

## **Mathematics Curriculum**

Children will have a solid understanding of addition, subtraction, multiplication, and division at the end of the Junior Elementary program. Children will also have a good understanding of basic geometry and fractions. Junior Elementary children will be expected to:

- know quantities of symbols up through the millions
- do all whole number operations with addition, subtraction, multiplication, and a solid foundation in the concept of division
- understand fraction equivalents, operations with like-denominators.

## **Language (Reading and Writing)**

Language is the key to the elementary classroom. It allows the child to explore and follow her interests. Junior Elementary continues to build a strong phonics based reading program while incorporating whole language approaches in order to help children become thoughtful readers who read for meaning. Our objective is to teach children a love of reading and writing while providing them with the necessary skills to be successful. Junior Elementary students will spend a significant amount of time, up to two and a half hours per day, on language. Among the skills that third grade students will be expected to know and do are the following:

- continue with development of decoding strategies using phonics o use a variety of whole language comprehension strategies
- perform basic literary analysis (plot, style, theme, point of view, etc.)
- use various research techniques, such as dictionaries, encyclopedias, print media and the Internet
- have proper mechanics of writing (punctuation, parts of speech, diagramming sentences, formal and functional spelling, denealian and cursive handwriting)
- understand compound words, contractions, synonyms, antonyms, etc.
- understand the writing process (drafting, editing, reviewing, and revising)
- write in a variety of genre, including personal essays, journals, creative writing, poetry, and research reports
- speak and listen in ways that relate real/imaginary events with organization and closure
- engage in relevant discussions with active listening
- follow oral and written directions
- use appropriate tone, accurate diction and pronunciation.

## **Cultural Studies**

(includes Anthropology, History, Sociology, and Geography)

The cultural studies curriculum is the core content of the Elementary program. Children are taught to embrace the study of the world in which we live. The curriculum is both

independent and closely integrated into the reading and writing of the Junior Elementary program. The literature and books are designed to raise important concepts and ideas. Children are asked to play an active role in thinking about how they can make positive contributions to the world at large. Junior Elementary students will be using the cultural studies and science curriculum to do research projects on topics that vary from year to year depending upon the child's and teacher's interests (such as Egypt, Civil Rights, American Revolution, and the Aztecs). Some of the expectations by completion of this program include:

- understanding time and calendars
- ability to use compass and maps
- understanding concepts of democracy and citizenship
- knowledge of U.S. geography
- introduction to world civilization and cultures
- knowledge of practical economics and earth resources
- understanding physical and cultural geography

### **Science**

Students will develop the ability to know and use scientific processes to investigate their natural world. They will perform experiments and do investigations to better develop their skills of observation and analysis while discovering some of the workings of the Earth and universe. Junior Elementary students will continue to stress the basic content of the life sciences and also be introduced to physical sciences with the study of the atom and basic mechanics. More emphasis is also placed on research and field work. Some specific content that students will be expected to know and do includes:

- knowing and practicing scientific processes including hypothesizing, experimenting, reflecting, analyzing, and reporting scientific data
- classification of the animal and plant kingdoms
- knowing basic ecological principles and their application to the local ecology
- basic atomic theory
- history of the universe and characteristics of our solar system
- Earth history