



GRADE FIVE, 2009 - 2010

Fifth grade is a year of tremendous academic and social growth. Students develop their basic skills in reading, mathematics and the social sciences, while gaining experience and confidence in independent thinking. Students are asked to take an increasingly responsible role in their learning, reinforcing and strengthening what they have already learned, and developing and incorporating new areas of skill and interest. An interdisciplinary and thematic approach to studies encourages students to discover how areas of learning interrelate. Fifth grade is also a year of physical and emotional maturation and social and intellectual development. Students begin to independently evaluate social dynamics. They experience a greater sense of personal responsibility and begin a lifelong process of actively exploring new interests and opportunities. A conscious partnership between home and school underscores each child's joy and success.

ENGLISH: The English curriculum for grade five rests on a foundation of extensive reading and intensive writing. Through reading and writing and associated projects, students develop a broad array of skills. This year, the fifth grade will read a variety of literature including *My Side of the Mountain* (George), *James and the Giant Peach* (Dahl), *Journey to Topaz* (Uchida), *The Incredible Journey of Lewis and Clark*, *Roll of Thunder Hear My Cry* (Taylor), *A Fair Wind for Troy* (Gates), *Lord of the Sky* (Gates), *The Peaceful Warrior* (Clayton) D'Aulaires' *Book of Greek Myths*, and a selection of poetry. In conjunction with the history curriculum, we will study the folklore, legends and myths of the cultures studied. Book projects, class discussions, study questions, written reading responses, and drama will help students develop an appreciation of structure and theme in a variety of genres.

Fifth graders will practice the writing process, which reinforces the steps of prewriting, drafting, revision, conferencing, and editing. Selected pieces of writing will be polished and shared. Content for the writing will come from personal experiences and themes in the literature read. The fifth grade teacher will keep writing portfolios documenting their growth as writers.

Grammar skills will be developed through work in Walch's *Steps to Good Grammar*. The Perfection Form Company's *Everyday Words* from Classical Origins will be the core of the spelling instruction. Specific grammar and spelling skills are also introduced and reviewed as their need becomes apparent in student writing. Fifth graders are encouraged to type their final written work and to practice neat penmanship.

MATHEMATICS: The fifth grade math program strengthens a student's understanding of concepts and operations through class activities and individual work. The University of Chicago School Mathematics Project *Everyday Mathematics* is the core of the mathematics curriculum. Fifth graders will review basic facts and operations and work to develop an understanding of estimation, place value, fractions, percents, probability, decimals, measurement, graphs, and geometry. *Everyday Mathematics* emphasizes problem solving and integrates games and word problems in the lessons. A variety of manipulatives are used throughout the year to develop and strengthen skills. Mechanical drawing lessons incorporate geometry terms and reinforce measurement skills.

Students are introduced to algebraic concepts through exercises in Hands-On Equations, a game-based introduction to linear equations. Frequent checkpoints include regular homework, quizzes, and periodic tests.

SCIENCE: The focus of the fifth grade science program is the development of the basic processes of scientific investigation. Students will work to strengthen their skills of observation, prediction, organization, and interpretation. Scientific literacy, sound hypothesizing, the use of controls, and the manipulation of variables will be emphasized.

We will begin in the fall with a unit focused on physical science, structures, and inventions. An initial study of the forces of tension and compression will lead to the construction of bridges and mechanized vehicles. Students will also investigate the forces of motion and principles of energy transfer. This unit may be highlighted by a visit to the Boston Museum of Science where students will be asked to discern where, when, and how various elements of their studies have been applied. The fall term will also include a number of environmentally based lessons designed to enrich our first literature project. Activities may include explorations with educators from BEEC (Bonnyvale Environmental Education Center) and The Grafton Nature Museum.

After the winter break, students will conduct several air pressure experiments. Our purpose will be to practice the design and organization of experiments, and to prepare independent projects for a 5th–8th grade science fair. This is an opportunity for the fifth grader to investigate and communicate a scientific process or phenomenon, and to demonstrate proficiency in hypothesizing, experimenting, and reporting.

In the spring, we will study the skeletal and muscular systems of the human body and the respiratory, circulatory, digestive, and reproductive systems. Our focus will be on health and wellness. Students will read and discuss selected passages from Mary Elting's *The Human Body* and the Contemporary Health Series Curriculum *A Time of Change*. National Geographic videos, and activities including model arm building and chicken wing and heart dissections, will complement our class discussions.

HISTORY: During the fall term, students will investigate the adventures of Meriwether Lewis and William Clark. Specific U.S. geography skills will be emphasized through map-drawing exercises and charting the route taken by Jefferson's Corps of Discovery. Our investigation will be enriched by independent research, map and compass work, and art projects. In the spring term, fifth graders will study life in Ancient Greece. This unit will focus on reading and interpreting Greek mythology, investigating the history of democracy, and understanding how children came of age in the ancient world. Special attention will be paid to Athens under Pericles and the Peloponnesian War. Important parallels will be drawn between Greek democracy and American constitutional government. Students will be expected to research a topic of their own choice and produce a culminating unit project. Students will gain practice in research methods as they work on their theme-related report. They will practice note-taking skills, learn to use an outline, and be introduced to a variety of organizational strategies.

ART: The fifth grade art curriculum introduces the students to an analytical approach to looking at and thinking about art. Students will study the principles and elements of design as well as experiment with a variety of media and techniques. Projects typically undertaken have been Vasarely-inspired optical art pieces, Deborah Butterfield-style horses, and vases painted after Giorgio Morandi. Students work on improving overall drawing ability and familiarizing themselves with the proportions of the human head. In the winter term they do an in-depth study of Japanese art and work on ink brush painting, printmaking, papier-mâché lacquer bowls, Anime drawing, and much more.

FRENCH: For the fifth grade, we will be continuing in the series *Alex et Zoé*. This well-designed children's book employs comics, a CD, and a writing workbook as tools to engage students. The series is designed specifically for young learners of French and is structured to work on units that incorporate a song, games, and reading and writing built around a body of vocabulary. Topics covered include greetings, activities, clothing, foods, the body, and places. Additionally, the new language series *Qtalk*, which employs pictures as a mechanism to promote oral proficiency, will be used to get students speaking more in class. Class meets two times a week for 45 minutes, in the French room.

MUSIC AND TECHNOLOGY: The music program is an integral part of the TGS curriculum with all students in K-8 having three music classes per week. The primary goals are: developing an appreciation for music; singing on-pitch; reading music and playing an instrument; dancing cooperatively; taking direction and performing on stage. Basic computer skills and an introduction to music technology are also important components of the program. Students work in groups, individually, and with several faculty members throughout the year in different learning situations.

STUDY SKILLS: Study skills are developed and emphasized in fifth grade. Students are expected to keep an updated assignment schedule in their notebooks. Time management skills are fostered in class and practiced throughout the year. Homework assignments include math, reading, reading responses, illustrating work, map work, etc. Students are expected to complete neat and thorough work for evaluation. Students can expect to have between 15 and 45 minutes of homework each day including 20 minutes of independent reading. Math homework is generally assigned each day. Spelling lessons are due on Tuesday or Wednesday and tests are given on Friday. Weekend homework begins in January.

SOCIAL CURRICULUM: The social curriculum at TGS is designed to complement the academic curriculum and help maintain a healthy social and learning environment. This includes a series of "Community Life" classes at all grade levels that complements and reinforces the classroom-based social curricular activities and goals. We define a healthy school community as a place where people have a sense of belonging, where adults and students extend and receive respect in their

relationships with each other, and where people feel both a sense of support and personal challenge to help them learn and grow as human beings.

The "Community Life" classes help highlight and develop important community skills such as cooperation, team building, personal and social responsibility, deep listening, mindful speech, emotional literacy, respect for diversity, conflict resolution, stress reduction and relaxation, self-awareness, and problem solving.

Beginning in fifth grade, students are introduced to a sequence of Adventure Programming Initiatives that teach the basics of communication, cooperation, and trust in a milieu of fun. Students are challenged to explore the basics through cooperative and competitive games and low- and high-rope elements on our in-house ropes course.

LIBRARY: The fifth grade will meet with the librarian once a week to share and discuss books. Fifth graders will choose library materials from a variety of sources to support class work and reading for pleasure.

PHYSICAL SKILLS DEVELOPMENT: Physical skills development in grade five is a program designed to give a child a chance to develop physically through play, games, skill tasks, core strength, and movement activities. Activities are planned to stress various underlying themes of the program: strength and endurance (muscular and cardiovascular), coordination, game skills, sportsmanship, and social interaction. The daily program varies in size and structure of the groups. Fall activities promote positive social dynamics, gross motor skill development, and endurance and coordination. After-school cross-country running practice and meets are scheduled through the fall, as well as soccer games with other schools. In winter, students focus on cross-country skiing and have the opportunity to receive downhill skiing instruction.