

# Table of Contents

## DOMAIN I ENGLISH LANGUAGE ARTS..... 1

### COMPETENCY 1 UNDERSTAND THE FOUNDATIONS OF READING DEVELOPMENT ..... 5

**Skill 1.1: 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..... 5**

**Skill 1.2: Defining phonological awareness and phonemic awareness, and analyzing their role in reading development ..... 10**

**Skill 1.3: 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) ..... 11**

**Skill 1.4: Demonstrating knowledge of the alphabetic principle and analyzing how emergent readers use this principle to master letter-sound correspondence and to decode simple words..... 14**

**Skill 1.5: 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 ..... 15**

**Skill 1.6: 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) ..... 18

**COMPETENCY 2**  
**UNDERSTAND SKILLS AND STRATEGIES INVOLVED**  
**IN READING COMPREHENSION** ..... 21

**SKILL 2.1: 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) ..... 21

**SKILL 2.2: 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) ..... 25

**SKILL 2.3: 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) ..... 26

**SKILL 2.4: 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)..... 29

**SKILL 2.5: Demonstrating knowledge of methods for helping readers monitor their own comprehension as they read** (e.g., think-alouds, self-questioning strategies) ..... 34

**SKILL 2.6: 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) ..... 35

**COMPETENCY 3**  
**UNDERSTAND AND APPLY READING SKILLS AND STRATEGIES FOR**  
**VARIOUS PURPOSES (INCLUDING INFORMATION AND UNDERSTANDING,**  
**CRITICAL ANALYSIS AND EVALUATION, LITERARY RESPONSE,**  
**AND SOCIAL INTERACTION)**..... 37

**SKILL 3.1: Recognizing how to vary reading strategies for different texts and purposes** (e.g., skimming, scanning, in-depth reading, rereading) and for different

<b>types and genres of written communication</b> ( <i>e.g., fiction, nonfiction, poetry</i> ) .....	<b>37</b>
<b>SKILL 3.2: Applying knowledge of techniques for gathering, interpreting, and synthesizing information when reading a variety of printed texts and electronic sources</b> .....	<b>38</b>
<b>SKILL 3.3: Recognizing how to analyze and assess a writer’s credibility or objectivity when reading printed and electronic texts</b> .....	<b>39</b>
<b>SKILL 3.4: Analyzing and interpreting information from texts containing tables, charts, graphs, maps, and other illustrations</b> .....	<b>41</b>
<b>SKILL 3.5: Demonstrating knowledge of strategies to promote literary response skills</b> ( <i>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</i> ) .....	<b>42</b>
<b>SKILL 3.6: Identifying effective ways of modeling independent reading for enjoyment and encouraging participation in a community of readers</b> ( <i>e.g., book clubs, literature circles</i> ) .....	<b>43</b>
<b>COMPETENCY 4</b>	
<b>UNDERSTAND PROCESSES FOR GENERATING, DEVELOPING, REVISING, EDITING, AND PRESENTING/PUBLISHING WRITTEN TEXTS</b> .....	<b>45</b>
<b>SKILL 4.1: Applying knowledge of prewriting strategies</b> ( <i>e.g., brainstorming, prioritizing and selecting topics including clustering and other graphic organizers</i> ).....	<b>45</b>
<b>SKILL 4.2: Identifying effective techniques of note taking, outlining, and drafting</b> .....	<b>47</b>
<b>SKILL 4.3: Revising written texts to improve unity and logical organization</b> ( <i>e.g., formulating topic sentences, reordering paragraphs or sentences, adding transition words and phrases, eliminating distracting sentences</i> ).....	<b>48</b>
<b>SKILL 4.4: Editing written work to ensure conformity to conventions of standard English usage</b> ( <i>e.g., eliminating misplaced or dangling modifiers, eliminating sentence fragments, correcting errors in subject-verb agreement and pronoun-antecedent agreement</i> ) .....	<b>52</b>
<b>SKILL 4.5: Editing and proofreading written work to correct misspellings and eliminate errors in punctuation and capitalization</b> .....	<b>54</b>
<b>SKILL 4.6: Applying knowledge of the uses of technology to plan, create, revise, edit, and present/publish written texts and multimedia works</b> .....	<b>59</b>

## COMPETENCY 5

**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)..... 61**

**SKILL 5.1: 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..... 61**

**SKILL 5.2: Recognizing how to incorporate graphic representations (e.g., diagrams, graphs, time lines) into writing for various purposes ..... 63**

**SKILL 5.3: 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) ..... 63**

**SKILL 5.4: Identifying techniques for expressing point of view, using logical organization, and avoiding bias in writing for critical analysis, evaluation, or persuasion ..... 64**

**SKILL 5.5: Demonstrating knowledge of strategies for writing a response to a literary selection by referring to the text, to other works, and to personal experience..... 67**

**SKILL 5.6: Demonstrating awareness of voice in writing for personal expression and social interaction ..... 68**

## COMPETENCY 6

**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) ..... 69**

**SKILL 6.1: 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)..... 69**

**SKILL 6.2: 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) ..... 70**

**SKILL 6.3: 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..... 72

**SKILL 6.4: 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)..... 74

**SKILL 6.5: Applying knowledge of oral language conventions appropriate to a variety of social situations** (e.g., informal conversations, job interviews)..... 75

## COMPETENCY 7

**UNDERSTAND AND APPLY TECHNIQUES OF LITERARY ANALYSIS TO WORKS OF FICTION, DRAMA, POETRY, AND NONFICTION**..... 76

**SKILL 7.1: Analyzing similarities and differences between fiction and nonfiction** ..... 76

**SKILL 7.2: Demonstrating knowledge of story elements in works of fiction** (e.g., plot, character, setting, theme, mood) ..... 77

**SKILL 7.3: 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)..... 79

**SKILL 7.4: Applying knowledge of various types of nonfiction** (e.g., informational texts, newspaper articles, essays, biographies, memoirs, letters, journals)..... 82

**SKILL 7.5: Analyzing the use of language to convey style, tone, and point of view in works of fiction and nonfiction** ..... 83

**SKILL 7.6: 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..... 85

## COMPETENCY 8

**DEMONSTRATE KNOWLEDGE OF LITERATURE, INCLUDING LITERATURE FROM DIVERSE CULTURES AND LITERATURE FOR CHILDREN/ADOLESCENTS** ..... 91

**SKILL 8.1: Demonstrating awareness of ways in which literary texts reflect the time and place in which they were written** ..... 91

**SKILL 8.2: Demonstrating awareness of the ways in which literary works reflect and express cultural values and ideas** ..... 92

**SKILL 8.3: Recognizing major themes and characteristics of works written by well known authors** ..... 92

**SKILL 8.4: Demonstrating knowledge of important works and authors of literature for children and adolescents** ..... 93

**SKILL 8.5: Analyzing themes and elements of traditional and contemporary literature for children and adolescents** ..... 96

**DOMAIN II**  
**MATHEMATICS** ..... 101

**COMPETENCY 9**  
**UNDERSTAND FORMAL AND INFORMAL REASONING PROCESSES, INCLUDING LOGIC AND SIMPLE PROOFS, AND APPLY PROBLEM-SOLVING TECHNIQUES AND STRATEGIES IN A VARIETY OF CONTEXTS** ..... 105

**SKILL 9.1: Using models, facts, patterns, and relationships to draw conclusions about mathematical problems or situations** ..... 105

**SKILL 9.2: Judging the validity or logic of mathematical arguments** ..... 107

**SKILL 9.1: Drawing a valid conclusion based on stated conditions and evaluating conclusions involving simple and compound sentences** ..... 109

**SKILL 9.3: Applying inductive reasoning to make mathematical conjectures** ..... 111

**SKILL 9.4: 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** ..... 111

**SKILL 9.5: Analyzing the usefulness of a specific model or mental math procedure for exploring a given mathematical, scientific, or technological idea or problem** ..... 112

**SKILL 9.6: Using mathematical notation to represent a given relationship** ..... 113

## COMPETENCY 10

USE MATHEMATICAL TERMINOLOGY AND SYMBOLS TO INTERPRET, REPRESENT, AND COMMUNICATE MATHEMATICAL IDEAS AND INFORMATION ..... 113

**SKILL 10.1:** Using appropriate models, diagrams, and symbols to represent mathematical concepts ..... 113

**SKILL 10.2:** Using appropriate vocabulary to express given mathematical ideas and relationships ..... 114

**SKILL 10.3:** Relating the language of ordinary experiences to mathematical language and symbols ..... 115

**SKILL 10.4:** Translating among graphic, numeric, symbolic, and verbal representations of mathematical relationships and concepts ..... 115

**SKILL 10.5:** Using mathematical representations to model and interpret physical, social, and mathematical phenomena ..... 116

**SKILL 10.6:** Selecting the appropriate computational and operational method to solve given mathematical problems ..... 117

## COMPETENCY 11

UNDERSTAND SKILLS AND CONCEPTS RELATED TO NUMBER AND NUMERATION, AND APPLY THESE CONCEPTS TO REAL-WORLD SITUATIONS ..... 118

**SKILL 11.1:** Demonstrating an understanding of the commutative, distributive, and associative properties ..... 118

**SKILL 11.2:** Using ratios, proportions, and percents to model and solve problems ..... 119

**SKILL 11.3:** Comparing and ordering fractions, decimals, and percents ..... 121

**SKILL 11.4:** 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*) ..... 122

**SKILL 11.5:** Analyzing the number properties used in operational algorithms (*e.g., multiplication, long division*) ..... 123

**SKILL 11.6:** Applying number properties to manipulate and simplify algebraic expressions .. 126

**SKILL 11.7:** Recognizing and describing mathematical relationships ..... 127

# COMPETENCY 12

## UNDERSTAND PATTERNS AND APPLY THE PRINCIPLES AND PROPERTIES OF LINEAR ALGEBRAIC RELATIONS AND FUNCTIONS ..... 128

**SKILL 12.1:** Using a variety of representations (*e.g., manipulatives, figures, numbers, calculators*) to recognize and extend patterns ..... 128

**SKILL 12.2:** Analyzing mathematical relationships and patterns using tables, verbal rules, equations, and graphs ..... 129

**SKILL 12.3:** Deriving an algebraic expression or function to represent a relationship or pattern from the physical or social world ..... 131

**SKILL 12.4:** Using algebraic functions to describe given graphs, to plot points, and to determine slopes ..... 132

**SKILL 12.5:** Performing algebraic operations to solve equations and inequalities ..... 133

**SKILL 12.6:** Analyzing how changing one variable changes the other variable for linear and nonlinear functions ..... 135

**SKILL 12.7:** Identifying relationships among two- and three-dimensional geometric shapes . 140

# COMPETENCY 13

## UNDERSTAND THE PRINCIPLES AND PROPERTIES OF GEOMETRY AND TRIGONOMETRY, AND APPLY THEM TO MODEL AND SOLVE PROBLEMS ..... 144

**SKILL 13.1:** Applying knowledge of basic geometric figures to solve real-world problems involving more complex patterns (*e.g., area and perimeter of composite figures*) .... 144

**SKILL 13.2:** Applying the concepts of similarity and congruence to model and solve problems ..... 145

**SKILL 13.3:** Applying inductive and deductive reasoning to solve problems in geometry ..... 146

**SKILL 13.4:** Using coordinate geometry to represent and analyze properties of geometric figures ..... 148

**SKILL 13.5:** Applying transformations (*e.g., reflections, rotations, dilations*) and symmetry to analyze properties of geometric figures ..... 150

**SKILL 13.6:** Demonstrating knowledge of fundamental units of customary and metric measurement ..... 151

## COMPETENCY 14

UNDERSTAND CONCEPTS, PRINCIPLES, SKILLS, AND PROCEDURES  
RELATED TO THE CUSTOMARY AND METRIC SYSTEMS OF MEASUREMENT ..... 153

**SKILL 14.1:** Selecting an appropriate unit to express measures of length, area, capacity, weight, volume, time, temperature, and angle ..... 153

**SKILL 14.2:** Estimating and converting measurements using standard and nonstandard measurement units within customary and metric systems ..... 154

**SKILL 14.3:** Developing and using formulas to determine the perimeter and area of two-dimensional shapes and the surface area and volume of three-dimensional shapes ..... 155

**SKILL 14.4:** Solving measurement problems involving derived measurements (*e.g., velocity, density*) ..... 158

**SKILL 14.5:** Applying the Pythagorean theorem and right triangle trigonometry to solve measurement problems ..... 162

**SKILL 14.6:** Demonstrating the ability to collect, organize, and analyze data using appropriate graphic and nongraphic representations ..... 164

## COMPETENCY 15

UNDERSTAND CONCEPTS AND SKILLS RELATED TO DATA ANALYSIS, PROBABILITY, AND STATISTICS, AND APPLY THIS UNDERSTANDING TO EVALUATE AND INTERPRET DATA AND TO SOLVE PROBLEMS ..... 168

**SKILL 15.1:** Demonstrating the ability to collect, organize, and analyze data using appropriate graphic and nongraphic representations ..... 168

**SKILL 15.2:** 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*) ..... 170

**SKILL 15.3:** Computing probabilities using a variety of methods (*e.g., ratio and proportion, tree diagrams, tables of data, area models*) ..... 171

**SKILL 15.4:** Using simulations (*e.g., spinners, multisided die, random number generators*) to estimate probabilities ..... 173

**SKILL 15.5:** Applying measures of central tendency (*mean, median, mode*) and spread (*e.g., range, percentiles, variance*) to analyze data in graphic or nongraphic form ..... 175

**SKILL 15.6:** Formulating and designing statistical experiments to collect, analyze, and interpret data ..... 175

**SKILL 15.7: Identifying patterns and trends in data and making predictions based on those trends..... 177**

**DOMAIN III  
SCIENCE AND TECHNOLOGY ..... 179**

**COMPETENCY 16  
UNDERSTAND AND APPLY THE PRINCIPLES AND PROCESSES OF  
SCIENTIFIC INQUIRY AND INVESTIGATION ..... 181**

**SKILL 16.1: Formulate hypotheses based on reasoning and preliminary results or information ..... 181**

**SKILL 16.2: Evaluate the soundness and feasibility of a proposed scientific investigation..... 183**

**SKILL 16.3: Apply mathematical rules or formulas (including basic statistics) to analyze given experimental or observational data ..... 184**

**SKILL 16.4: Interpret data presented in one or more graphs, charts, or tables to determine patterns or relationships ..... 184**

**SKILL 16.5: Evaluating the validity of a scientific conclusion in a given situation ..... 186**

**SKILL 16.6: Apply procedures for the safe and appropriate use of equipment and the care and humane treatment of animals in the laboratory ..... 187**

**COMPETENCY 17  
UNDERSTAND AND APPLY CONCEPTS, PRINCIPLES, AND THEORIES  
PERTAINING TO THE PHYSICAL SETTING (INCLUDING EARTH SCIENCE,  
CHEMISTRY, AND PHYSICS) ..... 193**

**SKILL 17.1: Analyze interactions among the earth, the moon, and the sun (e.g., seasonal changes, the phases of the moon) ..... 193**

**SKILL 17.2: Analyze the effects of interactions among components of air, water, and land (e.g., weather, volcanism, erosion) ..... 195**

**SKILL 17.3: Distinguishing between physical and chemical properties of matter and between physical and chemical changes in matter ..... 200**

<b>SKILL 17.4: Distinguishing among forms of energy and identifying the transformations of energy observed in everyday life</b> .....	200
<b>SKILL 17.5: Analyze the effects of forces on objects in given situations</b> .....	202
<b>SKILL 17.6: Inferring the physical science principle</b> ( <i>e.g., effects of common forces, conservation of energy</i> ) <b>illustrated in a given situation</b> .....	203

## COMPETENCY 18

### UNDERSTAND AND APPLY CONCEPTS, PRINCIPLES, AND THEORIES PERTAINING TO THE LIVING ENVIRONMENT .....

205

<b>SKILL 18.1: Recognizing the characteristics of living things and common life processes</b> .....	205
<b>SKILL 18.2: Analyzing the processes that contribute to the continuity of life</b> ( <i>e.g., reproduction and development, inheritance of genetic information</i> ) .....	205
<b>SKILL 18.3: Analyzing the factors that contribute to change in organisms and species over time</b> .....	206
<b>SKILL 18.4: Comparing the ways a variety of organisms carry out basic life functions and maintain dynamic equilibrium</b> ( <i>e.g., obtaining nutrients, maintaining water balance</i> ) .....	206
<b>SKILL 18.5: Analyzing the effects of environmental conditions</b> ( <i>e.g., temperature, availability of water and sunlight</i> ) <b>on living organisms and the relationships between plants and animals within a community</b> .....	210
<b>SKILL 18.6: Inferring the life science principle</b> ( <i>e.g., adaptation, homeostasis</i> ) <b>illustrated in a given situation</b> .....	210

## COMPETENCY 19

### APPLY KNOWLEDGE OF TECHNOLOGY AND THE PRINCIPLES OF ENGINEERING DESIGN .....

211

<b>SKILL 19.1: Demonstrating an understanding of technological systems</b> ( <i>e.g., transportation system</i> ) <b>and the principles on which technological systems are constructed</b> ( <i>e.g., the use of component subsystems</i> ) .....	211
<b>SKILL 19.2: Analyzing the roles of modeling and optimization in the engineering design process</b> .....	213
<b>SKILL 19.3: Evaluating a proposed technological solution to a given problem or need</b> .....	214

**SKILL 19.4: Applying a criteria for selecting tools, materials, and other resources to design and construct a technological product or service** ..... 216

**SKILL 19.5: Recognizing appropriate tests of a given technological solution** ..... 217

**SKILL 19.6: Analyzing the positive and negative effects of technology on individuals, society, and the environment** ..... 218

## COMPETENCY 20

**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** ..... 220

**SKILL 20.1: Making connections among the common themes of mathematics, science, and technology** (*e.g., systems, models, magnitude and scale, equilibrium and stability, patterns of change*) ..... 220

**SKILL 20.2: 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*) ..... 223

**SKILL 20.3: Apply principles of mathematics, science, and technology to explore phenomena from other areas of learning** (*e.g., applying statistical methodologies to examine census data*) ..... 224

**SKILL 20.4: Design solutions to problems in the physical and social worlds using mathematical, scientific, and technological reasoning and procedures** ..... 225

**SKILL 20.5: 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** ..... 226

# DOMAIN IV

## SOCIAL STUDIES ..... 229

### COMPETENCY 21

UNDERSTAND MAJOR IDEAS, ERAS, THEMES, DEVELOPMENTS, AND TURNING POINTS IN THE HISTORY OF NEW YORK STATE, THE UNITED STATES, AND THE WORLD ..... 233

**SKILL 21.1:** Defining important conceptual terms and using them to analyze general historical phenomena and specific historical events ..... 233

**SKILL 21.2:** Analyzing the social effects of major developments in human history ..... 236

**SKILL 21.3:** Understanding major political, social, economic, and geographic characteristics of ancient civilizations and the connections and interactions among these civilizations ..... 238

**SKILL 21.4:** 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 ..... 243

**SKILL 21.5:** Analyzing the effects of European contact with indigenous cultures and the effects of European settlement on New York State and the Northeast ..... 250

**SKILL 21.6:** Analyze how the roles and contributions of individuals and groups helped shape U.S. social, political, economic, cultural, and religious life ..... 256

### COMPETENCY 22

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. . 265

**SKILL 22.1:** Defining important geographic terms and concepts and using them to analyze various geographic issues, problems, and phenomena ..... 265

**SKILL 22.2:** 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 ..... 268

**SKILL 22.3:** Recognizing physical characteristics of the Earth's surface and the continual reshaping of it by physical processes ..... 271

**SKILL 22.4:** 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 ..... 274

**SKILL 22.5:** Examining ways in which economic, environmental, and cultural factors influence demographic change, and interpreting geographic relationships, such as population density and spatial distribution patterns ..... 276

**SKILL 22.6:** Analyzing the impact of human activity on the physical environment ..... 281

**COMPETENCY 23**  
**UNDERSTAND CONCEPTS AND PHENOMENA RELATED TO HUMAN DEVELOPMENT AND INTERACTIONS ..... 285**

**SKILL 23.1:** Using concepts, theories, and modes of inquiry drawn from anthropology, psychology, and sociology to examine general social phenomena and issues related to intercultural understanding ..... 285

**SKILL 23.2:** Evaluating factors that contribute to personal identity ..... 286

**SKILL 23.3:** Recognizing how language, literature, the arts, media, architecture, traditions, beliefs, values, and behaviors influence and/or reflect the development and transmission of culture ..... 287

**SKILL 23.4:** Analyzing the roles and functions of social groups and institutions in the United States and their influence on individual and group interactions ..... 287

**SKILL 23.5:** Analyzing why individuals and groups hold different or competing points of view on issues, events, or historical developments ..... 288

**SKILL 23.6:** Understanding the processes of social and cultural change ..... 289

**COMPETENCY 24**  
**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 ..... 290**

**SKILL 24.1:** Defining important economic and political terms and use them to analyze general phenomena and specific issues ..... 290

**SKILL 24.2:** Analyzing the basic structure, fundamental ideas, accomplishments, and problems of the U.S. economic system ..... 292

<b>SKILL 24.3: Recognizing and compare basic characteristics of major models of economic organization and various governmental systems .....</b>	<b>294</b>
<b>SKILL 24.4: Analyzing values, principles, concepts, and key features of American constitutional democracy .....</b>	<b>296</b>
<b>SKILL 24.5: Comparing different perspectives regarding economic and political issues and policies in New York State and the United States.....</b>	<b>298</b>
<b>SKILL 24.6: Analyzing ways in which the United States has influenced other nations and how other nations have influenced U.S. politics and culture .....</b>	<b>300</b>

## COMPETENCY 25

<b>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 .....</b>	<b>300</b>
---	------------

<b>SKILL 25.1: 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 .....</b>	<b>300</b>
<b>SKILL 25.2: Recognizing the core values of the U.S. democratic system .....</b>	<b>304</b>
<b>SKILL 25.3: Understanding the U.S. election process and the roles of political parties, pressure groups, and special interests in the U.S. political system .....</b>	<b>305</b>
<b>SKILL 25.4: Explaining what citizenship means in a democratic society and analyze the ways in which citizens participate in and influence the political process in the United States .....</b>	<b>310</b>
<b>SKILL 25.5: Examining the rights, responsibilities, and privileges of individuals in relation to family, social group, career, community, and nation.....</b>	<b>313</b>
<b>SKILL 25.6: Analyzing factors that have expanded or limited the role of the individual in U.S. political life during the twentieth century .....</b>	<b>317</b>

## COMPETENCY 26

<b>UNDERSTAND AND APPLY SKILLS RELATED TO SOCIAL STUDIES, INCLUDING GATHERING, ORGANIZING, MAPPING, EVALUATING, INTERPRETING, AND DISPLAYING INFORMATION.....</b>	<b>320</b>
---	------------

<b>SKILL 26.1: Evaluating the appropriateness of various resources and research methods for meeting specified information needs and apply procedures for retrieving information using traditional resources and current technologies .....</b>	<b>320</b>
--	------------

**SKILL 26.2: Demonstrating an understanding of concepts, tools, and technologies for mapping information about the spatial distribution of people, places, and environments..... 321**

**SKILL 26.3: Analyzing information in social studies ..... 325**

**SKILL 26.4: Interpreting information presented in one or more graphic representations and translate written or graphic information from one form to the other ..... 326**

**SKILL 26.5: Summarizing the purpose or point of view of a historical narrative ..... 329**

**DOMAIN V  
THE FINE ARTS ..... 331**

**COMPETENCY 27  
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 ..... 333**

**SKILL 27.1: 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 ..... 333**

**SKILL 27.2: Analyzing two-dimensional and three-dimensional works of art in terms of their visual and sensory characteristics..... 339**

**SKILL 27.3: 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..... 340**

**SKILL 27.4: Applying knowledge of basic tools and techniques for working with various materials (e.g., clay, textiles, wood) ..... 341**

**SKILL 27.5: Analyzing how works of art reflect the cultures in which they were produced (e.g., materials or techniques used, subject matter, style) ..... 342**

**SKILL 27.6: Comparing works of art of different cultures, eras, and artists in terms of characteristics such as theme, imagery, and style..... 345**

## COMPETENCY 28

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..... 346

**SKILL 28.1: Comparing various types of instruments** (*e.g., strings, percussion, woodwind, brass, electronic*) in terms of the sounds they produce ..... 346

**SKILL 28.2: Defining and applying common musical terms** (*e.g., pitch, tempo*)..... 347

**SKILL 28.3: Using basic scientific concepts to explain how music-related sound is produced, transmitted through air, and received by listeners** ..... 349

**SKILL 28.4: Relating characteristics of music** (*e.g., rhythm, beat*) to musical effects produced ..... 349

**SKILL 28.5: Recognizing basic technical skills that musicians must develop to produce an aesthetically acceptable performance** (*e.g., manual dexterity, breathing techniques, knowledge of musical notation*) ..... 350

**SKILL 28.6: Analyzing how different cultures have created music reflective of their histories and societies** (*e.g., call-and-response songs, ballads, work songs, folk songs*) ..... 352

## COMPETENCY 29

UNDERSTAND CONCEPTS, TECHNIQUES, AND MATERIALS RELATED TO THE THEATRE AND DANCE; ANALYZE WORKS OF DRAMA AND DANCE; AND UNDERSTAND THE CULTURAL DIMENSIONS AND CONTRIBUTIONS OF DRAMA AND DANCE..... 353

**SKILL 29.1: Comparing dramatic and theatrical forms and their characteristics** (*e.g., pantomime, improvisation*)..... 353

**SKILL 29.2: Relating types of dance** (*e.g., ballet, folk, modern*) to their characteristic forms of movement, expressive qualities, and cultural origins ..... 354

**SKILL 29.3: Analyzing how technical aspects of performance** (*e.g., costumes, props, lighting*) affect the message or overall impression created by a performance ..... 356

**SKILL 29.4: Recognizing how language, voice, gesture, and movement are used to develop character and create interaction among performers in theatrical productions** ..... 357

**SKILL 29.5: 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*) ..... 358

# DOMAIN VI

## HEALTH AND FITNESS..... 361

### COMPETENCY 30

**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..... 363**

**SKILL 30.1: Identifying common health problems and explaining how they can be prevented, detected, and treated ..... 363**

**SKILL 30.2: Recognizing the basic knowledge and skills necessary to support positive health choices and behaviors ..... 365**

**SKILL 30.3: Applying decision-making and problem-solving skills and procedures in individual and group situations (e.g., situations related to personal wellbeing, self-esteem, and interpersonal relationships) ..... 366**

**SKILL 30.4: Recognizing basic principles of good nutrition and using them to plan a diet that accommodates nutritional needs, activity level, and optimal weight ..... 370**

**SKILL 30.5: 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 ..... 372**

**SKILL 30.6: Interpreting advertising claims for health-care products and services and distinguishing between valid and invalid health information ..... 375**

**SKILL 30.7: Analyzing environmental conditions and their impact upon personal and community health and safety ..... 376**

### COMPETENCY 31

**UNDERSTAND PHYSICAL EDUCATION CONCEPTS AND PRACTICES RELATED TO THE DEVELOPMENT OF PERSONAL LIVING SKILLS ..... 378**

**SKILL 31.1: Recognizing sequences and characteristics of physical development throughout the various developmental levels ..... 378**

<b>SKILL 31.2: Demonstrating knowledge of activities that promote the development of motor skills</b> (e.g., locomotor, manipulative, body mechanics) <b>and perceptual awareness skills</b> (e.g., body awareness, spatial and directional awareness).....	<b>380</b>
<b>SKILL 31.3: Applying safety concepts and practices associated with physical activities</b> (e.g., doing warm-up exercises, wearing protective equipment) .....	<b>384</b>
<b>SKILL 31.4: Understanding skills necessary for successful participation in given sports and activities</b> (e.g., spatial orientation, eye-hand coordination, movement) .....	<b>385</b>
<b>SKILL 31.5: Analyzing ways in which participation in individual or group sports or physical activities can promote personal living skills</b> (e.g., self-discipline, respect for self and others, resource management) <b>and interpersonal skills</b> (e.g., cooperation, sportsmanship, leadership, teamwork, communication).....	<b>386</b>

## COMPETENCY 32

### UNDERSTAND HEALTH-RELATED PHYSICAL FITNESS CONCEPTS AND PRACTICES ... 386

<b>SKILL 32.1: Recognizing components, functions, and common disorders of the major body systems</b> .....	<b>386</b>
<b>SKILL 32.2: Demonstrating knowledge of basic components of physical fitness</b> (e.g., strength, endurance, flexibility) <b>and applying principles of training</b> .....	<b>396</b>
<b>SKILL 32.3: Applying strategies for developing a personal fitness plan based on self-assessment, goal setting, and an understanding of physiological changes that result from training</b> .....	<b>399</b>
<b>SKILL 32.4: Analyzing the relationship between life-long physical activity and the prevention of illness, disease, and premature death</b> .....	<b>401</b>
<b>SKILL 32.5: Applying knowledge of principles and activities for developing and maintaining cardiorespiratory endurance, muscular strength, flexibility, and levels of body composition that promote good health</b> .....	<b>401</b>

# DOMAIN VII

## FAMILY AND CONSUMER SCIENCE AND CAREER DEVELOPMENT ..... 403

### COMPETENCY 33

#### UNDERSTAND CONCEPTS AND PRACTICES RELATED TO CHILD DEVELOPMENT AND CARE AND APPLY KNOWLEDGE OF FAMILY AND INTERPERSONAL RELATIONSHIPS ..... 405

**SKILL 33.1:** Recognizing stages and characteristics of physical, cognitive, social, and emotional development during infancy, childhood, and adolescence ..... 405

**SKILL 33.2:** 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 ... 409

**SKILL 33.3:** 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 ..... 409

**SKILL 33.4:** Analyzing factors that affect decisions about whether and when to have children and recognizing ways to prepare for the responsibilities of parenthood ..... 411

**SKILL 33.5:** 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 ..... 412

**SKILL 33.6:** Recognizing the types and characteristics of interpersonal relationships and analyzing decision-making processes related to interpersonal relationships ..... 413

**SKILL 33.7:** Examining social and cultural influences on interpersonal communication and analyzing factors affecting the formation of positive relationships in the family, workplace, and community ..... 415

## COMPETENCY 34

**UNDERSTAND SKILLS AND PROCEDURES RELATED TO CONSUMER ECONOMICS AND PERSONAL RESOURCE MANAGEMENT ..... 417**

**SKILL 34.1: Recognizing rights and responsibilities of consumers in various purchasing situations** (*e.g., rights in relation to product and service warranties and guarantees*) ..... 417

**SKILL 34.2: Demonstrating knowledge of types and characteristics of consumer fraud and applying procedures for seeking redress and registering consumer complaints..... 417**

**SKILL 34.3: Applying knowledge of procedures for making major purchases** (*e.g., comparison shopping, negotiation, interpreting labels or contract terminology*)..... 418

**SKILL 34.4: Analyzing considerations involved in selecting and maintaining housing and motor vehicles, obtaining credit and insurance, and making investments ..... 418**

**SKILL 34.5: Examining steps and considerations involved in planning and maintaining a personal or family budget and applying money management guidelines appropriate for various situations ..... 419**

**SKILL 34.6: 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 ..... 419**

## COMPETENCY 35

**UNDERSTAND BASIC PRINCIPLES OF CAREER DEVELOPMENT; APPLY PROCESSES AND SKILLS FOR SEEKING AND MAINTAINING EMPLOYMENT; AND DEMONSTRATE KNOWLEDGE OF WORKPLACE SKILLS, BEHAVIORS, AND RESPONSIBILITIES ..... 420**

**SKILL 35.1: 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 ..... 420**

**SKILL 35.2: Recognizing factors to consider when evaluating careers and applying procedures for conducting career research..... 420**

**SKILL 35.3: 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*) ..... 421

**SKILL 35.4: Applying skills and procedures for job interviews** (*e.g., personal appearance and demeanor, communicating effectively during an interview*)..... 421

**SKILL 35.5: Applying knowledge of effective communication principles, work etiquette, interpersonal skills, and techniques for handling stress or conflict in the workplace** ..... 421

**SKILL 35.6: Recognizing rights and responsibilities in relation to employment**  
*(e.g., protection from harassment and discrimination, employer’s performance expectations)* ... 422

**SAMPLE TEST** ..... 423

**Sample Test** ..... 425

**Answer Key** ..... 438

**Rigor Table** ..... 438

**Constructed Response Assignment** ..... 439