# FIFTH GRADE CURRICULUM

# READING/LANGUAGE ARTS

#### **Word Level Work**

## Phonological Awareness, Phonics and Spelling

- Use independent spelling strategies including:
- -Using word banks
- -Spell words within common letter strings but different pronunciations
- -Collect/classify words within common roots

#### Vocabulary Extension

- Define familiar vocabulary and unit vocabulary in their own words, using alternative phrases or expressions
- Use thesaurus for writing a variety of interesting words in compositions, poetry, reflections, etc.
- Know how nouns and adjectives can be made into verbs by use of suffixes
- Use alternative words and expressions which are more accurate or interesting than the common choices
- Explore and discuss the implications of words which imply gender
- Know a range of suffixes that can be added to nouns and verbs to make adjectives
- Investigate compound words and recognize that they can aid spelling

#### **Sentence Level Work**

#### Grammatical Awareness

- Re-read own writing, silently and out-loud, to check for grammatical sense and accuracy; identify errors and suggest alternative constructions
- Investigate verb tenses: past, present, future
- Identify adverbs and understand their functions in sentences
- Link work on expressive and figurative language in stories and poetry
- Examining comparative and superlative adjectives
- Comparing adjectives on a scale of intensity  $% \left( x\right) =\left( x\right) +\left( x\right) +\left($
- Relating adjectives to adverbs which in dictate degrees of intensity  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($

## Sentence Construction and Punctuation

- Practice using commas to mark grammatical boundaries within sentences; link to work on editing and revising own writing
- Use the apostrophe accurately to mark possession  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($
- Understand the significance or word order
- Recognize how commas, connectives and periods are used to join and separate clauses
- Understand how the grammar of a sentence alters when the sentence type is altered

# READING/ LANGUAGE ARTS



- Use of connectives, e.g., adverbs, adverbial phrases, conjunctions, structure an argument
- Edit own work and peer edit

#### Text Level Work

FICTION AND POETRY

## Reading Comprehension

- Investigate how settings and characters are built up from small details
- Chronology in narrative using written or the media texts, by plot mapping how much time passes in the course of the story
- Prepare, read and perform play scripts; compare script vs. story organization
- Understand how writers create imaginary worlds
- Identify social, moral, cultural issues in stories and discuss recurring themes
- Read stories from other cultures, by focusing on e.g., differences in place, time, customs and relationships; identify and discuss recurring themes
- Write critically about an issue or dilemma raised in a story, explaining the problem, alternative courses of action and evaluating the writer's solution
- Understand the following terms and identify them in poems: verse, chorus, couplet, stanza, rhyme, rhythm, alliteration, onomatopoeia
- Describe and review own reading habits through monthly reading goals and widen reading experience beyond classroom requirements and books for pleasure
- Understand and identify from who's point of view the story is told
- Experiment with various ways to articulate their personal opinion/reaction to story/elements of story
- Help other students to make meaning from a text through student-monitored literature circles

## Writing Composition

- Use different ways of planning stories
- Write independently, linking own experience to situations in historical stories
- Use paragraphs in story writing to organize and sequence the narrative
- Develop settings in own writing, making use of work on adjectives and figurative language to describe settings effectively
- Write persuasive essays, using and manipulating language and factual information to support statements of their opinion
- Write expository essay, choosing specific words to best articulate meaning and instruction
- Write poetry based on the structure and/or style of poems read  $% \left( 1\right) =\left( 1\right) \left( 1\right)$
- Write own examples of descriptive, expressive language based on those read  $\,$

# FIFTH GRADE CURRICULUM

# READING/ LANGUAGE ARTS- CONTINUED

- Write personal reflections on poetry, art, quotations and other culture discussed in class
- Write five paragraph essays with thesis statements
- Practice writing well-constructed, meaningful work, without a formal brainstorming/outlining procedure
- Practice note-taking skills, both 'quick-form' from the board or from conversation, ad 'long form' for research purposes

#### Nonfiction

## Reading Comprehension

- Identify different types of text
- Identify features of non-fiction texts in print which support the reader in gaining information efficiently
- Select and examine opening sentences that set scenes, capture interest, etc.
- Understand and use the terms *fact* and *opinion*; begin to distinguish the two in reading and other media
- Predict newspaper stories from the evidence of headlines
- Prepare for factual research by reviewing what is known, what is needed, what is available and where one might search
- Identify how & why paragraphs are used to organize & sequence information
- Know how arguments are presented
- From examples of persuasive writing, investigate how style and vocabulary are used to convince the intended reader

# **M**ATHEMATICS

#### Number Sense

- Use appropriate math vocabulary
- Use computation and estimation to solve problems  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($
- Explore discrete mathematics by using and explaining  $\mbox{\sc Venn}$  diagrams
- Use mental math to solve computation problems  $% \left( \mathbf{r}_{i}\right) =\mathbf{r}_{i}$
- Represent numerical relationships in one- and two-dimensional graphs
- Develop, analyze and explain procedures for computing, estimating and solving proportions
- Identify and demonstrate understanding of number theory
- Develop algorithms to solve problems
- Compute with whole numbers, decimals and fractions, including numbers having multiple digits

## **MATHEMATICS- CONTINUED**



- Use and describe different strategies to estimate quantities
- Investigate and describe relationships among fractions and decimals and percents
- Understand and explain how operations relate to one another
- Understand and model fractional parts- Round fractions to the nearest whole number
- Compare and order whole numbers, fractions and decimals
- Use operations involving integers (including negative numbers) <u>Algebraic Thinking</u>
- Represent situations and number pattern with tables and graphs
- Write and develop multi-step word problems
- Develop algebraic expressions to represent mathematical relationships in word problems
- Demonstrate an ability to solve linear equations, using concrete, informal and formal methods
- Explore number patterns, using a calculator
- Write equations to represent a situation and to solve problems
- Write number sentences, using fractions and whole numbers
- Use order of operations to solve problems mentally
- Apply algebraic methods to solve problems
- Understand and apply the concepts of the variable, set, subset and equation <u>Geometry and Measurement</u>
- Identify, draw, describe, compare and classify geometric figures
- Know values of money
- Compute with measurements English and metric systems
- Describe the meaning and use length, perimeter, area, weight, mass, volume and capacity
- Solve problems using area, perimeter, volume and surface area
- Represent and solve problems, using geometric models
- Use mathematical relationships to determine degrees in angles of a triangle
- Use pi as a numerical value in relation to work with circles
- Use a coordinate grid to locate ordered pairs and interpret information
- Use metric units to describe length
- Convert values using the metric system
- Use a compass, ruler and protractor to construct simple plane figures, including angles and circles
- Identify types of angles, measure them using a protractor and name them by using letters
- Draw and label congruent segments, angles, figures

# FIFTH GRADE CURRICULUM

#### MATHEMATICS - CONTINUED

#### Data Analysis: Statistics and Probability

- Devise a plan, collect, organize and describe data systematically
- Construct, read and interpret tables, charts and graphs
- Evaluate arguments that are based on data analysis
- Find and describe the average of given data
- Make predictions that are based on experimental or theoretical probabilities
- Calculate and combine probabilities to solve real-life problems
- Make predictions from generalizations, hypotheses, rules and conjectures based on data that are organized in tables, charts or diagrams
- Use logical reasoning to solve problems
- Solve elimination-grid logic problems
- Model situations by devising and carrying out experiments or simulations to determine probabilities
- Make inferences and convincing arguments that are based on data analysis

## SCIENCE

# Scientific Methodology

- Year-long Inquiry/Science journal
- Systematic investigation: Make & test predictions; identify variables, draw conclusions; communicate and critique results
- Resolve differing explanations for same observation
- Scientific models: applications & limitations
- Use computers to analyze and report data
- Occupations in science & engineering related to IB units
- Scientist Biography: Modern Scientists
- Intersection of cultural beliefs & science

## Living Things

- Classification of living organisms
- Structural and behavioral animal & plant adaptations
- Survival advantages in animals
- Principles of Evolution
- Hearing and vision

## Forces & Energy

- Forms of energy and their properties
- Energy transformation & storage
- Characteristics of electricity; simple circuits



ACADEMY

ROCHESTER

# SOCIAL STUDIES

#### Community & Government

- Types of government
- Tribal governance

#### **Economics**

- Entrepreneurism. Entrepreneurs: present & historical

#### **US History**

- American government: core principles of democracy, the founders and federalism, founding documents, Constitution
- Timelines: links between events in an era
- Biography: US Leaders, Founding Statesmen
- Historical reenactment

## World History

- World religions
- Case studies: compare & contrast features and impact of prior civilizations/empires/eras

## Geography

- Important human and physical landmarks of Northeastern America and the new nation
- Effects of geography on migration, settlement borders, & land use
- Geographic locations, physical and human features of countries discussed this year

# VISUAL ARTS

- Combine an increased understanding of abstract concepts with observational skills that integrate the Units of Inquiry
- Learn to interpret their surroundings through direct and interpretive architectural studies
- Learn more sophisticated concepts, such as perspective and value
- Study symbolism in art through color and line (world religions)
- Use art as a communication tool to relate to mass media, music and various cultures
- Complete projects connected to art history and culture
- Study and create works in the style of famous artists