

# Princeton Charter School

## Grade Five Program

### English Language and Literature: Grade Five

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:** A continued introduction to critical reading, with selections from a variety of new and familiar genres and styles: short stories, essays, plays, short novels, and biographies. Students investigate plot and characterization in detail, and distinguish stated and implied main ideas. Students study meter, verse, and rhyming in poetry.

**Expressive and Expository Writing:** Written work emphasizes research skills and the formal writing process, with students expected to fully apply their knowledge of grammar, spelling, and vocabulary to final drafts. Students write stories with proper use of dialogue and simple comparison-contrast essays.

**Grammar, Syntax, and Language Mechanics:** Structure of sentences; parts of speech; agreement; verbs; and punctuation.

**Vocabulary and Spelling:** Spelling work uses phonetic patterns and letter clusters, prefixes, suffixes, derivatives, word roots, and etymology as tools. Students continue to work on building their vocabulary.

**Listening and Speaking Skills:** Students take notes during short lectures, participate in class discussions, make three- to five-minute oral reports, and recite poetry.

**Research and Study Skills:** Students continue to work on paraphrasing; use a thesaurus; use the library to support writing and oral assignments; and demonstrate note taking and bibliographic skills.

**Homework:** Students have daily assignments amounting to 20-30 minutes per night in reading, writing, vocabulary, grammar, or spelling as follow-up or preparation for each class period. Students are given frequent writing assignments for which they make notes and produce an outline, rough draft, revisions, and edited version. Students write book reports and simple research reports.

**Tests and Major Projects:** Weekly spelling quizzes, tests at the end of units, reading and writing evaluations. Occasional book reports and research reports will be assigned.

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

#### Books:

##### Anthologies:

*Collections for Young Scholars, Student Anthology, Volume 5, Book 1: Learning, Astronomy, Family Heritage; Volume 5, Book 2: Journeys; Volume 6, Book 1: Ancient Civilizations, Taking a Stand, plus associated workbooks, Open Court.*

**Grammar:**

*Houghton Mifflin English, 6, Houghton Mifflin.*

**Spelling and Vocabulary:**

*McDougal, Littell Spelling 6, D. Bohlen and C. McConnell.*

*Wordly Wise Book 2, Educators Publishing Service.*

**Literature:**

*The Secret Garden, Frances Hodgson Burnett*

*The Wonderful Flight to the Mushroom Planet, Eleanor Cameron*

*The Cat Who Went to Heaven, Elizabeth Coatsworth*

*My Brother Sam is Dead, James Lincoln Collier*

*A Wrinkle in Time, Madeleine L'Engle*

*Where the Red Fern Grows, Wilson Rawls*

*Roll of Thunder, Hear My Cry, Mildred D. Taylor*

**Supplemental Reading:**

*Ghost Cadet, Elaine Marie Alphin*

*The Secret of the Andes, Ann Nolan Clark*

*The Door in the Wall, Marguerite DeAngeli*

*Number the Stars, Lois Lowry*

*Henry Reed, Inc., Keith Robertson*

*Dragon's Gate, Laurence Yep*

*Biography of a Non-American*

## **Mathematics: Grade Five**

The goals of the grade-five course are:

- to develop mathematical reasoning and communication skills;
- to extend arithmetic fluency to operations with decimals and fractions;
- to analyze and two- and three-dimensional geometric figures in terms of their components and relationships among components;
- to use graphs for data organization and analysis; and
- to build a mathematical vocabulary.

### **Course Content**

**Number Sense:** Decimals; bases other than 10; exponents; prime factorization; greatest common factor and least common multiple; equivalent fractions; mixed numbers; ratios, proportions, and percents.

**Geometry and Spatial Sense:** Properties of two- and three-dimensional shapes; perspective; projections; perimeter, area, and circumference; congruence, similarity, and symmetry; rotation, translation, and reflection; coordinate geometry; geometric terms.

**Numerical Operations:** Order of operations; computations with decimals, fractions, mixed numbers, ratios, and percents.

**Measurement:** Measurement units and tools; standard units; converting units; estimation units; formulas.

**Estimation:** Computational estimates; comparisons; estimation strategies.

**Patterns and Functions:** Construct, recognize, extend, and describe patterns using tables, rules, variables, and graphs; input-output relationships.

**Probability and Statistics:** Analyze data generated by chance devices; experimental probabilities; equally likely outcomes; fair and unfair games; sampling; formulate and check hypotheses based on data; create, read, interpret, and translate between different types of graphs.

**Algebra:** Represent an arithmetic relationship with an equation or inequality using a variable; translate between number patterns expressed with tables to graphs, rules, or equations.

**Discrete Mathematics:** Systematic counting to determine the number of outcomes, combinations, arrangements, or paths; tree diagrams; simple algorithms.

**Conceptual Building Blocks of Calculus:** Patterns that continue indefinitely; infinity; linear and exponential growth; area; volume; subdividing a complex figure.

#### **Textbooks:**

*New Jersey HSP Math, Grade 5*, Harcourt, Inc.

*Grade 6 Addison Wesley Mathematics*, 1995.

Supplemental Materials: *Primary Mathematics Challenging Work Problems, Level 5*, Joseph D. Lee, Singapore Math.

**Homework:** Students have daily assignments amounting to 20-30 minutes per night 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 every 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.

## **History and Geography: Grade Five**

In grade five, students complete their study of United States history, and embark on a four-year, roughly chronological study of world history and geography. The first year covers civilizations up to approximately 500 B.C. and includes the study of the political, economic, cultural, and technological forces that have shaped the course of events. The general objectives for students are to develop knowledge of the human story to 500 B.C. and skill in thinking, imagining, and communicating—especially in writing—about how people lived during this period. The curriculum is directed toward developing the students’:

- knowledge of historical and geographical facts (people, places, events, chronologies);
- ability to describe the lives of the various peoples they have learned about, and to relate the lives of people in antiquity to their own lives today;
- ability to compare the portion of the human story they are studying with portions they studied previously;
- recognition of primary historical sources, and understanding of how primary sources are used by historians to construct “narratives” of the past; and
- skill with maps and time-lines.

### **United States History Course Content**

**A Nation in Conflict:** Building tensions leading up to the Civil War; economic causes of the war between the states; the Civil War and reconstruction.

**Toward the Modern Age:** Immigration; industrialization.

### **Human History Course Content**

**Introduction to the Course:** The tools of historians and archaeologists; how to construct and to use time-lines constructed; primary sources and how historians use them; early humans; the beginning of farming.

**The Sumerians:** The characteristics of civilization are: cities, a food surplus, division of labor, complicated government, monumental buildings, and writing; daily life in Ur; the city-state form of government; technological advances include irrigation and extensive use of wheeled vehicles.

**The Babylonians, Assyrians, and Persians:** Why were empires formed; how were the empires different from city-states; daily life in the Babylonian empire; Hammurabi’s laws; the Assyrian empire; the Persian Emperors Cyrus and Darius; daily life; continuity and change.

**The Egyptians:** How did the Nile affect the lives of the Egyptians; how was Egyptian life similar to, and different from, life in ancient Mesopotamia; what were the artistic achievements of the Egyptians; the gods of Egypt; Hatshepsut; Thutmose III; Akhnaton; the treasures of Tutankhamon.

**The Hebrews:** The Bible as a primary source; the Exodus; Saul, David, and Solomon; the Babylonian captivity; life in Palestine; the influence of religious ideas.

**The Minoans and Mycenaeans:** Life in a Minoan palace-city; Theseus and the Minotaur; the importance of trade; life in Mycenaean city-states; the labors of Heracles; the Trojan wars.

**The Americas to circa 300 B.C.:** Geographic features of the Americas; the earliest inhabitants; the Olmecs; the origin of corn.

### **Books:**

Textbook: *United States History*, Houghton Mifflin, 2005.

Readings: *Human History to 500 B.C.*, Washington World History Project.

Atlas: *The Nystrom Desk Atlas*, Nystrom.

**Homework:** Students have reading assignments as preparation or follow-up for class. Activities include analytical writing, creative writing, making and using maps.

**Tests and Major Projects:** Tests are given at the ends of units. Projects include simple research reports, book reports, and dramatizations.

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

## **Science: Grade Five**

The fifth-grade course includes life, physical, and earth sciences. Students are expected to:

- learn scientific concepts and vocabulary in areas covered;
- design and conduct experiments;
- use measurements in the course of experiments;
- record and graph data;
- apply mathematics to analyze experiments;
- use data and analysis to make predictions; and
- write organized laboratory reports.

### **Life Sciences – Ecology**

Topics: interactions among living things; cycles in nature; biological clocks; biogeography; Earth's biomes; and wildlife conservation.

### **Physical Sciences**

Topics: chemical reactions, heat, and energy; temperature; phase transitions; thermal expansion;

### **Earth Sciences**

Topics: structure of the atmosphere; the magnetosphere; structure and motions of the oceans; ocean life zones; fresh water on the surface and below the surface of the Earth; landmasses; and structure of the Earth's interior.

### **Health**

Topics: human skeletal, muscular and digestive systems; human reproductive system; family life education.

### **Instructional Materials:**

|  |                              |
|--|------------------------------|
| <i>Ecology: Earth's Living Resources</i> | Prentice Hall Science, 1997. |
| <i>Chemical Interactions</i>             | Delta Science Modules II.    |
| <i>Exploring Planet Earth</i>            | Prentice Hall Science, 1997. |
| <i>Human Biology and Health</i>          | Prentice Hall Science, 1997. |
| <i>You and Your Body</i>                 | Delta Science Modules II.    |

## French Language: Grade Five

The goals of the French language program for grade five are for students to:

- increase and refine their ability to communicate in French;
- complete authentic tasks and projects involving communication entirely in French;
- increase and enhance their knowledge of grammar in order to promote correct communication strategies and patterns;
- increase their general knowledge by using French as a vehicle for learning across the curriculum; and
- gain insights into English and French cultural and linguistic similarities and differences as reflected in the languages.

The textbook for grade five, *Visages - III*, includes six high-interest, age-appropriate themes. Each theme provides a variety of motivational, hands-on activities designed to develop the students' ability to communicate, read, and write in French. The accompanying workbook, *Plus-3*, reinforces the grammar concepts learned and provides ample practice for new vocabulary and concepts. An integrated approach fosters language growth, encouraging students to develop reading, writing, speaking, and listening skills to increase their comprehension and become effective communicators of meaning.

### Course Content

**Communication** - Students learn about types of communication used when visiting a French-speaking country including: setting a table; reading a newspaper article; describing clothing; conducting an interview; and planning a budget.

**Writing** - Students write about professions, write and design a brochure and a radio announcement, and complete a small research paper about marine life.

**Grammar** - Students learn conjugation of regular and irregular verbs; the correct use of present, future, and past tenses; possessive adjectives; and pronouns.

**Vocabulary** - New vocabulary is introduced weekly, decoded and used in class in drills and sentences. Students memorize the new words and use them in their own sentences. The vocabulary acquired throughout the year covers giving directions; identifying clothes; ordering food; and traveling in a French-speaking country.

**Homework:** Students have 15-minute daily assignments in reading, writing, vocabulary, or grammar, to practice the new lesson or concept learned that day. There are occasional projects that may require some work at home.

**Evaluation:** Strategies to measure and monitor student progress occur simultaneously with instruction. Ongoing evaluation creates the expectation in students that all activities are valuable and are monitored. Self-evaluation at the beginning, in the middle, and at the end of a theme assists students to see the "big picture" of their learning, to judge for themselves their progress towards objectives, and to plan for improvement. Self-evaluation sheets provide students occasions to celebrate achievements and to reflect on their own learning.

Class participation, a major key to success in French, is measured daily. Children are encouraged to answer as much as possible during class.

## Spanish Language A: Grade Five

Spanish Language A is the introductory course for a sequential program to develop language proficiency and to prepare students to integrate into a high-school program. The emphasis is on the ability to communicate effectively and to read and write in Spanish. The goals of the course are that students be able to:

- read and write simple paragraphs;
- carry on a basic conversation in Spanish; and
- discuss the customs and culture of some Spanish-speaking countries.

Classes are taught primarily in Spanish, using the textbook, *Paso a Paso A*, which is organized into six thematic chapters. The elements of a chapter tie together; students learn the vocabulary related to the theme, the grammar they need to communicate about the theme, and the information that anchors the language in its cultural context. End-of-the-chapter vocabulary lists reflect how new words are used to create and convey meaning.

Students use the computer laboratory on a regular basis, using *Spanish for the Real World*, which gives students the opportunity to cover material beyond their textbook, and *Pasos Vivos* which correlates with the textbook.

### Course Content

**Listening and Speaking** - Students learn to express themselves coherently and to convey simple ideas to classmates. Students describe themselves, others, animals, and objects; express likes and dislikes, preferences, and opinions; ask and give information and directions; and address people both formally and informally.

**Vocabulary and Spelling** - Through communicative activities students acquire a variety of vocabulary relating to school and home environments, time, directions, transportation, activities, colors, and counting.

**Writing and Grammar** - Students write simple paragraphs, poems, songs, and conversations using present-tense verbs. They study fundamental grammar: common present-tense regular and irregular verbs; simple future verb forms; personal pronouns; nouns; gender; adjectives; and the use of prepositions.

**Reading and Literature** - Students read simple poems and songs, and elementary-level books from the classroom library.

**Culture** - The culture of the Hispanic world is integrated into the program. Topics about daily life include Hispanic foods, names, and leisure-time activities. Students also study the names and locations of Spanish speaking countries, and are introduced to holidays and customs of a number of these countries.

**Homework:** Students have 15-minute reading, writing, vocabulary, grammar, or spelling assignments as follow-up or preparation for each class. Assignments focus on accuracy of writing and spelling, reading comprehension, and the correct use of vocabulary and grammar. There are occasional oral presentations on Hispanic countries and holidays.

**Evaluation:** Short quizzes check knowledge of vocabulary and grammar, and longer end-of-chapter assessments. Grades are based on class participation, homework, quizzes, tests, major projects, and presentations.

**Books:**

**Textbook:** *Paso a Paso A*, Scott Foresman Addison Wesley;

**Workbook:** *Paso a Paso 1. Practice Workbook*;

## **Milestones: Grade Five**

### **World Civilizations Milestone (History and English)**

**Task:** What is a civilization? Compare and contrast two civilizations that you studied and show how and why they are true civilizations.

**Criteria:** Quality of analysis; no errors of fact or of writing mechanics.

### **Science Laboratory/Safety Report Milestone (Science and Mathematics)**

**Task:** Prepare a report of a science lab with arithmetic operations and data; explain all safety measures and the reasons for them; what could go wrong?

**Criteria:** Proper layout and writing; accuracy and explanations of safety measures and reasons for them.

### **Typing Milestone (Technology)**

**Task:** Demonstrate competency in typing.

**Criteria:** Four lines at 25 words per minute; 90 percent accuracy.