LANGUAGE ARTS

Reading Habits (and Processes)

- Pick books they can read independently.
- Pick books of various genres (fiction, nonfiction, fantasy, etc.).
- Read for an extended amount of time.
- Read with expression.
- Read with fluency (clearly, without hesitation) to help understand meaning.
- Keep a record of reading throughout year to show growth.
- Adjust reading speed depending on type or difficulty of text.

Reading Comprehension

- Use strategies to figure out new words (word structure, context, semantic clues, dictionary, thesauri).
- Use different strategies to gain meaning (rereading, picture clues, prediction, punctuation).
- Make connections between the text and themselves, other stories, and the world around them.
- Respond or react to literature in various ways.
- Read for many purposes (clarification, confirmation, information).
- Use strategies to confirm or look for information (cause and effect, chronological order, predicting outcomes, graphic organizers).
- Identify themes and main idea of text.
- Identify story elements (character, setting, plot) and compare them from story to story and author to author.
- Identify and read various genre (mystery, fantasy, fiction, nonfiction, informational text).
- Use various resources to obtain information (dictionary, thesaurus, internet search, etc.).

Literature

- Identify characters in books and the traits they possess.
- Predict and draw conclusions about story elements.
- Compare characters and themes across authors and genres.
- Complete author studies.

Print/Sound Code

- Use a variety of strategies to "sound out" words.
- Writing Habits
- Writes daily (journals, logs, etc.).
- Formulate a planning page to assist with organize writing.
- Rereads own writing.
- Maintain a portfolio showing writing progress.
- Use input from teachers and peers to improve writing (conferences, buddy writing).

Writing Purposes

- Writes for many reasons (informing, entertaining, persuading).
- Generate a purpose and plan for writing.
- Support ideas with facts and details.
- Provide or omit details in writing to make it easier to understand.
- Think about who will be reading their writing.
- Write for specific audiences.
- Write in various genre (narrative, nonfiction, responses to literature).
- Produce finished work in the following genres:
  - °Narrative: stories, fictional or autobiographical
  - °Nonfiction: reports, lists, charts
  - °Functional: signs, instructions, labels, recipes, directions
  - °Produce and Respond to Literature: poems, reactions to books, songs, drama

Written Language and Conventions

- Construct complete, correct sentences and paragraphs using proper grammar, mechanics, punctuation, spelling.
- Use a variety of types of sentences.

Listening and Speaking

- Read aloud with fluency and expression.
- Paraphrase to confirm understanding of material.
- Express opinions and judgments in conversations.
- Prepare and present an individual report.

NEW ROCHELLE SCHOOL DISTRICT

City School District of New Rochelle

Grade Level Learning Outcomes
Grade Five

September 2009

Dear Families,

Teachers and administrators in the City School District of New Rochelle have focused much attention in recent years on strengthening the alignment of our instructional program with the New York State learning standards. These standards indicate what students are expected "to know and be able to do" at various points along the academic path from Kindergarten to Grade 12. In order to codify this process of curriculum alignment, we have developed local learning outcomes for each of the elementary grades. They are intended to provide teachers with even greater clarity about what students are expected to accomplish each year.

This brochure summarizes the major concepts and skills in Language Arts, Math, Science and Social Studies that are included in the Fifth Grade curriculum. These items are not designed to be a checklist, but rather are offered to parents as an overview of the instructional program presented to students in Fifth Grade. Since curriculum development is an ongoing process in our district, we will continue to solicit and gather feedback from staff in order to make these learning outcomes documents more comprehensive. Any revisions made in the document for teachers will be reflected in updated editions of this brochure.

Again this year, the State Education Department will be administering student assessments in Grades 3, 4 and 5 that are intended to measure how well children demonstrate proficiency on the State learning standards and comply with the federal No Child Left Behind law that requires annual testing of all elementary and middle school students. As a district, we will continue to evaluate our Grade 2 instructional program and the performance of second grade children through the use of locally-developed English Language Arts and Math assessments, which are specifically designed to parallel the format and content of the State exams. Finally, based on the suggestions received from teachers and parents, we will be making ongoing refinements in our elementary school report cards in order to better inform parents about student progress in relation to these local learning outcomes.

I welcome any comments that you wish to offer about this brochure.

Dr. Jeffrey Korostoff
Assistant Superintendent

Parents who desire more specific information as to which math outcomes could be included he the March NYS Math Test, are encouraged to access the State's "pre-post" document available at
www.emsc.nysed.gov/3-8/gr5prepost.htm

SOCIAL STUDIES

Students study the geography, economics, and culture from historical and contemporary perspectives of the United States of America, Canada, and the nations in Latin America.

History of the United States, Canada, and Latin America

- Explore the customs, traditions, beliefs, and ideas of ethnic, national, and religious groups that have contributed to the cultural diversity of the nations and regions.
- Discuss key turning points and events that have contributed to the development of these nations and regions.
- Possess knowledge of historical figures and groups who have made significant contributions to the development of the United States, Canada, and Latin America.
- Demonstrate knowledge of how industrial growth and development and urbanization have impacted the United States, Canada, and Latin America.

Geography of the United States, Canada, and Latin America

- Use maps, globes, satellite images, computer models, and geographic representations to gather, process and report information on the United States, Canada, and Latin America.
- Analyze, compare and contrast the physical and human characteristics of regions in the United States, Canada, and Latin America, and how these characteristics shape the regions and their environments.
- Determine how human actions modify physical environments.

The Economies of the United States, Canada, and Latin America

- Analyze, compare, and contrast the economic systems, resources, production, distribution, exchange, and consumption of goods and services.
- Use concepts such as scarcity, supply, demand, markets, economic growth, and productivity in order to study the economic systems of the United States, Canada, and Latin America.
- Discuss economic decision-making, and ways in which economic decisions made by one nation or region affects other nations or regions.

The Governments of the United States, Canada, and Latin America

- Discuss, analyze, compare, and contrast the governmental structures of the United States, Canada, and Latin America.
- Develop knowledge of the values, beliefs and principles of constitutional democracy in the United States and Canada through the analysis of various legal, political and historic documents.
- Develop an awareness of the patriotic celebrations of the various nations.
- Determine how international organizations contribute to peace, economic development, and cultural understanding.

SCIENCE

Physical Sciences

- Observe, investigate, and describe the physical properties and structures of materials, their interactions, and changes in their properties, for example the changes that occur when a chemical reaction takes place.
- Describe the position, direction, and motion of objects and describe the forces that affect their motion, for example gravity, friction, and other pushes and pulls.
- Continue to observe investigate, and describe light, heat, electrical, sound, chemical, magnetic and mechanical energy and what happens when objects interact with them, for example how generators work (magnetic energy producing electricity) and electricity producing magnetic energy.
- Observe, investigate, and describe how energy is transformed, for example how a turning generator (mechanical energy) lights a bulb (electrical energy).

Life Sciences

- Explain how adaptation, interdependence, and environmental change give a survival advantage to certain organisms.
- Understand that ecosystems are made up of populations of producers, consumers, and decomposers and their interactions with the abiotic environment
- Describe how organisms and the environment are dependent on one another, for example how plants need water.
- Understand how various factors can affect the life spans and life cycles of organisms for example the effect of acid rain on organisms.
- Understand the impact humans have on ecosystems, for example how nonnative species of insect introduced into the environment can impact the ecological balance.

Earth and Space Sciences

- Examine, test, describe, and measure the effects of erosion and other natural events for example volcanoes and earthquakes on Earth's land masses, atmosphere, and bodies of water.
- Understand how human decisions can have an impact on Earth materials for example how soil runoff can impact populations in our waterways.
- Develop an understanding of how the Earth, the Moon, and other objects in the sky move in regular and predictable patterns.
- Observe, measure, and record daily, monthly, seasonal, and cyclical changes, in the environment, for example tidal influences.
- Understand the natural cycles of Earth's land, water, and air, for example the rock cycle.

Inquiry

- Plan and conduct investigations individually and in groups, a variety of investigations using controlled variables and supporting conclusions using data (evidence).
- Produce an individual or group report of an investigation using creative writing, diagrams, graphs, and artwork
- Support conclusions of an investigation by discussing how the variables affect the results.

Scientific Thinking

- Ask appropriate questions, use evidence and concepts learned from observations and reliable sources, as well as common sense, to construct explanations for experiment results
- Work individually and in groups to collect, describe, record, and share information and ideas.
- Identify the variables that could affect the results of an experiment, such as how the amount of food, light, water, and temperature affects the growth of organisms.
- Propose and critique alternate explanations for observations and distinguish between fact and opinion.

Scientific Tool and Technology

- Use technology and tools such as magnifiers, microscopes, scales, thermometers, and computers to observe and measure objects, organisms and phenomena.
- Use standard and nonstandard units of measurement for length, width, weight, and volume and recording those measurements.
- Use data tables and graphs to record, read, and understand experiment results.
- Recognize possible bias and perspective in data, for example recognizing misleading advertising.

Real-World Application

- Understand and describe examples of the importance of science and technology and the impact they have on our lives, such as how research scientists discover new treatments for diseases.
- Develop and describe, orally and in writing, appropriate choices leading to good personal health, such as recognizing the importance of exercising and the risks of smoking, alcohol and drug use.
- Begin to understand how the designed world is affected by a variety of limitations; for example, use evidence to assess risk and benefit regarding complex environmental issues.

Scientific Communication

- Use information gathered from observation, experiments, print and no-print sources.
- Actively listen for alternative interpretations and ideas.
- Report orally and in writing using appropriate science vocabulary.

MATHEMATICS

Process Standards

- Interpret information correctly, identify the problem and generate possible strategies and solutions.
- Act out, diagram or model with manipulatives, activities involving mathematical situations from literature or real life.
- Represent problem situations verbally, numerically, algebraically, and/or graphically with and without technology.
- Translate from a picture/diagram to a numerical or symbolic expression.
- Analyze problems by observing patterns and making correctly labeled chats, lists, or graphs.
- Know the difference between relevant and irrelevant information when solving problems.
- Determine the efficiency of different representations of a problem.
- Verify results and understand the validity of counterexamples.
- Raise questions that elicit, extend or challenge others' thinking
- Use appropriate vocabulary when describing objects, relationships, mathematical solutions and rationale.

Content Standards

Number Sense and Operations

- Read, write, order and compare whole numbers to millions.
- Understand place value of the base ten number system through millions.
- Create equivalent fractions given a fraction.
- Compare and order fractions with like and unlike denominators.
- Simplify fractions to lowest terms, convert improper fractions to mixed numbers and the reverse.
- Use a variety of strategies to add and subtract fractions and mixed numbers with like denominators.
- Read, write and order decimals to thousandths.
- Understand the concept or ratio and express in different forms.
- Compare the relationship between fractions, decimals and percents using <,> and/or =.
- Use a variety of strategies to add, subtract, multiply and divide decimals to thousandths.
- Understand that percent means part of 100 and write percents as fractions and decimals.
- Recognize prime and composite numbers.
- Find multiples and factors of a number at the least common multiple, common factor, and greatest common factor of two numbers.
- Evaluate an arithmetic expression using order of operations.
- Estimate and justify the reasonableness of answers to problems involving addition and subtraction of fractions with like denominators and to problems using all operations involving decimals.
- Define and use appropriate terminology when referring to constants, variables and algebraic expressions.
- Translate simple verbal expressions into algebraic expressions.
- Substitute assigned values into variable expressions and solve using order of operations.
- Solve simple one-step equations using inverse operations.
- Create and explain numeric and geometric patterns and algebraic relationships.

Geometry and Measurement

- Calculate the perimeter of regular and irregular polygons.
- Classify triangles by properties of their angles and sides.
- Measure and draw angles using a protractor. Know that the sum of interior angles of a quadrilateral is 360 degrees and the sum of the interior angles in a triangle is 180 degrees.
- Identify congruent and similar basic geometric shapes.
- Find a missing angle when given two angles of a triangle.
- Identify and draw lines of symmetry of basic geometric shapes.
- Identify and plot points in the first quadrant.
- Use a ruler to measure to nearest half, fourth and eighth of an inch.
- Identify equivalent units of length using customary and metric measurement.
- Convert measurements within a given system.
- Calculate elapsed time in hours and minutes.
- Determine the tool and techniques to measure with appropriate precision.

Statistics and Probability

- Collect and record data from a variety of sources.
- Display data in a line graph to show change over time.
- Calculate the mean, mode, median and range for a given set of data.
- Formulate conclusions and make predictions from graphs.
- Record experiment results using fractions and ratios.
- Determine the probability and possible outcomes of a single event in an experiment.