

FOURTH GRADE CURRICULUM

READING/ LANGUAGE ARTS

Word Level Work

Spelling Conventions and Rules

- Distinguish between the spelling and meanings of common homophones, e.g., to/two/too; they're, there, their; peace, piece
- Spell irregular tense changes, e.g. go/went, can/could
- Spell words within common letter strings but different pronunciations, e.g. tough, though, hour, journey, could, route

Vocabulary Extension

- Define familiar vocabulary and unit vocabulary in their own words, using alternative phrases or expressions
- Use 3rd and 4th place letters to sequence words in alphabetical order
- Use thesaurus for writing a variety of interesting words in compositions, poetry, reflections, etc.
- Explore and discuss the implications of words which imply gender, e.g. prince/princess, fox/vixen, king/queen
- 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 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
- Understand that some words can be changed in particular ways and others cannot and that these are important clues for identifying word classes

Sentence Construction and Punctuation

- Identify the common punctuation marks including commas, semi-colons, colons, dashes, hyphens, speech marks, and to respond to them appropriately when reading
- Work on editing and revising own writing
- Use the apostrophe accurately to mark possession
- Understand the significance of word order
- Edit own work and peer edit



READING/ LANGUAGE ARTS

Text Level Work

FICTION AND POETRY

Reading Comprehension

- Investigate how settings and characters are built up from small details and how reader responds to them
- Identify the main characteristics of the key characters
- Explore narrative order; identify and map out the main stages of the story
- Prepare, read and perform play scripts
- Chart the build-up of a play scene
- Compare and contrast poems on similar themes
- Understand how writers create imaginary worlds and to show how the writer evoked it through detail
- Understanding setting as time and place in a story
- Identify social, moral, cultural issues in stories
- Read stories from other cultures, identify and discuss recurring themes
- Recognize how certain types of texts are targeted at particular readers
- Write critically about an issue or dilemma raised in a story
- Clap out and count the syllables in each line of regular poetry
- Describe how a poet does not use rhyme, e.g. every alternative line, rhyming couplets, no rhyme, other patterns or rhyme
- Describe and review own reading habits through monthly reading goals and widen reading experience beyond classroom requirements and books for pleasure

Writing Composition

- Use different ways of planning stories
- Plan a story identifying the stages of its telling
- Write independently, linking own experience to situations in historical stories
- Write play scripts, e.g., using own stories or read stories as basis
- Write poems based on personal or imagined experience, linked to poems read
- 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
- Collaborate with others to write stories in chapters, using plans with particular audiences in mind
- Write an alternative ending for a known story and discuss how this would change the reader's view of the characters and events of the original story
- Write personal reflections on poetry, art, quotations and other cultures discussed in class

FOURTH GRADE CURRICULUM



READING/ LANGUAGE ARTS- CONTINUED

NONFICTION

Reading Comprehension

- Identify different types of text, i.e., their content, structure vocabulary, style, layout and purpose
- Understand and use the terms *fact* and *opinion*; begin to distinguish the two in reading and other media
- Identify the main features of newspapers: lay-out, range of information, voice, level of formality, organization of articles, advertisements and headlines
- Investigate how reading strategies are adapted to suit the different properties of Information Technology texts
- Appraise a non-fiction book for its contents and usefulness by scanning contents, headings, etc.
- Identify how and why paragraphs are used to organize and sequence information
- Read, compare and evaluate examples of arguments and discussions
- Evaluate advertisements for their impact, appeal and honesty
- Summarize a sentence or paragraph by identifying the most important elements and reworking them in a limited number of words

Writing Composition

- Write newspaper style reports
- Write clear instructions using conventions learned from reading
- Improve the cohesion of written instructions and directions through the use of link phrases and organizational devices such as sub-headings and numbering
- Write a non-chronological report, including the use of organizational devices, e.g., numbered lists, headings for conciseness
- Fill out brief notes into connected prose
- Collect information from a variety of sources and present it in one simple format

MATHEMATICS

Number Sense

- Use appropriate math vocabulary
- Use computation and estimation to solve problems
- Use mental math to solve computation problems
- Represent numerical relationships in one- and two-dimensional graphs
- Develop, analyze and explain procedures for computing, estimating and solving proportions

MATHEMATICS- CONTINUED

- Know and understand place value, including in the context of money
- Identify and demonstrate understanding of number theory
- Compute with whole numbers, decimals and fractions, including numbers having multiple digits
- Use and describe different strategies for estimation
- Use multiple strategies to solve problems
- Investigate and describe relationships among fractions, decimals and percents
- 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)

Algebraic Thinking

- Represent situations and number patterns with tables and graphs
- Analyze functional relationships to explain how a change in one quantity results in a change in another
- Use patterns and functions to represent and solve problems
- Identify patterns in the environment
- Write an equation to represent a situation and solve problems
- Demonstrate an ability to solve linear equations, using concrete, informal and formal methods
- Explore number patterns, using a calculator
- Write number sentences, using fractions and whole numbers
- Use order of operations to solve problems mentally
- Explore and describe a variety of ways of solving equations, including hands-on activities, trial and error and numerical analysis
- Apply algebraic methods to solve problems
- Understand and apply the concepts of the variable, set, subset and equation

Geometry and Measurement

- Identify, draw, describe, compare and classify geometric figures
- Know values of money
- Know and apply measurement equivalencies
- Solve problems using area, perimeter, volume and surface area
- Use proportional reasoning to solve and create measurement problems
- Select appropriate units and tools to measure to the degree of accuracy required in a particular situation
- Calculate time intervals and use conversions to solve problems
- Use tiling patterns to explore area
- Use a coordinate grid to locate ordered pairs and interpret information

FOURTH GRADE CURRICULUM



MATHEMATICS- CONTINUED

- Use metric units to describe length
- Identify types of angles, estimate their size and name them by using letters
- Use a compass, ruler and protractor to construct simple plane figures, including angles and circles

Data Analysis: Statistics and Probability

- Devise a plan, collect, organize and describe data systematically
- Construct, read and interpret tables, charts and graphs
- 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
- Use logical reasoning to solve problems
- Make inferences and convincing arguments that are based on data analysis

SCIENCE

Scientific methodology

- Year-long Inquiry/Science journal
- Scientific rigor: skepticism, reproducibility, error, bias, open communication & scrutiny of results.
- Case studies (examples of scientific rigor issues from above)
- Conduct or critique an experiment using the scientific method
- Occupations in science & engineering related to IB units
- Scientist biography: Chemist/Physicist

Living Things

- Migration of animals
- Balance in nature: ecosystems, food chains (focus on oceans)
- Effects of human and nonhuman factors on ecosystems

Earth & Space

- Meteorology: measurements, air pressure/movement, cloud formation, temperature, wind, wind chill

Materials & Matter

- Physical and chemical properties of matter
- States of matter
- Atoms and molecules
- Periodic Table of Elements

SOCIAL STUDIES

Community & Government

- Rights & Inequalities (e.g. Bill of Rights, women's suffrage, civil rights, Native Americans, etc.)
- Local & state government, government officials

Economics

- Economic factors (e.g. taxation) in revolution

US History

- Declaration of Independence & American Revolution
- Westward Expansion of United States
- Types of revolutions (e.g. industrial, technological, political)
- Immigration & citizenship (e.g. Ellis Island)

World History

- Age of Revolutions (e.g. France, Russia)

Geography

- North American Geography over time (including colonial geography)
- Effects of geography on migration, settlement borders, and land use
- Location of various ecosystems
- 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
- Explore art elements and principles of design in advertising
- 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