

Robert C. Parker School
Curriculum Summary
Grades 4-5

Introduction

The 4/5 curriculum is a two year continuum, which reflects the multi-age classroom structure at Robert C. Parker School. Although the following is a breakdown by subject area, our goal is that we continually plan our units with a view to integrating these core areas of study.

Social Studies

Social studies units are organized around essential questions that guide research and study. Hands-on activities, guided group reading with discussion questions, independent reading lists, role plays, simulations, plays, etc., are ways the issues around the central question are processed. Throughout the year, the students' diverse learning strengths are addressed. A culminating experience presented to a larger audience ties the learning into a cohesive whole. Throughout, participation in peer reviews, student-created rubrics and self-directed independent study as well as collaborative work in teams and small groups are the means for gaining deeper understanding as well as assessing understanding and skill growth. With the goals being both learning subject matter and cooperative skills, we strive to build foundation knowledge, so that students can continue to build on this base throughout their lifetimes using critical thinking skills developed at this middle elementary age.

Year 1: *New York State: Geography and Native Tribes (The Iroquois)*

Local and International Landmarks and World Wonders

Ancient Civilization: The Aztec, Inca, and Maya

Greek Mythology

Big Questions: How do native peoples adapt to their environment?

Year 2: *United States Geography, Government; State and Local Government*

History Makers (living museum)

Immigration

Lewis and Clark, Westward Movement in America

Big Questions: Where are our origins? Where did we come from? How did we create change? What was its impact?

Language Arts

This area of skills involves reading, writing, listening, speaking. Language Arts are integrated into Social Studies. In addition, independent and whole class reading for pleasure is practiced in order to develop an avid and life-long connection with literature. Students read inside and outside the classroom on a daily basis and write summaries of their selections. Literature Groups provide opportunities to discuss and reflect upon engaging questions raised in the texts. Writing skills are developed through Journals and Writers Workshop. These approaches allow students to gather seed ideas and develop them into published pieces to celebrate with an audience. We

also explore writing and writers through author and genre studies. Opportunities to listen and to speak respectfully and thoughtfully occur on a daily basis. Students practice presentation skills.

Study and Research Skills

As part of learning the research process, fourth and fifth grade students learn alphabetization, keyword searches, scanning and separating main ideas from details, as well as sampling some of the basics of Boolean searches. Additional assistance with genre identification, and finding the most appropriate reference materials are provided. A critical balance between printed materials and online resources is the goal. In addition, the school librarian gives Book Talks to keep the students aware of the newest fiction and non-fiction on the shelves.

Science

Science is approached through hands-on activities. The Scientific Method of experimentation is emphasized when students engage in group and independent areas of study. The curriculum is developed closely with the science teacher and is designed to build foundation knowledge for scientific learning.

Year 1

Science Explorations:

- Biomes Study: What makes one biome different from another? Environment and Animals
- Biomes close to home: Deciduous and Coniferous Forest
- Tree identification
- Food webs: Prey/Predator
- Adaptations: Animal studies on how form and function interact to propel physical and behavioral adaptations.
- South and Central American Bioregions
- Wind turbines

Year 2

Science Explorations:

- Movement of the Earth - seasons
- Energy: Chemical, Electromagnetic - heat, light (Chemiluminescence)
- Animal/Plant Migration
- Energy: Mechanical - force and motion, simple machines
- Invent a Vehicle

Science in Health class:

- Anatomy/ Physiology
- Body Systems
- Human Life Cycle
- Body Comparisons
- Exercise Science
- Energy Systems: Aerobic/Anaerobic

Mathematics

The core of the fourth and fifth grade mathematics curriculum is *Investigations in Number, Data and Space* for grade 4 and *Connected Math, 6th grade level*, for grade 5. The major goals are to offer students meaningful mathematical problems and to emphasize depth in mathematical thinking. In addition, basic algorithms are taught to mastery. Challenges and project-based experiences are also components of the fourth and fifth grade math classes.