

# Princeton Charter School

## Grade One Program

### English Language and Literature: Grade One

The goals of the grade-one English language and literature program are to guide each child:

- to learn the phonetic connection between words and sounds;
- to become a reader;
- to write simple sentences with correct capitalization and punctuation; and
- to develop good listening and speaking skills.

#### Course Content

**Phonics and Spelling:** Through systematic phonics instruction, students learn the 43 common sounds (phonemes) of the English language and the letters or combinations of letters that represent those sounds. To reinforce the connection between sounds and words, students see a word, hear the sounds in the word, say the sounds and word, and write down the word with correct spelling.

**Reading:** A variety of approaches and resources are used to guide children as they develop their reading skills. For reading instruction students are placed into four- or five-student reading groups; groupings are flexible based on student progress and needs, with regrouping every three to six weeks.

**Literature:** Reading Big Books engages children in hearing and reading literature from all genres. It introduces them to both print and book conventions and to the behaviors and strategies that good readers use to get meaning from what they read. Decodable books give emergent readers practice with the sounds and words they learn. Literature selections encourage students to read for longer intervals to become fluent readers.

**Expressive and Expository Writing:** Students write in their journals every morning. There are expressive and expository writing assignments based on stories read in class and other school activities. As the year progresses, the formal writing process of prewriting, drafting, and revising is introduced.

**Grammar, Syntax, and Language Mechanics:** Students learn to recognize the four types of sentences (statement, question, exclamation, command), and to identify subjects and verbs. They learn to capitalize the first word of a sentence and to end a sentence with a period. They also learn to capitalize the pronoun “I,” and names.

**Penmanship:** Students work on correct formation of numerals and lowercase and uppercase printed letters. They also work on letter and word spacing.

**Listening and Speaking Skills:** Students listen to stories and folk tales and participate in discussions about the stories; they also discuss other literature they read. Students give brief oral reports including show-and-tell. Selected poems are memorized and recited, giving the children opportunities to develop expressive oral language.

**Research Skills:** Students learn to use a children’s dictionary and to check out library books.

**Books:**

**Writing Program**

*Units of Study for Primary Writing: A Yearlong Curriculum (Grades K-2)*, Lucy Calkins and the Units of Study Coauthors, First Hand.

**Phonetic Books:**

*Decodable Takehome Books*, Open Court.

**Reading Anthologies:**

*Open Court Reading, Book 1: Games; Folktales*, Open Court.

*Open Court Reading, Book 2: Keep Trying; Homes*, Open Court.

**Workbooks:**

*My Printing Book*, Jan Olsen, Handwriting Without Tears.

*Write One SkillsBook*, David Kemper, Carol Elsholz, and Patrick Sebranek, Great Source.

*Zaner-Bloser Handwriting, 1*, C. S. Hackney.

*Spelling Connections 1 and 2*, J. Richard Gentry, Zaner-Bloser.

## Mathematics: Grade One

The goals of the grade-one mathematics course are for students to:

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

### Course Content

**Number Sense:** Counting forward and backward; skip counting; comparing and ordering whole numbers and simple fractions; number lines; using counters and base-ten blocks to add, subtract and develop place-value concepts; numbers are used for counts, measures, labels, and locations.

**Geometry and Spatial Sense:** Solid and plane figures; number of sides; symmetry; similar shapes; slides, flips, and turns (rotations, translations, and reflections).

**Numerical Operations:** Doubling; Addition and subtraction with whole numbers; relationship between addition and subtraction; using addition to check subtraction; two-digit addition and subtraction.

**Measurement:** Measurement units and rulers; the need for standard units; inches; centimeters; time to five minutes.

**Estimation:** Estimate the number of objects; estimate results of operations.

**Patterns and Functions:** Construct, recognize, extend, and describe patterns in geometry and number sequences; function machines (input-output relationships, what's my rule?).

**Probability and Statistics:** Use data generated by chance devices; simple events; equally likely outcomes; tallies; bar graphs; pictographs.

**Algebra:** Equality; inequality; missing addends.

**Discrete Mathematics:** systematic counting to determine the number of combinations, or paths; classification and sorting by attributes;

**Textbooks:**

*New Jersey HSP Math, Grade 1*, Harcourt, Inc.

Supplemental Materials: *Primary Mathematics Challenging Work Problems, Level 1*, Joseph D. Lee, Singapore Math.

## **History and Geography: Grade One**

In grade one, history time is story time, with history and geography taught through folk tales, legends, myths, accounts of historical events, and biographies. The teacher reads stories aloud every day, and children may also read stories independently. Listening to and reading these stories builds a child's sense of the world as a community and introduces new vocabulary and basic cultural knowledge. In addition to an introduction to stories from all over the world, there are many stories from Europe. Major geographical features affecting people's lives are studied as stories are read from each region.

The objectives of the program are to:

- develop children's knowledge and appreciation of the world's stories;
- develop children's knowledge and appreciation of the similarity and diversity of the world's peoples and places; and
- develop the skills and attitudes children need for the further study of history and geography at later levels.

These objective will be met through the following three components:

**Stories** - A collection of folk literature from around the world has been assembled in the school library. Reading these folk stories provides the focus for the study of people's lives in many places and at many times. As a story is read, class discussion draws attention to aspects of the story or illustrations which give information about everyday things, daily life, geographic features, values, customs and festivals, art and architecture, or government. Sometimes there might be evidence that allows one story to be placed at a specific time, or at a time relative to another story the class has read previously.

**Studies of people in a region** - In learning about how people live in these regions, students will touch on most of the following:

**Geographic features** - major land and water forms; climate; cities, towns, villages, and farms; plants and animals.

**Everyday things** - houses; food; clothes; buildings; transportation.

**Daily lives** - children's activities (school, toys, games) and feelings; activities of other family members; ways of making a living; ways of producing, buying, and selling things.

**Languages and stories** - values and religion; customs, holidays, and festivals; art and architecture.

**Geographic knowledge and skills** - Students use maps and globes to develop geographic knowledge and skills. In the course of the year, students:

- learn that there are many kinds of maps;
- recognize color conventions and other symbols on maps
- begin to learn about map projections;
- participate in making a map of a familiar place, such as the classroom, the playground, or the school;
- develop the ability to do the following with reference to the regions they study:
  - locate them on a world map and globe;
  - locate some of the countries and major cities on a world map and globe;
  - locate some of the major land and water forms of each region in a simple atlas published for children;
  - describe the climate of each region in general terms;
  - name and describe some of the plants and animals in each region; and
  - distinguish among cities, villages, and farms in pictures.

Children learn map skills from the book *Map Essentials 1*, National Geographic, 2001.

## Science: Grade One

In first grade, the science program centers on activities through which students:

- conduct experiments;
- make simple measurements in the course of experiments;
- record and graph data;
- make predictions based on data and analysis; and
- ask questions and make and record observations.

Students investigate **Balance and Motion** through the following activities:

In **Balance**, students explore balance, counterbalance, and stability through experiments with shapes, pencils, and mobiles. They discover ways to balance two-dimensional tagboard shapes, find balance points, and use counterweights to balance shapes.

In **Spinners**, students discover different ways to produce rotational motion using tops and other spinning toys they construct. Students explore variables that influence the spinning of zoomers (disks on a string), and twirlers (flying spinners).

In **Rollers**, students roll objects down slopes to observe and compare rolling systems with different-sized wheels. They roll paper cups, add weights, and predict the curved rolling paths, and they experiment with marbles to observe spheres as rollers.

Students investigate **New Plants** and observe life cycle through the following activities:

In **Brassica Seeds**, students plant rapid-growing seeds and observe the sequence of changes over time. They record observations by drawing, labeling, and captioning.

In **Grass and Grain Seeds**, students find out what happens when they grow rye grass and alfalfa plants, mow them close to the surface, and allow them to grow again. They plant wheat seed in soda straws, monitor the plant's growth, and record observations with labeled drawings.

In **Stems**, students cut plant stems, place them in water or soil, and observe changes over time. Students select the stems that show promise for developing into new plants and plant them in soil. They also plant potato pieces and observe and record the results.

In **Bulbs and Roots**, students initiate the growth of a new plant from a bulb, and from a carrot or radish root or part of the root. They observe changes and record their observations in labeled drawings. They make conclusions about the likelihood of producing new plants from parts that are normally underground.

Students study **Dinosaurs** to learn about their structure, how they interacted with their environment, and how scientists have discovered what they know about dinosaurs.

Students study **Nutrition and Germs** to discover how to keep their bodies healthy.

#### **Instructional Materials:**

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

## **French Language: Grade One**

In grade one, students are introduced to the sounds of French through songs, short poems, and stories. This literature-based method focuses on oral communication with some exposure to writing and reading at a basic level in order to familiarize the students with the graphic representation of the French language. Classes are taught in French to immerse the children in the language and to provide them with the motivation to learn, explore, and discover French as an adventure and as a journey into fantasy and imagination.

The children start with *Une Petite Grenouille*, a program of learning French for children six to seven years old, consisting of three stories accompanied by an audiocassette. Each story is a theme that breaks down in structured units to facilitate learning. In addition, four stories are taught from the collection *Imagination*. Together, these two story collections prepare the students for the second grade textbook, *Le Petit Trampoline*.

## Course Content

**Communication** - The objective of the course is to provide students with basic “formulas” for communication of simple structures in French. Students learn greetings, ask simple questions, express likes and dislikes, say “no,” count, and categorize colors, animals, and foods.

**Vocabulary** - All new vocabulary is introduced in French through pictures, objects, drawings and “Total Physical Response” (TPR). In a TPR lesson, the teacher models actions that students then mimic as they simultaneously hear vocabulary words and commands in French. As often as possible, the students are given opportunities to “experience” the vocabulary learned by acting it out, taking a class trip, or creating a picture story. In order to make French more real to the very young, cross-curriculum content is used as appropriate.

**Phonetics** - Oral communications emphasize correct pronunciation through repetition of groups of sounds and through songs that focus on pronunciation and on difficult sounds in French.

**Culture** - The entire first-grade curriculum integrates cultural aspects that make learning French an authentic experience. The children are introduced to Francophone customs, holidays, foods, school, and so forth.

## Milestones: Grade One

### Reading Milestone (English)

**Task:** Demonstrate the ability to read a text at the level of *The Cat in the Hat* by Dr. Seuss, or *The Very Hungry Caterpillar* by Eric Carle.

**Criteria:** Able to sound out unknown words;

### Addition and Subtraction Milestone (Mathematics)

**Task:** Demonstrate mastery of addition and subtraction of whole numbers up to and including ten.

**Criteria:** 90% accuracy on 20 problems.