.16.Q3: Measures of central tendency

The student will create and solve problems involving the measures of central tendency (mean, median, mode) and the range of a set of data.

Standard M7.17.Q3: Graphing data

The student, given a problem situation, will collect, analyze, display, and interpret data, using a variety of graphical methods, including

- a) frequency distributions;
- b) line plots;
- c) histograms;
- d) stem-and-leaf plots;
- e) box-and-whisker plots; and
- f) scattergrams.

Standard M7.18.Q3: Data analysis

The student will make inferences, conjectures, and predictions based on analysis of a set of data.

STRAND: PATTERNS, FUNCTIONS AND ALGEBRA

Standard M7.19.Q4: Functional relationships

The student will represent, analyze, and generalize a variety of patterns, including arithmetic sequences and geometric sequences, with tables, graphs, rules, and words in order to investigate and describe functional relationships.

Standard M7.20.Q4: Algebraic expressions

The student will write verbal expressions as algebraic expressions and sentences as equations.

Standard M7.21.Q4: The vocabulary of equations

The student will use the following algebraic terms appropriately: equation, inequality, and expression.

Standard M7.22.Q4: Solving algebraic problems

The student will

- a) solve one-step linear equations and inequalities in one variable with strategies involving inverse operations and integers, using concrete materials, pictorial representations, and paper and pencil; and
- b) solve practical problems requiring the solution of a one-step linear equation.

Mathematics, Grade 8 Overview (Course 3)

Course 3 begins with a focus on rational numbers and their operations, equations and inequalities. Students will build their understanding of these concepts using models, such as algebra tiles, number lines, and verbal models. Students will also apply their skills to problem – solving situations and use estimation to check reasonableness. Topics from math strands, such as real number properties, geometric formulas, and averages, are also introduced and expanded throughout the course. The second half of the course include topics such as linear equations and their graphs, properties of right triangles, geometric transformations, and probability. The number and variety of problems, ranging from basic to challenging, give students the practice they need to develop their math skills.

STRAND: NUMBERS AND NUMBER SENSE**Standard M8.1.Q1: Working with rational numbers**

The student will

- simplify numerical expressions involving positive exponents, using rational numbers, order of operations, and properties of operations with real numbers;
- recognize, represent, compare, and order rational numbers expressed in scientific notation; and
- compare and order decimals, fractions, percents, and numbers written in scientific notation.

Standard M8.2.Q1: The real number system

The student will describe orally and in writing the relationship between the subsets of the real number system.

STRAND: COMPUTATION AND ESTIMATION**Standard M8.3.Q1: Solving problems with rational numbers**

The student will solve practical problems involving rational numbers, percents, ratios, and proportions. Problems will be of varying complexities and will involve real-life data, such as finding a discount and discount prices and balancing a checkbook.

Standard M8.4.Q1: The order of operations

The student will apply the order of operations to evaluate algebraic expressions for given replacement values of the variables. Problems will be limited to positive exponents.

Standard M8.5.Q1: Squares and square roots

The student, given a whole number from 0 to 100, will identify it as a perfect square or find the two consecutive whole numbers between which the square root lies.

STRAND: MEASUREMENT**Standard M8.6.Q3: Measuring angles**

The student will verify by measuring and describe the relationships among vertical angles, supplementary angles, and complementary angles and will measure and draw angles of less than 360° .

Standard M8.7.Q3: Measuring three-dimensional shapes

The student will investigate and solve practical problems involving volume and surface area of rectangular solids (prisms), cylinders, cones, and pyramids.

STRAND: GEOMETRY

Standard M8.8.Q3: Transformations

The student will apply transformations (rotate or turn, reflect or flip, translate or slide, and dilate or scale) to geometric figures represented on graph paper. The student will identify applications of transformations, such as tiling, fabric design, art, and scaling.

Standard M8.9.Q3: Three-dimensional models

The student will construct a three-dimensional model, given the top, side, and/or bottom views.

Standard M8.10.Q3: The Pythagorean Theorem

The student will

- a) verify the Pythagorean Theorem, using diagrams, concrete materials, and measurement; and
- b) apply the Pythagorean Theorem to find the missing length of a side of a right triangle when given the lengths of the other two sides.

STRAND: PROBABILITY AND STATISTICS

Standard M8.11.Q4: Introduction to probability

The student will analyze problem situations, including games of chance, board games, or grading scales, and make predictions, using knowledge of probability.

Standard M8.12.Q4: Graphic representations of probability

The student will make comparisons, predictions, and inferences, using information displayed in frequency distributions; box-and-whisker plots; scattergrams; line, bar, circle, and picture graphs; and histograms.

Standard M8.13.Q4: Matrices

The student will use a matrix to organize and describe data.

STRAND: PATTERNS, FUNCTIONS AND ALGEBRA

Standard M8.14.Q2: Mathematical relationships

The student will

- a) describe and represent relations and functions, using tables, graphs, and rules; and
- b) relate and compare tables, graphs, and rules as different forms of representation for relationships.

Standard M8.15.Q2: Equations and inequalities

The student will solve two-step equations and inequalities in one variable, using concrete materials, pictorial representations, and paper and pencil.

Standard M8.16.Q2: Graphing linear equations

The student will graph a linear equation in two variables, in the coordinate plane, using a table of ordered pairs.

Standard M8.17.Q2: Solving algebraic problems

The student will create and solve problems, using proportions, formulas, and functions.

Standard M8.18.Q2: The vocabulary of functions

The student will use the following algebraic terms appropriately: domain, range, independent variable, and dependent variable.

Algebra 1, Grade 8 Overview

The content of *Algebra 1* is organized around families of functions, with special emphasis on linear and quadratic functions. As students learn about each family of functions, they will learn to represent them in multiple ways – as verbal descriptions, equations, tables, and graphs. They will also learn to model real-world situations using functions in order to solve problems arising from those situations. In addition to its algebra content, *Algebra 1* includes lessons on probability, data analysis and geometry.

Standard A.2: Expressions and operations

The student will represent verbal quantitative situations algebraically and evaluate these expressions for given replacement values of the variables. Students will choose an appropriate computational technique, such as mental mathematics, calculator, or paper and pencil.

Standard A.10: Expressions and operations

The student will apply the laws of exponents to perform operations on expressions with integral exponents, using scientific notation when appropriate.

Standard A.11: Expressions and operations

The student will add, subtract, and multiply polynomials and divide polynomials with monomial divisors, using concrete objects, pictorial and area representations, and algebraic manipulations.

Standard A.12: Expressions and operations

The student will factor completely first- and second-degree binomials and trinomials in one or two variables. The graphing calculator will be used as a tool for factoring and for confirming algebraic factorizations.

Standard A.13: Expressions and operations

The student will express the square root of a whole number in simplest radical form and approximate square roots to the nearest tenth.

Standard A.5: Relations and functions

The student will create and use tabular, symbolic, graphical, verbal, and physical representations to analyze a given set of data for the existence of a pattern, determine the domain and range of relations, and identify the relations that are functions.

Standard A.15: Relations and functions

The student will, given a rule, find the values of a function for elements in its domain and locate the zeros of the function both algebraically and with a graphing calculator. The value of $f(x)$ will be related to the ordinate on the graph.

Standard A.18: Relations and functions

The student will analyze a relation to determine whether a direct variation exists and represent it algebraically and graphically, if possible.

Standard A.1: Equations and inequalities

The student will solve multi-step linear equations and inequalities in one variable, solve literal equations (formulas) for a given variable, and apply these skills to solve practical problems. Graphing calculators will be used to confirm algebraic solutions.

Standard A.3: Equations and inequalities

The student will justify steps used in simplifying expressions and solving equations and inequalities. Justifications will include the use of concrete objects; pictorial representations; and the properties of real numbers, equality, and inequality.

Standard A.6: Equations and inequalities

The student will select, justify, and apply an appropriate technique to graph linear functions and linear inequalities in two variables. Techniques will include slope-intercept, x- and y-intercepts, graphing by transformation, and the use of the graphing calculator.

Standard A.7: Equations and inequalities

The student will determine the slope of a line when given an equation of the line, the graph of the line, or two points on the line. Slope will be described as rate of change and will be positive, negative, zero, or undefined. The graphing calculator will be used to investigate the effect of changes in the slope on the graph of the line.

Standard A.8: Equations and inequalities

The student will write an equation of a line when given the graph of the line, two points on the line, or the slope and a point on the line.

Standard A.9: Equations and inequalities

The student will solve systems of two linear equations in two variables both algebraically and graphically and apply these techniques to solve practical problems. Graphing calculators will be used both as a primary tool for solution and to confirm an algebraic solution.

Standard A.14: Equations and inequalities

The student will solve quadratic equations in one variable both algebraically and graphically. Graphing calculators will be used both as a primary tool in solving problems and to verify algebraic solutions.

Standard A.4: Statistics

The student will use matrices to organize and manipulate data, including matrix addition, subtraction, and scalar multiplication. Data will arise from business, industrial, and consumer situations.

Standard A. 16: Statistics

The student will, given a set of data points, write an equation for a line of best fit and use the equation to make predictions.

Standard A. 17: Statistics

The student will compare and contrast multiple one-variable data sets, using statistical techniques that include measures of central tendency, range, and box-and-whisker graphs.

Life Science, Grade 7 Overview

The Life Science course is an introduction to Biology, the study of living things. Students will learn the basic concepts of various types of organisms, from a single cell to complex, multi-cellular living things including human body systems. As students learn the wonderful world of living things, they will engage in hands-on activities and projects that will help develop their basic science skills in preparation for high school science.

Standard LS7.1.Q1: Research methods for scientific investigations

The student will plan and conduct investigations that reflect an understanding of the nature of science and appropriate research methods.

- a) Organization of data into tables showing repeated trials and means.
- b) Definition of variables.
- c) Use of metric units (SI — International System of Units).
- d) Construction of models to illustrate and explain phenomena.
- e) Identification of sources of experimental error.
- f) Identification of dependent variables, independent variables, and constants.
- g) Use of controlled variables and repeated trials to test hypotheses.
- h) Construction and interpretation of continuous line graphs to make predictions.
- i) Evaluation and defense of interpretations from a set of data.
- j) Development and reinforcement of an understanding of the nature of science.

Standard LS7.2.Q2: Cellular structure

The student will investigate and understand that all living things are composed of cells.

- a) Cell structure and organelles (cell membrane, cell wall, cytoplasm, vacuole, mitochondrion, endoplasmic reticulum, nucleus, and chloroplast).
- b) Similarities and differences between plant and animal cells.
- c) Development of cell theory.
- d) Cell division (mitosis and meiosis).

Standard LS7.3.Q1: Cellular organization

The student will investigate and understand that living things show patterns of cellular organization.

- a) Cells, tissues, organs, and systems.
- b) Life functions and processes of cells, tissues, organs, and systems (respiration, removal of wastes, growth, reproduction, digestion, and cellular transport).

Standard LS7.4.Q1: Life processes

The student will investigate and understand that the basic needs of organisms must be met in order to carry out life processes.

- a) Plant needs (light, water, gases, nutrients).
- b) Animal needs (food, water, gases, shelter, space).
- c) Factors that influence life processes.

Standard LS7.5.Q2: Classification of organisms

The student will investigate and understand how organisms can be classified.

- a) The distinguishing characteristics of kingdoms of organisms.
- b) The distinguishing characteristics of major animal and plant phyla.
- c) The characteristics of the species.

Standard LS7.6.Q2: Photosynthesis

The student will investigate and understand the basic physical and chemical processes of photosynthesis and its importance to plant and animal life.

- a) Energy transfer between sunlight and chlorophyll.
- b) Transformation of water and carbon dioxide into sugar and oxygen.
- c) Photosynthesis as the foundation of virtually all food webs.

Standard LS7.7.Q2: Ecosystems

The student will investigate and understand that organisms within an ecosystem are dependent on one another and on nonliving components of the environment.

- a) The carbon, water, and nitrogen cycles.
- b) Interactions resulting in a flow of energy and matter throughout the system.
- c) Complex relationships within terrestrial, freshwater, and marine ecosystems.
- d) Energy flow in food webs and energy pyramids.

Standard LS7.8.Q2: Interactions within populations

The student will investigate and understand that interactions exist among members of a population.

- a) Competition, cooperation, social hierarchy, territorial imperative.
- b) Influence of behavior on a population.

Standard LS7.9.Q2: Interactions within communities

The student will investigate and understand interactions among populations in a biological community.

- a) The relationships among producers, consumers, and decomposers in food webs.
- b) The relationship between predators and prey.
- c) Competition and cooperation.
- d) Symbiotic relationships.
- e) Niches.

Standard LS7.10.Q2: Organism adaptations

The student will investigate and understand how organisms adapt to biotic and abiotic factors in an ecosystem.

- a) Differences between ecosystems and biomes.
- b) Characteristics of land, marine, and freshwater ecosystems.
- c) Adaptations that enable organisms to survive within a specific ecosystem.

Standard LS7.11.Q2: Change in ecosystems

The student will investigate and understand that ecosystems, communities, populations, and organisms are dynamic and change over time (daily, seasonal, and long term).

- a) Phototropism, hibernation, and dormancy.
- b) Factors that increase or decrease population size.
- c) Eutrophication, climate changes, and catastrophic disturbances.

Standard LS7.12.Q1: Human impact on ecosystems

The student will investigate and understand the relationships between ecosystem dynamics and human activity.

- a) Food production and harvest.
- b) Change in habitat size, quality, or structure.
- c) Change in species competition.
- d) Population disturbances and factors that threaten or enhance species survival.

- e) Environmental issues (water supply, air quality, energy production, and waste management).

Standard LS7.13.Q1: Genetics

The student will investigate and understand that organisms reproduce and transmit genetic information to new generations.

- a) The role of DNA.
- b) The function of genes and chromosomes.
- c) Genotypes and phenotypes.
- d) Factors affecting the expression of traits.
- e) Characteristics that can and cannot be inherited.
- f) Genetic engineering and its applications.
- g) Historical contributions and significance of discoveries related to genetics.

Standard LS7.14.Q1: Evolution

The student will investigate and understand that organisms change over time. The relationships of mutation, adaptation, natural selection, and extinction.

- a) Evidence of evolution of different species in the fossil record.
- b) How environmental influences, as well as genetic variation, can lead to diversity of organisms.

Standard LS7.15.Q3/4: Body Systems

The students will investigate and understand body systems, parts, functions, and diseases.

- a) Skeletal system. (Q3)
- b) Muscular system. (Q3)
- c) Digestive system. (Q3)
- d) Circulatory system. (Q4)
- e) Nervous system. (Q4)

Physical Science, Grade 8 Overview

The Physical Science course is designed to equip students with the critical thinking skills and practical experience they will need to meet the challenges of a high school science curriculum. Major topics covered include mechanics, the laws of motion, energy, electricity, magnetism, the elements, molecules, atoms, light, heat, and the periodic table. The course stresses hands-on learning and scientific analysis through experiments, performance-based projects and the use of technology.

Standard PS8.1.Q2: Research methods for scientific investigations

The student will plan and conduct investigations that reflect an understanding of the nature of science and appropriate research methods.

- a) Safe use of chemicals and equipment.
- b) Accurate measurement and report of length, mass, volume, density, temperature, weight, and force using metric units (SI — International System of Units).
- c) Conversion among metric units, applying appropriate prefixes.
- d) Use of triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, and spring scales to gather data.
- e) Expression of numbers in scientific notation where appropriate.
- f) Research skills using a variety of resources.
- g) Identification of independent and dependent variables, constants, controls, and repeated trials.
- h) Construction and interpretation of data tables showing the independent and dependent variables, derived quantities, and the number of trials.
- i) Construction and interpretation of data tables for descriptive statistics showing specific measures of central tendency, the range of the data set, and the number of repeated trials.
- j) Construction and interpretation of frequency distributions, scattergrams, line plots, and histograms.
- k) Drawing valid conclusions after analyzing data.
- l) Use of research methods to investigate practical problems and questions.
- m) Presentation of experimental results in appropriate written form.
- n) Development and reinforcement of an understanding of the nature of science.

Standard PS8.2.Q1: The nature of matter

The student will investigate and understand the basic nature of matter.

- a) The particle theory of matter.
- b) Elements, compounds, mixtures, acids, bases, and salts.
- c) Solids, liquids, and gases.
- d) Characteristics of types of matter based on physical and chemical properties.
- e) Physical properties (shape, density, solubility, odor, melting point, boiling point, color).
- f) Chemical properties (acidity, basicity, combustibility, reactivity).

Standard PS8.3.Q1: Atomic structure

The student will investigate and understand the modern and historical models of atomic structure.

- a) The contributions of Dalton, Thomson, Rutherford, and Bohr in understanding the atom.
- b) The modern model of atomic structure.

Standard PS8.4.Q1: The periodic table of elements

The student will investigate and understand the organization and use of the periodic table of elements to obtain information.

- a) Symbols, atomic number, atomic mass, chemical families (groups), and periods.
- b) Classification of elements as metals, metalloids, and nonmetals.
- c) Simple compounds (formulas and the nature of bonding).

Standard PS8.5.Q3: Changes in matter

The student will investigate and understand changes in matter and the relationship of these changes to the Law of Conservation of Matter and Energy.

- a) Physical changes.
- b) Nuclear reactions (products of fusion and fission and the effect of these products on human beings and the environment).
- c) Chemical changes (types of reactions, reactants, and products; and balanced equations).

Standard PS8.6.Q2: Energy

The student will investigate and understand states and forms of energy and how energy is transferred and transformed.

- a) Potential and kinetic energy.
- b) Mechanical, chemical, and electrical energy.
- c) Heat, light, and sound.

Standard PS8.7.Q2: Heat and temperature

The student will investigate and understand temperature scales, heat, and heat transfer.

- a) Celsius and Kelvin temperature scales and absolute zero.
- b) Phase change, freezing point, melting point, boiling point, vaporization, and condensation.
- c) Conduction, convection, and radiation.
- d) Applications of heat transfer (heat engines, thermostats, refrigeration, and heat pumps).

Standard PS8.8.Q4: Sound

The student will investigate and understand characteristics of sound and technological applications of sound waves.

- a) Wavelength, frequency, speed, and amplitude.
- b) Resonance.
- c) The nature of mechanical waves.
- d) Technological applications of sound.

Standard PS8.9.Q4: Light

The student will investigate and understand the nature and technological applications of light.

- a) The wave behavior of light (reflection, refraction, diffraction, and interference).
- b) Images formed by lenses and mirrors.
- c) The electromagnetic spectrum.

Standard PS8.10.Q4: Work, force, and motion

The student will investigate and understand scientific principles and technological applications of work, force, and motion.

- a) Speed, velocity, and acceleration.
- b) Newton's laws of motion
- c) Work, force, mechanical advantage, efficiency, and power.
- d) Applications (simple machines, compound machines, powered vehicles, rockets, and restraining devices).

Standard PS8.11.Q3: Electricity and magnetism

The student will investigate and understand basic principles of electricity and magnetism.

- a) Static electricity, current electricity, and circuits.
- b) Magnetic fields and electromagnets.
- c) Motors and generators.

Music Arts, Grade 7 Overview

The seventh grade general music standards involve students in a higher level of music concepts and the further development of music skills through singing, playing instruments, moving, and listening. The standards encourage the reading of music notation and the assimilation of previous music study toward understanding the mechanics of a music score. Students will explore the creative and expressive aspects of music through composing and arranging. Evaluation of music performances will allow students opportunities to apply music knowledge and experiences to new situations.

STRAND: PERFORMANCE AND PRODUCTION**Standard MA7.1: Musical patterns**

The student will read and perform rhythmic, melodic, and harmonic patterns.

Standard MA7.2: Two-part music

The student will sing and play music written in two or more parts.

Standard MA7.3: Music and movement

The student will participate in a variety of movement activities in the study of music.

- a) Demonstrate a variety of styles, periods, and form through structured and unstructured dance and movement.
- b) Demonstrate elements of music, using body percussion and other physical responses.

Standard MA7.4: Creating music

The student will create music through a variety of experiences.

- a) Discuss how a composer communicates ideas by manipulating elements of music.
- b) Improvise melodies, rhythm, and harmonies.
- c) Compose melodies, rhythm, and harmonies.
- d) Create arrangements of known melodies, using traditional or nontraditional sound sources, including computer-related technology.

Music Arts, Grade 8 Overview

The first goal of the Music Appreciation class is to explore and appreciate the many musical periods and composers that have helped shape the music we hear and enjoy today. The second goal is to develop an understanding of how music and musicians were influenced by everyday events that took place throughout history. The student will discover why and how music is connected to all curriculums, such as mathematics, science, literature, art, politics, and history. The class will begin by examining ancient musical ideas and practices and end with looking at how it has evolved over the centuries and try to extrapolate about where it may be headed.

STRAND: PERFORMANCE AND PRODUCTION**Standard MA8.1: Musical experiences**

The student will participate in a variety of music experiences.

- a) Develop skills in music individually and in groups.
- b) Listen and respond to music.

Standard MA8.2: Reading music

The student will read and notate music.

- a) Notate original musical ideas in treble and bass clefs.
- b) Notate music from dictation.
- c) Employ technology to notate and/or read music.

STRAND: CULTURAL CONTEXT AND MUSIC THEORY**Standard MA8.3: Expressing musical ideas**

The student will organize and express musical ideas and sounds.

- a) Improvise music.
- b) Arrange music, using a choice of notation and form.
- c) Compose music, using a choice of notation and form.
- d) Use music terminology in explaining music, music notation, instruments, voices, and performances.

Standard MA8.4: Investigating musical sounds

The student will investigate characteristics of musical sounds.

- a) Employ elements of music, including melody, rhythm, harmony, form, and texture.
- b) Employ technology to explore musical sounds.
- c) Investigate traditional and nontraditional sound sources.

Standard MA8.5: Music and the human experience

The student will investigate the role of music in the human experience.

- a) Explore the development and function of music in diverse cultures throughout history through oral and written traditions.
- b) Identify the various uses of music.
- c) Discuss the role of technology in the development of music.

STRAND: JUDGMENT AND CRITICISM

Standard MA8.6: Making aesthetic judgments

The student will develop evaluative criteria to make aesthetic judgments.

- a) Develop skills in evaluating music individually and in groups.
- b) Defend individual judgments regarding the function of the elements of music.

STRAND: AESTHETICS

Standard MA8.7: Exploring musical styles

The student will explore music styles and genres through listening, performing, writing, and discussing.

Standard MA8.8: Performance behavior

The student will demonstrate appropriate performance behavior as a participant and/or listener.

- a) Exhibit respect for the contributions of self and others within a musical setting.
- b) Demonstrate appropriate audience behavior for the context and style of music performed.

Standard MA8.9: Music and other disciplines

The student will identify and compare relationships between music and other disciplines.

STRAND: CULTURAL CONTEXT AND MUSIC THEORY

Standard MA7.5: Investigating music

The student will investigate musical sounds, form, styles, and genres through listening, discussing, writing, and performing.

Standard MA7.6: Music in society

The student will investigate the role of music in society.

- a) Identify career pathways in music.
- b) Identify the influence of daily music experience in one's personal life.

STRAND: JUDGMENT AND CRITICISM

Standard MA7.7: Describing music performances

The student will describe performances, live or recorded, using music terminology.

- a) Develop criteria for evaluating music performances.
- b) Identify music of diverse cultures, including representative composers.
- c) Identify instruments, voice classifications (soprano, alto, tenor, bass), and a variety of performing ensembles aurally and visually.
- d) Use traditional and nontraditional sound sources.

Visual Arts Overview

The art program at Link is based on the philosophy that art is a universal language. It is a language that transcends time, belonging to everyone, which is spoken by people of every time and every culture. Art is a way of communicating and creating, which helps students know themselves, and relate their experiences to the world beyond the classroom. Link embraces a discipline based Art Education which includes art history, criticism, production and aesthetics.

STRAND: VISUAL COMMUNICATION AND PRODUCTION

Standard VA.1: Color relationships

The student will create works of art that emphasize specific formal color relationships.

Standard VA.2: Elements of art

The student will further expand and develop the use of the elements of art and the principles of design.

Standard VA.5: Lines

The student will use line to create value in a work of art.

Standard VA.6: Three-dimensional art

The student will create three-dimensional works of art, using a variety of themes and processes.

Standard VA.7: Graphic arts

The student will identify and analyze the uses of typography in graphic arts.

Standard VA.9: Art portfolios

The student will create and maintain an art portfolio.

Standard VA.11: The process of art

The student will provide evidence of the critical and artistic processes used to achieve final art solutions in personal works of art by documenting preparation, rough drafts, and final solutions.

STRAND: CULTURAL CONTEXT AND ART HISTORY

Standard VA.12: Artists in the media

The student will identify the roles of artists (e.g., graphic artists, animators, videographers, photographers, and advertising artists) in mass media.

Standard VA.13: Architecture

The student will identify and analyze art and architecture from various world cultures, periods, or civilizations by styles, symbolism, and technological impact.

Standard VA.15: Comparing art

The student will compare and contrast works of art according to medium, period, style, and artist.

STRAND: JUDGMENT AND CRITICISM

Standard VA.16: Art as communication

The student will analyze the effect the elements of art and the principles of design have on the communication of ideas.

Standard VA.17: Socio-cultural context

The student will investigate and discuss the use of social, cultural, and historical context as they contribute to meaning in a work of art.

Standard VA.18: Personal context

The student will communicate how personal experiences influence critical judgments about and interpretations of works of art.

Standard VA.19: Art critiques

The student will critique in oral and written form, personal work and the work of others, using appropriate art vocabulary.

STRAND: AESTHETICS

Standard VA.20: The purpose of art

The student will discuss and analyze the purposes, values, and meanings of works of art.

Standard VA.21: Responding to art

The student will formulate and respond to meaningful questions about works of art, based on observations and interpretations.

Standard VA.22: Sensory responses

The student will describe personal sensory responses to the visual qualities of a work of art, using appropriate art vocabulary.

Theatre Arts Overview

The purpose of drama class is to introduce the student to a real theater experience. This is done by exposing the students to the history of early theater styles, understanding and creating monologues to be used as a form of improvisation, involving them in theater technique games, and researching the early format of theater. They will also learn how to critique other plays that will be performed. In addition, they will also learn about types of genres, and information about the early pioneers of theater.

Standard TA.1: Communicating ideas through drama

The student will communicate ideas, using individual performances, group productions, or group projects to demonstrate teamwork, cooperation, and dependability.

Standard TA.2: Theatre games and improvisation

The student will create and build trust and develop listening skills through participation in theatre games and improvisations (e.g., solo and group characterizations, portrayals of characters in conflict, experiments in rhythm and imagery).

Standard TA.3: Acting skills

The student will demonstrate acting skills by

- a) vocal production—projection and articulation;
- b) movement and gestures; and
- c) memorization.

Standard TA.4: Technical aspects of the theatre

The student will work collaboratively and safely to select, create, and utilize the technical elements of lighting, scenery, costuming, makeup, properties, and sound.

STRAND: CULTURAL CONTEXT AND ART HISTORY

Standard TA.5: Investigating society through drama

The student will investigate a variety of societal roles, occupations, and relationships, using dramatic activities.

Standard TA.6: Theatre and other literary genres

The student will demonstrate how theatre is similar to and different from other literary genres, using storytelling, scene presentation, improvisation, or pantomime.

Standard TA.7: Investigating historical-cultural concepts through drama

The student will demonstrate an awareness of a variety of historical and cultural concepts, using dramatic activities.

Standard TA.8: Drama as literature

The student will identify drama as a major form of literature and identify elements of plot, character, setting, mood, and theme.

Standard TA.9: Theatre in the community

The student will identify and describe theatrical resources in the community, including professional and community theatres, experts, and sources of scripts and materials.

STRAND: JUDGMENT AND CRITICISM

Standard TA.10: Evaluating performances

The student will give constructive and objective criticism of class performances, using appropriate theatre arts vocabulary.

Standard TA.11: Using criticism

The student will demonstrate the ability to accept and incorporate constructive criticism in subsequent work.

Standard TA.12: Analyzing scripts

The student will read and analyze scripts and respond in oral, written, or visual form.

Standard TA.13: Analyzing live theatre

The student will view, analyze, and interpret live theatre in regard to directing, design, acting, and artistic presentation, using oral or written responses.

STRAND: AESTHETICS

Standard TA.14: Qualities of theatre

The student will recognize and respond to the unique qualities of theatre, including

- a) interaction of the audience and actors;
- b) immediacy of live performance;
- c) representation of life; and
- d) incorporation of the other arts.

Standard TA.15: Aesthetics and the theatre

The student will define aesthetics and discuss how it is reflected in theatre arts and everyday life.

Fitness, Grade 7 Overview

The fitness program is focused on building healthy exercise habits in students. The course provides students with an opportunity to become more aware of the importance of physical activity to their overall physical health. Students will also engage in individual and team sports, understand the rules and strategy of various sports and to improve their physical conditioning. Students are encouraged to demonstrate leadership, sportsmanship and responsibility in competition.

Standard PE7.1.Q1: Personal fitness

The student will apply concepts and principles of training to improve physical fitness.

- a) Identify safe practices for improving physical fitness.
- b) Develop a comprehensive personal fitness plan, including goals, strategies, and timeline, for improving at least three self-selected components of health-related fitness.
- c) Use a variety of resources, including available technology, to monitor fitness improvement.
- d) Analyze the relationships among physical activity, calorie intake, and body composition.
- e) Demonstrate correct form when performing physical fitness activities.

Standard PE7.2.Q2: Movement principles and concepts

The student will understand and apply movement principles and concepts.

- a) Demonstrate proper use of movement concepts in dynamic game situations (e.g., relationship between opponents, appropriate offensive position with the goal or ball).
- b) Apply biomechanical principles (e.g., center of gravity, base of support, trajectory) to understand and perform skillful movements.
- c) Use basic offensive and defensive tactics and strategies while playing a modified version of a game/sport.
- d) Analyze skill patterns of self and partner, detecting and correcting mechanical errors.
- e) Identify similarities in movements across different physical activities (e.g., overhand throw, tennis serve, overhand volleyball serve, and overhead clear in badminton).

Standard PE7.3.Q3: Skilled movement

The student will demonstrate competence in modified versions of various game/sport, rhythmic, and recreational activities.

- a) Use skill combinations competently in modified versions of team (e.g., soccer, team handball, volleyball) and individual/dual (e.g., tennis, racquetball, golf) activities.
- b) Display appropriate use of speed, force, and form in a variety of movement activities (e.g., run, sprint, kick, jump, throw).
- c) Demonstrate basic abilities and safety precautions in recreational pursuits (e.g., in-line skating, orienteering, hiking, cycling, ropes courses, backpacking, canoeing, rock climbing).
- d) Demonstrate moving to a rhythm in selected folk, country, square, contemporary, and line dances.

Standard PE7.4.Q4: Responsible behaviors

The student will work independently and with others in cooperative and competitive physical activity settings.

- a) Apply safety procedures, rules, and appropriate etiquette in physical activity settings.
- b) Solve problems, accept appropriate challenges, and resolve conflicts in a responsible manner.
- c) Demonstrate supportive behaviors that promote the inclusion and safety of others when participating in physical activity.

Standard PE7.5.Q4: Physically active lifestyle

The student will select and participate in physical activity to produce health-related benefits.

- a) Select and set goals, and participate at school and outside of school in activities that help improve flexibility, muscle strength and endurance, cardiovascular endurance, and body composition.
- b) Analyze the relationship between physical activity and stress management, and investigate ways to use physical activity to lessen the impact of stress.

Fitness, Grade 8 Overview

The fitness program is focused on building healthy exercise habits in students. The course provides students with an opportunity to become more aware of the importance of physical activity to their overall physical health. Students will also engage in individual and team sports, understand the rules and strategy of various sports and to improve their physical conditioning. Students are encouraged to demonstrate leadership, sportsmanship and responsibility in competition.

Standard PE8.1.Q1: Skilled movement

The student will demonstrate competence and perform skills in modified versions of various game/sport, rhythmic/dance, and recreational activities.

- a) Use skill combinations competently in specialized versions of individual, dual, and team activities.
- b) Demonstrate skill in recreational pursuits (e.g., in-line skating, orienteering, hiking, cycling, ropes courses, backpacking, canoeing, fishing, archery).
- c) Demonstrate moving to a rhythm (e.g., devise and perform dance sequences, using set patterns and changes in speed, direction, and flow).

Standard PE8.3.Q2: Movement principles and concepts

The student will apply movement principles and concepts to specific sport, dance, and recreational skill performance.

- a) Adapt skill movements by modifying use of body, space, effort, and relationships to meet complex skill demands.
- b) Apply biomechanical principles (e.g., spin, rebound, effects of levers) to understand and perform skillful movements.
- c) Understand and use basic offensive and defensive tactics and strategies while playing specialized games/sports.
- d) Analyze skill patterns of self and partner.
- e) Analyze the skill demands in one physical activity, and apply principles of motor learning (e.g., feedback and knowledge of results, whole/part/whole, transfer of learning) to improve performance.

Standard PE8.4.Q3: Personal fitness

The student will apply self-assessment skills to improve or maintain personal fitness.

- a) Self-assess level of physical activity and personal fitness on all components of health-related fitness, and develop a plan, including goals, strategies, and timeline, for maintenance or improvement.
- b) Investigate and self-assess the relationship among body composition, nutrition, family history, and levels of physical activity, and develop a plan for maintenance or improvement.
- c) Use a variety of resources, including available technology, to assess, monitor, and improve personal fitness.
- d) Demonstrate the ability to calculate resting and target heart rate.
- e) Monitor heart rate before, during, and after vigorous physical activity.

Standard PE8.5.Q4: Responsible behaviors

The student will work independently and with others in cooperative and competitive physical activity settings.

- a) Exhibit fair play and act responsibly in physical activity settings.
- b) Identify positive and negative effects of peer influence.
- c) Exhibit respect for the unique characteristics, diverse backgrounds, and varying abilities of peers.

Standard PE8.6.Q4: Physically active lifestyle

The student will demonstrate a physically active lifestyle, including activity within and outside of the physical education setting.

- a) Participate regularly in health-enhancing and personally rewarding physical activities during unscheduled times.
- b) Analyze and evaluate personal behaviors that support or do not support a healthy lifestyle

ADDITIONAL CO – CURRICULAR COURSES

Literature Enrichment

The Whole Novels Program was initiated by Madeleine Ray of Bank Street College. It is a program designed around developmentally appropriate themes and novel ideas. As formal operational thinkers, adolescents are interested in and can be intellectually challenged by themes such as justice, power, friendship and coming-of age. The Whole Novels Program implements teaching techniques such as literature circles, teacher directed mini-lessons, story-telling, journal writing, poly-plots writing, one paragraph writing assignments, community group meetings, and inquiry-based small group discussions. Selected literary materials include picture books, folk tales, Greek Mythology, graphic novels, comics, plays, poetry and novels. Integrated into the Whole Novels Program are opportunities to observe and discuss thematically related visual material in order to deepen the students' experience with the written word.

High School Prep

In keeping with the school's mission, Link's High School Prep class guides students through the high school admission process by building entrance examination, oral presentation, and interview skills. A highlight of the course is the development of the Student Portfolio, a working portfolio which students use to set realistic goals, design action plans, celebrate successes, and reflect on their academic and character growth.

Health

Link's newly introduced Health Class guides students in making wise health decisions and avoiding those risky behaviors that impact adolescents; i.e., drug and alcohol abuse, tobacco use, sexual behaviors that result in HIV infection, unwanted pregnancies, and STDs, unhealthy dietary patterns, and inadequate physical activity.

Technology

Technology is integrated into all core curriculum areas. Students learn computer skills and programs, such as keyboarding, PowerPoint, and spreadsheets, as they research and prepare class projects and other assignments. Through the Destinations class, students learn to use technology while discovering other cultures and places.

Study Skills

In order to help students develop the skills necessary for life-long learning and academic success, Link provides one quarter class that introduces and sharpens students' study and organizational skills.

LEARNING BEYOND THE CLASSROOM

Link's student life activities are designed to help students achieve the intellectual, social, moral and academic foundation necessary for the student's overall development.

Link's core values-based education and student life activities inspire students at a very critical stage in their lives to choose their own positive path to personal, social and moral values, as well as become aware of ways to further develop and deepen themselves as future citizens and leaders of the world.

Advisory System

With a 9:1 student-to-faculty advisor ratio and regular opportunities for individual follow-up, the Advisory System provides faculty mentorship for every student, whereby students check in daily with advisors regarding homework and meet weekly with advisors individually to discuss personal issues and school work and in small groups to engage in activities that explore values and character development. The advisory system also provides a regular system of communication between parent and advisor.

Electives

Through a comprehensive and varied electives program, Link students are discovering new areas of interest. Elective courses expose students to a variety of activities and interests outside the curriculum, including African Dance, Yearbook, Newspaper, Poetry Slam!, Advanced Piano, Choir, Film, Student Government, Japanese, Orchestra/Ensemble, and Karate. Courses change each quarter. These classes are taught by a combination of Link faculty and outside instructors who specialize in the topic being presented.

Community Service

Link's community service is designed to enhance students' character development, and to further Link's mission of providing opportunities for students to "give back to others." By performing community service, students develop vital character, grow in social responsibility, and gain leadership skills. Community service, a graduation requirement, is performed by all Link students. Each 8th grade community/homeroom designs and participates in a one-time service project. Each 7th grader participates in an 8-week project by reading and sharing stories with 3- and 4-year-olds in NCC's Community Hills Early Learning Center in Newark. In addition, students and their families participate in student-organized projects such as canned food drives for Thanksgiving and coat/sweater drives during the winter. It is Link's hope that community service activities, required over the course of two years at Link, engender in our students an enduring propensity to give back to others.

Sports

Link offers opportunities to its scholar-athletes to engage in organized sports, including girls' and boys' basketball, girls' volleyball, co-ed flag football, cheerleading, lacrosse and fencing, all designed to build teamwork and develop good sportsmanship.

Outdoor Education: All students take part in an outdoor education program, beginning in the summer and continuing through the school year, through Project U.S.E. The outdoor education program aims to enable students to apply Link's core values when confronting personal and group challenges. Students develop leadership and cooperation skills while facing group and individual challenge courses, as well as participating in camp and canoe experiences. Each seventh grader goes on two separate day-trips and each eighth grader attends a three-day/two-night trip.



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