

Curriculum for: **Fourth Grade**



NEW YORK STATE ASSESSMENT IN ENGLISH LANGUAGE ARTS & MATHEMATICS

Students are required to take challenging state exams in grade 3-5. The tests provide evidence of students' progress on the NYS learning standards in English language arts and mathematics.

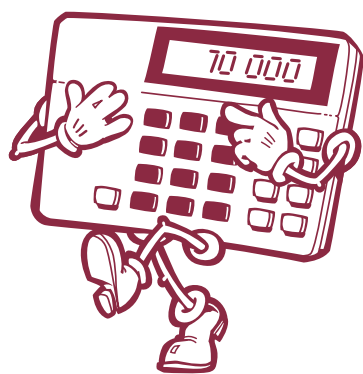
Students need not only to show basic skills in English and mathematics, but also to apply the knowledge and skills they have learned. In addition to answering multiple choice questions that measure basic skills, students will write compositions to explain their understanding of what they have heard and read, and to demonstrate their ability to use skills of spelling, grammar, punctuation, sentence formation, and paragraphing. They will also support their solutions to mathematics problems, showing the steps they used in the solution and explaining the mathematical processes and concepts involved.

LANGUAGE ARTS

READERS/LISTENERS

Language Arts Goals Students will...	Grade Level Indicators Students will...
exhibit a positive attitude	<ul style="list-style-type: none"> ✱ be enthusiastic and take risks ✱ participate in reading activities ✱ focus attention on readers and speakers ✱ respect what others have to say
view reading as an active process using experiences and strategies to construct meaning	<ul style="list-style-type: none"> ✱ read for meaning ✱ reread when text does not make sense ✱ self-correct errors ✱ use context ✱ demonstrate understanding of characters, events and facts ✱ make and confirm predictions about text ✱ compare/contrast, draw conclusions, and verify information from text ✱ identify and summarize main ideas and facts from text ✱ understand use of figurative language ✱ skim to locate pertinent information ✱ relate experiences to reading ✱ respond critically to literature ✱ increase fluency ✱ develop and expand vocabulary
begin to recognize distinguishing features of various genre	<ul style="list-style-type: none"> ✱ identify/discuss author's style, purpose and technique ✱ read/listen – poetry, tall/folk tales, fables, historical/realistic fiction, biography, autobiography, non-fiction, multi-media, magazines, content area texts, etc. ✱ identify characteristics of various genre
use library and multi-media resources for research and to gather information for a variety of purposes	<ul style="list-style-type: none"> ✱ apply knowledge of books, computers, library, videos, maps, diagrams, charts, graphs, dictionaries, encyclopedias, timelines, glossaries, bibliographies, outlines, telephone books, atlases, etc.
WRITERS/SPEAKERS	
exhibit a positive attitude	<ul style="list-style-type: none"> ✱ be enthusiastic and take risks ✱ take pride in sharing, writing ideas and experiences ✱ actively participate in writing activities and group discussions ✱ speak confidently in front of others
CHART, CONTINUED	

Fourth Grade, continued



WRITERS/SPEAKERS, CONTINUED	
use process writing to communicate a message, with increasing independence	<ul style="list-style-type: none"> * use prewriting, drafting, conferencing, revising and editing with teacher guidance * revise for meaning/clarity * write in logical sequence * interpret and present a clear understanding of information * use a variety of sentence lengths and styles * replicate various styles of writing * use editing and proofreading skills * use a variety of spelling strategies to correctly spell words frequently used in reading and writing
convey ideas in clear, understandable and appropriate language	<ul style="list-style-type: none"> * retell ideas and events from read-alouds and independent readings * relate personal experiences to reading and other learning situations * compose compositions and a variety of informational pieces with essential ideas and details * develop and expand vocabulary
write appropriately in various situations for a variety of purposes and audiences	<ul style="list-style-type: none"> * use letter writing, journals, interviews, expository and narrative writing, lists, outlines, bibliographies, etc. * respond critically to literature and support ideas * select and use appropriate materials for a specific purpose * answer essay questions * use note-taking skills

MATHEMATICS

Number and numeration

- * cardinal numbers to 100,000
- * counting—skip count to numbers greater than 1000
- * rounding to nearest tenth, whole number, hundred, and thousand
- * place value to millions
- * Roman system
- * patterns

Operations with whole numbers

- * addition, subtraction less than one million
- * multiplication facts through 144
 - 2 and 3 digits
 - by 10
- * division
 - through 144
 - 2 and 3 digits
 - checking
- * properties
 - commutative
 - associative
 - distributive
- * identity
- * inverse operations
- * word problems

Operations with fractions

- * order
- * inequality
- * equivalence
- * addition, subtraction with fractions and decimals
- * word problems

Probability and statistics

- * data gathering, organization, analysis
- * frequency tables
- * arrangements

Geometry and measurement

- * measurement
 - units of measure
 - area, volume, perimeter, initially by counting units
 - circumference using coordinate paper and string
 - formula with areas and volume
 - time to the second
- * word problems
- * shape
 - plane and solid figures
 - terms—i.e., polygon, chord, radius, face, edge, vertex, angle
- * symmetry
- * coordinate geometry

Fourth Grade, continued**SOCIAL STUDIES**

The grade four program builds on students' understanding of families, schools, and communities and highlights the political institutions and historic development of their local communities with connections to New York State and the United States. The in-depth study of local government will emphasize the structure and function of the different branches and the roles of civic leaders. Students continue to learn about the rights, responsibilities and duties of citizenship. Students develop a sense of political efficacy and a better understanding of the roles of supporters and leaders. Students expand their civic concepts of power, equality, justice, and citizenship as they learn about local government.

Students study about the significant people, places, events and issues that influenced life in their local communities and connect local, New York State, and United States history. *Topics include:*

- * Native American Indians of New York State
- * European encounter: three worlds meet in the Americas (Europe, Africa, and the Americas)
- * Colonial and Revolutionary periods
- * The Revolutionary War in New York State
- * The New Nation
- * Industrial growth and expansion
- * Economic, political and social impacts of urbanization
- * Government—local and state
- * Purposes of government

SCIENCE

The science curriculum at the fourth grade level includes:

- * Life science
 - classification of plants
 - communities of animals
 - ecological relationships
 - plant/animal adaptations
- * Physical science
 - measuring the matter
 - energy conversion with machines
 - electrical magnetic energy
- * Earth science
 - rocks/minerals
 - the oceans
 - organization of the solar system
 - measuring the weather
- * Additional activities
 - life science activities
 - technology activities

HEALTH EDUCATION

The fourth grade curriculum in health education includes the following subjects:

- * Individual uniqueness and self image
- * Appreciating differences
- * Physical effects of emotional strain
- * Conflict resolution
- * Decision making skills
- * Cells and tissues
- * Digestive, respiratory, circulatory and nervous systems
- * Identification of germ types and their ability to spread
- * Parts and function of the immune system
- * HIV/AIDS education
- * Effects of drugs on the body
- * Stimulants, depressants, inhalants and marijuana
- * Refusal skills and decision making
- * Food groups and their effects
- * Six classifications of nutrients
- * Combination foods
- * Serving sizes
- * Stranger safety
- * Sexual abuse awareness (good touch vs. bad touch)
- * Safety when in charge
- * Safety around water, fire and animals

PHYSICAL EDUCATION

Students at the fourth grade level will:

- * be able to perform motor/movement skills in a variety of structural games;
- * be able to demonstrate skill mastery in basic motor skills;
- * understand the component of physical fitness and effects of lack of exercise on the body;
- * be able to work collectively with other students to accomplish a variety of goals; and
- * be able to respect the rights and feelings of others by demonstrating self-control and peaceful conflict resolution.

ART

Using the New York State Learning Standard for the Arts, fourth grade students will:

- * understand and use the elements of art to create independent artwork which expresses their ideas artistically;
- * expand upon their knowledge of artists and their famous works;
- * acquire the artistic skills needed to visually express and communicate their personal experience;
- * select and use the appropriate materials and tools to produce their intended results; and
- * continue to develop and use an appropriate art vocabulary.

Projects might include lessons based on New York State cultures, computer generated artwork, or the creation of an art portfolio.