

Princeton Charter School

Grade Three Program

English Language and Literature: Grade Three

The goal of the English language and literature program is to improve each student's fluency in reading, writing, listening, and speaking.

Course Content

Literature and Reading Comprehension: Students expand their vocabulary and comprehension skills while they read and discuss various literary forms: fiction, fables, legends, folk tales, biographies, poems, plays, and nonfiction.

Expressive and Expository Writing: Expressive and expository writing assignments emphasize the formal writing process of outlining, drafting, revising, and editing. Students work on more advanced composition skills: word selection (synonyms, antonyms, and homonyms), detailing, and paragraphing.

Grammar, Syntax, and Language Mechanics: Grammatical instruction covers subject and predicate rules and introduces the function of other parts of speech.

Vocabulary and Spelling: Spelling work emphasizes phonetic patterns and letter clusters. Students practice penmanship.

Listening and Speaking Skills: Students take notes, participate in class discussions, and give two- to three-minute oral reports with notes. Reading work includes exercises in choral speaking and storytelling to allow children opportunities to develop expressive oral language.

Research and Study Skills: Students learn basic referencing skills with tables of contents, indices, atlases, dictionaries, encyclopedias, and a library catalog. Simple research reports use three or four sources and include a bibliography.

Homework: Students have daily assignments amounting to 20-25 minutes per night in reading, writing, vocabulary, grammar, or spelling as follow-up or preparation for each class period. Students are given writing assignments for which they make notes and produce an outline, rough draft, and revised version. There are occasional book reports and simple research reports.

Tests and Major Projects: Weekly spelling quizzes; unit tests; reading and writing evaluations. Occasional book reports, writing projects, and simple research reports will be assigned.

Grading: Classwork, homework, quizzes, tests, participation in discussions, projects, and presentations. Opportunities for revision of written work will be given.

Books:

Anthologies:

Collections for Young Scholars, Student Anthology, Volume 3, Book 1: Friendship, Imagination, Money, Open Court.

Collections for Young Scholars, Student Anthology, Volume 3, Book 2: City Wildlife, Country Life, Storytelling, plus associated workbooks, Open Court.

Literature:

Sarah, Plain and Tall, Patricia MacLachlan
The Enormous Egg, Oliver Butterworth
The Stone Fox, John Reynolds Gardiner
Mr. Popper's Penguins, Richard and Florence Atwater
The Cricket in Times Square, George Seldon
Trumpet of the Swan, E. B. White

Supplemental Reading:

The Indian in the Cupboard, Lynn Reid Banks
The Whipping Boy, Sid Fleischman
The Cabin Faced West, Jean Fritz
Maniac Monkeys on Magnolia Street, Angela Johnson
The Forgotten Door, Alexander Key
The Haunting of Grade Three, Grace MacCarone
Yang the Youngest and His Terrible Ear, Lensey Namioka
Biographies

Grammar:

Houghton Mifflin English, 4, Houghton Mifflin.

Workbooks:

McDougal, Littell Spelling 4, D. Bohen and C. McConnell.
Zaner-Bloser Handwriting with a New Alphabet, 3, C. S. Hackney.
Primary Analogies, Book 3, G. Brunner, J. Schoenlank, M. Williams, T. Wiss.

Mathematics: Grade Three

The goals of the grade-three mathematics course are:

- to develop mathematical reasoning, problem solving, and communication skills;
- to build fluency in numerical operations with whole numbers;
- to describe and to begin to analyze geometric shapes in terms of their properties;
- to use graphs to organize data; and
- to build a mathematical vocabulary.

Course Content

Number Sense: Base-10 place value concepts; comparing and ordering integers; expanded notation; rounding; time; money; fractions; negative numbers.

Geometry and Spatial Sense: Identify and see relationships between polygons and space figures; length; width; congruence, similarity, and symmetry; rotation, translation, and reflection; geometric terms.

Numerical Operations: Computation with whole numbers; multiplication; division.

Measurement: Measurement units and tools; standard units; estimation.

Estimation: Whole-number estimates; comparisons; when estimation is appropriate or useful.

Patterns and Functions: Construct, recognize, extend, and describe patterns in geometry, tables, and computations; function machines (input-output relationships).

Probability and Statistics: Use data generated by chance devices; simple events; equally likely outcomes; fair and unfair games; predictions; read bar and line graphs.

Algebra: Equality; inequality; use variables in fact problems; (represent an arithmetic relationship with an equation or inequality using a variable; translate between number patterns expressed with objects or tables to graphs, rules, or equations.

Discrete Mathematics: Systematic counting to determine the number of outcomes, combinations, arrangements, or paths; tree diagrams; classification and sorting by attributes; simple algorithms.

Conceptual Building Blocks of Calculus: Patterns that continue indefinitely area; subdividing a complex figure.

Textbook: *Grade 4 Addison Wesley Mathematics*, 1995.

Homework: Students have 15-20 minutes daily homework assignments to review and practice what they have learned in class.

Tests: Quizzes are given approximately once per week, and tests are given at the end of each chapter and at the end of the year.

Grading: Quarterly grades are based on homework completion, quizzes, tests, participation in discussions, and any projects assigned.

Science: Grade Three

In third grade, the science program centers on activities through which students are expected to learn how to:

- design and conduct experiments;
- use measurements and the metric system in the course of experiments;
- record and graph data;
- use data and analysis to make predictions; and
- write organized lab reports.

Students investigate **Structures of Life** through the following activities:

In **Origin of Seeds** students examine and sort a selection of seeds and look for seeds in fresh fruit. They describe and compare seed properties.

By **Sprouting Seeds** students investigate the effect water has on the seeds by observing and recording changes over time. They examine germinated seeds to study growth and set up a hydroponic garden to study plant life cycles.

Students **Meet a Crawfish**, observe its structure and behavior, establish a feeding and maintenance schedule, and map its track in the habitat.

Students investigate **Magnetism and Electricity** through the following activities:

The **Force** deals with permanent magnetism. Students study magnetic interactions and investigate variables that influence the force of attraction.

Making Connections investigates the flow of electricity through circuits. Students test materials to see if they are conductors or insulators.

In **Current Attractions** students discover that electric currents create magnetic fields and moving magnets make electric currents.

In **Click It** students build telegraphs, create a code, and wire up a two-way communications channel.

Students investigate **Earth, Moon, and Stars** through the following activities:

In **Earth's Shape and Gravity**, students use balls to study why the Earth's globe appears flat to a person on the surface, and learn that gravity attracts objects toward the center of the earth.

In **Moon**, students observe, record, and discuss the phases of the moon. They model eclipses using balls for the Earth and moon, and a light source for the sun.

With **Stars**, students learn that the rotation of the Earth on its axis causes the stars to appear to spin around the North Star at night, and that the revolution of the Earth around the sun causes different constellations to appear in the night sky. They make a star clock and learn to use a star map.

Students investigate **Earth Materials** to discover properties and identifying characteristics of rocks and minerals, and to learn about how rocks are formed.

In **Mock Rocks**, students use geologist's tools and techniques to separate mock rocks into ingredients to discover their composition.

In **Scratch Test**, students observe, describe, and record properties of four minerals, and use the scratch test to determine relative hardness.

In **Calcite Quest**, students observe that a characteristic property of calcite is that it bubbles in vinegar. Using this test, students go on a quest to find calcite in common rocks.

In **Take it for Granite**, Students use the properties of five minerals to find out which of the minerals compose granite.

Students study the **Human Digestive and Skeletal Systems** to learn about how their bodies work.

Instructional Materials:

Full Option Science System, Lawrence Hall of Science, University of California, Berkeley.

Great Explorations in Math and Science, Lawrence Hall of Science, University of California, Berkeley.

French Language: Grade Three

The textbook for grade three, *Trampoline - Level I*, is divided into 5 magazines or units designed to be taught over the course of one academic year. The goal of this course is to motivate young students to learn French through a series of episodes such as cartoons, French news and other information from France, songs, rhymes, games, and entertainment. This is all organized in the form of a children's magazine to which the students "subscribe" during the year. The textbook is all in French, very colorful and easy for an eight- or nine-year-old child to follow. The book comes with an audio-cassette tape to be used during class. French is spoken for almost the entire duration of the class period. Students learn to speak, read, and write French simultaneously, and they also are introduced to aspects of Francophone culture.

Course Content

Communication - The students learn to communicate in simple sentences to introduce themselves; to describe an object, a person, or a place; to offer, to accept or to refuse something; to talk on the phone; to express time (days, hours, weeks, schedules, seasons); to ask and to give directions; to express quantity; to compare; to write a letter; and to tell weather. Cassette tapes matched to the course units are extensively used.

Grammar - Students learn the present, past and future tenses; pronouns, articles, adjectives, and adverbs; the formation of a negative sentence; and the use of imperative.

Vocabulary - New vocabulary is introduced weekly, decoded, and used in class in drills and sentences. Students memorize the new vocabulary and use it in their own sentences orally. The vocabulary the students acquire throughout the year covers words and expressions related to the familiar universe of children of this age: school, friends, family, clothing, food and meals, the days of the week, the seasons and months of the year, pets and animals, transportation, currency, telling time, numbers from 1 to 100, colors, and French proper names. Students learn the concept of gender and the gender of their vocabulary words.

Phonetics - Students learn the French alphabet and the pronunciation of letters and groups of letters in French words. Familiarization with the sounds of French is very important. Pronunciation is emphasized in every class. Intonation and rhythm of a phrase are also studied. Students memorize simple poems and songs to emphasize the sounds of French words and phrases.

Language Laboratory - The students use the computer lab once a week for enhanced development of their language skills. The program in use for this academic year is *French for the Real World*.

Culture - French culture is seen through the eyes of school children living in France and includes their school universe; their friends and family; a Parisian building; French countryside; food and meals; major French holidays, and the geography of France.

Milestones: Grade Three

Story Milestone (English and Art)

Task: Write a story with a clear beginning, middle, and end, illustrate a cover page, and add from one to five illustrations. Read the story to the class.

Criteria: Use of five-step writing process; contains all elements of a story; no major mistakes in grammar, spelling, or penmanship; illustrations relate to story.

Multiplication Table Milestone (Mathematics)

Task: Demonstrate mastery of multiplication tables.

Criteria: 90 percent accuracy on 30 problems.