
**NEW YORK STATE TEACHER
CERTIFICATION EXAMINATIONS™**

**FIELD 02: MULTI-SUBJECT
TEST FRAMEWORK**

June 2003

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Subarea	Selected-Response	Range of Objectives
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English Language Arts
Mathematics
Science and Technology
Social Studies
The Fine Arts
Health and Fitness
Family and Consumer Science and Career Development

The New York State multi-subject educator has the knowledge and skills necessary to teach effectively in New York State public schools (birth–grade 9). The multi-subject teacher is an effective communicator who understands and applies the language skills used in acquiring and transmitting information, responding to literature, expressing feelings and attitudes, evaluating ideas, and maintaining social relationships. The multi-subject teacher applies mathematical concepts and procedures to solve a variety of problems; draws on knowledge of principles and relationships in the life and physical sciences for scientific inquiry; and understands the interconnectedness of science, mathematics, and technology. The multi-subject teacher uses the perspectives of the social sciences to analyze historical events and the contemporary world; interprets works of art using knowledge of a variety of forms, techniques, and cultural contexts; understands the principles and practices essential to personal health, fitness, and safety; and can apply skills and concepts related to child development, family and interpersonal relationships, personal resources management, and career development. Most importantly, the multi-subject teacher can apply factual information and intellectual skills in an interdisciplinary approach to analyze the natural phenomena, historical developments, social dynamics, and individual expressions of the human experience that have shaped our society and the world around us.

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SUBAREA I—ENGLISH LANGUAGE ARTS

0001 Understand the foundations of reading development.

For example:

- demonstrating knowledge of the developmental progression from prereading to conventional literacy, with individual variations, and analyzing how literacy develops in multiple contexts through reading, writing, and oral language experiences
- defining phonological awareness and phonemic awareness, and analyzing their role in reading development
- demonstrating knowledge of concepts about print (e.g., book-handling skills, awareness that print carries meaning, recognition of directionality, ability to track print, ability to recognize and name letters)
- demonstrating knowledge of the alphabetic principle and analyzing how emergent readers use this principle to master letter-sound correspondence and to decode simple words
- demonstrating knowledge of a variety of word identification strategies, including use of phonics, use of semantic and syntactic cues, context clues, syllabication, analysis of word structure (e.g., roots, prefixes, suffixes), and sight-word recognition
- analyzing factors that affect a reader's ability to construct meaning from texts (e.g., word recognition, reading fluency, vocabulary development, context clues, visual cues, prior knowledge and experience)

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0002 Understand skills and strategies involved in reading comprehension.

For example:

- demonstrating knowledge of literal comprehension skills (e.g., the ability to identify the sequence of events in a text, the ability to identify explicitly stated main ideas, details, and cause-and-effect patterns in a text)
- demonstrating knowledge of inferential comprehension skills (e.g., the ability to draw conclusions or generalizations from a text, the ability to infer ideas, details, and cause-and-effect relationships that are not explicitly stated in a text)
- demonstrating knowledge of evaluative comprehension skills (e.g., the ability to distinguish between facts and opinions in a text, the ability to detect faulty reasoning in a text, the ability to detect bias and propaganda in a text)
- applying knowledge of strategies to use before, during, and after reading to enhance comprehension (e.g., developing and activating prior knowledge, connecting texts to personal experience, previewing a text, making predictions about a text, using K-W-L charts and other graphic organizers, taking notes on a text, discussing a text)
- demonstrating knowledge of methods for helping readers monitor their own comprehension as they read (e.g., think-alouds, self-questioning strategies)
- demonstrating knowledge of various methods for assessing comprehension of a text (e.g., questioning the reader, having the reader give an oral or written retelling, asking the reader to identify the theme(s) or to paraphrase or summarize the main idea)

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0003 Understand and apply reading skills and strategies for various purposes (including information and understanding, critical analysis and evaluation, literary response, and social interaction).

For example:

- recognizing how to vary reading strategies for different texts and purposes (e.g., skimming, scanning, in-depth reading, rereading) and for different types and genres of written communication (e.g., fiction, nonfiction, poetry)
- applying knowledge of techniques for gathering, interpreting, and synthesizing information when reading a variety of printed texts and electronic sources
- recognizing how to analyze and assess a writer's credibility or objectivity when reading printed and electronic texts
- analyzing and interpreting information from texts containing tables, charts, graphs, maps, and other illustrations
- demonstrating knowledge of strategies to promote literary response skills (e.g., connecting the text to personal experience and prior knowledge, citing evidence from a text to support an interpretation, using reading logs or guided reading techniques)
- identifying effective ways of modeling independent reading for enjoyment and encouraging participation in a community of readers (e.g., book clubs, literature circles)

0004 Understand processes for generating, developing, revising, editing, and presenting/publishing written texts.

For example:

- applying knowledge of prewriting strategies (e.g., brainstorming, prioritizing and selecting topics including clustering and other graphic organizers)
- identifying effective techniques of note taking, outlining, and drafting
- revising written texts to improve unity and logical organization (e.g., formulating topic sentences, reordering paragraphs or sentences, adding transition words and phrases, eliminating distracting sentences)
- editing written work to ensure conformity to conventions of standard English usage (e.g., eliminating misplaced or dangling modifiers, eliminating sentence fragments, correcting errors in subject-verb agreement and pronoun-antecedent agreement)
- editing and proofreading written work to correct misspellings and eliminate errors in punctuation and capitalization
- applying knowledge of the uses of technology to plan, create, revise, edit, and present/publish written texts and multimedia works

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0005 Understand and apply writing skills and strategies for various purposes (including information and understanding, critical analysis and evaluation, literary response and personal expression, and social interaction).

For example:

- analyzing factors a writer should consider when writing for a variety of audiences and purposes (e.g., informative, persuasive, expressive), including factors related to selection of topic and mode of written expression
- recognizing how to incorporate graphic representations (e.g., diagrams, graphs, time lines) into writing for various purposes
- applying knowledge of skills involved in writing a research paper (e.g., generating ideas and questions, posing problems, evaluating and summarizing data from a variety of print and nonprint sources)
- identifying techniques for expressing point of view, using logical organization, and avoiding bias in writing for critical analysis, evaluation, or persuasion
- demonstrating knowledge of strategies for writing a response to a literary selection by referring to the text, to other works, and to personal experience
- demonstrating awareness of voice in writing for personal expression and social interaction

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0006 Understand skills and strategies involved in listening and speaking for various purposes (including information and understanding, critical analysis and evaluation, literary response and expression, and social interaction).

For example:

- recognizing appropriate listening strategies for given contexts and purposes (e.g., interpreting and analyzing information that is presented orally, appreciating literary texts that are read aloud, understanding small-group and large-group discussions)
- analyzing factors that affect the ability to listen effectively and to construct meaning from oral messages in various listening situations (e.g., using prior knowledge, recognizing transitions, interpreting nonverbal cues, using notetaking and outlining), and applying measures of effective listening (e.g., the ability to repeat instructions, the ability to retell stories)
- analyzing how features of spoken language (e.g., word choice, rate, pitch, tone, volume) and nonverbal cues (e.g., body language, visual aids, facial expressions) affect a speaker's ability to communicate effectively in given situations
- recognizing how to vary speaking strategies for different audiences, purposes, and occasions (e.g., providing instructions, participating in group discussions, persuading or entertaining an audience, giving an oral presentation or interpretation of a literary work)
- recognizing the effective use of oral communication skills and nonverbal communication skills in situations involving people of different ages, genders, cultures, and other personal characteristics
- applying knowledge of oral language conventions appropriate to a variety of social situations (e.g., informal conversations, job interviews)

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0007 Understand and apply techniques of literary analysis to works of fiction, drama, poetry, and nonfiction.

For example:

- analyzing similarities and differences between fiction and nonfiction
- demonstrating knowledge of story elements in works of fiction (e.g., plot, character, setting, theme, mood)
- applying knowledge of drama to analyze dramatic structure (e.g., introduction, rising action, climax, falling action, conclusion) and identify common dramatic devices (e.g., soliloquy, aside)
- applying knowledge of various types of nonfiction (e.g., informational texts, newspaper articles, essays, biographies, memoirs, letters, journals)
- analyzing the use of language to convey style, tone, and point of view in works of fiction and nonfiction
- recognizing the formal elements of a poetic text (e.g., meter, rhyme scheme, stanza structure, alliteration, assonance, onomatopoeia, figurative language) and analyzing their relationship to the meaning of the text

0008 Demonstrate knowledge of literature, including literature from diverse cultures and literature for children/adolescents.

For example:

- demonstrating awareness of ways in which literary texts reflect the time and place in which they were written
- demonstrating awareness of the ways in which literary works reflect and express cultural values and ideas
- recognizing major themes and characteristics of works written by well-known authors
- demonstrating knowledge of important works and authors of literature for children and adolescents
- analyzing themes and elements of traditional and contemporary literature for children and adolescents

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SUBAREA II—MATHEMATICS

0009 Understand formal and informal reasoning processes, including logic and simple proofs, and apply problem-solving techniques and strategies in a variety of contexts.

For example:

- using models, facts, patterns, and relationships to draw conclusions about mathematical problems or situations
- judging the validity or logic of mathematical arguments
- drawing a valid conclusion based on stated conditions and evaluating conclusions involving simple and compound sentences
- applying inductive reasoning to make mathematical conjectures
- using a variety of problem-solving strategies to model and solve problems, and evaluating the appropriateness of a problem-solving strategy (e.g., estimation, mental math, working backward, pattern recognition) in a given situation
- analyzing the usefulness of a specific model or mental math procedure for exploring a given mathematical, scientific, or technological idea or problem

0010 Use mathematical terminology and symbols to interpret, represent, and communicate mathematical ideas and information.

For example:

- using mathematical notation to represent a given relationship
- using appropriate models, diagrams, and symbols to represent mathematical concepts
- using appropriate vocabulary to express given mathematical ideas and relationships
- relating the language of ordinary experiences to mathematical language and symbols
- translating among graphic, numeric, symbolic, and verbal representations of mathematical relationships and concepts
- using mathematical representations to model and interpret physical, social, and mathematical phenomena

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0011 Understand skills and concepts related to number and numeration, and apply these concepts to real-world situations.

For example:

- selecting the appropriate computational and operational method to solve given mathematical problems
- demonstrating an understanding of the commutative, distributive, and associative properties
- using ratios, proportions, and percents to model and solve problems
- comparing and ordering fractions, decimals, and percents
- solving problems using equivalent forms of numbers (e.g., integer, fraction, decimal, percent, exponential and scientific notation), and problems involving number theory (e.g., primes, factors, multiples)
- analyzing the number properties used in operational algorithms (e.g., multiplication, long division)
- applying number properties to manipulate and simplify algebraic expressions

0012 Understand patterns and apply the principles and properties of linear algebraic relations and functions.

For example:

- recognizing and describing mathematical relationships
- using a variety of representations (e.g., manipulatives, figures, numbers, calculators) to recognize and extend patterns
- analyzing mathematical relationships and patterns using tables, verbal rules, equations, and graphs
- deriving an algebraic expression or function to represent a relationship or pattern from the physical or social world
- using algebraic functions to describe given graphs, to plot points, and to determine slopes
- performing algebraic operations to solve equations and inequalities
- analyzing how changing one variable changes the other variable for linear and nonlinear functions

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0013 Understand the principles and properties of geometry and trigonometry, and apply them to model and solve problems.

For example:

- identifying relationships among two- and three-dimensional geometric shapes
- applying knowledge of basic geometric figures to solve real-world problems involving more complex patterns (e.g., area and perimeter of composite figures)
- applying the concepts of similarity and congruence to model and solve problems
- applying inductive and deductive reasoning to solve problems in geometry
- using coordinate geometry to represent and analyze properties of geometric figures
- applying transformations (e.g., reflections, rotations, dilations) and symmetry to analyze properties of geometric figures

0014 Understand concepts, principles, skills, and procedures related to the customary and metric systems of measurement.

For example:

- demonstrating knowledge of fundamental units of customary and metric measurement
- selecting an appropriate unit to express measures of length, area, capacity, weight, volume, time, temperature, and angle
- estimating and converting measurements using standard and nonstandard measurement units within customary and metric systems
- developing and using formulas to determine the perimeter and area of two-dimensional shapes and the surface area and volume of three-dimensional shapes
- solving measurement problems involving derived measurements (e.g., velocity, density)
- applying the Pythagorean theorem and right triangle trigonometry to solve measurement problems

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0015 Understand concepts and skills related to data analysis, probability, and statistics, and apply this understanding to evaluate and interpret data and to solve problems.

For example:

- demonstrating the ability to collect, organize, and analyze data using appropriate graphic and nongraphic representations
- displaying and interpreting data in a variety of different formats (e.g., frequency histograms, tables, pie charts, box-and-whisker plots, stem-and-leaf plots, scatterplots)
- computing probabilities using a variety of methods (e.g., ratio and proportion, tree diagrams, tables of data, area models)
- using simulations (e.g., spinners, multisided die, random number generators) to estimate probabilities
- applying measures of central tendency (mean, median, mode) and spread (e.g., range, percentiles, variance) to analyze data in graphic or nongraphic form
- formulating and designing statistical experiments to collect, analyze, and interpret data
- identifying patterns and trends in data and making predictions based on those trends

SUBAREA III—SCIENCE AND TECHNOLOGY

0016 Understand and apply the principles and processes of scientific inquiry and investigation.

For example:

- formulating hypotheses based on reasoning and preliminary results or information
- evaluating the soundness and feasibility of a proposed scientific investigation
- applying mathematical rules or formulas (including basic statistics) to analyze given experimental or observational data
- interpreting data presented in one or more graphs, charts, or tables to determine patterns or relationships
- evaluating the validity of a scientific conclusion in a given situation
- applying procedures for the safe and appropriate use of equipment and the care and humane treatment of animals in the laboratory

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0017 Understand and apply concepts, principles, and theories pertaining to the physical setting (including earth science, chemistry, and physics).

For example:

- analyzing interactions among the earth, the moon, and the sun (e.g., seasonal changes, the phases of the moon)
- analyzing the effects of interactions among components of air, water, and land (e.g., weather, volcanism, erosion)
- distinguishing between physical and chemical properties of matter and between physical and chemical changes in matter
- distinguishing among forms of energy and identifying the transformations of energy observed in everyday life
- analyzing the effects of forces on objects in given situations
- inferring the physical science principle (e.g., effects of common forces, conservation of energy) illustrated in a given situation

0018 Understand and apply concepts, principles, and theories pertaining to the living environment.

For example:

- recognizing the characteristics of living things and common life processes
- analyzing processes that contribute to the continuity of life (e.g., reproduction and development, inheritance of genetic information)
- analyzing the factors that contribute to change in organisms and species over time
- comparing the ways a variety of organisms carry out basic life functions and maintain dynamic equilibrium (e.g., obtaining nutrients, maintaining water balance)
- analyzing the effects of environmental conditions (e.g., temperature, availability of water and sunlight) on living organisms and the relationships between plants and animals within a community
- inferring the life science principle (e.g., adaptation, homeostasis) illustrated in a given situation

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0019 Apply knowledge of technology and the principles of engineering design.

For example:

- demonstrating an understanding of technological systems (e.g., transportation system) and the principles on which technological systems are constructed (e.g., the use of component subsystems)
- analyzing the roles of modeling and optimization in the engineering design process
- evaluating a proposed technological solution to a given problem or need
- applying criteria for selecting tools, materials, and other resources to design and construct a technological product or service
- recognizing appropriate tests of a given technological solution
- analyzing the positive and negative effects of technology on individuals, society, and the environment

0020 Understand the relationships among and common themes that connect mathematics, science, and technology, and the application of knowledge and skills in these disciplines to other areas of learning.

For example:

- making connections among the common themes of mathematics, science, and technology (e.g., systems, models, magnitude and scale, equilibrium and stability, patterns of change)
- applying principles of mathematics, science, and technology to model a given situation (e.g., the movement of energy and nutrients between a food chain and the physical environment)
- applying principles of mathematics, science, and technology to explore phenomena from other areas of learning (e.g., applying statistical methodologies to examine census data)
- designing solutions to problems in the physical and social worlds using mathematical, scientific, and technological reasoning and procedures
- analyzing the effects of human activities (e.g., burning fossil fuels, clear-cutting forests) on the environment and evaluating the use of science and technology in solving problems related to these effects

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SUBAREA IV—SOCIAL STUDIES

0021 Understand major ideas, eras, themes, developments, and turning points in the history of New York State, the United States, and the world.

For example:

- defining important conceptual terms (e.g., racism, nation-state, nationalism, feudalism) and using them to analyze general historical phenomena and specific historical events
- analyzing the social effects of major developments in human history (e.g., the agricultural revolution, the scientific revolution, the industrial revolution, the information revolution)
- understanding major political, social, economic, and geographic characteristics of ancient civilizations and the connections and interactions among these civilizations
- examining reasons for organizing periods of history in different ways and comparing alternative interpretations of key events and issues in New York State, U.S., and world history
- analyzing the effects of European contact with indigenous cultures and the effects of European settlement on New York State and the Northeast
- analyzing how the roles and contributions of individuals and groups helped shape U.S. social, political, economic, cultural, and religious life

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0022 Understand geographic concepts and phenomena and analyze the interrelationships of geography, society, and culture in the development of New York State, the United States, and the world.

For example:

- defining important geographic terms and concepts (e.g., habitat, resource, cultural diffusion, ecology) and using them to analyze various geographic issues, problems, and phenomena
- demonstrating an understanding of the six essential elements of geography: the world in spatial terms, places and regions, physical settings, human systems, environment and society, and the use of geography
- recognizing physical characteristics of the earth's surface and the continual reshaping of it by physical processes (e.g., how weather, climate, and the water cycle influence different regions)
- analyzing the development and interaction of social, political, cultural, and religious systems in different regions of New York State, the United States, and the world
- examining ways in which economic, environmental, and cultural factors influence demographic change, and interpreting geographic relationships, such as population density and spatial distribution patterns
- analyzing the impact of human activity on the physical environment (e.g., industrial development, population growth, deforestation)

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0023 Understand concepts and phenomena related to human development and interactions (including anthropological, psychological, and sociological concepts).

For example:

- using concepts, theories, and modes of inquiry drawn from anthropology, psychology, and sociology to examine general social phenomena and issues related to intercultural understanding
- evaluating factors that contribute to personal identity (e.g., family, group affiliations, socialization processes)
- recognizing how language, literature, the arts, media, architecture, traditions, beliefs, values, and behaviors influence and/or reflect the development and transmission of culture
- analyzing the roles and functions of social groups and institutions in the United States (e.g., ethnic groups, schools, religions) and their influence on individual and group interactions
- analyzing why individuals and groups hold different or competing points of view on issues, events, or historical developments
- understanding the processes of social and cultural change

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0024 Understand economic and political principles, concepts, and systems, and relate this knowledge to historical and contemporary developments in New York State, the United States, and the world.

For example:

- defining important economic and political terms and concepts (e.g., scarcity, opportunity cost, supply and demand, productivity, power, natural rights, checks and balances) and using them to analyze general phenomena and specific issues
- analyzing the basic structure, fundamental ideas, accomplishments, and problems of the U.S. economic system
- recognizing and comparing basic characteristics of major models of economic organization (e.g., traditional, market, command) and various governmental systems (e.g., democratic, authoritarian)
- analyzing values, principles, concepts, and key features of American constitutional democracy (e.g., individual freedom, separation of powers, due process, federalism)
- comparing different perspectives regarding economic and political issues and policies in New York State and the United States (e.g., taxing and spending decisions)
- analyzing ways in which the United States has influenced other nations (e.g., in the development of democratic principles and human rights) and how other nations have influenced U.S. politics and culture

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0025 Understand the roles, rights, and responsibilities of citizenship in the United States and the skills, knowledge, and attitudes necessary for successful participation in civic life.

For example:

- analyzing the personal and political rights guaranteed in the Declaration of Independence, the U.S. Constitution, the Constitution of the State of New York, and major civil rights legislation
- recognizing the core values of the U.S. democratic system (e.g., justice, honesty, the rule of law, self-discipline, due process, equality, majority rule, respect for minority rights)
- demonstrating an understanding of the U.S. election process and the roles of political parties, pressure groups, and special interests in the U.S. political system
- explaining what citizenship means in a democratic society and analyzing the ways in which citizens participate in and influence the political process in the United States (e.g., the role of public opinion and citizen action groups in shaping public policy)
- examining the rights, responsibilities, and privileges of individuals in relation to family, social group, career, community, and nation
- analyzing factors that have expanded or limited the role of the individual in U.S. political life during the twentieth century (e.g., female suffrage, Jim Crow laws, growth of presidential primaries, role of the media in political elections)

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0026 Understand and apply skills related to social studies, including gathering, organizing, mapping, evaluating, interpreting, and displaying information.

For example:

- evaluating the appropriateness of various resources and research methods for meeting specified information needs (e.g., atlas, bibliography, almanac, database, survey, poll) and applying procedures for retrieving information using traditional resources and current technologies (e.g., CD-ROM, the Internet)
- demonstrating an understanding of concepts, tools, and technologies for mapping information about the spatial distribution of people, places, and environments (e.g., mapping grids, latitude and longitude, the advantages and limitations of different types of maps and map projections)
- analyzing information in social studies materials (e.g., identifying central themes in important historical speeches or documents, distinguishing fact from opinion, evaluating multiple points of view in policy debates)
- interpreting information presented in one or more graphic representations (e.g., graph, table, map) and translating written or graphic information from one form to the other
- summarizing the purpose or point of view of a historical narrative

SUBAREA V—THE FINE ARTS

0027 Understand the concepts, techniques, and materials of the visual arts; analyze works of visual art; and understand the cultural dimensions and contributions of the visual arts.

For example:

- identifying basic elements (e.g., line, color) and principles (e.g., unity, balance) of art, and recognizing how they are used to communicate meaning in works of art
- analyzing two-dimensional and three-dimensional works of art in terms of their visual and sensory characteristics
- applying knowledge of the characteristics of various art media (e.g., two-dimensional, three-dimensional, electronic) to select a medium appropriate for a given artistic purpose or intent
- applying knowledge of basic tools and techniques for working with various materials (e.g., clay, textiles, wood)
- analyzing how works of art reflect the cultures in which they were produced (e.g., materials or techniques used, subject matter, style)
- comparing works of art of different cultures, eras, and artists in terms of characteristics such as theme, imagery, and style

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0028 Understand concepts, techniques, and materials for producing, listening to, and responding to music; analyze works of music; and understand the cultural dimensions and contributions of music.

For example:

- comparing various types of instruments (e.g., strings, percussion, woodwind, brass, electronic) in terms of the sounds they produce
- defining and applying common musical terms (e.g., pitch, tempo)
- using basic scientific concepts to explain how music-related sound is produced, transmitted through air, and received by listeners
- relating characteristics of music (e.g., rhythm, beat) to musical effects produced
- recognizing basic technical skills that musicians must develop to produce an aesthetically acceptable performance (e.g., manual dexterity, breathing techniques, knowledge of musical notation)
- analyzing how different cultures have created music reflective of their histories and societies (e.g., call-and-response songs, ballads, work songs, folk songs)

0029 Understand concepts, techniques, and materials related to theater and dance; analyze works of drama and dance; and understand the cultural dimensions and contributions of drama and dance.

For example:

- comparing dramatic and theatrical forms and their characteristics (e.g., pantomime, improvisation)
- relating types of dance (e.g., ballet, folk, modern) to their characteristic forms of movement, expressive qualities, and cultural origins
- analyzing how technical aspects of performance (e.g., costumes, props, lighting) affect the message or overall impression created by a performance
- recognizing how language, voice, gesture, and movement are used to develop character and create interaction among performers in theatrical productions
- analyzing ways in which different cultures have used drama and dance (e.g., to teach moral lessons, to preserve cultural traditions, to affirm the sense of community, to entertain)

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SUBAREA VI—HEALTH AND FITNESS

0030 Understand basic principles and practices of personal, interpersonal, and community health and safety; and apply related knowledge and skills (e.g., decision making, problem solving) to promote personal well-being.

For example:

- identifying common health problems and explaining how they can be prevented, detected, and treated
- recognizing the basic knowledge and skills necessary to support positive health choices and behaviors
- applying decision-making and problem-solving skills and procedures in individual and group situations (e.g., situations related to personal well-being, self-esteem, and interpersonal relationships)
- recognizing basic principles of good nutrition and using them to plan a diet that accommodates nutritional needs, activity level, and optimal weight
- analyzing contemporary health-related issues (e.g., HIV, teenage pregnancy, suicide, substance abuse) in terms of their causes, effects, and significance for individuals, families, and society and evaluating strategies for their prevention
- interpreting advertising claims for health-care products and services and distinguishing between valid and invalid health information
- analyzing environmental conditions and their impact upon personal and community health and safety

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0031 Understand physical education concepts and practices related to the development of personal living skills.

For example:

- recognizing sequences and characteristics of physical development throughout the various developmental levels
- demonstrating knowledge of activities that promote the development of motor skills (e.g., locomotor, manipulative, body mechanics) and perceptual awareness skills (e.g., body awareness, spatial and directional awareness)
- applying safety concepts and practices associated with physical activities (e.g., doing warm-up exercises, wearing protective equipment)
- understanding skills necessary for successful participation in given sports and activities (e.g., spatial orientation, eye-hand coordination, movement)
- analyzing ways in which participation in individual or group sports or physical activities can promote personal living skills (e.g., self-discipline, respect for self and others, resource management) and interpersonal skills (e.g., cooperation, sportsmanship, leadership, teamwork, communication)

0032 Understand health-related physical fitness concepts and practices.

For example:

- recognizing components, functions, and common disorders of the major body systems
- demonstrating knowledge of basic components of physical fitness (e.g., strength, endurance, flexibility) and applying principles of training
- applying strategies for developing a personal fitness plan based on self-assessment, goal setting, and an understanding of physiological changes that result from training
- analyzing the relationship between life-long physical activity and the prevention of illness, disease, and premature death
- applying knowledge of principles and activities for developing and maintaining cardiorespiratory endurance, muscular strength, flexibility, and levels of body composition that promote good health

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SUBAREA VII—FAMILY AND CONSUMER SCIENCE AND CAREER DEVELOPMENT

0033 Understand concepts and practices related to child development and care and apply knowledge of family and interpersonal relationships.

For example:

- recognizing stages and characteristics of physical, cognitive, social, and emotional development during infancy, childhood, and adolescence
- demonstrating knowledge of children's physical, dietary, and hygienic needs (e.g., nutritional guidelines, dental care, proper washing procedures) and applying developmentally appropriate methods for promoting self-care during childhood
- identifying causes of common childhood accidents and health care emergencies and applying physical care and safety guidelines for caregivers of infants, toddlers, and preschool and school-age children
- analyzing factors that affect decisions about whether and when to have children and recognizing ways to prepare for the responsibilities of parenthood
- demonstrating knowledge of family structure (e.g., extended, blended, single parent, dual career), roles and responsibilities of family members, and the functions of families in society
- recognizing the types and characteristics of interpersonal relationships and analyzing decision-making processes related to interpersonal relationships
- examining social and cultural influences on interpersonal communication and analyzing factors affecting the formation of positive relationships in the family, workplace, and community

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0034 Understand skills and procedures related to consumer economics and personal resource management.

For example:

- recognizing rights and responsibilities of consumers in various purchasing situations (e.g., rights in relation to product and service warranties and guarantees)
- demonstrating knowledge of types and characteristics of consumer fraud and applying procedures for seeking redress and registering consumer complaints
- applying knowledge of procedures for making major purchases (e.g., comparison shopping, negotiation, interpreting labels or contract terminology)
- analyzing considerations involved in selecting and maintaining housing and motor vehicles, obtaining credit and insurance, and making investments
- examining steps and considerations involved in planning and maintaining a personal or family budget and applying money management guidelines appropriate for various situations
- demonstrating knowledge of personal and family resources (e.g., time, skills, energy) and applying decision-making and goal-setting procedures for managing personal and family resources in various situations

**FIELD 02: MULTI-SUBJECT
TEST FRAMEWORK**

0035 Understand basic principles of career development; apply processes and skills for seeking and maintaining employment; and demonstrate knowledge of workplace skills, behaviors, and responsibilities.

For example:

- demonstrating knowledge of the relationship of personal interests, skills, and abilities to successful employment and recognizing the relationship between the changing nature of work and educational requirements
- recognizing factors to consider when evaluating careers and applying procedures for conducting career research
- demonstrating knowledge of steps involved in searching for a job and recognizing factors affecting the success of a job search (e.g., writing an effective letter of application, résumé preparation)
- applying skills and procedures for job interviews (e.g., personal appearance and demeanor, communicating effectively during an interview)
- applying knowledge of effective communication principles, work etiquette, interpersonal skills, and techniques for handling stress or conflict in the workplace
- recognizing rights and responsibilities in relation to employment (e.g., protection from harassment and discrimination, employer's performance expectations)

**SUBAREA VIII—FOUNDATIONS OF READING: CONSTRUCTED-RESPONSE
ASSIGNMENT**

The content to be addressed by the constructed-response assignment is described in Subarea I, Objectives 01 and 02.