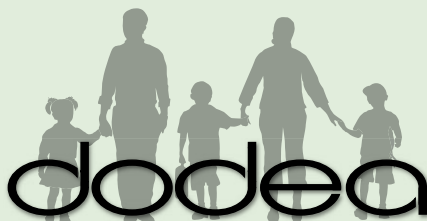


Parents Guide To

SECOND GRADE

Instruction



DEPARTMENT OF DEFENSE EDUCATION ACTIVITY

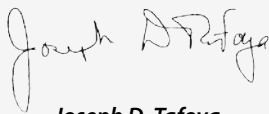
Message from the Director

Dear Parents:

The Department of Defense Education Activity (*DoDEA*) is committed to providing the highest quality of education to its students. One way to provide a quality education is with an effective curriculum that reflects high standards and expectations. Thus, DoDEA has developed rigorous content standards aligned with national guidelines and standards. But even the most rigorous standards cannot make schools and students successful without the support of parents.

This booklet is designed to inform you, our parents, of DoDEA's expectations for students in the four major curriculum areas—reading/language arts, mathematics, science, and social studies—at the second grade level. These expectations are aligned with the second grade curriculum that is used by the classroom teacher for daily instruction. The booklet also provides examples of what your child is learning in the classroom, and what he or she should know and be able to accomplish upon exiting second grade. In addition, it provides suggestions and tips on how you can help him or her at home.

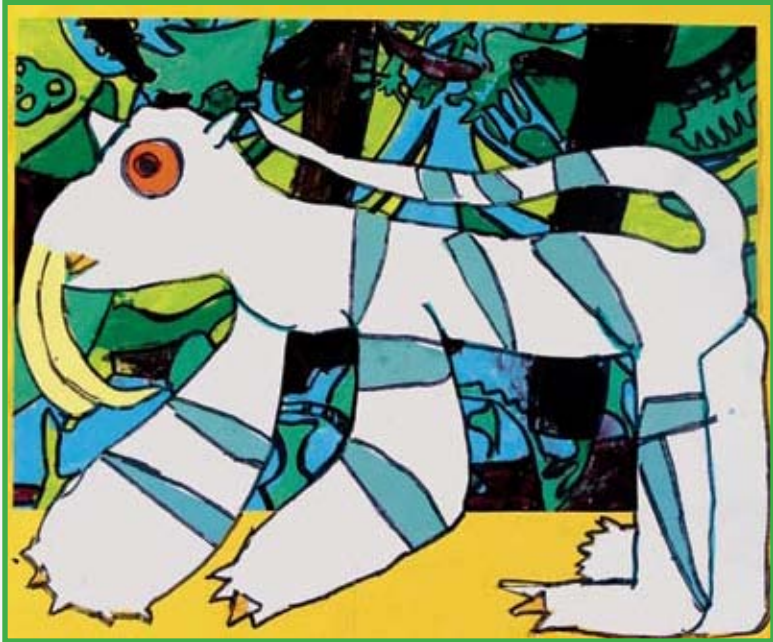
I hope this publication is informative and assists you with understanding DoDEA's educational goals for your child in second grade. Working together, we can ensure his or her success and start him or her down the path to life-long learning.



Joseph D. Tafoya
Director

Department of Defense Education Activity

Welcome to Second Grade



Erin Valley
Paper Collage, "Saber Tooth"

Help Your Child Find Success

As your child moves from first grade to second grade, he or she will display more independence in his or her learning patterns. Based on national standards and research on how children learn, the Department of Defense Education Activity (*DoDEA*) has developed clear expectations, or standards to guide classroom instruction at each grade level. This booklet reflects some of DoDEA's standards for the major academic areas in the second grade. For a complete copy of the DoDEA standards, please refer to DoDEA's website, www.dodea.edu.

DoDEA's standards reflect learning expectations for a second grade student. Because of learning styles and differences, we know that not all children reach the same expectations at the same time. If you are unsure or worried about your child's educational progress, please discuss it with his or her classroom teacher. DoDEA believes that all children can learn if parents and schools work together.

Your child will enter the second grade eager to please and share his or her work with family and friends. Your child will be interested in learning, wanting to discover how things work. He or she will make significant leaps in reading, writing, and math skills, and his knowledge base in the areas of science, social studies, and technology will involve more complex concepts and thinking. As your child develops and progresses in school, he or she will show his or her understanding by using new vocabulary, orally and in writing.

This will be an exciting year of learning for your child. DoDEA is ready to partner with you in making your child's second grade year successful. Some things you can do at home are:

Take Time

Your child will seek your attention and want your help to make his or her school life successful. The more interest you show in your child's learning, the more motivated and positive he or she will be towards school and homework. Your child will learn how to relate his or her learning to the real world by following your examples. Together, you and your child can take the knowledge he or she learns at school and apply it in the home setting.

Talk Together

Your child is a unique individual who has important things to share with you about his or her school day. Set aside a time each day for your child to talk about his or her daily experiences. Daily conversations will not only help improve your child's vocabulary, self-expression, and self-esteem, but it will also show him or her how special he or she is in your life. Research indicates that "Language plays a central role in learning, and the success of children in school depends to a very large degree on their ability to speak and listen." (*Speaking and Listening, the National Center on Education and the Economy, and the University of Pittsburgh, 2001*)

Encourage Creativity

Second graders tend to view life in black and white terms, becoming more interested in "real" activities than engaging in fantasy. They become less dependent on their imaginations and try to make sense of their world by becoming interested in the rules, rituals, and routines that govern their lives.

Creativity is the substance of discovery. Creativity comes from brainstorming different solutions to the numerous issues we encounter each day. Have a writing tablet close at hand and jot down ideas that your child brings to your discussions. Later, help your child develop these ideas through drawing, writing, or role-playing activities. Your child will become more creative if you encourage him or her to think outside the box. Help your child break new ground by creating exciting, challenging experiences where he or she can tap his or her creative intelligence.

Read Together

Your child must continue to read a lot—a book or several chapters of a book each day. Although he or she should now have the skills to read independently, your child will still benefit from hearing good books and stories read aloud to him or her. It is important to model the daily habit of reading (*e.g., a newspaper, a book, a magazine*) for your child.

Set the Environment for Learning

To help your child reach DoDEA's standards or expectations for second grade, it is most important that you review his or her work on a daily basis. Ask your child to tell you about his or her work and the process used to complete it. It is important that your child feels success, but remember that learning from one's mistakes is a part of life. Your child will learn by working through his or her errors. Motivation comes from within, so guide your child in seeing the importance of reinforcing learning.

Set aside a quiet time each day for your child to work on reading or completing homework. Find a place in your home where he or she will be free from distractions. Use a kitchen timer to set a work period, a short break, and then a completion period for the work. If your child seems overwhelmed, talk with his or her classroom teacher. Homework is meant to reinforce learning, so you want the time spent on it to be stimulating, not frustrating, for your child.

Physical Activity, Nutrition, and Safety Tips

As a parent, you have an important role in shaping your children’s physical activity, nutrition, and safety attitudes and behaviors. Help keep them safe, healthy, and ready to learn. Here are some things you can do.

It is recommended that children participate in at least 60 minutes of moderate-intensity physical activity most days of the week. Ensure that the activity is age appropriate, and, to ensure safety, provide protective equipment such as helmets, wrist pads, and knee pads.

Plan your children’s snack choices. Healthy choices may include popcorn, low-fat or fat-free milk, cheese or yogurt, and low-sugar, whole-grain cereals.

Create a safe home and community environment. Children should use booster seats until they can wear the lap belt low and flat on the hips and the shoulder belt across the shoulder (*usually when a child is around 80 pounds and about 4-feet-9-inches tall*).



Reading and Writing

Reading

Students link sounds to letters or letter clusters in reading.

Students will go beyond just using skills to hear and say separate sounds in words to using patterns to decode words. Students will look for beginning, middle, or end similarities and differences to identify letter-sound relationships.

You can help by having your child:

- Read a book and point out regularly spelled one-and two-syllable words.
- Recognize or decode common irregularly spelled words (*e.g., mice, geese, know, they*).
- Read words with vowel sounds spelled various ways (*e.g., long e as in he; ea as in sea; ee as in bee*).
- Read words with controlled vowel sounds (*e.g., ar as in tar; er as in her*).
- Read words with common endings (*e.g., have your child point out words in a book that end with ing-working, playing, cooking*)

Students understand the plot and character development from a reading and retain the information over several days.

Students will use higher-level abstract thinking skills such as interpretation, comparison, and evaluation to understand the differences in plot and character development. Most second grade reading is completed silently and independently except when read aloud for emphasis or interest.

You can help by having your child:

- Read unfamiliar books and recognize most of the words.
- Use a tone of voice, pauses, and emphasis to better understand what he or she is reading (*e.g., help your child understand how the author used language to develop the characters*).
- Use punctuation-including commas, periods, question marks and quotation marks-to determine the meaning of a passage.
- Search for clues within the text that can help him or her understand the meaning

Reading and Writing

- Look at the relationship between the beginning and ending parts of a passage to figure out how they make sense together.
- Combine information from two different parts of a story to make sense (*e.g., match the title with an illustration*).
- Understand cause-and-effect relationships that are suggested in the text.
- Discuss how, why, and what-if questions about non-fiction texts.

Students read more complex material and learn to read across academic areas such as social studies, science, and math.

Students will read books that have several chapters, and will use their reading skills across other academic areas during the school day.

You can help by having your child:

- Read one or two short books every day.
- Read multiple books by the same author and then compare the books.
- Improve vocabulary by using new words that he or she has encountered in his or her daily readings.
- Reread favorite books to gain deeper comprehension of the text and the author's style.
- Read informational writings (*e.g., directions to games, instructions for video games*).
- Read his or her own writing and the writing of classmates.
- Read announcements, labels, instructions, menus, and invitations.
- Listen to "worthwhile" readings (*e.g., classic children's literature*) and then use the language in conversations with you.
- Paraphrase or summarize what another speaker has said.
- Use questioning techniques that allow him or her to politely correct or challenge ideas that differ from his or her own ideas.
- Talk about the meaning of some new words found in his or her readings.
- Learn strategies for making sense of new words in a passage (*e.g., read the entire sentence to help figure out the meaning of the word*).

Reading and Writing

Writing

Students use specific criteria to decide what to write about—what is important to them, what they know something about, what will yield a good product, and what will reach their audience.

Students will write longer and more detailed sentences at this level. They will decide what to write about and revise their own writing. They will write for a variety of purposes and audiences.

You can help by having your child:

- Write on a daily basis.
- Come up with his or her own topics when writing (*e.g., have your child make his own book by writing and drawing pictures*). [*There are some excellent computer programs that will assist your child in writing and drawing stories, including “Paint on Windows,” “Kids Pics,” “Word on Windows,” and “Children’s Publishing.”*]
- Reread, revise, edit, and proofread his or her own work.
- Evaluate the quality of his or her written work.

Students learn to write as a way to communicate with others and as a way to demonstrate understanding of a topic.

Students will explore different kinds of writing including literature, narrative reports, and informational writing.

You can help by having your child:

- Use language in writing that does not sound like everyday speech (*e.g., “Slowly, slowly he turned around.”*).
- Create settings, characters, and moods that are believable.
- Learn to tell not only what happened to a character but also what the character wondered, remembered, and hoped.
- Write in first and third person (*e.g., write “real” stories such as a story about a family trip to the zoo in first person—“We went to the zoo on Saturday and I saw lots of animals,” and make-believe stories with make-believe characters in third person—“Franklin wanted his dad to take him to the baseball game.”*).
- Use exchanges between people effectively (*e.g., have story characters have a “life-like” conversation*).

Reading and Writing

- Demonstrate organizational skills to communicate facts and details correctly (e.g., *put things that happen in a story in the correct order*).
- Use charts, illustrations, and diagrams to show understanding.
- Provide enough details and information for a reader to follow the actions in a story.
- Write variations on stories that he or she has read, telling the story from a new point of view, substituting a new setting, changing important characters, or rewriting the ending of the story.
- Write stories on the computer, and work with your child on editing his or her work.
- Make connections between what your child writes and his or her own life.
- Ask questions that will encourage your child to expand upon a story (e.g., *“What do you think she did before she went to bed?”* or *“Do you think he was happy or sad when his friend moved away?”*).



Reading and Writing

Students develop fluency as writers.

Students will produce longer and more detailed written texts. Some echo how they talk while others show an awareness of literary style. Students will correctly use periods, capital letters, quotation marks, and exclamation points more frequently.

You can help by having your child:

- Practice using connecting words and phrases (*e.g., but, and*).
- Learn to vary sentence patterns and length in writing.
- Use words from his or her speaking vocabulary, as well as words gained from reading and class discussions, in his or her writing.
- Use words that communicate the intended meaning (*e.g., screamed instead of said*).
- Extend his or her writing vocabulary by using special words related to the topic or setting (*e.g., the names of different kinds of trees—such as oak and maple—when writing about a forest*).
- Apply spelling strategies to spell unfamiliar words (*e.g., use rhymes such as “i before e except after c…”*).
- Use correct verb tenses and plurals (*e.g., she does, they do; mouse-mice*).
- Use capital letters and correct punctuation when writing.
- Edit his or her written work for spelling and punctuation errors (*e.g., have your child circle words that he or she thinks may be spelled incorrectly. Have your child try to write the word three different ways. Then discuss the correct spelling, and give your child the opportunity to correct his or her work.*).
- Write in a daily journal to expand on his or her thoughts and ideas.



Mathematics

Number and Operations

Students estimate, calculate, and develop strategies for solving addition and subtraction problems based on number relationships.

Students learn to apply math in daily life.

You can help by having your child:

- Take a walk with you. While walking, count the steps by 1's, 2's, 5's, 10's, and 20's to 100.
- Compute answers in his or her head. For example, when driving in a car, give a problem such as "Begin with 2, subtract 1, add 2. What is your answer?" Pause after each step of the problem.
- Use estimations when appropriate. Ask your child questions like "About how long will it take to get to the store? How many pieces of candy are in the jar?"
- Show fractions such as one-half, one-fourth, and one-third when eating pizza (*or any food that can be divided into sections*).
- Count the change when you are at a store.

Algebra

Students generalize a pattern to determine a rule.

Students represent information using words, numbers, and symbols.

You can help by having your child:

- Solve story problems about things that your child is doing each day. For example, "If you have 12 Popsicles in the freezer and you eat 7 this week, how many will you have left?"
- Use a button collection to make up math story problems and represent them with buttons. Use buttons of two colors to represent adding and subtracting, asking your child to write a number sentence for the buttons you display. For example, 6 green buttons and 2 white buttons equals 8 buttons: $6 + 2 = 8$.

Mathematics

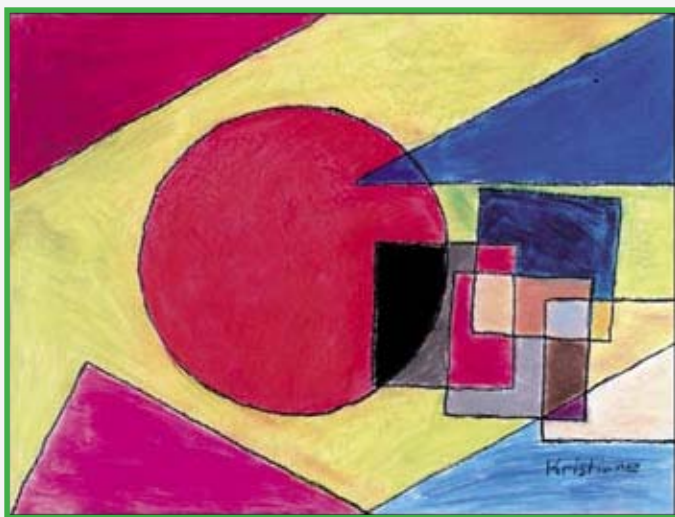
Geometry

Students identify and describe a single transformation (*flip, rotate, slide*) of a simple shape.

Students learn to manipulate shapes around them.

You can help by having your child:

- Use maps to identify left, right, north, south, east, and west.
- Fold a sheet of paper in half. Draw half of an image on one side of the fold (*such as one set of wings for a butterfly*). Duplicate the image on the other side of the fold line. If completed correctly, the images should match when the paper is folded on that line of symmetry. You can also use craft items such as noodles, string, and buttons to create the duplicated image next to the fold line.
- Play "Move It." Ask your child to do simple movements such as "Move two steps to the right."



Kristiane Sonnenberg
Pastel, "Geometric"

Mathematics

Measurement

Students make and use estimates of measurement.

Students select and correctly use the appropriate measurement tool and unit.

You can help by having your child:

- Tell time by five minutes, quarter-hour, half-hour, and hour using digital clocks and clocks with hands.
- Use a calendar to mark and keep track of special days such as birthdays, return date for a parent who is deployed, and the date of a grandparent's visit.
- Use an outside thermometer to keep track of the daily temperature.
- Measure, estimate, and compare household objects by size, length, perimeter, weight, and volume using a variety of measurement units (*for example, inch, foot, yard, centimeter, meter, cup, pint, quart, liter, gram, and pound*).

Data Analysis and Probability

Students read, interpret, and create graphs and tables.

Students begin to use formal information presentations.

You can help by having your child:

- Run a short distance while you time him or her with a watch. You can do this over several days and record the results. Display these results in a bar graph. Discuss how quickly and easily data can be displayed in a graph. Try graphing other activities, such as recording how many jumping jacks your child can do. Include siblings or friends and record their data as well.



Inquiry Skills

Students conduct investigations using the processes of scientific inquiry.

Students will use a broad range of inquiry skills to understand their natural world. They will learn to make more detailed observations and conclusions, and use unusual or unexpected data to help them validate information.

You can help by having your child:

- Gather scientific information from a variety of reliable sources (*e.g., if your child likes dinosaurs, discuss dinosaurs, read dinosaur books, construct dinosaur models, and visit museums to see dinosaur fossil displays*).
- Design and conduct investigations.
- Select and use the appropriate tools to collect and record data and observations (*e.g., use a magnifying glass to look at bugs or leaves, a telescope to view the constellations, a microscope to study blood, graphs and charts to record real problems*).
- Ask questions about the data that has been collected, and then report his or her observations and predictions using scientific words. Learn to use graphs to explain scientific information.
- Build models to explain scientific learning (*e.g., build a Lego model of a windmill*).
- Describe procedures and results of his observations and investigations orally and in writing. Summarize the data, and state a conclusion orally and in writing.



Physical Science

Students identify the properties of objects and materials.

Students will learn about the different states of matter and how to classify objects according to their physical characteristics. Their knowledge of the physical world will be gained through investigations with rocks and soil, and through activities with light and magnetism.

You can help by having your child:

- Conduct experiments that demonstrate the three states of matter (*e.g., conduct an experiment with water to show the three states of matter, liquid/solid/gas: melt ice-a solid, to get water-a liquid, and then boil it to get steam-a gas*).
- Develop classification systems to sort objects based on physical characteristics (*e.g., use a variety of objects and compare the following characteristics: buoyancy, shine, hardness, and flexibility*).
- Explore motion of objects by moving objects of different sizes and weights (*e.g., use a variety of sizes of toy cars to explore how size and weight affect their movement*).
- Record and describe the directional paths of objects (*e.g., circular, straight, zigzag, high/low*).
- Explore ways to produce different speeds to produce different sounds (*e.g., a fan on low, medium, and high speeds*).
- Compare techniques and forces needed for moving objects.
- Investigate magnetic attraction in relationship to a magnet's poles.
- Investigate and record the temperatures of different objects and places in the environment.
- Investigate and describe how light is reflected.

Science

Life Science

Students study the characteristics and life cycles of organisms (i.e., living things), and how they adapt in different environments.

Living things grow, change, and reproduce. Students will group plants and animals based on unique characteristics, and will examine how living things develop systems to protect themselves and adapt to their environments.

You can help by having your child:

- Identify unique characteristics of organisms, including both plants and animals.
- Describe how an organism finds food, water, and shelter in its environment.
- Identify the life cycles of different organisms (*e.g., observe the life cycles of tadpoles/frogs or caterpillars/butterflies*).
- Investigate how living organisms adapt for self-protection (*e.g., look for insects such as grasshoppers or animals such as polar bears that use coloration or protective coverings to blend in with nature*).
- Identify how animals and plants are especially suited to certain environments (*e.g., read and discuss a book on rainforests, jungles, and deserts to compare the different plants and animals that live in these environments*).

Earth and Space Science

Students learn to identify the properties of Earth, and describe changes in the earth and sky.

Students will explore the physical world around them and describe the changes over time. They will observe weather and seasonal changes, and describe how these affect the lives of living things.

You can help by having your child:

- Classify rocks and soils using characteristics that are observable (*e.g., have your child start a rock collection*).
- Encourage your child to read books to help identify and classify his or her collection by color, size, and texture.

Science

- When traveling, collect rocks that are particular to that area and add them to his or her collection.
- Investigate different rock samples that contain fossils and compare them to living organisms (*e.g., using a fossil, compare it to a similar animal/fish/plant that is alive today*).
- Describe ways the earth is constantly changing (*e.g., go on a family outing and discuss how weathering and erosion can affect the family's favorite outdoor recreational areas, such as a favorite beach becoming narrower*).
- Observe and record weather changes in the local environment (*e.g., draw and color simple maps of the school property that show all the different surface coverings, such as grass playing fields, hardtop playgrounds, and sidewalks. Identify the effects of any erosion or weathering on the school environment.*).
- Observe and record the phases of the moon through several months (*e.g., each night before going to bed, have your child observe the phase of the moon and then draw it on a chart beside the bed. After each month of recording, discuss the chart with your child and compare it to the other months.*).



Science and Technology

Students identify simple technologies and demonstrate inquiry abilities in technology design.

Students will explore how simple technological tools assist them in classroom and home settings. Using the information on how technology supports people, students will identify a problem in their immediate environment and then propose and implement a solution.

You can help by having your child:

- Explore specific technologies that help people work efficiently (*e.g., feeding and milking cows, growing and harvesting crops, getting products to market*).
- Examine commonly used tools or toys, and explain how they work.
- Identify a problem in his or her immediate environment (*e.g., jobs not being done around the house*) and propose a possible solution using a technological tool (*e.g., use a computer to make a chart listing every family member's responsibilities*).
- Implement a proposed solution to the problem and evaluate the results (*e.g., make a job chart and see if that helps to get the jobs done*).
- Communicate methods and solutions orally, in writing, or in pictures.



Science in Personal and Social Perspectives

Students practice safety in science activities, practice conservation of resources, and understand how humans interact with the environment.

Students will practice safety when conducting scientific investigations. They will describe changes and characteristics in a population, identify types of resources, and describe how environments change.

You can help by having your child:

- Practice safety when he or she is involved in scientific activities.
- Identify where important resources are located (*e.g., water, forests*).
- Practice conservation strategies for using resources at school and home (*e.g., have your child practice the recycling of bottles, paper, and cans. Encourage him or her to recycle outside the home environment.*).
- Find new ways to reuse materials (*e.g., have your child use items such as milk cartons or old film canisters to make something useful or fun*).
- Observe and discuss why changes occur in the indoor and outdoor school environment (*e.g., discuss with your child how littering the streets or playground can affect him or her and his or her friends.*).
- Explain how students can have an effect on the environment (*e.g., by picking up trash, planting flowers, building feeders for birds*).

Social Studies

Citizenship

Students study the ideals, principles, and practices of citizenship in a democratic republic.

Students will learn vocabulary as it relates to citizenship and the neighborhood. They will learn the concepts of self-control, fairness, and leadership.

You can help by having your child:

- Identify, describe, and display characteristics of good citizenship.
- Define his or her role as a member of a group (*e.g., identify different conflicts he or she may face when he or she works in groups at home and at school, and how to resolve these conflicts*).
- Explain actions citizens can take to influence policy (*e.g., the American Society for the Prevention of Cruelty to Animals works to protect animals*).

Culture

Students study cultures and cultural diversity.

Students will explore the influence of language, art, music, and cultural elements on the way people live.

You can help by having your child:

- Tell how communities are alike and what makes them unique.
- Describe the customs of specific holiday celebrations and cultures (*e.g., giving gifts at Christmas and Three Kings Day, lighting candles at Hanukkah, carving ice sculptures in Japan, and breaking piñatas in Mexico*).
- Relate how people from various cultures make contributions to communities (*e.g., explore foods from different states and countries*).

Social Studies

Time, Continuity, and Change

Students study how people view themselves in and over time.

Students will discover how their own family and neighborhood change over time. They will learn about time in relationship to themselves and their neighborhood.

You can help by having your child:

- Tell how communities change to meet the needs of their members (*e.g., as more families with children move into a community, more schools and playgrounds will be built*).
- Compare and contrast how the various modes of communication and transportation have been developed (*e.g., wall/desk telephones, wireless phones, cellular phones; covered wagons, trains, cars, airplanes. Discuss what kinds of communication and transportation your family has used over the years.*).
- Keep a calendar and timeline of events (*e.g., create a month-long calendar, and mark important dates and events*).

Space and Place

Students study their world and where they fit geographically.

Students will use maps to locate familiar places and geographic features, follow routes, and explain movement from place to place. They will learn vocabulary pertaining to geography skills.

You can help by having your child:

- Design and build a map with a key (*e.g., use symbols to represent such things as houses, parks, sidewalks, and roads*).
- Use globes and maps as sources of information (*e.g., to find the different countries and continents where people live*).
- Describe how weather and seasonal patterns affect land and living things (*e.g., the different kinds of plants and animals that live at the North Pole and the equator; the different kinds of fruits, vegetables, and birds that are found in Minnesota and Florida*).
- Locate various cities, states, countries, and continents on a map.
- Use geographical terms to describe land, bodies of water, weather, and climate (*e.g., mountains, plains, lakes, oceans, an arctic climate, a temperate climate*).

Social Studies

Individual Development and Identity

Students learn about individual development and identity.

Students will recognize that individuals vary in the ways that they contribute to their neighborhoods.

You can help by having your child:

- Recognize that people vary in abilities and talents (*e.g., some people are musicians, some are artists, some are builders, some are scientists*).
- Recognize the need for personal goals.
- Demonstrate appropriate behavior in a variety of settings (*e.g., in a classroom, on a playground*).

Individuals, Groups, and Institutions

Students learn about the interaction among individuals, groups, and institutions.

Students will explore how family needs and concerns are addressed within the neighborhood. They will explore different roles of others within the neighborhood.

You can help by having your child:

- Explain an individual's responsibility towards his or her family and community.
- List ways people depend upon human resources and institutions (*e.g., on farmers, airplane pilots; libraries, hospitals*).
- Relate social studies content to real experiences (*e.g., study the way different products are processed and packaged in order to get to the store and your house*).

Production, Distribution, and Consumption

Students learn how people organize for the production, distribution, and consumption of goods and services.

*Students will track products and distributors of food, and explain how food items (*e.g., corn*) get from the farm to the supermarket.*

You can help by having your child:

- Describe various jobs/careers (*e.g., farmer, trucker, baker, store manager*).

Social Studies

- Define the concepts of cooperation, competition, and conflict as they apply to production, distribution, and consumption of goods and services (*e.g., a farmer working with a trucker to get his corn to market; two grocery stores selling tomatoes at different prices; a grocery store not wanting to accept a shipment of bananas because they are too ripe*).
- Define “goods” (*things that people make or grow*), “services” (*useful things that people do for others*), “workers,” “income,” and “consumers.”
- Distinguish between producers (*e.g., a vegetable farmer*) and consumers (*e.g., a father buying corn for dinner*).

Power, Authority, and Governance

Students study the structure of power and authority.

Students will learn about the democratic process and evaluate the qualities of leaders. They will recognize that in a democratic government like the United States, citizens vote for governmental representatives to represent them and make decisions.

You can help by having your child:

- Understand the rights and responsibilities of citizens.
- Relate the concept of authority to home, school, and community.
- Describe the need for laws (*e.g., laws such as stop signs that protect citizens’ safety*).



Social Studies

Science, Technology, and Society

Students learn about the relationships among science, technology, and society.

Students will identify important energy resources in their home. They will identify ways to care for and protect natural resources, recognizing that they can make a difference in helping the environment.

You can help by having your child:

- Name energy sources found in homes (*e.g., electricity, natural gas*) and explain how these energy sources have been developed.
- Identify ways people can conserve and replenish natural resources (*e.g., plant new trees*).
- Name the ways science and technology have led to changes in the world (*e.g., making clothes at factories instead of at home; using a computer for shopping instead of going to the store*).

Global Connections

Students learn how they connect and depend upon others in a global society.

Students will recognize that the earth has many countries and that there are many kinds of life on Earth. Students will explore the impact of language, art, music, and cultural elements on global understanding.

You can help by having your child:

- Recognize the impact of individuals in a global society.
- Discuss the traditions and customs that are transmitted within a family or community (*e.g., clothing, music, dance, food*).
- Identify the responsibilities of a global citizen (*e.g., to recognize the need for recycling things such as glass, paper, plastics, and metals, and for saving historical buildings and monuments*).



Notes

Appendix

Resources for Children

Read-Aloud Books

Fiction

- Brenner, Barbara. *One Small Place in a Tree*. New York: Harper Collins, 2004
- Browning, Sheri. *All Tutus Should Be Pink!* New York: Scholastic, 1992.
- Corey, Shana. *Players in Pigtails*. New York: Scholastic, 2003.
- Cushman, Doug. *Space Cat*. New York: HarperCollins, 2004.
- French, Jackie. *Too Many Pears!* Long Island City, NY: Star Bright Books, 2003.
- Gutman, D. *Get Rich Quick Club*. New York: HarperCollins, 2004.
- Hest, Amy. *Mr. George Baker*. Cambridge, MA: Candlewick Press, 2004.
- Jenkins, Steve. *Actual Size*. Boston: Houghton Mifflin Co., 2004.
- Jinkins, Jim. *Pinky Dinky Doo: Where Are My Shoes?* New York: Random House, 2004.
- Kasza, Keiko. *My Lucky Day*. New York: Penguin Group, 2003.
- Krensky, Stephen. *We Just MOVED!* New York: Scholastic, 1998.
- McKissack, Patricia. *Messy Bessey's Family Reunion*. New York: Scholastic, 2000.
- Pallotta, Jerry. *The Beetle Alphabet Book*. Watertown, MA: Charlesbridge Publishing, 2004.
- Pow, Tom. *Tell Me One Thing, Dad*. Cambridge, MA: Candlewick Press, 2004.
- Prelutsky, Jack. *It's Raining Pigs & Noodles*. London: Puffin Books, 2000.
- Roth, Carol. *Who Will Tuck Me In Tonight?* New York: North-South Books, 2004.
- Sierra, Judy. *Wild About Books*. New York: Random House, 2004.
- Smith, Janice Lee. *Jess and the Stinky Cowboys*. New York: Penguin Group, 2004.
- Stuart, Melissa. *Goldilocks and the Three Bears*. New York: Scholastic, 2002.
- Weeks, Sarah. *If I Were a Lion*. New York: Simon & Schuster, 2004.

Resources for Children

Nonfiction

- Brenner, Barbara. *One Small Place by the Sea*. New York: HarperCollins, 2004.
- Crowley, Joy. *Red-Eyed Tree Frog*. New York: Scholastic, 2000.
- Fowler, Allan. *The Sun's Family of Planets*. New York: Scholastic, 1992.
- Kottke, Jan. *A Day with Firefighters*. New York: Scholastic, 2000.
- Marzollo, Jean. *I Am a Rock*. New York: Scholastic, 1998.
- Patent Hinshaw, Dorothy. *The Right Dog for the Job: Ira's Path from Service Dog to Guide Dog*. New York: Walker & Co., 2004.
- Sobol, Richard. *An Elephant in the Backyard*. New York: Penguin Group, 2004.
- Turner, Pamela S. *Hachiko: The True Story of a Loyal Dog*. Boston: Houghton Mifflin Co., 2004.

Recommended Reading Websites

- Billy Bear's Alphabet Game — <http://www.billybear4kids.com/games/online/alphabet/abc.htm> — Alphabet games.
- Book It, Families — <http://www.bookitprogram.com/parents/> — Family tips and ideas designed to motivate children to read more.
- Child Fun — <http://www.childfun.com/themes/letters.shtml> — Alphabet games and activities.
- Consumer Report (*Helping Your Child Learn to Read*) — http://www.ifginc.com/Consumer_Reports/LearnToRead.html
- Magic School Bus — <http://www.scholastic.com/magicschoolbus/home.htm> — Activities for children.
- Talespin — <http://www.pitara.com/talespin/folktales.asp> — Children's folktales and stories.
- United States Department of Education — <http://www.ed.gov/pubs/CompactforReading/index.html> — Materials for families to ensure children have good reading skills; includes 400 activities for K–3 students.
- University of Florida — <http://web.uflib.ufl.edu/cm/africana/children.htm> — African children's literature.

Resources for Children

Read-Aloud Mathematics Books

- Aberg, Rebecca. *Latitude And Longitude*. New York: Scholastic, 2003.
- Bader, Bonnie. *100 Monsters In My School*. New York: Penguin Group, 2002.
- Bader, Bonnie. *Graphs*. New York: Scholastic, 2003.
- Bauer Stamper, Judith. *Bowwow Bake Sale*. New York: Scholastic, 2002.
- Bruce, Sheila. *Everybody Wins!* La Jolla, CA: Kane/Miller Book Publishers, 2001.
- Driscoll, Laura. *Blast Off Kid*. La Jolla, CA: Kane/Miller Book Publishers, 2003.
- Dodson Wade, Mary. *Map Scales*. New York: Scholastic, 2003.
- Dussling, Jennifer. *Fair Is Fair!* La Jolla, CA: Kane/Miller Book Publishers, 2003.
- Friedman, Mel. *Kitten Castle*. La Jolla, CA: Kane/Miller Book Publishers, 2001.
- Gabriel, Nat. *Sam's Sneaker Squares*. La Jolla, CA: Kane/Miller Book Publishers, 2001.
- Gaiman, Neil. *The Day I Swapped My Dad For Two Goldfish*. New York: HarperCollins, 2004.
- Herman, Gail. *Bad Luck Brad*. La Jolla, CA: Kane/Miller Book Publishers, 2002.
- Kassirer, Sue. *What's Next, Nina?* La Jolla, CA: Kane/Miller Book Publishers, 2001.
- Leedy, Loreen. *Follow The Money!* New York: Holiday House, 2002.
- Murphy, Stuart J. *Captain Invincible And The Space Shapes*. New York: HarperTrophy, 2001.
- Murphy, Stuart J. *Probably Pistachio*. New York: HarperTrophy, 2001.
- Murphy, Stuart J. *Racing Around*. New York: HarperTrophy, 2002.
- Murphy, Stuart J. *Coyotes All Around*. New York: HarperTrophy, 2003.
- Murphy, Stuart J. *Sundae Scoop*. New York: HarperTrophy, 2003.

Resources for Children

- Murphy, Stuart J. *100 Days Of Cool*. New York: HarperTrophy, 2004.
- Pallotta, Jerry. *Apple Fractions*. New York: Scholastic, 2002.
- Pollack, Pam. *Chickens On The Move*. La Jolla, CA: Kane/Miller Book Publishers, 2002.
- Recht Penner, Lucille. *X Marks The Spot!* La Jolla, CA: Kane/Miller Book Publishers, 2002.
- Shulevitz, Uri. *One Monday Morning*. New York: Farrar, Straus & Giroux, 2003.
- Stamper, Judith Bauer. *Go, Fractions!* New York: Scholastic, 2003.
- Sweeney, Joan. *Me Counting Time: From Seconds To Centuries*. New York: Random House, 2001.
- Yates, Philip. *Ten Little Mummies: An Egyptian Counting Book*. New York: Penguin Group, 2005.

Recommended Mathematics Websites

- Education by Design Kids Activities — <http://www.edbydesign.com/kidsact.html> — Online activities for kids, including a Pokemon scrambler, math games, and a place to publish stories, jokes, and poems.
- Eisenhower National Clearinghouse — <http://www.enc.org/professional/timesavers/lessonplans/math/0,1544.1%2DCounting.00shtm> — Math activities.
- Everyday Mathematics — <http://www.everydaymath.com> — Games and activities to build math knowledge.
- Kids Math Syvum Book — <http://www.syvum.com/math/arithmetic/level1.html> — Arithmetic problems and math exercises for kids.
- Math Cats Magic Chalkboard — <http://www.mathcats.com/> — Math art gallery and lots of interactive math activities, including magic squares, conversions, seasonal surveys, symmetry, tessellations, geometric designs, and games.
- Math Is Fun — <http://www.mathisfun.com/> — Math games and activities you can play with your child to help in understanding numbers and math concepts.
- Quia Mathematics Activities — <http://quia.com/dir/math> — Activities to practice addition, subtraction, multiplication, division, and rounding.

Resources for Children

- Teach R Kids Math — <http://www.teachrkids.com/> — Math for elementary school kids.
- United States Department of Education — <http://www.ed.gov/parents/academic/help/math/index.html> — Fun activities to strengthen math skills and build a positive attitude toward math.

Read-Aloud Science Books

- Allen, Judy. *Are You a Butterfly?* New York: Larousse Kingfisher Chambers, 2003.
- Allen, Judy. *Are You a Spider?* New York: Larousse Kingfisher Chambers, 2003.
- Blevins, Wiley. *You Can Use a Magnifying Glass.* New York: Scholastic, 2004.
- Brown, Jonathan A. *Henry Ford.* Stamford, CT: Weekly Reader Early Learning Library, 2005.
- Bullock, Linda. *Looking Through a Telescope.* New York: Kane Press, 2003.
- Gabriel, Nat. *Sam's Sneaker Squares.* New York: Kane Press, 2002.
- Gordon, Sharon. *Keeping Clean.* New York: Scholastic, 2002.
- Herman, Gail. *Keep Your Distance!* New York: Kane Press, 2001.
- Hewett, Joan. *Flamingo Chick Grows Up.* Minneapolis, MN: Lerner Classroom, 2002.
- Hewett, Joan. *Harbor Seal Pup Grows Up.* Minneapolis, MN: Lerner Classroom, 2002.
- James, Anne. *Ant Attack!* New York: Kane Press, 2001.
- Kenah, Katharine. *Predator Attack!* Columbus, OH: Waterbird Books, 2004.
- Krensky, Stephen. *Ben Franklin and His First Kite.* New York: Simon & Schuster, 2002.
- Levine, Shar, Johnstone, Leslie, & Harpster, Steve. *First Science Experiments: Wonderful Weather.* New York: Sterling Publishing, 2005.
- Murphy, Patricia J. *Up and Down.* New York: Scholastic, 2002.
- Murphy, Stuart J. *Racing Around.* New York: HarperTrophy, 2002.
- Nelson, Robin. *From Foal to Horse.* Minneapolis, MN: Lerner Classroom, 2003.

Resources for Children

- Nelson, Robin. *From Tree to House*. Minneapolis, MN: Lerner Classroom, 2004.
- Pancella, Peggy. *Bicycle Safety*. Chicago: Heinemann-Raintree, 2005.
- Ross, Michael Elsohn. *Re-Cycles*. Minneapolis, MN: Lerner Classroom, 2002.
- Trumbauer, Lisa. *What Is a Thermometer?* New York: Scholastic, 2003.
- Trumbauer, Lisa. *What Is Friction?* New York: Scholastic, 2003.

Recommended Science Websites

- About.com The Human Internet - <http://kidscience.miningco.com/msub15.htm> - science/nature for kids.
- Discovery Channel - <http://school.discovery.com/sciencefaircentral/> - many activities and games on science concepts.
- Disney Family Page - <http://family.go.com> - activities, learning opportunities, parenting techniques, and more.
- Early Childhood Math and Science Activities - http://members.tripod.com/~Patricia_F/mathscience.html - science and math activities for ages 3 to 10.
- The Franklin Institute Online - <http://www.fi.edu/tfi/activity/> - science activities for children 5-12 years of age.
- National Geographic.com - <http://www.nationalgeographic.com/kids/index.html> - games, activities, and articles for children.
- NASA's Space Science Activities for Students <http://www.nasa.gov> - space science activities for elementary students.
- Science Nature for Kids - <http://kidscience.about.com/cs/theenvironment/> - ask experts tough questions, and have fun and learn about science at the same time with experiments, projects, and games.
- The Science Spiders - <http://www.sciencespiders.com/TheScienceSpiders/default.htm> - science books and activities for children ages 3 to 10.
- Sesame Street - www.sesameworkshop.org - includes safety tips for kids, family activities, health information, children's education, and parenting tips.

Resources for Children

- United States Department of Education - <http://www.ed.gov:80/pubs/parents/Science/index.html> - Helping Your Child Learn Science.
- United States Department of Education - <http://www.ed.gov/pubs/parents/Science/Introduction.html> - ways to help children learn science.
- Yahoo - http://www.yahooligans.com/Science_and_Nature/ - links to science websites for kids.
- 2think.org - <http://www.2think.org/hycls.shtml> - Helping your Child Learn Science.

Read-Aloud Social Studies Books

- Abells, Chana Byers. *Children We Remember: Photographs from the Archives of Yad*. New York: Greenwillow Books, 1986.
- Ackerman, Karen. *By the Dawn's Early Light*. New York: Atheneum, 1994.
- Brown, Margaret Wise. *The Grasshopper and the Ants*. New York: Disney Press, 1983.
- Cooney, Barbara. *Miss Rumphius*. New York: Viking Penguin, 1982.
- De Paola, Tomie (*Reteller*). *The Legend of the Bluebonnet*. New York: G. P. Putnam's Sons, 1983.
- Ernst, Lisa Campbell. *Squirrel Park*. New York: Bradbury Press, 1993.
- Hall, Donald. *Ox-Cart Man*. New York: Viking Press, 1979.
- Krull, Kathleen. *It's My Earth, Too: How I Can Help the Earth Stay Alive*. New York: Doubleday, 1992.
- Low, Alice. *The Family Read-Aloud Holiday Treasury*. Boston: Little, Brown, & Co., 1991.
- Paulsen, Gary. *Work Song*. San Diego, CA: Harcourt Brace & Co., 1997.
- Peters, Lisa Westberg. *The Sun, the Wind, and the Rain*. New York: Henry Holt & Co., 1988.
- Polacco, Patricia. *The Keeping Quilt*. New York: Simon and Schuster, Inc., 1988.
- Rappaport, Doreen. *Martin's Big Words: The Life of Dr. Martin Luther King, Jr.* New York: Hyperion Books for Children, 2001.

Resources for Children

- Spencer, Eve. *A Flag for Our Country*. New York: Steck Vaughn, 1993.
- Van Laan, Nancy. *Round and Round Again*. New York: Hyperion Books, 1994.
- Wing, Natasha. *Jalapeno Bagels*. New York: Atheneum Books for Young Readers, 1996.

Recommended Social Studies Websites

- Early Childhood Social Studies — http://patricia_f.tripod.com/ssmotor.html — Large collection of activities to help young children learn about themselves and the world in which they live.
- Fun Social Studies — <http://www.funsocialstudies.com/> — A child-friendly environment for learning social studies, with articles and links primarily aimed at children from 7 to 12.
- National Geographic — <http://www.nationalgeographic.com/kids/> — Games, contests, articles, and activities.
- National Geographic Xpedition — <http://www.nationalgeographic.com/xpeditions/hall/index.html> — An interactive “museum” that takes children on geography journeys.
- National History Museum: London — <http://www.nhm.ac.uk/interactive/index.html> — Exhibits and activities, as well as research projects, features, and related sites.
- United States Department of Education — <http://www.kidsource.com/kidsource/content/history.html> — Activities to help children from 4 to 11 learn history.
- The Wagon Train — <http://www.siec.k12.in.us/~west/proj/lincoln/> — A picture gallery, an Internet treasure hunt, and class activities.

Resources Bibliography

Publications

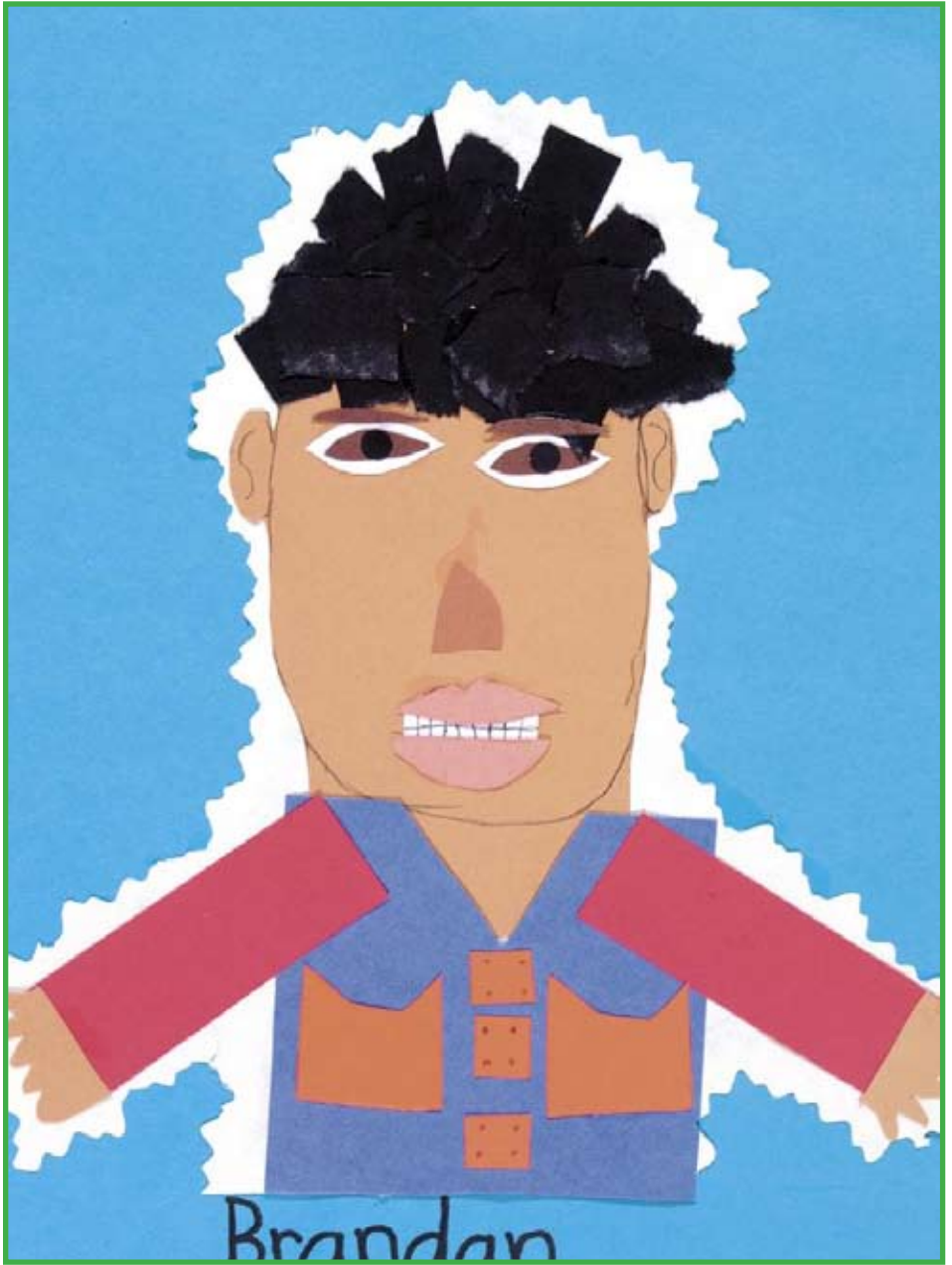
- *Bridges to Home*. Creative Publications, 1997.
- *Department of Defense Education Activity (DoDEA) Content Standards for English/Reading/Language Arts, draft for K-12th, December 2001.*
- *Department of Defense Education Activity (DoDEA) Content Standards for Mathematics, January 2000.*
- *Department of Defense Education Activity (DoDEA) Content Standards for Science, 1997.*
- *Department of Defense Education Activity (DoDEA) Content Standards for Social Studies, draft as of March 2000.*
- *Discovery Works*. Houghton Mifflin Science, 2000.
- *Helping Your Child Learn Science*. Nancy Paulu and Margery Martin. US Department of Education, June 1991.
- *Mathematics, The Path to Math Success - Grade Two*. Silver Burdett Ginn, 1999.
- *Mega Skills, How Families Can Help Children Succeed in School and Beyond*. Dorothy Rich. Houghton Mifflin Company, 1988.
- *Parents On Your Side*. Lee Canter and Marlene Canter. Lee Carter and Associates, 1991.
- *People Together*. McGraw-Hill School Division, 2001.
- *Performance Standards, Volume I, Elementary School*. Learning Research and Development Center of the University of Pittsburgh and the National Center on Education and the Economy, 1998.
- *Promoting Your School*. Carolyn Warner. Corwin Press, 1994.
- *Reading and Writing Grade by Grade*. New Standards Primary Literacy Committee. National Center on Education and the Economy and the University of Pittsburgh, 1999.
- *Science at Home*. Curriculum Associates, Inc., 1997.
- *Speaking and Listening for Preschool Through Third Grade*. New Standards Speaking and Listening Committee. National Center on Education and the Economy and the University of Pittsburgh, 2001.
- *Spotlight on Standards in the Classroom*. Red Clay Consolidated School District. Office of Standards and Curriculum, 1999.

Resources Bibliography

- *What Parents Need to Know About Reading and Writing*. National Center on Education and the Economy and the University of Pittsburgh, 2000.
- *Working Parents Can Raise Smart Kids*. John E. Beaulieu and Alex Granzin. Parkland Press, 1999.
- *Yardsticks, Children in the Classroom Ages 4-12*. Chip Wood. Northeast Foundation for Children, 1996.

Websites

- "Beginning to Read." Kid Source Online. <http://www.kidsource.com/schwab/developing.reading.skills.html>, accessed 8 August 2001.
- "Continuing on Track - As Your Child Grows and Learns." Child Trends. <http://www.childtrends.org>, accessed 10 August 2001.
- "Developing Reading Skills in Young Children." Dr. Lyon Reid. Kid Source Online. <http://www.kidsource.com/schwab/developing.reading.skills.html>, accessed April 2000.
- "Early Literacy Handbook." LBJ School of Public Affairs. Just for the Kids. <http://www.just4kids.org/>, accessed 10 September 2001.
- "Helping Your Child Learn Science-Activities at Home." 2think.org. <http://www.2think.org/home.html>, accessed 8 August 2001.
- "Helping Your Child Succeed in School." Dorothy Rich. Kid Source Online. <http://www.kidsource.com/kidsource/pages/Education.html>, accessed 8 August 2001.
- "How Parents and Families Can Help Their Children Do Better in School." Kid Source Online. <http://www.kidsource.com>, accessed 8 August 2001.
- "How to Get Ready for a New School Year." Jeanne Allen. Center For Education Reform. <http://www.edreform.com/pubs/parent.htm>, accessed 6 August 2001.
- "School Readiness: Helping Communities Get Children Ready for School and Schools Ready for Children." Child Trends. <http://www.childtrends.org>, accessed 10 August 2001.



*Brandon Macabinquil
Collage, "Going to School"*

www.dodea.edu