

Your Child in Fourth Grade



A Parent Manual Prepared by
the Hicksville School District

BOARD OF EDUCATION

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A Message from the Superintendent

You and your child are an important part of our school community. It is our goal to maintain and strengthen strong partnerships between home and school and work together to support the academic, social and emotional development of the children we share.

This handbook is designed to provide you with an overview of the topics that your child will be taught and expected to master by the end of the school year. You will find descriptions for the areas of English Language Arts, Mathematics, Science, Social Studies, Art, Music, Physical Education, and English as a Second Language. The descriptions are based upon curricula written by the teachers and administrators of Hicksville Public Schools and are aligned to the New York State Education Department Syllabi and the Common Core State Standards.

We realize how important it is to work closely with our parents in order to provide our students with the highest quality education experience. For each content area, you will find home activities designed to reinforce what is learned in school. These activities also include suggested learning experiences to help build background knowledge, thus making it easier for children to learn as they make connections between new concepts and what is already known. Should you have any questions regarding the information presented in this handbook, please do not hesitate to contact the classroom teacher, the school principal or central administration.

Our entire faculty and staff look forward to working with you as partners in making this a successful school year for all of our students.

Sincerely yours,

Dr. Carl Bonuso
Superintendent of Schools

Learning Standards

Students will demonstrate the knowledge and skills necessary to meet the following objectives:

Growth in reading comprehension and the ability to make connections between and among ideas from increasingly complex texts over time
Plan, revise, edit, and publish written pieces using evidence from literary and informational texts through argumentative, narrative, and informational/explanatory forms
Develop a range of useful oral communication and interpersonal skills to integrate information from various sources, listen carefully to ideas, and evaluate what is heard
Use media and visual displays strategically to present information; adapt speech to context and task.
Utilize the essential rules of standard written and spoken English to approach language as a matter of craft and informed choices among alternatives

Engaging in mathematical analysis, scientific inquiry and technological design
Managing information systems
Understanding mathematical concepts and principles
Understanding scientific concepts and principles
Understanding the concepts and principles of technology
Understanding common themes across mathematics, science and technology
Interdisciplinary problem-solving

Understanding the history of the United States and New York State
Understanding world history
Understanding the geography of the world
Understanding economic systems
Understanding governmental systems and the United States Constitution
Understanding governmental civic values and responsibilities

Creating, performing and participating in the Arts
Knowing and using arts materials and resources
Responding to and analyzing works of art
Understanding cultural dimensions and contributions of the Arts

Maintain personal health and fitness
Maintain a safe and healthy environment
Manage personal and community resources

Communicating in a language other than English
Attaining cross-cultural understanding

Planning a career
Apply academic learning in real world situations
Pursuing career options

English Language Arts - Grade 4

OVERVIEW

The New York State Education Department has established learning standards that are summarized in a series of documents that make up the *Common Core Learning Standards for English Language Arts and Literacy*. The full text of the Common Core learning standards and accompanying appendices for English Language Arts and Literacy can be found at: http://www.p12.nysed.gov/ciai/common_core_standards/. *Common Core Learning Standards for English Language Arts and Literacy* is also available through the English department page on the district's website.

These standards are a framework to assist school districts in developing, from the earliest levels, a philosophy and set of goals for curriculum and instruction so that students will be to demonstrate the following capabilities upon graduation and be ready for college and careers:

- independence in reading with complex texts across a range of types and disciplines to build strong content knowledge;
- value evidence in reasoning and be able to critique as well as comprehend when both when speaking and writing;
- respond to the varying demands of audience, task, purpose, and discipline and understand varied perspectives and cultures when both speaking and writing.
- conduct research, interpret information, and present conclusions and perspectives clearly and effectively, both individually and as part of a collaborative team.

The purpose of reading and related English Language Arts and Literacy instruction is to develop independent and confident lifelong readers and writers. A high priority, which begins at the earliest level, is the focus on speaking and listening as well as meaning and thinking. Carefully planned teacher modeling, demonstration, and discussion assist students in understanding selections and with the development of their critical thinking, auditory and visual discrimination, language concepts, and comprehension strategies. Ultimately, it is our goal to inspire students to read for information, knowledge and enjoyment in order to satisfy their curiosity about the world in which they live and to be able to effectively compete in and contribute to a global society.

GRADE-SPECIFIC OBJECTIVES

Children in fourth grade take part in activities such as the following, which align with the new standards and assessments set by the state and will be reflected in their Elementary Report Card.

Reading Standards for Literature

1. Determine a theme of a story, drama, or poem from details in the text; summarize the text.
2. Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (*e.g.*, Herculean).
3. Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (*e.g.*, verse, rhythm, meter) and drama (*e.g.*, casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.
4. Recognize, interpret and make connections in narratives, poetry, and drama to other texts, ideas, cultural perspectives, personal events and situations.
5. Self-select text based upon personal preferences.

Reading Standards for Informational Text

1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
2. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
3. Describe the overall structure (*e.g.*, chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
4. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

Writing Standards

1. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.
2. Link opinion and reasons using words and phrases (*e.g.*, *for instance*, *in order to*, *in addition*).
3. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (*e.g.*, headings), illustrations, and multimedia when useful to aiding comprehension.
4. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
5. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

USEFUL VOCABULARY

The following is a list of words that appeared in reading comprehension passages on past Grade 4 statewide exams:

assignment	embarrassed	hormone	shiny
attitude	emerge	metabolism	shoulder (verb)
beautiful	evening	miniature	spectator
clever	failure	murmur	suddenly
coach (noun)	familiar	poisonous	sweltering
colorful	farther	portrait	tangled
complain	fluid	predator	thundered
conserve	fragile	prey	tiny
cuddly	furious	probably	towering
develop	heartbroken	shattered	tremendous

Put these words on cards and review several of them each day with your child. She or he should be able to recognize them on sight without having to sound them out. Again, put pictures with the words, where possible. Also, help your child to construct sentences and short paragraphs using these words.

HOME ACTIVITIES TO SUPPORT LEARNING

By following your child's progress through work brought home, you will be able to reinforce skills and knowledge learned in the classroom. Here are some activities you can do with your fourth-grader:

1. Keep a list of the books which your child reads. At this age, children generally have found several books that they enjoy. The key to this enjoyment is usually the way the author presents the characters and the plot. Help your child to make a list of favorite authors. Go to the library or a bookstore and get books by the same author which your child has not read before.
2. Encourage your children to read more informational (non-fiction) texts on subjects of interest to them. Many magazines such as *National Geographic* offer junior versions of their publications for older readers. There are also a number of informational websites aimed to a young audience.
3. Have your child tell you about informational texts that he or she has read and recount the chronology of events, the structure of the presentation, and/or the concepts discussed.
4. Plan trips with your child to museums and special attractions such as the Old Bethpage Village Restoration, the Metropolitan Museum of Art, the Historical Society of New York, *etc.* Have your child include a description of these visits in his or her journal.
5. Continue to include library visits and library activities as part of your child's out-of-school activities.

6. Encourage your child to read stories and poems from other cultures. Work with your child on the Internet to find news outlets and websites that report world events from the perspective of another culture. Have your child compare that point-of-view to one from an American newspaper or website and explain the differences between the two.

SELECTING BOOKS FOR YOUR CHILD

One of the tools available to you to help you select books appropriate for your child's reading level is Lexiles. Lexiles are indicators of readability, of how easy or difficult it is to read a particular text, and are based on two factors: word frequency and sentence length. Lexiles increase with the level of reading skills required to comprehend a given text; the higher the Lexile measure, the more difficult the text.

Lexile measures are calculated from a reading test or program. The Lexile measures shown in the chart at the end of this section correspond to the RIT scores that your child received on the Reading section of the MAP for Primary Grades test that your child took during the past school year.

You will note that the Lexile Measures are shown in ranges. The bottom of each range represents approximately 100 points below your child's actual Lexile measure; the upper part of the range is set at approximately 50 points above that measure. Books at the lower end of the range should be readily accessible to your child, while those at the top of the range will be more challenging and will allow your child to stretch his or her skills.

You can find additional Lexile ratings for other books for your child using the book locator that can be found at <http://lexile.com>. The book locator will allow you to specify authors, areas of interest, and Lexile ranges to develop a list of books that are both interesting and accessible to your child. **Please, note: lexile.com does not screen for content or age-appropriateness of material; it only provides measures of readability. You should, as always, assist your child in making appropriate choices for their reading material.**

Also, parents should understand that while Lexiles are a helpful tool for helping children succeed at reading and improve their skills, they are just that – a tool. They are not a substitute for interest or enthusiasm, and children of all ages should be encouraged at times to just pick up a book that looks interesting, open the cover...and read.

INTERNET RESOURCES

Aesop's Fables:

<http://www.parenting-by-example.com/free-fables-for-children>

Hicksville Public Library:

<http://www.nassaulibrary.org/hicksv/>

Metropolitan Museum of Art:

<http://www.metmuseum.org/home.asp>

Mythology and Tall Tales (American)

<http://americanfolklore.net/folklore/tall-tales/>

<http://www.kidskonnnect.com/subject-index/22-reading/433-tall-tales.html>

Mythology (Vocabulary)

<http://quizlet.com/207305/greek-mythology-vocabulary-all-flash-cards/>

Mythology (World)

<http://www.archive.org/details/kzss003>

<http://www.planetozkids.com/oban/legends.htm>

National Geographic:

<http://www.nationalgeographic.com/>

New York Historical Society:

<https://www.nyhistory.org/web/>

Old Bethpage Restoration:

<http://www.fieldtrip.com/ny/65728400.htm>

RIT to Lexile Conversions							
Grade 4				Grade 5			
RIT	Lexile Range	RIT	Lexile Range	RIT	Lexile Range	RIT	Lexile Range
164	BR	205	589-739	180	149-299	214	759-909
174	40-190	206	605-755	183	200-350	215	773-923
175	54-204	207	626-776	184	221-371	216	796-946
179	126-276	208	638-788	188	281-431	217	805-955
183	196-346	209	655-805	189	306-456	218	825-975
184	207-357	210	681-831	198	468-618	219	848-998
186	247-397	211	707-857	199	476-626	220	865-1015
189	296-446	212	716-866	200	498-648	221	871-1021
190	328-478	213	736-886	201	517-667	223	920-1070
191	336-486	214	758-908	202	536-686	224	925-1075
192	348-498	215	779-929	203	550-700	225	957-1107
193	375-525	216	788-938	204	568-718	225	959-1109
194	396-546	217	804-954	205	591-741	226	973-1123
195	414-564	219	848-998	206	616-766	227	978-1128
196	428-578	220	854-1004	207	633-783	228	1012-1162
197	443-593	222	891-1041	208	638-788	229	1020-1170
199	475-625	223	922-1072	209	666-816	230	1041-1191
200	499-649	224	934-1084	210	678-828	231	1051-1201
201	523-673	226	964-1114	211	701-851	234	1105-1255
203	553-703			212	723-873	234	1118-1268
204	575-725			213	738-888		

Mathematics – Grade 4

OVERVIEW

The mathematics program in the Hicksville School is designed to provide students with the knowledge and understanding of mathematics necessary to function in a world that depends on the application of mathematics. Our program meets the New York State learning standard, which states that students will understand the concepts of and become proficient with the skills of mathematics. They will be able to communicate and reason mathematically and finally, become problem solvers by using appropriate tools and strategies through the integrated study of number sense and operations, algebra, geometry, measurement, and statistics and probability.

Based on the Common Core State Standards, the following concepts will be taught in the fourth grade:

- Angles
- Area
- Data - Describe, Interpret & Comparisons
- Data - Graphing
- Decimals - Comparing & Ordering
- Decimals - Meaning of
- Equations & Expressions - Writing & Solving
- Factors / Multiples
- Fractions - Comparing & Ordering
- Fractions - Equivalences
- Fractions - Operations with
- Line Types
- Mass
- Measurement - Conversions
- Measurement - Measuring Length
- Money
- Patterns
- Perimeter
- Place Value
- Prime / Composite
- Properties of Operations
- Shapes (2-D) - Name & Classify by their Properties
- Standard Algorithms
- Symmetry
- Time
- Volume / Capacity
- Whole Numbers - Addition & Subtraction
- Whole Numbers - Comparing & Ordering
- Whole Numbers - Multiplication & Division
- Whole Numbers - Multiplying & Dividing with 10s
- Whole Numbers - Reading & Writing
- Whole Numbers - Rounding & Estimation

The standards associated with the concepts listed above can be found in detail on the school district website link: <http://www.hicksvillepublicschools.org/Page/5168>

GRADE SPECIFIC OBJECTIVES

1. Skip count by 1000's
2. Read and write whole numbers to 10,000
3. Understand the place value structure:
 - 10 ones = 1 ten
 - 10 tens = 1 hundred
 - 10 hundreds = 1 thousand
 - 10 thousands = 1 ten thousand
4. Understand and use the associative property of multiplication
5. Develop an understanding of fractions as locations on the number line and as divisions of whole numbers
6. Recognize and generate equivalent fractions
7. Use models to compare and order fractions with the same denominator
8. Develop an understanding of decimals as a part of a whole
9. Compare and order decimals
10. Use a variety of strategies to add and subtract numbers up to 10,000
11. Select the appropriate computational mode to solve problems
12. Use a variety of strategies to multiply two-digit numbers by one and two-digit numbers
13. Develop fluency in multiplying and dividing multiples of 10 and 100 up to 1000
14. Divide two-digit dividends by one-digit divisors (with and w/o remainders)
15. Interpret the meaning of remainders
16. Add and subtract proper fractions with common denominators
17. Add and subtract decimals to tenths and hundredths using a hundreds chart
18. Express decimals as an equivalent form of fractions to tenths and hundredths
19. Round numbers less than 1000 to nearest tens and hundreds
20. Check reasonableness of answers by estimation
21. Use open sentences to express and evaluate relationships
22. Use symbols $<$, $>$, $=$, \neq to compare whole numbers, decimals and unit fractions
23. Find the value(s) that make an open sentence true if it contains $>$ or $<$
24. Describe numeric and geometric patterns
25. Analyze a pattern or function and state the rule that describes it
26. Identify various polygons and name them according to their number of sides
27. Find the perimeter of figures
28. Find the area of a rectangle by counting units
29. Draw and identify line pairs, intersecting, parallel and perpendicular
30. Classify angles as acute, obtuse, right and straight
31. Identify points and rays when drawing angles
32. Know and understand equivalent units of (standard) length
 - 12 inches = 1 foot
 - 3 feet = 1 yard
33. Select appropriate tools and units to measure length weight and capacity
34. Make change using coins and dollar bills
35. Calculate elapsed time in half hours and hours
36. Calculate elapsed time in days and weeks
37. Collect and record data based on experiments and surveys
38. Represent data using tables, bar and pictographs
39. Read and interpret line graphs
40. Develop and make predictions based on data
41. Formulate conclusions and make predictions based on graphs

MATHEMATICS GLOSSARY - GRADE FOUR

PROBLEM SOLVING

analyze - To examine something to find out what it is or what makes it work

collaborate -To work together on or cooperate on an intellectual level

discuss - To speak to another or others about a particular situation; to examine or consider in speech or writing

examine - To observe carefully or critically, inspect; to study or analyze

explore - To look for patterns or relationships between elements within a given setting

graphical representations - A graphic representation is used to show a numerical relationship; a representation of a collection of data or a survey in graphic form (i. e. bar graph, pictograph)

identify -To establish the identity of; to designate or specify

interpret - To explain the meaning of a mathematical situation

invalid approach - An approach or example that is basically flawed and does not lead to the correct solution of the problem

Example: Simplify the expression: $12 + 8 \div 2 \times 3^2$

An invalid approach would be to simplify the expression from left to right, disregarding the order of operations.

A valid approach would be to simplify the expression using the order of operations.

$$\begin{aligned} \text{Invalid: } & 12 + 8 \div 2 \times 3^2 \\ & 20 \div 2 \times 3^2 \\ & 10 \times 3^2 \\ & 30^2 \end{aligned}$$

Incorrect answer: 900

$$\begin{aligned} \text{Valid: } & 12 + 8 \div 2 \times 3^2 \\ & 12 + 8 \div 2 \times 9 \\ & 12 + 4 \times 9 \\ & 12 + 36 \end{aligned}$$

Correct answer: 48

irrelevant information - Extraneous information that has no bearing on the problem and cannot be used in its solution

Example: A DVD player costs \$339.50. Bria has \$550 in her savings account. If she pays \$35 down and one monthly payment of \$22.50, how much more must she pay?

Relevant information:

Cost: \$339.50

Down payment: \$35

Additional payment: \$22.50

Irrelevant information:

Savings account balance: \$550.

oral representations - A representation or explanation of a mathematical situation in verbal form

pictorial representations - A representation or explanation of a mathematical situation in picture (i.e. pictograph, drawing) form

problem solving strategies - Various methods used to solve word problems; strategies may include, but are not limited to: acting it out, drawing a picture or graph, using logical reasoning, looking for a pattern, using a process of elimination, creating an organized chart or list, solving a simpler but related problem, using trial and error (guess and check), working backwards, writing an equation

- **act it out** - To perform in or as if in a play; represent dramatically; to realize in action
- **draw a graph** - Create a graphic representation used to show a numerical relationship using pens, pencils, markers, etc.
- **draw a picture** - Create an image of something formed on a surface using pens, pencils, markers, etc.
- **logical reasoning** - The process of using a rational, systematic series of steps based on sound mathematical procedures to arrive at a conclusion; the drawing of conclusions from given facts and mathematical principles; often used as a problem solving strategy
- **look for a pattern** - To attempt to observe a design (geometric) or sequence (numeric or algebraic) that is predictable because some aspect of it repeats
- **make an organized chart** - Create a diagram that illustrates information in the form of a table, graph, or picture in an organized form
- **make an organized list** - Create a record or catalog in an organized form
- **process of elimination** - The procedure of getting rid of unwanted or needed material
- **solve a simpler problem** - Solve an easier or less complicated problem
- **trial and error (guess and check)** - A problem solving strategy whereby a reasonable estimate for an answer is made and checked in the problem. If the solution is not reached, the estimate is adjusted and checked again in the problem. This process continues until the correct answer is found
- **work backwards** - To solve a problem starting from the solution and working back to the beginning
- **write an equation** - Create a mathematical sentence stating that two expressions are equal using pens, pencil crayon, marker, etc.

real world situation - A mathematical problem that can be present in a real life circumstance, for example, measuring a room for carpeting or going shopping using money

recognize - To know or identify something based on prior knowledge

relevant information - Information applicable to the problem; information necessary for the solution of a problem; data that is pertinent, applicable, and essential in the solution of a problem

understand - To perceive and comprehend a mathematical problem, situation, or representation

valid approach - Based on proper procedures, a valid approach will lead to the correct solution of a problem

verify results - To ascertain or confirm that a mathematical property, concept, or statement is true

written representations - A representation or explanation of a mathematical situation in written form

REASONING AND PROOF

argument - The communication, in verbal or written form, of the reasoning process that leads to a valid conclusion; a valid argument is the result of the conjecture/reasoning process

counterexample - An example to show that a rule is not true for all numbers.

Example: Show by counterexample that the commutative property does not work for subtraction $4 - 5 \neq 5 - 4$

explain - (See justify)

investigate - (See explore)

justify - To provide an argument for a mathematical conjecture; it may be an intuitive argument or a set of examples that support the conjecture; the argument may include, but is not limited to, a written paragraph, measurement using appropriate tools, the use of dynamic software, or a written proof

make conjectures - To make an inference or judgment of a mathematical question or situation based on incomplete evidence; guesswork

mathematical statement - A mathematical sentence whose truth value can be determined to be either true or false

reasonableness of a solution - The justification that a particular solution to a problem is within logical estimates

true/false - To determine whether a mathematical statement is correct or incorrect

COMMUNICATION

accurate - How close a numerical measure is to its actual value

answer - A spoken or written reply to a question; a (correct) solution to a mathematical problem

clarify - To make clear or easier to understand; to clear of confusion or uncertainty

explain - (See justify)

label work - To use words or symbols to allow an answer to a mathematical problem to be more accurately explained and identified

organize - To put together into an orderly, coherent form; to arrange in a pattern or structure

verbal form of reasoning - A mathematical expression or relationship using words rather than symbols

written form of reasoning - A mathematical expression or relationship using words or symbols in a written form

CONNECTIONS

apply - To use a theorem or concept to solve an algebraic, numeric, or geometric problem

compare - To state the similarities or differences between two or more numbers, objects, or figures by considering size, shape, odd, even, or other attributes

connect - To associate or consider one mathematical situation to another

contrast - To set in opposition in order to show or emphasize differences

multiple representations - Various ways to present, interpret, communicate, and connect mathematical information and relationships

recognize - To know or identify something from prior knowledge

understand - To perceive and comprehend a mathematical problem, situation, or representation

REPRESENTATION

construct - To draw a geometric figure that meets specific requirements

differences - The amount by which one quantity is greater or less than another; the amount that remains after one quantity is subtracted from another; specific points or elements that distinguish one thing from another

similarities - -The quality or condition of being similar; specific points or elements in which two things are alike

types of representations

chart A diagram that illustrates information in the form of a table, graph, or picture

equation - A mathematical sentence stating that two expressions are equal

graph - A graphic representation used to show a numerical relationship

physical model - A representation of something using objects

symbol - A notation used to represent an operation or abstract idea (e.g., +, -, >, ∞ , or π).

table - A systematic or orderly list of values, usually in rows and columns

verbal language - Using oral language to explain or discuss a mathematical situation with others

written language - Using written language to explain or discuss a mathematical situation with others

NUMBER SENSE AND OPERATIONS

array - A set of objects or numbers arranged in an order, usually into rows and/or columns

associative property - A property of real numbers that states that the sum or product of a set of numbers is the same, regardless of how the numbers are grouped

Examples: Addition: $2 + (3.5 + 1.3) = (2 + 3.5) + 1.3$
Multiplication: $6 \times (18 \times 7) = (6 \times 18) \times 7$

common denominator - A whole number greater than zero that is a common multiple of each denominator in two or more fractions (e.g., common denominators for $\frac{1}{6}$ and $\frac{3}{8}$ are 24, 36, 48, ...)

compose a number - Part of a process of grouping decomposed numbers into quantities that are easier to compute

decimal number - A fractional number written using base ten notation; a mixed decimal number has a whole number part as well (e.g., 0.32 is a decimal number and 3.5 is a mixed decimal number)

decompose a number - To break a number into smaller units to simplify computation (e.g., $15 = 10 + 5$)

dividend - A number to be divided by another number (divisor)

divisor - The number by which the dividend is divided

equivalent fractions - (halves, thirds, fourths, fifths, sixths, tenths) Two or more fractions that have the same quotient or that name the same region, part of a set, or part of a segment (e.g., $\frac{1}{3} = \frac{3}{9}$)

estimate - An answer that is an approximation

even number - A whole number that is a multiple of 2

fact family - A set of facts, each of which relates the same three numbers through addition or subtraction (e.g., $3 + 4 = 7$, $4 + 3 = 7$, $7 - 4 = 3$, $7 - 3 = 4$)

factor (noun) - A number or expression that is multiplied by another to yield a product (e.g., a factor of 32 is 8 because $8 \times 4 = 32$ and a factor of $5x^3$ is $5x$ because $5x(x^2) = 5x^3$)

factor (verb) - To express as a product of two or more factors

four-digit number - A number that contains four digits

fraction - A number that represents part of a whole, part of a set, or a quotient in the form $\frac{a}{b}$ which can be read as a divided by b

improper fraction - A fraction whose numerator is greater than its denominator

inverse property - A property of real numbers that states that the result of two real numbers that when combined will result in the identity element; when a number is added to its additive inverse, the sum is always zero; (e.g., $8 + -8 = 0$); when a number is multiplied by its multiplicative inverse, the product is always 1 (See additive inverse and multiplicative inverse)

multiple - The product of a given whole number and any other whole number

multiplication - A mathematical operation of combining groups of equal amounts; repeated addition; the inverse of division

not equal to - Term used to describe mathematical values or figures that are not the same or equivalent to each other

odd number - An integer that when divided by 2 has a remainder of ± 1 ; an integer that has 1, 3, 5, 7, or 9 in the ones place

part - A piece or section of a whole

place value - (hundredths, tenths, ones, tens, hundreds, thousands) The value of a digit in a number based on its position (e.g., in the number 28, the 2 is in the tens place and the 8 is in the ones place)

product - The number that is obtained when two or more factors are multiplied

proper fraction - A fraction whose numerator is less than its denominator

related facts - (See fact family)

remainder The amount left over when one number or polynomial is divided by another number or polynomial; if the remainder is 0, it is usually said that there is no remainder

Example:

$$\begin{array}{r} 2 \text{ r } 4 \\ 7 \overline{)18} \\ \underline{14} \\ 4 \end{array}$$

4 is the remainder.

round a number - To approximate the value of a whole number or decimal to a specific place value

Example: Rounded to the nearest ten: Rounded to the nearest tenth:

125 rounds to 130

1.25 rounds to 1.3 (*not* 1.30)

122 rounds to 120

1.22 rounds to 1.2 (*not* 1.20)

whole - Containing all components; complete; a complete number without a fractional part

zero property of addition - The property that states that the sum of a number and zero is that same number (i.e., $a + 0 = a$ for all a)

zero property of multiplication - The property that states that the product of any number and zero is always zero (i.e., $a \times 0 = 0$ for all a)

ALGEBRA

algebraic expression - A mathematical phrase that is written using one or more variables and constants, but which does not contain a relation symbol ($<$, $>$, \leq , \geq , $=$, \neq) (e.g., $3y + 6$)

geometric pattern - An arrangement of geometric figures that repeats

numeric pattern - An arrangement of numbers that repeat or that follow a specified rule

open sentence - A statement that contains at least one unknown. It becomes true or false when a quantity is substituted for the unknown (e.g., $3 + n = 5$ becomes true when $n = 2$)

operations - Procedures used to combine numbers, expressions, or polynomials into a single result (e.g., addition, subtraction, multiplication, division, exponents)

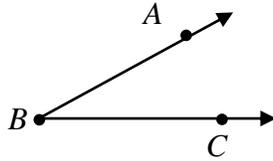
variable - A symbol used to represent a number or group of numbers in an expression or an equation

GEOMETRY

acute angle - An angle whose measure is greater than 0° and less than 90°

angle - A geometric figure formed by two non-collinear rays that have a common endpoint

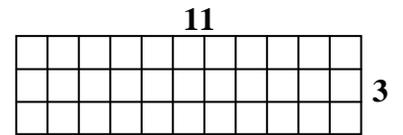
Example:



$\angle ABC$ has its vertex at point B .

area - The measure of the interior surface of a closed region or figure; area is measured in square units

Example: The area of the rectangle is 33 square units



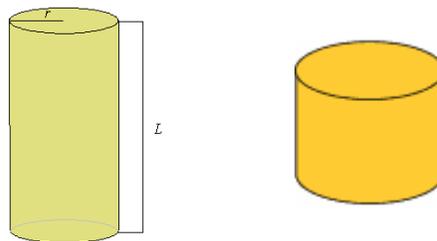
closed figure - A figure that starts and ends at the same point

cone - A solid bounded by a region called its base (usually a circle) in a plane and the surface formed by straight line segments which join points on the boundary of the base to a fixed point, called its vertex, not in the plane containing the base

cube - A solid rectangular figure (prism) with 6 square faces

cylinder - A solid bounded by two parallel congruent closed curves (usually circles), called its bases, in a plane and the surface formed by straight line segments that join points on the each of the closed curves

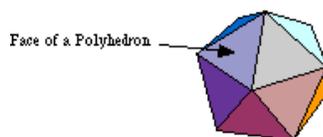
Examples:



edge - A line segment where two faces of a three-dimensional figure intersect

endpoint - A point at either end of a line segment or the beginning point of a ray

face - Polygons which bound the surface of a geometric solid



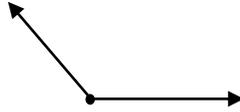
geometric figure - Any combination of points, lines, planes, or curves in two or three dimensions

intersecting lines - Lines that share a common point

line segment - The set of points on a line consisting of two fixed points (e.g., P and Q) and all of the points between P and Q ; P and Q are referred to as the endpoints of the segment

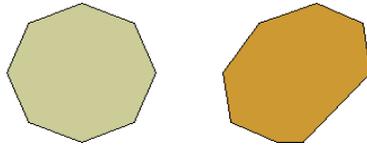
obtuse angle - An angle whose measure is greater than 90° and less than 180° .

Example:



octagon - A polygon with 8 sides and 8 angles

Examples:

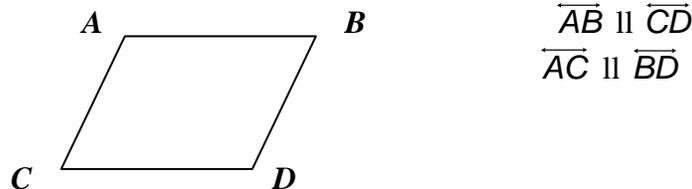


open figure - A figure that is not closed; i.e., it does not start and end at the same point

parallel lines - Lines in the same plane that never intersect no matter how far they are extended; they are equidistant from each other

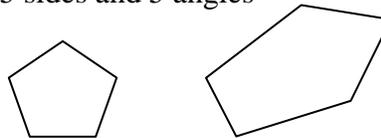
parallelogram - A quadrilateral with two pairs of parallel sides

Example:



pentagon - A polygon with 5 sides and 5 angles

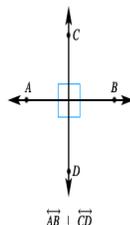
Examples:



perimeter - The distance around a closed figure

perpendicular - Two lines, segments, or rays that intersect to form right angles

Example:

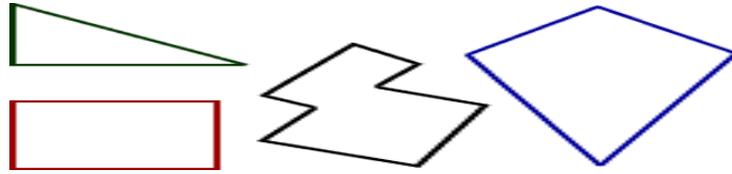


plane figure - A figure that lies on a flat surface; it has length, width, perimeter, and area

point - An exact location in space; a point has no dimension

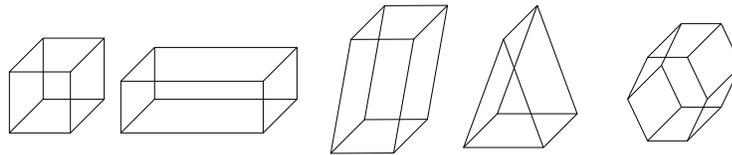
polygon - A closed plane figure formed by three or more line segments.

Examples:



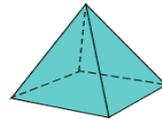
prism - A three-dimensional figure (solid) that has two congruent and parallel faces that are polygons; these are the bases; the remaining faces are parallelograms.

Examples:



pyramid - A polyhedron whose base is a polygon and whose lateral faces are triangles that share a common vertex

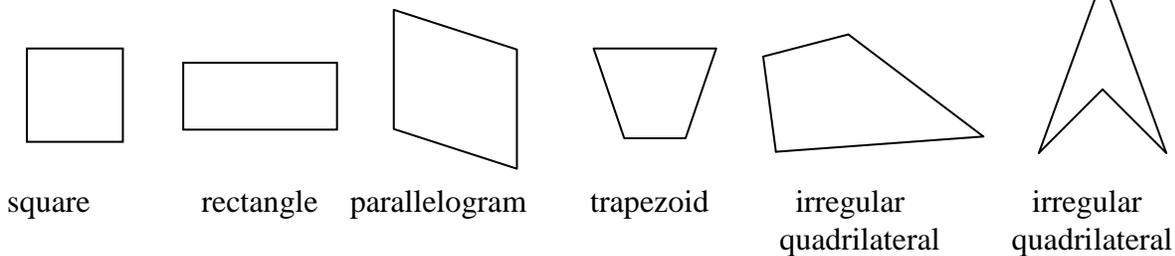
Example:



quadrilateral - A polygon with 4 sides

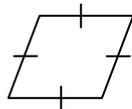
and 4 angles

Examples:



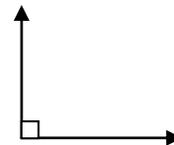
rhombus - A parallelogram with two adjacent sides congruent (all four sides are congruent)

Example:



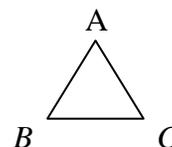
right angle - An angle formed by two perpendicular lines, the measure of which is 90°

Example:



side - A line segment joining two adjacent vertices of a polygon

Example: \overline{AB} is a side of $\triangle ABC$.



solid figure - A three-dimensional geometric figure that has length, width, and height

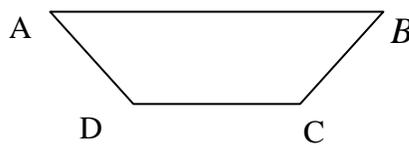
sphere - A three-dimensional figure with a set of points in space that are equidistant from a fixed point called the center

straight angle - An angle that has a measure of 180° ; an angle formed by two rays in opposite directions from their common endpoint

three - dimensional figure - An object that has length, width, and height; also called a solid figure (e.g., prism, pyramid, cylinder, cone)

trapezoid - A quadrilateral with exactly one pair of parallel sides

Example: In the trapezoid below, $\overline{AB} \parallel \overline{CD}$



two-dimensional figure - A figure that has length and width but no height (e.g., circle, square, triangle)

vertex - (1) The common endpoint of two sides of a polygon; (2) the common endpoint of two rays that form an angle; (3) the common point where two or more edges of a three-dimensional solid meet

vertices - The plural form of vertex

MEASUREMENT

capacity - The maximum amount a container can hold

centimeter (cm) - A metric unit of length which is equal to one-hundredth of a meter

cup - A customary unit used to measure capacity; 1 cup = 8 ounces

customary units - The units of measure used in the customary measurement system

elapsed time - The difference between two times; the amount of time that has passed

equivalent - Equal in value

Examples: $3 + 3$ is equivalent to 2×3 (equivalent numerical expressions)

2.9 is equivalent to 2.90 (equivalent decimals)

1 yard is equivalent to 3 feet (equivalent lengths)

$\frac{2}{3}$ is equivalent to $\frac{8}{12}$ (equivalent fractions)

gallon - A customary unit used to measure capacity; 1 gallon = 4 quarts

gram (g) - A metric unit used to measure mass; 1000 grams = 1 kilogram

kilogram (kg) - A metric unit to measure mass; 1 kilogram = 1000 grams

length - The distance from one end of an object to the other end

liter (L) - A metric unit used to measure capacity; 1 liter = 1000 milliliters

mass - The amount of matter or substance in an object; commonly taken as a measure of the amount of material it contains and causes it to have weight in a gravitational field. [This should not be confused with weight, which is a measure of the force of gravity on an object. An apple weighs more on Jupiter than it does on Earth because Jupiter's gravity is stronger. However, the apple always has the same mass, no matter where it is]

meter - A metric unit used to measure length; 1 meter = 100 centimeters = 1000 millimeters

metric units - Units used in the metric system:

length (meter): kilometer, hectometer, decameter, meter, decimeter, centimeter, millimeter

capacity (liter): kiloliter, hectoliter, decaliter, liter, deciliter, centiliter, milliliter

mass (gram): kilogram, hectogram, decagram, gram, decigram, centigram, milligram

milliliter (mL) - A metric unit used to measure capacity; 1 milliliter = 0.001 liter

ounce (oz) - A customary unit used to measure mass; 1 ounce = $\frac{1}{16}$ pound;

16 ounces = 1 pound

pint (pt) - A customary unit used to measure capacity; 2 cups = 1 pint; 2 pints = 1 quart

pound (lb) - A customary unit used to measure mass; 1 pound = 16 ounces

quart (qt) - A customary unit to measure capacity; 1 quart = 2 pints

ton - A unit of weight equal to 2,000 pounds

STATISTICS AND PROBABILITY

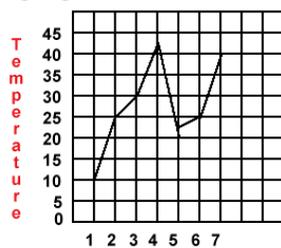
bar graph - A graph that uses horizontal or vertical bars to display data

Example:



line graph - A graph that uses line segments to show changes in data; the data usually represents a quantity changing over time

Example:



Average Daily Temperature for
January 1-7 in Degrees Fahrenheit

scale on a graph - The indication on a graph of the units of measure used for the data being displayed

HOME ACTIVITIES TO SUPPORT LEARNING

1. When preparing meals requiring recipes, help your child read and follow the recipe. Try to mix denominators ($\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{3}$ etc.)
2. When in a restaurant have your child determine how much change you should receive. For example if the bill is \$28.30 and you give the person \$30.00, how much change should you get?
3. When you go grocery shopping, have your child try to estimate the cost of your items.
4. When on a trip, have your child try to name the figures of various objects you see (octagon, square, rectangle, etc.)
5. Have your child help you measure around the house. Find perimeter in inches and then feet.

INTERNET RESOURCES

www.aaamath.com

www.aplusmath.com

www.factmonster.com

www.brainpop.com

www.coolmath4kids.com

www.funbrain.com

www.funschool.com

www.multiplication.com

www.primarygames.com

www.helpingwithmath.com

www.engageny.org

www-k6.thinkcentral.com

Science – Grade 4

OVERVIEW

In accordance with the Common Core and New York State Science Learning Standards the science program at each grade level promotes the processes of scientific inquiry to prepare students to participate fully in an ever-changing world. Students are given the opportunity to exercise their curiosity and questioning spirit. Inquiry is a critical component of the science program at all levels and in every domain of science. Scientific inquiry involves a variety of skills and information gathering and analysis. Using processing skills for science inquiry allow our students to demonstrate safety in science, use the scientific method to develop and test hypotheses, identify controls and variables in experiments, develop decision making skills, use the metric system for scientific measurement, communicate concepts learned through written, verbal, and constructed models and gain a greater understanding of scientific vocabulary.

These skills are designed to prepare the students for a New York State Science Assessment given in grades 4, 8, and during high school in meeting graduation requirements and skills for success in an advancing world. It is important to note that the development of the skills necessary for successful achievement begins in Kindergarten.

The science program nurtures problem exploration through a hands-on approach, and emphasizes the use and manipulation of materials and equipment in investigations. Students will develop a greater appreciation of the scientific process, a more sophisticated understanding of the value of technology, and a deeper commitment to the protection of the natural world. Fourth grade classes investigate units on life sciences, physical science, earth science and the human body. These four units spiral through the curriculum each year helping students build upon prior knowledge while expanding their understanding and application of scientific concepts, principles, and theories related to the physical setting and the living environment. The objectives taught as part of the Fourth Grade curriculum are listed below.

GRADE SPECIFIC OBJECTIVES

1. Investigating the structure and function of cells
2. Discussing the cell theory and comparing plant and animal cells
3. Exploring variations in species
4. Investigating DNA and how organisms inherit traits
5. Inquiring about change and adaptation
6. Understanding the work of Darwin
7. Differentiating between inherited and learned behavior
8. Inquiring about ecosystems and biomes
9. Constructing a model of the energy pyramid and studying the interact of producers, consumers, and decomposers
10. Understanding heat and how it affects matter
11. Investigating conduction, convection, and radiation
12. Understanding the relationship between temperature and changes in state
13. Investigating chemical reactions and the properties of acids and bases
14. Understanding mass, forces, motion, and Newton’s Laws of Motion
15. Exploring the world of light, color, and sound

16. Exploring weather patterns and the use of technology to collect data
17. Inquiring about the Earth's processes
18. Understanding changes within the Earth's crust, the formation of soil, the effect of water on land surfaces, and what rocks and fossils tell us about the past
19. Exploring the Universe and discussing space exploration
20. Understanding our limited resources and the roles of recycling and conservation
21. Inquiring about the nervous and endocrine systems
22. Understanding the affect of drugs, alcohol, and tobacco on the body

IMPORTANT VOCABULARY

absorb	chemical energy	earthquake	gravity
adaptation	chlorophyll	ecosystem	habitat
air mass	classify	effect	hearing aid
air pressure	colony	electric signal	herbivore
amphibian	comet	electrical energy	hibernation
amplify	compass	electromagnet	high blood pressure
anemia	complex machine	ellipse	high-pressure area
anemometer	concave lens	embryo	host
artery	concussion	endangered	humidity
asteroid	condense	energy	hygrometer
atherosclerosis	conductor	enzyme	indigestion
atrium	conifer	erosion	inertia
axis	constellation	esophagus	instinct
backbone	consumer	exoskeleton	insulator
balance	context	extinct	kilogram
bar graph	continental	fault	kinetic
barometer	control	fertilization	landform
behavior	convex lens	food chain	large intestine
boiling point	coral reef	food web	light zone
bullhorn	cubic meter	force forecast	line graph
camouflage	current	fossil	liter
capacity	dark zone	freezing point	low-pressure area
capillary	decomposer	friction	magnet
carbon dioxide	density	front	magnetic
carnivore	dicot	generator gills	magnetism
cause	digestion	graduated cylinder	mammal
centimeter	dormant	gram	mass matter
chemical change	dune	graphic source	mechanical energy

median	ovary	range	spinal cord
melting point	ovule	recycle	spore
meteor	parallel circuit	red blood cell	stamen
meteorite	parasite	reflect	stethoscope
meteorologist	photosynthesis	reflex	stimulus
meter	physical	reproduce	symbiosis tide
microphone	pistil	reptile	translucent
migration	pitch	resistance	transmit
milliliter	plasma	response	transparent
mineral mixture	platelet	revolution	trench
mode	pole	ridge	vein
molt	pollen	rotation	ventricle
monocot	pollination	saliva	vibrate
National Weather Service	pollution	satellite	visible spectrum
nerve cell	potential	scavenger	volcano
nerve ending	precipitation	sense organ	volume
nutrient	predator	sepal series circuit	wave
ocean basin	predict	simple machine	wavelength
omnivore	prey]	small intestine	weathering
opaque	producer	solar system	wind vane
orbit	rain gauge	solution	work

HOME ACTIVITIES TO SUPPORT LEARNING

The following activities will allow you to promote your child's success in various science courses throughout their academic career:

- Review their completed homework assignments
- Aid your child in any science project assigned by the classroom teacher
- Visit various museums and zoos in the metropolitan area
- Encourage the viewing of science programs on the television
- Encourage your child to visit the recommended web sites
- Make regular contact with their classroom teacher

INTERNET RESOURCES

Recommended Science Websites:

www.sfscience.com

www.kz.com

www.nysed.gov

www.schoolisland.com

www.science.nasa.gov

www.discovery.com

www.sciencereviewgames.com

<http://www.nysl.nysed.gov/reference/educoref.htm#sci>

Social Studies - Grade 4

OVERVIEW

Grade 4 Social Studies is focused on New York State and local communities and their change over time, incorporating the study of geography, history, economics, and government. The course is divided into seven Key Ideas that span the State's history from before the European colonial era to the modern period. The Key Ideas allow teachers to make connections to present-day New York State and the local community.

The students will study the following key ideas:

GEOGRAPHY OF NEW YORK STATE: New York State has a diverse geography. Various maps can be used to represent and examine the geography of New York State.

NATIVE AMERICAN GROUPS AND THE ENVIRONMENT: Native American groups, chiefly the Iroquois (Haudenosaunee) and Algonquian-speaking groups, inhabited the region that became New York State. Native American Indians interacted with the environment and developed unique cultures.

COLONIAL AND REVOLUTIONARY PERIOD IN NEW YORK: European exploration led to the colonization of the region that became New York State. Beginning in the early 1600s, colonial New York was home to people from many different countries. Colonial New York was important during the Revolutionary Period.

GOVERNMENT: There are different levels of government within the United States and New York State. The purpose of government is to protect the rights of citizens and to promote the common good. The government of New York State establishes rights, freedoms, and responsibilities for its citizens.

IN SEARCH OF FREEDOM AND A CALL FOR CHANGE: Different groups of people did not have equal rights and freedoms. People worked to bring about change. The struggle for rights and freedoms was one factor in the division of the United States that resulted in the Civil War.

WESTWARD MOVEMENT AND INDUSTRIALIZATION: New York State played an important role in the growth of the United States. During the 1800s, people traveled west looking for opportunities. Economic activities in New York State are varied and have changed over time, with improvements in transportation and technology.

IMMIGRATION AND MIGRATION FROM THE EARLY 1800S TO THE PRESENT: Many people have immigrated and migrated to New York State contributing to its cultural growth and development.

IMPORTANT VOCABULARY

artifacts	equality of opportunity	legislative branch
authority	eras	local
basic needs	ethnic	local location
Bill of Rights	exchange	longitude
branches of government	exchanges of goods/services	make, enforce, interpret
cause/effect	executive branch	rules/laws
centuries	exploration	meridians
capital resources	explorer	migration
celebrations	geographic factors	millennia
change	globe	opportunity costs
change over time	goods and services	perspectives
choices	govern	physical characteristics
citizen	government	physical features
citizenship	historical narratives	political
civilization	human migration	political boundaries
colonial governments	human resources	political power
communication	human settlements	political similarities/ differences
community	immigration	rural to urban to suburban migration
compare/contrast	individual liberties	scientific/technological
Constitution – New York	individual rights to life, liberty, pursuit of happiness	slavery
Constitution – United States	industrialization	social/cultural
consumers	industrial growth/expansion	turning points
consumption	interactions	unity
costs	interdependent	values
Declaration of Independence	interpretations	ways of making living
democracy	inventions	Western hemisphere
economic	judicial branch	westward migration & expansion
similarities/difference	jury service	
effects –	justice	
social/political/economic	legends	
equality		

HOME ACTIVITIES TO SUPPORT LEARNING

Reading historical fiction and non-fiction will support social studies learning. Suggested authors include: Avi, James & Christopher Collier, Paul Fleischman, Jean Fritz & Gary Paulsen.

INTERNET RESOURCES

<https://www.engageny.org/resource/new-york-state-k-12-social-studies-framework>
Social Studies Curriculum Information

<http://www.timeforkids.com/TFK/kids>
Time for Kids contains interesting articles and lessons.

www.crf-usa.org
Constitution Rights Foundation – law related ideas.

www.pbs.org
Public Television Station



Fine Arts – Grade 4

ART OVERVIEW

The elementary art program provides children with experiences to develop creativity and to learn to admire and appreciate beauty. In keeping with the N.Y. Learning Standards for the Arts, the goals of this “hands-on” program are to have the children participate in the creation and production of a variety of visual art works, to know and use art materials and resources, as well as to appreciate, respond to, and analyze art that they see. Children will develop and understanding of their own historical and cultural heritage and those of others within their communities and beyond.

These learning experiences for grades 3-5 are presented repeatedly in a variety of ways to reinforce and further develop understandings of line, color, value, texture, shape and form. Gradually children also become familiar with and able to apply concepts of rhythm, balance, unity, variety, emphasis, contrast and proportion. Between third and fifth grade students participate in the experiences listed below:

GRADE SPECIFIC ART OBJECTIVES

1. Developing drawing and painting techniques to organize and depict ideas, feelings and moods.
2. Applying an manipulating elements of art through shapes, variations in lines, colors, sizes and textures to express balance, dominance, repetition, and other principles of design.
3. Learning to create three dimensional qualities.
4. Creating in print, crafts, and graphic art media.
5. Gaining a deeper appreciation of one’s own aesthetic values and those of other people and cultures through further study of arts heritage in historical and cultural contexts.
6. Expanding aesthetic perceptions by examining artwork to recognize and discriminate among visual and tactile characteristics.
7. Learning to talk about works of art by using objective criteria for analysis, interpretation, and judgment.

IMPORTANT VOCABULARY

analogous colors	focal point	medium	restore
appliqué	format	minimal art	rice paper
bas-relief	freestanding	negative space	romanticism
byzantine art	function	nib	spatial
capital	gesture	oblique	spatial relationship
cartography	gesture drawing	perceptual	stained glass
cartographer	graphic art	perspective	static
chop mark	graphic designer	photomontage	stippling
coil method	graphics	plaster	stylized
conceptual	graphite	point of view	subtle
connoisseur	ground	post impressionism	tapestry
continuity	hatching	product design	thinner
converge	icon	protractor	tonality

decoupage	iconography	quill	tone transition
dominance	illusion of depth	radial	translucent
elements of design	impressionism	radius	transparent
emboss	industrial designer	recede	t-square
embroidery	intaglio	related colors	typography
expressionism	linocut linoleum	relief	under painting
façade	manuscript	relief printing	unity
fauvism	mass	renaissance art	vantage point
fettling knife	matte	render	vermillion

HOME ACTIVITIES TO SUPPORT LEARNING

- Talk to your child about what they did in art class each week
- Take your child to museums where art is displayed
- Encourage your child to create illustrations of events or ideas from the books they are reading
- Encourage your child to draw real life objects through careful observation of the object (choose objects that have a simple shape or relatively little detail)
- Encourage your child to draw objects or events from memory
- Share with your child the art of your own cultural heritage
- Discuss how various works of art make your child feel
- Encourage your child to observe and find various shapes, textures, or types of lines in familiar objects, nature, photographs or works of art
- Encourage your child to create at home by drawing, coloring with crayons or use of watercolor paints
- Compliment your child's creativity
- Watch educational television programs with your child that use art as a primary medium for learning and expression
- Ask your local library for books on art appropriate for fourth graders

INTERNET RESOURCES

<http://www.metmuseum.org/>
<http://www.nga.gov/education/classroom/>
<http://nysata.org/>
<http://www.arteducators.org/olc/pub/NAEA/home/>
<http://www.vsaarts.org/>
<http://www.vsartsnys.org/>
<http://naea-reston.org/olc/pub/NAEA/home/>

MUSIC OVERVIEW

The elementary music program provides balanced, comprehensive, and sequential experiences for children to perform, create, and respond to music. Through singing, playing instruments, moving to music, and creating music, children acquire musical skills and knowledge by doing. In keeping with the N.Y. State Learning Standards for the Arts, the goals of this “hands-on” program are to have children create, perform, and participate in music-making, know and use musical materials and resources, appreciate, respond to, and analyze music they hear. Furthermore, through experiential learning, students will understand their own historical and cultural heritage and those of others within their communities and beyond. The specific learning objectives taught in fourth grade are listed below.

GRADE SPECIFIC MUSIC OBJECTIVES

1. Sing, alone and with others, a varied repertoire of songs.
2. Perform on instruments, alone and with others, a variety of music.
3. Improvise and create melodies, variations, and accompaniments.
4. Read and notate music.
5. Listen to, analyze, and describe music.
6. Understand relationships between music, the other arts, and other disciplines.
7. Understand music in relation to history and culture.
8. Further expand song repertoire, including more advanced singing games, rounds, two-part songs, partner songs, and descants.
9. Expand musical reading and notational skills through sol-fa to encompass Sol, Mi, La, Re, Do, low La, low Sol, high Do, Fa and Ti.
10. Learn the diatonic scale.
11. Expand rhythmic skills appropriate for this grade level to include eighth-note/sixteenth note combinations (ti-ti-ri, and ti-ri-ti) as well as the concept of upbeat or anacrusis.
12. Add concepts involving the fermata, da capo, and D.S. al fine.
13. Expand listening experiences to include programmatic music and excerpts from instrumental and choral literature.
14. Develop and apply musical skills through the use of the recorder.
15. Provide the opportunity for student to study a string or band instrument and to join the chorus.

IMPORTANT VOCABULARY

folk song, style, form, fermata, da capo, D.S. al fine, instrumental, choral, improvisation, vibration, notation, soprano, alto, conductor, ti-tiri, tiri-ti, fa, ti, woodwind, brass, percussion flute, clarinet, oboe, bassoon, saxophone, trumpet, trombone, baritone, tuba, snare drum, bass drum, timpani.

HOME ACTIVITIES TO SUPPORT LEARNING

- Talk to your child about what they did in music class each week
- Take your child to live music concerts
- Listen to music of various styles, from various cultures and historical eras
- Share with your child the music of your own cultural heritage
- Discuss with your child how various songs or pieces of music make them feel
- Sing various children's songs to them and with them
- Watch educational television programs with your child that use music as a primary medium for learning and expression
- Visit the local library for CDs of music to listen to
- If your child studies an instrument, encourage them to practice on a regular basis

INTERNET RESOURCES

<http://www.menc.org/>

<http://www.nmea.us/>

<http://nyssma.org/>

<http://www.amc-music.org/>

<http://nyphil.org/>

<http://www.lipharmonic.com/>

Physical Education & Health – Grade 4

PHYSICAL EDUCATION OVERVIEW

The Physical Education Program is an important part of your child’s education. It is an integral part of the total educational growth and development process of each child. This program significantly contributes to the acquisition of personal living skills such as cardiovascular fitness, muscular skeletal fitness, cooperation, risk taking, safety, trust and respect.

The sequential learning experiences in Physical Education are designed to fulfill the child’s physical development and translate into a meaningful and successful program that meets the needs of all children.

Activities will include physical fitness, locomotor and non-locomotor skills, movement exploration, perceptual motor skills and object manipulation in the lower grades (K-2). In grades 3-5 the activities will include rhythms, ball handling, team and individual sports and physical fitness. These activities and experiences will help prepare the youngster for middle school physical education and after school athletics.

HEALTH OVERVIEW

THE GREAT BODY SHOP is a comprehensive health, substance abuse and violence prevention program in which your child will be participating this year. This program will help your child learn more about his or her body and how to take care of it. The program is a team effort involving you, your child, the teacher and members of the community. Each month, your child will receive a student issue of THE GREAT BODY SHOP which will present an appropriate level of knowledge about topics such as nutrition, safety, preventing illness and drug and alcohol prevention. Games, quizzes and other material will help develop values, build critical thinking skills and promote behaviors that relate to health goals. Your child’s teacher will discuss the units of THE GREAT BODY SHOP in depth with the students. Student monthly issues will be sent home to share with the family and we ask that you talk about the lessons learned with your child.



English as a Second Language –Fourth Grade

OVERVIEW

English Language Learners are given daily instruction in English as a Second Language to support work done in their primary classroom and to help them become confident in all English-language skills. The amount of English as a Second Language instruction is determined by the student's scores on either the NYSITELL (NY State Identification Test for English Language Learners) test or the NY State English As A Second Language Achievement Test (NYSESLAT).

We encourage parents to be partners in their children's education. In the Fall, parents of English Language Learners are invited to meet with the ESL teacher during Back-To-School night. We host ESL Family Game Nights and Math Activities Nights that you can attend with your child and his/her ESL teacher. Your child's ESL teacher holds morning meetings a few weeks before the NYSESLAT so that you can learn more about this important test and help your child meet with success.

Should you have any questions or concerns during the school year, please contact your child's ESL teacher.

GRADE SPECIFIC OBJECTIVES

1. Use dialogue in written form
2. Use compound words, contractions, suffixes and prefixes
3. Utilize vocabulary strategies through semantic mapping, context clues, analogies, multiple meanings, synonyms and antonyms
4. Respond to literature verbally and in written form
5. Predict outcomes, compare, summarize and make inferences
6. Use proper outline format that clearly defines the topic and includes supportive sentences
7. Identify and utilize capitalization, punctuation, nouns, pronouns, adjectives, adverbs and articles
8. Use complete sentences and appropriate spelling
9. Write an invitation, a letter to a friend or relative, business letter, and a thank-you note of at least eight sentences
10. Write paragraphs of at least five sentences using the comparison/contrast and cause/effect patterns of organization
11. Use a dictionary, glossary, thesaurus and newspapers
12. Write a one-page report in a content area employing the concepts learned to date

IMPORTANT VOCABULARY

assignment	embarrassed	hormone	shiny
attitude	emerge	metabolism	shoulder
beautiful	evening	miniature	suddenly
coach	failure	murmur	tangled
colorful	familiar	poisonous	thundered
complain	farther	predator	tiny
conserve	fluid	prey	towering
cuddly	fragile	probably	watch
develop			

HOME ACTIVITIES TO SUPPORT LEARNING

1. Ask your child what they are doing in school.
2. Review your child's homework assignment or ask your child to explain it to you.
3. Make regular visits to the Hicksville Public Library and get a library card for your child.
4. Read to your child in English or in your native language and ask your child to tell you about the reading.

INTERNET RESOURCES

You can request the following publications in English and Spanish from the U.S. Department of Education. All are provided at no cost. They can be ordered on-line at www.edpubs.org

Helping Your Child Learn Mathematics
Como Ayudar a Su Hijo a Aprender Ciencias
La Lectura Es Lo Primero: Como Ayudar a Aprender a Leer
Como Ayudar a Su Hijo a Ser Un Buen Lector
(English/Spanish)Guide for Parents:
How Do I Know a Good Early Reading Program When I See One

Aesop's Fables
<http://www.parenting-by-example.com/free-fables-for-children>

Hicksville Public Library:
<http://www.hicksvillelibrary.org>

Highlights:
<http://www.highlights.com/index.jsp>

National Geographic:
<http://www.nationalgeographic.com/>

