

GRADE SEVEN
2007-2008



As new members of the Upper School, seventh graders will take on increased responsibility and independence in their daily activities. They will serve as role models for the younger students and contribute positively to the every day operation of the school. The seventh grade curriculum encourages students to think analytically as they practice and improve their basic skills in different subject areas. Students learn to study independently, work in small groups, and share their knowledge with their peers.

MATH: In the seventh grade the math curriculum is designed to review skills students have learned in earlier grades, and to introduce algebraic concepts through graphing, looking at patterns, and balancing linear equations. Students are encouraged to think logically and break problems down into parts that they know how to solve. Answers and procedures may not always be immediately obvious, but problems that seem confusing at first become easier with analysis and practice. A goal of the math program is to have students learn to think about problems and try different methods for solving them, especially when they are confronted with new concepts. The primary text for the course, Harold Jacob's *A Human Endeavor*, encourages students to become facile with numbers, to find patterns, and to draw mathematical conclusions from activities and problems.

In addition to the text, during the fall, the class will study tree plots in the woods behind the school in a joint math-science project. Seventh graders will work in small groups, measuring and recording data. They will learn how to plot points on a coordinate graph, use pi to find the diameter of trees, take compass bearings, and find degrees of angles. At the end of the year they become comfortable using variables in expressions and equations, in preparation for Algebra 1 in the eighth grade. Throughout the course, students practice using spreadsheets to make computer generated graphs. In addition, the class will have access to manipulatives such as Cuisenaire Rods, Mira, unit chips, and geometric shapes and solids to enhance students' comprehension and appreciation of mathematics.

GLOBAL GEOGRAPHY: In the seventh grade, students learn about the physical and cultural geography and natural resources of various areas of the world, with a focus on developing countries. They will compare their own way of life with that in less developed regions as they work to develop an understanding and appreciation for people and places around the world. A goal for the course is for students to develop an awareness of their relationship to the rest of the world while they work on improving research, writing, and communication skills.

The five themes of geography (location, place, human/environment interaction, movement, and region) will serve as a basis to examine life in different countries. Students will practice note taking, outlining, and writing two drafts of reports. During the year

students will complete one or two research papers and develop a project of their choice. Information will be shared with classmates through oral and visual presentations, as well as through cooking, art, and music.

The course begins with a study of physical geography, including the origin of continents and landforms, and map skills. Students will learn about natural resources in the local area, and then research developing countries to understand how geography, climate, and resources influence culture, the economy, and living conditions. An important aspect of the course will be looking at nutrition needs and available calories in different countries. After the December break, the class will put on an Oxfam hunger banquet to emphasize the inequities of food and wealth distribution in the world. During the winter students will study countries in Africa and Asia, and in the spring the focus will be on the history of Quebec. Students will have their own atlases for reference throughout the year. The TGS and local libraries will provide books on individual countries, and students will use the Internet for current information and interactive programs.

ENGLISH: Seventh grade English emphasizes the reading of good literature, creative and expository writing and critical thinking. Literature is selected from different genres including nonfiction, drama, poetry, the short story and the novel. Each selection serves as a model of expression and as a springboard for writing assignments, animated classroom discussions and analysis. Exercises in English serves as a grammar text for the seventh grade, and students complete Vocabulary Energizers I, by D. Popkin. Spelling will be directly connected to the vocabulary work and writing assignments. Reading selections will draw from *The Miracle Worker* (Gibson) *The Old Man and the Sea* (Hemingway), *The Shakespeare Stealer* (Gary Blackwood), *I Am the Cheese* (Cormier), *Our Town* (Thornton Wilder), *Much Ado About Nothing* or *Romeo and Juliet* (Shakespeare), *A Book of Poetry: Perspectives in Literature*, *Short Stories I: Perspectives in Literature* and *Seedfolks* (Fleischman).

SCIENCE: Through research and experimentation, seventh graders will practice the scientific method of observation, analysis, and presentation. They will learn how to write structured lab reports on data they have collected, as well as written reports on topics they have researched in books and on the Internet. Concise, clear oral reports with posters and graphs will be another method for presenting information. Students will have a chance to explore topics of their choice while following a scientific process.

In the fall, the science and math curriculums are tied together as students observe and collect data from their plots in the woods. They will learn about the growth of the local forest and how to identify species of trees and take a trip to the White Mountains to observe a different forest and landscape. Students will also study various cycles found in nature. In conjunction with the geography course, students will be introduced to healthy nutrition. They will examine their own diets and use the computer to create spreadsheets and graphs to display data.

During the winter, the class will focus on lab work and develop a science project of their own to research and test. Spring brings exploration of the vernal phenomena found in the forest that the students got to know during their studies in the fall. Texts for the year include *A Guide to New England's Landscape* and Prentice Hall's

Earth's Natural Resources. Individual projects will utilize a variety of sources, including journals, library books, and the Internet for current information on scientific topics.

DRUG AND ALCOHOL CURRICULUM: In conjunction with science, the seventh grade substance abuse program will focus on the way drugs, especially alcohol, affect the body. Decision making skills and role playing will give students the knowledge and tools to enable them to deal with situations they might encounter involving drugs and alcohol.

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.

PHYSICAL SKILLS DEVELOPMENT: This program is designed to give a child a chance to develop physically through play, games, and skill tasks. Activities are planned to stress various underlying themes of the program: strength and endurance (muscular and cardiovascular), coordination, game skills, sportsmanship and social interaction. During the fall, sixth, seventh, and eighth graders will work with 3 teachers each class period. The fall curriculum includes two classes each week focusing on Presidential Fitness guidelines, one practicing cooperative games, and one for general aerobic fitness, building up to the timed mile run. After-school cross-country running practice and meets are scheduled through the fall. In winter, seventh graders cross-country ski on the TGS trails, skate with fifth-eighth graders at the Vermont Academy rink, and have a choice between cross-country skiing at Grafton Ponds or downhill skiing or snowboarding instruction at Okemo. Spring activities include both team and cooperative games as well as some track and field sports.

TECHNOLOGY: Technology in the seventh grade occurs throughout the curriculum. In conjunction with scheduled tech time in the Midi lab where students learn many computer Internet related skills, geography, math, and science all incorporate the use of technology on a regular basis. Students prepare PowerPoint presentations, produce videos, use the Internet for research projects, use Inspiration for outlines, view geological simulations, and take part in interactive programs such as individual nutritional analysis and Oxfam/world hunger related activities. Many assignments also require spreadsheets and graphs, using Microsoft Excel. All students are expected to use the computer to type papers and save their work in individual student and class folders on the TGS network.

STUDY SKILLS: In the seventh grade, each subject integrates study skills instruction into standard assignments, both in class and for homework. Students learn how to research, take notes, outline using the Inspiration program, write multiple drafts of reports with bibliographies, and keep track of their materials in folders in their binders and on the computer. They use the start of the period after lunch every day to review and record homework assignments in their weekly planners and organize their binders. Seventh graders have rubrics for many assignments and activities, including group activities and oral and written presentations, to guide them through the process and help them evaluate their work.

HOMEWORK: Seventh graders can expect 30-40 minutes of homework per subject each night, or up to two hours of homework, though often the workload will be less. Each student will be given an assignment book to keep track of all work. There is a forty minute study period every day which students use to clarify assignments, get extra help, or work on their homework. They will follow guidelines and apply study skills such as note taking, outlining, and using study time efficiently and productively.