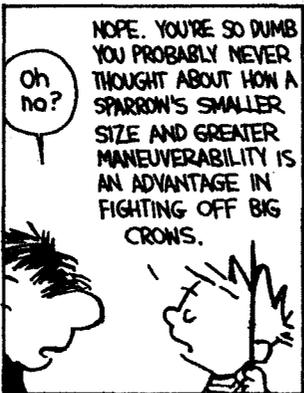
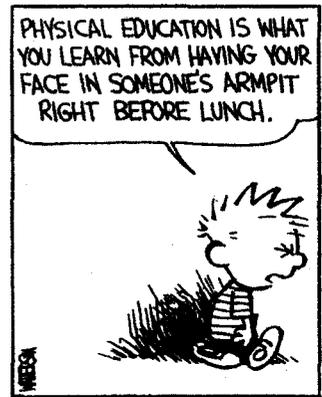
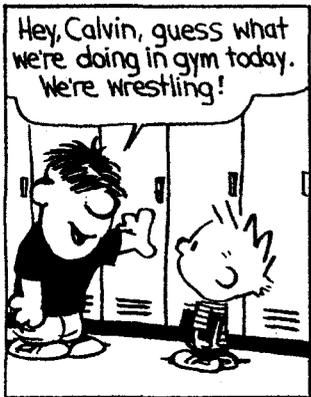


# Calvin and Hobbes

by WATSON

SCHOOL'S OUT!  
FREE AT LAST!

*A survey of middle school students' experiences with bullying shows that kids want the adults in school to pay attention and keep them safe.*

**Donna M. San Antonio and Elizabeth A. Salzfass**

# How We Treat

**W**hen rising middle school students are asked to name their biggest worry about going to a new school, they most often answer, "That I will not have any friends" or "That people will make fun of me" (San Antonio, 2004). The prospect of being friendless or getting teased looms large for many students at this age and can profoundly affect their sense of affiliation with school. Students tell us with heartbreaking regularity of the pain and anger they feel when their peers do not see them, include them, or care about them. At the extreme, some students not only are treated with indifference but also become targets of bullying.

## **Devastating Effects**

Olweus (1993) defines bullying as verbal, physical, or psychological abuse or teasing accompanied by real or perceived imbalance of power. Bullying

most often focuses on qualities that students (and the broader society) perceive to be different from the established norm, such as expected gender-specific behavior for boys and girls, dress and physical appearance, and manner of speaking. Bullying is connected to diversity, and reducing bullying means taking steps to make the community and the school safe for diversity of all kinds.

Research indicates that bullying—with its accompanying fear, loss of self-efficacy, anger, and hurt—negatively affects the school environment and can greatly diminish students' ability to engage actively in learning (Hoover & Oliver, 1996). Being bullied has been linked with high rates of school absence (Fried & Fried, 1996); dropping out of school (Weinhold & Weinhold, 1998); and low self-esteem, anxiety, and depression (Banks, 1997). A U.S. Department of Education study (1998) found that students who had experi-

enced sustained threats and verbal and physical peer aggression carried out two-thirds of school shootings.

Some researchers and practitioners believe that the impact of bullying is as devastating and life changing as that of other forms of trauma, such as physical abuse. The effects of bullying may linger long into the victims' adulthood (Kaltiala-Heino, Rimpelae, Rantanen, & Rimpelae, 2000). Recent research has documented increased levels of depression and anxiety in adults who had been bullied in their youth (Gladstone, Parker, & Malhi, 2006).

Because of the documented harmful effects of bullying—as well as other forms of social isolation—on school climate and student achievement, educators are taking this problem seriously. Many schools have explored the benefits of implementing schoolwide programs to promote social and emotional learning, prevent bullying, and nurture positive peer relationships.



# Another in School

A survey of middle school students that we recently conducted in three schools provides information on bullying behavior that can inform such programs.

## **A Middle School Survey on Bullying**

To measure students' experience with physical, verbal, and relational<sup>1</sup> bullying, we administered surveys in spring 2006 to 211 7th and 8th grade students in three K–8 schools in New England. The three schools differ significantly by race, socioeconomic status, and urbanicity. Rural School,<sup>2</sup> located in a small town, serves a student population that is socioeconomically diverse but is 94 percent white; 25 percent of the students are eligible for free or reduced-price lunch. Big City School is located in a low-income urban neighborhood and serves primarily Latino (65 percent) and black (33 percent) students; 93 percent are eligible for free

or reduced-price lunch. Small City School has a socioeconomically and ethnically diverse student body composed of 40 percent white, 36 percent black, 11 percent Latino, and 10 percent Asian students; 30 percent of the students are eligible for free or reduced-price lunch.

We surveyed nearly all the students in each grade, with the exception of 8th graders at Rural School, where we were able to survey only half of the class. The surveys included multiple-choice and open-ended questions. Respondents

were evenly split between boys and girls. Most of our findings were consistent with what other research has found and what middle grades teachers know about bullying in the adolescent years. Some of our most significant findings follow.

## ***Extent of Bullying***

Most students (76.5 percent) felt safe most of the time. However, students at Big City School reported feeling safe much less often than did their peers at the other two schools (65 percent, compared with 83 percent at Small City School and 81 percent at Rural School). They also feared bullying more, even though students at Rural School reported seeing it occur more often. We believe this reflects the greater incidence of community violence to which Big City School students are exposed.

Rural School was the only school in which a majority of students (about 2 in 3) said that bullying was a serious

problem. Many of the respondents from Rural School spoke about the difference between physical and emotional safety. As one 7th grade girl said, "I feel safe physically but my emotions take a blow here."

In terms of grade level, bullying was more common for 7th graders than for 8th graders at the three schools we surveyed, with two notable exceptions:

Verbal bullying affected 8th grade girls more than any other subgroup at Small City School, and physical violence affected 8th grade boys and girls more than 7th graders at Big City School.

Finally, across schools, boys and girls experienced physical and verbal bullying to a similar extent, but girls experienced more relational bullying than boys did. Girls at all three schools

worried more often than boys that if they did or said something wrong, their friends would gang up on them and decide not to be their friends. This problem appeared to be most dire for girls at Rural School: A full 72 percent of them reported suffering relational bullying either "every once in a while," "often," or "every day," compared with 58 percent of girls at Big City School and 48 percent at Small City School. This finding raises the question of the effect of socioeconomic status and cultural background on the bullying phenomenon. The almost entirely white population of girls at the school with the widest gap between wealthy and poor students was the group most at risk of relational aggression.

Boys were more likely to admit to bullying other students than girls were (which may have something to do with the way bullying is traditionally defined), but no significant gender difference was expressed overall when we asked students whether boys or girls bullied other students more. We also found that boys bullied both boys and girls, whereas girls typically only bullied other girls. We were troubled by girls' graphic narrative responses that demonstrated that boys often bullied girls with demeaning comments about the girls' appearance and demands for sexual interactions, particularly oral sex.

### **Location of Bullying**

In all three schools, bullying happened most frequently in the hallways. When asked how to mitigate bullying at their school, many students suggested putting more adult supervisors in the hallways between classes. The second most common place in which bullying occurred differed across the three schools. At Big City School, bullying tended to happen in the bathrooms, where there was generally no adult supervision. At Small City School and Rural School, bullying happened on the

## **Choosing a Social-Emotional Learning Curriculum**

### **Look for a curriculum that**

- Becomes part of a schoolwide and communitywide discussion (with parents) about values, beliefs about how to treat one another, and policies that reflect these values.
- Poses developmentally and culturally appropriate social dilemmas for discussion.
- Challenges the idea that aggression and bullying are inevitable and expected behavior. Demonstrates how people can resolve tensions and disagreements without losing face by giving detailed examples of people who responded to violence in an actively nonviolent manner.
- Encourages students to express their feelings and experiences concerning bullying and enables students to generate realistic and credible ways to stay safe.
- Supports critical analysis of the issues and rejects explanations of behavior based on stereotypes (such as the idea that boys will use physical violence and girls will use relational violence).
- Helps children and teens become critical consumers of popular culture.
- Addresses all types of bullying.
- Discusses how bullying reflects broader societal injustice.
- Gives ideas for what the adults in the school can do as part of a whole-school effort.

### **Beware of any curriculum that**

- Ignores such issues as injustice, stereotype, and imbalance of power regarding gender, race, social class, and sexual orientation.
- Focuses on the victim's behavior as the reason for being a target of bullying.
- Focuses on student behavior without addressing schoolwide climate.
- Emphasizes having students tell the teacher about the bullying and ignoring bullying assaults.
- Focuses on either bullying only or victimization only.
- Portrays victims or bullies as unpopular misfits.
- Promotes simplistic or trendy solutions (for example, "boys will be boys").
- Promotes good solutions, such as peer mediation, but does not provide clear guidelines for when these strategies should and should not be used.
- Lacks evidence-based, population-specific suggestions for design, implementation, training, and evaluation.

playground and in the cafeteria, both places where adults were on duty.

### **Reasons Students Are Bullied**

Students at all three schools perceived that “being overweight” and “not dressing right” were the most common reasons an individual might be bullied. At Small City School and Rural School, the second most common reason stated was being perceived as gay, which suggests rigid behavior expectations for boys and girls. Many students commented that someone might be a target for bullying if they look or act “different” or “weird.”

### **Students’ Reactions to Bullying**

The most common strategies students reported using when confronted by bullies were walking away, saying mean things back, hitting back, or telling the bully to stop. The least common strategy was telling an adult at the school. Hitting back was a particularly popular response to bullying at Big City and Small City Schools, particularly among the boys. Given steadily increasing numbers of violent deaths over the last few years in many urban communities, we believe that this finding highlights the importance that urban youth put on maintaining a tough appearance to survive, as well as a perceived lack of options for nonviolent conflict resolution.

Student reactions to bullying also differed according to gender. More boys than girls believed that they had the right to use violence to protect themselves from physical violence or someone hurting their feelings or reputations. Girls reported being more likely to help a victim of bullying than boys did and more often said that bullying is wrong.

### **Inadequate Adult Response**

Most students said they were not confident that adults could protect them from being bullied. Students at Rural



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**Students want adults to see what is going on in their world and respond to bullying in caring, effective, and firm ways.**

School had more faith that their teachers could stop the bullying when they were told about it than did students at the other two schools. However, students in this school agreed with their urban peers that teachers did not seem to notice bullying and did not take it seriously enough. Most students said they wanted teachers to be more aware of all types of bullying and to intervene more often. These findings are consistent with past research in which students reported that most bullying goes undetected by school staff (Skiba & Fontanini, 2000).

When we talk with students in a variety of settings, they have many thoughts about how adults can help to make school safer and stop bullying. They frequently answer with statements like these: “Watch out for us and don’t ignore us.” “Pay attention.” “Just ask us what’s wrong.” “Talk to the students

who have been bullied to see how to stop it.” “Start caring more.” “Believe us.” “Punish the bullies.” “Do something instead of nothing.” One thing seems certain: Most students want adults to see what is going on in their world and respond to bullying in caring, effective, and firm ways.

### **What Schools Can Do**

The following recommendations for a schoolwide approach to bullying prevention are derived from our review of the literature, our survey findings, and a report generated by Northwest Regional Educational Laboratory (Railsback & Brewster, 2001). All sources agree that schoolwide strategies must complement classroom curriculum. Schools should not frame the issue of how students and educators treat one another as an issue of behavior. Instead, they should opt for a more comprehen-

sive set of goals that address social and moral development, school and classroom climate, teacher training, school policies, and community values, along with student behavior.

#### **Conduct an assessment.**

The first step toward creating an effective schoolwide antibullying program is identifying where, when, and how students experience bullying at a particular school. As our study demonstrated, different types of bullying occur with

#### **Implement an antibullying policy.**

When asked what teachers could do to stop bullying, many of the students we surveyed said that teachers should be stricter with bullies. An effective policy should be developed through collaboration among students, teachers, parents, and administrators.

Pepler and Craig (2000) say that a whole-school policy is the foundation of antibullying interventions, and they recommend that a policy include the following: a schoolwide commitment to

ongoing training and communication in this area is key. For students to develop positive attitudes toward school, they need to know that all staff members are committed to making it a safe and friendly environment.

#### **Help the bullied and the bullies.**

Another step in implementing a schoolwide antibullying program involves providing resources for those most affected by bullying. Many of the students we surveyed who had experienced bullying said that they wanted adults to listen to their stories. Some schools have had success with facilitating groups in which students address issues directly with their peers. The PALS program at Rocky Mountain Middle School in Idaho trains teachers to facilitate these groups, which increase communication and social skills and give stigmatized students a chance to experience a positive interpersonal connection with others and with the school.

Some students who are highly involved in bullying (either as perpetrators or victims) will need one-to-one support. It is important to involve parents and provide referrals for mentoring or counseling. Journaling with a teacher or counselor who reads and replies to concerns and issues may help particularly reticent students.

Connecting students to after-school and summer programs will enable them to socialize with their peers outside of the school and form new friendships.

When children have been treated unfairly or violently in their primary relationships, it can be difficult for them to understand why they and their peers should be treated with respect. Nakkula and Selman (1991) describe an effective intervention called *pair counseling* as a way for two children who have difficult peer relationships to come together with the help of a counselor to negotiate differences and learn how to be a friend.

**Where did we ever get the crazy idea that in order to make children do better, first we have to make them feel worse? Think of the last time you felt humiliated or treated unfairly. Did you feel like cooperating or doing better?**

— Jane Nelson

different frequency and magnitude among different populations in different school settings; therefore, a one-size-fits-all approach is not an appropriate solution. Schoolwide bullying intervention programs are more purposeful and relevant when they are informed by students' views. We strongly recommend using a participatory action research approach that involves students in framing a problem statement; constructing a survey; summarizing, analyzing, and reporting the results; and generating ideas for how staff and students can respond to the issues uncovered by the survey.

#### **Create a committee to focus on school relationships.**

A committee involving students, parents, and community members along with school staff should focus on schoolwide relationships, not only on student bullying. This committee will assist the school in generating developmentally and culturally sound prevention and intervention ideas.

address bullying; a statement of rights and responsibilities for all members of the school community; a definition of bullying, including types and dynamics; the process for identifying and reporting bullying; expected ways for students and staff to respond to bullying; strategies that will be implemented; and a way to assess the effectiveness of antibullying efforts.

#### **Train all school employees.**

Bullying can be subtle and hard to detect, making it challenging for adults to intervene effectively. To stop bullying, school staff (including custodians, clerical staff, bus drivers, and lunchroom staff) must first have an opportunity to discuss the various ways and locations in which bullying occurs. From there, they can develop structures for communicating across roles within a school district and decide on an appropriate unified response. Considering that the majority of students in our study did not believe they could count on adults to protect them from being bullied,

The Collaborative for Academic, Social, and Emotional Learning (CASEL) ([www.casef.org](http://www.casef.org)) was established to advance the science of social and emotional learning (SEL) and to coordinate and disseminate evidence-based SEL practices. Resources include the *Sustainable Social-Emotional Learning Framework*, *SEL Implementation Checklist*, and *SEL Implementation Guide*.

The Safetyzone ([www.safetyzone.org/index.html](http://www.safetyzone.org/index.html)) is a website of the Northwest Regional Educational Laboratory (NREL) providing information and materials related to school safety. The website offers a wide range of school safety technical assistance available to schools.

The Olweus Bullying Prevention Program ([www.clemson.edu/olweus](http://www.clemson.edu/olweus)) is an international, research-



based and widely used program. Schools that implement the program have shown a significant reduction in bullying and an increase in students' self-esteem and social skills.

Peace Game ([www.peacegame.com](http://www.peacegame.com)) is a website that provides information and resources for schools and educators. The website offers a variety of activities and games that are designed to help students develop social and emotional skills.

Committee on Children ([www.4mat.org](http://www.4mat.org)) provides information and resources for schools and educators. The website offers a variety of activities and games that are designed to help students develop social and emotional skills. The website also provides information about the organization's research and programs.

### **Recognize and name all forms of bullying.**

Be aware of the relationships among students and of shifts in cliques and friendships as much as possible. Look for subtle signs of relational aggression that may occur between students, such as whispering, spreading rumors, and exclusion. Let students know that comments and actions against any racial, ethnic, or social group will not be tolerated. Be prepared to explain your ethical position to your students. The students we surveyed suggested that teachers ask students what would benefit them and help students generate realistic and effective ideas. On this topic, one 7th grade girl wrote,

Teachers do everything, I think, in their power, but if they would just listen to the person who says they're being bullied, instead of just saying "stay away from them" or "ignore it" maybe we would see some change.

### **Reclaim goodness.**

School classrooms and corridors contain a full spectrum of behavior, from count-

less everyday small acts of kindness to serious acts of aggression. In our effort to mitigate negative student behavior, a commonly overlooked but essential aspect of creating emotionally and socially safe environments is noticing, acknowledging, and actively drawing out acts of kindness. Schools are places of tremendous courage, generosity, and thoughtfulness. Some students risk their own social standing by being kind to an "unpopular" classmate. Some students talk with others who appear lonely and try to offer friendship; they speak up when they see injustice because, in the words of one student, they "don't think it is right to judge people by how they dress." In past research (San Antonio, 2004) and in the survey we describe here, students frequently spoke with admiration about teachers who actively intervened against stereotyping and teasing based on gender, social class, race, and learning needs. Naming and reclaiming goodness in the school community is an important step toward reducing bullying.

### **Integrate social-emotional education into the curriculum.**

An effective curriculum for social, emotional, and ethical learning addresses bullying as a social and moral development issue. Activities in such a program focus on self-understanding, understanding of others, appreciation for diversity, and responsibility to the community. By encouraging empathy, respect, and acceptance and giving students tools for communicating their feelings and confronting conflict positively, an effective social-emotional learning curriculum will likely improve school climate and culture beyond just the mitigation of bullying. (See *Choosing a Social-Emotional Learning Curriculum*, p. 34, and *Social-Emotional Learning Curriculums Online*, p. 37.)

### **Educators Set the Tone**

As a primary social environment for young people, classrooms and schools are uniquely good places to learn how to treat others and how to tell others the way we want them to treat us. Dozens

# Naming and reclaiming goodness in the school community is an important step toward reducing bullying.

of times a day, people in schools negotiate interpersonal exchanges with others from diverse backgrounds, making schools a premier learning environment for social, emotional, and ethical learning. Nel Noddings (2002) has long held that a key purpose of schooling is to educate moral people:

An emphasis on social relationships in classrooms, students' interest in the subject matter to be studied and the connections between classroom life and that of the larger world provides the foundation of our attempts to produce moral people. As educators we must make it possible and desirable for students to be good. (p. 85)

Of course, students behave in aggressive or submissive ways for a variety of reasons that are not always easy to discern or manage. Some students may posture aggressively because they face violent behavior at home or in their neighborhoods, some have problems reading social cues or controlling their impulses, and some are simply scared. But in our work with schools, we have found that when educators take students' concerns seriously, teach them alternative ways to communicate their needs assertively but not violently, and provide adult guidance, vigilance, safety, good role models, and support, students are more likely to interact positively with their peers.

The findings from the survey we conducted among middle grade students support the concept that educators *can* influence the social and emotional climate of schools. Students' written comments on the survey make it clear that they value fairness, respectful communication, and adults who make them feel physically and emotionally

safe and cared for. By implementing an effective social-emotional learning curriculum and addressing the systemic factors that determine school climate, we can create schools where bullying is rare and where all students are ready to learn. ■

<sup>1</sup>Physical bullying includes hitting, kicking, or otherwise physically attacking the victim, as well as taking or damaging the victim's possessions. Verbal bullying includes name-calling, aggressive teasing, or making insulting comments designed to humiliate the victim. Relational bullying includes any behavior that intimidates and hurts the victim by harming or threatening to harm relationships or feelings of friendship and belonging (Crick & Bigbee, 1998). Cyberbullying involves the use of information and communication technologies, such as e-mail, cell phone and pager text messages, instant messaging, and Web sites to deliberately harm others ([www.cyberbullying.org](http://www.cyberbullying.org)).

<sup>2</sup>To preserve confidentiality, schools are identified by community type rather than by name.

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# A BULLY OF A WORD FIND!

Try to find the 20 words that are in the mess of a puzzle below.  
There are 10 bully words, and 10 words that we use when we are  
being good friends. Good luck!

SASYMPATHIZEYTLNNTPAAEPLAC  
EENEYHRESPONSIBLEERLPGEISN  
EMLESRINTIMIDATEFEELCNSOED  
MPEHSCYLEAHARASSMASYOBTFAD  
LADETERMINATIONIGESPNERECE  
OTAHNHTTNAIECLOETUTFARICV  
NHPBNIHTZERMOUCITRDIVDEOI  
NYSUSARETEEEEEUTRATETDEENOB  
ESLLHLEAIREACRMIOAHOEEHDPB  
CYHLDAASIPINMAARANERNAESEE  
LHLYSRTINASYIGNDSNTMCUPHRR  
IYTNTYSNSMANHESAESPEETHIAS  
DRABRBAGSAASAIYSPLYNCITPTA  
BEVGSEEMRSTLEETEPIMTTEDAET  
CEMHYGATTIBHASSLEIZSTPCPSI  
TNANOVAETIPSTHELEAPTMNTUUA

## BULLY WORDS

HARASS	BULLY
PRESSURE	HASSLE
PESTER	INTIMIDATE
TEASING	TORMENT
MEANY	THREATS

## GOOD WORDS

FRIENDSHIP	RESPONSIBLE
EMPATHY	COOPERATE
ALLY	DETERMINATION
BRAVE	CONFIDENCE
COURAGE	SYMPATHIZE

# Miss Rumphius: A Catalyst for Social Action

Melissa N. Matusevich

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."—Margaret Mead

In the evening Alice sat on her grandfather's knee and listened to his stories of far away places. When he finished, Alice would say, "When I grow up, I too will go to far away places, and when I grow old, I too will live beside the sea."

"That is all very well, little Alice," said her grandfather, "but there is a third thing you must do."

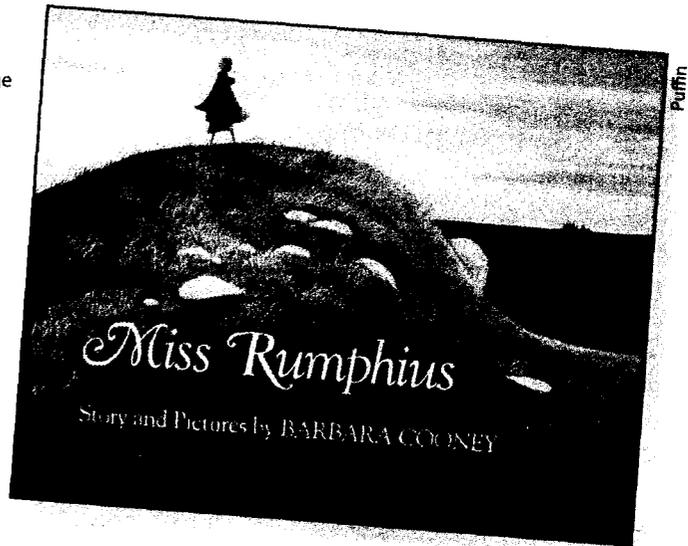
"What is that?" asked Alice.

"You must do something to make the world more beautiful," said her grandfather.

"All right," said Alice. But she did not know what that could be.

In the meantime Alice got up and washed her face and ate porridge for breakfast. She went to school and came home and did her homework.

And pretty soon she was grown up.—From *Miss Rumphius* by Barbara Cooney



*Miss Rumphius*, by Barbara Cooney, is the story of the author's great aunt who followed her grandfather's advice to make the world more beautiful.<sup>1</sup> It is an exquisite book, both text and pictures, and can be used to motivate children to become civic-minded activists.

As Walter C. Parker aptly states, social studies curriculum in schools is vital to our democratic way of life. "Without historical understanding, there can be no wisdom; without geographical understanding, no social or environmental intelligence; and without civic understanding, no democratic citizens, and, therefore, no democracy."<sup>2</sup> When I was teaching fourth and fifth grades, I wanted my students to assume the responsibility of civic activism for the public good. I worked hard to provide opportunities for my nine- and ten-year-old charges to develop the habits of mind they would need to function as civic-minded adults.

I discovered that the picture book *Miss Rumphius* was an effective method for motivating my fourth and fifth graders into action. Over the many years that I used *Miss Rumphius* as a catalyst for social action, the results led me to believe that my students were developing a social conscience and that they would continue their activism long after they were in my class.

### Rationale for the Lesson

Fourth and fifth grade students often do not understand that they can make important civic contributions. Many may want to, but do not know how to begin. Others believe that one child can't make a difference. Still others doubt that adults will take them seriously. I believe that if we want our young students to become civic-minded adults, we need to help them, when they are young, build the confidence and skills

to undertake social action. Barbara Cooney's *Miss Rumphius* is an excellent book to share with children as the teacher begins to lead students down the path to becoming active participants in our democracy.

Lee Bock states that books have an impact on children developing moral and ethical values and views because students make connections from the experiences of story characters to their own lives. Bock goes on to say that there are "works of fine literature, illustrated stories with which children can identify, complex, evocative stories that point even the youngest readers in the direction of empathetic connections beyond themselves. And isn't that the basis of ethical and moral behavior?"<sup>3</sup> Picture books can be used effectively to develop positive character traits in children. Teachers can help students build positive habits of ethical behavior

through careful analysis of the actions of characters in the stories that students read and study.<sup>4</sup>

### Context

When I was an elementary classroom teacher, I had my students “doing” social studies every day. My goal was to teach children that in a democracy everyone can have a voice and that each of us should be proactive and civic minded. Every year on the first day of school, I would read *Miss Rumphius* to my young charges emphasizing that Miss Rumphius worked hard to make the world a better place. After reading the book aloud, we would talk about Miss Rumphius and her dedication to improving the world. Then I would challenge my students to make that their own goal—do something to make the world a better place every single day. The lesson plan that follows is the one I would use.

### Focus

“Boys and girls, I want you to think about a someone you know or who you have heard about that helped make our world a better place. Let me give you an example: Martin Luther King, Jr. worked hard to make sure that all people have equal rights and are treated fairly. He helped to make the world a better place. Think of someone you know of who worked to make the world better and then talk with your partner about that person.” [Provide two or three minutes for students to discuss.]

“Now I am going to call on each set of partners. Tell me who you talked about and how the person made the world a better place.” [Allow time for discussion.]

### Learning from *Miss Rumphius*

“I am going to read you a story about a real person, Miss Rumphius, who lived a long time ago. In fact, Miss Rumphius was the author’s great aunt. Miss Rumphius lived an interesting life. When she was a child her grandfather gave Miss Rumphius an important piece of advice. Listen to the

story to find out what her grandfather advised Miss Rumphius to do and what happened when she did what he asked.” [Read the story aloud.]

“Boys and girls, what advice did Miss Rumphius’s grandfather give to her? That’s right. He told her to make the world more beautiful.

How did Miss Rumphius make the world more beautiful? Yes, she planted lupines.

Now, I have a question for you to think about. After you have an answer, talk to your partner. My question is this: What can you do to make the school a better place? Let me give you an example to help you get started.

I know that I can help make the school a better place by helping keep the hall bulletin boards up-to-date and attractive.” [Allow two or three minutes for students to discuss.]

“Now I am going to call on each set of partners. Tell me what you talked about. I am going to list your ideas on this chart. Sometimes when I hear a person’s idea, it helps me think of new ideas, so after I call on each set of partners I will call on volunteers who have thought of new ideas.” [Make a list on the chart. If necessary, make a few suggestions for things to add to the chart.]

“Let me read our list to you:

- Pick up trash on the classroom floor.
- Keep the bathrooms tidy.
- Put away things where they belong.
- At lunch, be careful not to make a mess.
- Follow school rules.
- Give things that are found on the floor to the owner.
- Ask for permission to borrow things.
- Share the kickball.

This is a good list. I know if each of us works hard to do these things our school will be a better place. If our school is a better place, how will that make our world a better place?” [Allow time for students to discuss.]

### issuing the Challenge

“I am now going to challenge you to make the world a better place by doing things at home. In fact, I think this is so important that it is going to be your homework every night this school year. Let’s make a new list, one that tells things we can do at home.” [Repeat the process as above.]

“Let me read our new list to you:

- Set the table without being asked.
- Do not argue or fight with brother (or sister).
- Give the dog water and food.
- Offer to help my mom and dad.
- Do my homework without being asked.
- Take out the garbage without being asked.
- Do what my parents ask the first time they ask.
- Do not complain about helping.
- Put things away.

This is a great list. I know that we will add to it as the year goes by. Right now I want you to plan what you are going to do tonight and then tell your partner.” [Allow time for partners to discuss and report out.]

“Boys and girls, there is something else that is important for you to do. I’d rather that you not talk about our project at home. Why? Because I want you to help make the world a better place for the right reasons. The goal is not to have someone tell you how wonderful you are for doing things or for being helpful. It is to quietly do the right things to make our world better.

“Tomorrow morning I am going to ask each of you to tell me what you did. We will discuss this every morning. I want making the world a better place to become a habit that you do every single day. Are there any questions?”

### Children as Citizen Activists

In my classroom, the children became quite thoughtful and creative in devising ways to meet the goal they had set for themselves. As it says in the lesson plan

above, for homework the first night of school, I would tell students that they had to go home and make the world a better place by doing something nice for someone they lived with. I'd explain that the goal was not to receive praise; in fact, I did not want them to tell anyone about our project. I promised that each morning we would have a short discussion and the children could share what they had done. This was an important step because children do need positive feedback. I assured the children that by doing something nice for someone else they would be helping to make the world a better place. I'd even tell my students that there are too many people out there making the world a worse place to live, so we would have to work very hard.

#### Charting Progress

The results always amazed me. Each morning we would talk about what they had done and usually, after the second or third week of school, one or two children would say that their parents always seemed to be in a good mood lately. (Gee—figure that one out!) I was always surprised by how seriously my students took this project and all the ways they devised to meet our big goal. Each day we would add new ideas to our chart. It wasn't long before we would have four or five large charts filled with the things students were doing. My students always took this very seriously and often would ask if they could do more than one thing.

After a few weeks, I began to talk about how in a democracy we all have rights and responsibilities, and that one big responsibility is to be civic minded. We'd talk about what that means and I'd give concrete examples. I'd relate true accounts of how adults worked toward the same goal that we had. Every year, without my prompting, students would begin bringing in stories they had heard on television and some would clip articles from the paper highlighting those making civic contributions. Every spring our town had a big clean-up called "Broomin' and Bloomin'."

Students often motivated their siblings and parents to participate.

#### Unexpected Results

Then, the last year I spent in an elementary classroom, something almost magical happened. Sometime in late October, my friend, Ken—who is wheelchair bound—came to school to volunteer as an adult aide in the classroom. He lived close by and would wheel himself over to help out in the afternoons.

This particular day when Ken came into the classroom, he was visibly upset. One of my students asked him what was wrong. Ken reported that on his way to the school he had gone by an electronics store to buy a part for his computer. He couldn't get into the store because there was no curb cut in the sidewalk. At the end of the day, four girls came to me and said, "We have to do something about this because it isn't fair that Ken can't shop where he wants. The only problem is we don't know what to do or how to go about doing whatever it is we should do. Will you help us?"

I talked to the girls and told them they could write a letter to the town council expressing their concerns. One girl looked at me and said, "Do you really think the town council will take us seriously?" I told them that I honestly didn't know, but that sometimes adults are impressed when children make serious efforts.

The next day the girls excitedly brought in a handwritten letter, and we mailed it. They felt good about taking the time to have their voices heard. Then we all put the letter out of our minds.

#### Making a Positive Difference

Two weeks later, the girls got a response. A letter from the town council was delivered to the school with the girls' names on the envelope. In their meeting, the town council had voted to approve installing curb cuts in locations throughout the town where there were none. Sure enough, we all looked out the window and there already was

a work crew putting a curb cut in front of the store.

Needless to say, my students and Ken were ecstatic. This had quite an effect on the rest of the class as they realized that their actions could make a difference. My students became reenergized and wanted to do even more than they already were. They began in earnest asking me if they could spend recess picking up litter on the playground or helping clean up the cafeteria after lunch. Several wanted to learn how to write letters to the newspaper.

All in all, it was amazing what resulted that year considering the small amount of time and effort I had expended kicking off the project by reading *Miss Rumphius*.

#### Final Thoughts

Children have an enormous amount of energy. Channeled, that energy can be put to good use in projects that benefit the common good. These accomplishments build real self-esteem, an important outcome in and of itself. More importantly, students also learn how to be proactive participants in our democracy. They will be better prepared to run our democracy when they inherit it. If we—public school teachers—do not accept the responsibility for teaching the next generation how to protect, defend, and preserve our democracy, who will? 📖

#### Notes

1. Barbara Cooney, *Miss Rumphius*, New York: Puffin, 1985.
2. Lee Bock, "Moral and Ethical Concepts," *School Library Journal* 49 (2003): 95.
3. M. R. Jalongo, "Stories that Teach Life Lessons," *Scholastic Early Childhood Today* 19 (2004): 36-43.
4. W. Parker, *Social Studies in Elementary Education* (Saddle River, NJ: Pearson Merrill Prentice Hall, 2005).

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**Title:** Miss Rumphius: A Catalyst for Social Action

**Subject areas:** Social Studies and Language Arts

**Grade levels:** 2<sup>nd</sup>-5<sup>th</sup>

**Key CA Content Standards Addressed:**

Language Arts

1.1 Ask thoughtful questions and respond to relevant questions with appropriate elaboration in oral settings.

Social Studies

2.5 Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives

3.4.2 Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government. Discuss the importance of public virtue and the role of citizens, including how to participate in a classroom, in the community, and in civic life.

**ELD stage of students:** Intermediate ELD level-Advanced ELD level

**Key ELD Standards Addressed:** Participate in social conversations with peers and adults on familiar topics and by asking and answering questions and soliciting information; Negotiate and initiate social conversations by questioning, restating, soliciting information, and paraphrasing the information of others.

**Teacher objectives:** Teacher will show students how to be active participants in our democracy. Teacher will teach students that in a democracy everyone can have a voice and that each of us should be proactive and civic minded. Teacher will challenge students to make their own goals to make the world a better place.

**Learner objectives:** Students will learn how to assume the responsibility of civic activism for the public good. Students will develop a social conscience and learn how to make important civic contributions.

**Materials:** Miss Rumphius by Barbara Cooney, chart paper

**Modifications for special needs, including ELL and exceptionalities:** Display completed lists around the classroom

**Procedure:**

(15 minutes) *Initiating activity:* Activate prior knowledge- "I want you to think about someone you know or have heard about that helped make our world a better place (e.g. Martin Luther King worked hard to make sure that all people have equal rights and are treated fairly. He helped to make the world a better place). Talk to your partner about that person." [Provide two to three minutes for discussion. Teacher calls on each set of partners to talk about the person they thought of who made the world a better place. Allow time for discussion.]

(25 minutes) *Modeling of process and/or guided practice:*

1) Introduce Miss Rumphius by Barbara Cooney. "I am going to read you a story about a real person, Miss Rumphius, who lived a long time ago. In fact, Miss Rumphius was the author's great aunt. Miss Rumphius lived an interesting life. When she was a child her grandfather gave Miss Rumphius an important piece of advice. Listen to find out what her grandfather advised Miss Rumphius to do and what happened when she did what he asked."

2) Read Miss Rumphius. "What advice did Miss Rumphius's grandfather give to her? (He told her to make the world more beautiful). How did Miss Rumphius make the world more beautiful? (She planted lupines)."

3) Introduce class activity- "What can you do to make the school a better place?" [Give an example (e.g. I know I can help make the school a better place by helping keep the hall bulletin boards up-to-date and attractive). Allow two to three minutes for students to discuss.]

"Now I am going to call on each set of partners. Tell me what you talked about. I am going to list your ideas on this chart. Sometimes when I hear a person's idea, it helps me think of new ideas, so after I call on each set of partners I will call on volunteers who have thought of new ideas." [Make a list on the chart. If necessary, make a few suggestions for things to add to the chart. Read the list.]

"This is a good list. I know if each of us works hard to do these things our school will be a better place. If our school is a better place, how will that make our world a better place?" [Allow time for students to discuss.]

4) Introduce class activity- "I am now going to challenge you to make the world a better place by doing things at home. In fact, I think this is so important that it is going to be your homework every night this school year. Let's make a new list, one that tells things we can do at home." [Repeat the process above. Make a list on the chart. If necessary, make a few suggestions for things to add to the chart. Read the list.]

"This is a great list. I know that we will add to it as the years goes by. Right now I want you to plan what you are going to do tonight and then tell your partner." [Allow time for partners to discuss and report out.]

(10 minutes) *Independent practice:* "There is something else that is important for you to do. I'd rather that you not talk about our project at home. Why? Because I want you to help make the world a better place for the right reasons. The goal is not to have someone tell you how wonderful you are for doing things or for being helpful. It is to quietly do the right things to make our world better. Tomorrow morning I am going to ask each of you to tell me what you did. We will discuss this every morning. I want making the world a better place to become a habit that you do every single day. Are there any questions?"

(5 minutes) *Closure:* "Tonight, go home and make the world a better place by doing something nice for someone you live with." [Allow students to share what they plan on doing.]

**Assessment of student performance:** Informal assessment during class discussion.

**Logical follow-up lesson:** In a democracy we all have rights and responsibilities.

Name \_\_\_\_\_

Date \_\_\_\_\_

Miss Rumphius

Vocabulary

1. \_\_\_\_\_ isle

2. \_\_\_\_\_ porridge

3. \_\_\_\_\_ jasmine

4. \_\_\_\_\_ conservatory

5. \_\_\_\_\_ moist

6. \_\_\_\_\_ tropical

7. \_\_\_\_\_ satisfaction

8. \_\_\_\_\_ curious

9. \_\_\_\_\_ lupine

10. \_\_\_\_\_ sow

- a. 1. Of, like, or found in the areas of the earth that are near the equator; 2. Hot and humid.
- b. To scatter or plant to produce a crop.
- c. A plant with clusters of different-colored flowers.
- d. Slightly wet; damp.
- e. A special place in which plants are grown.
- f. Eager to find out or know about something.
- g. A vine or shrub with yellow or white flowers that smell very sweet.
- h. Pleasure that comes from the fulfillment of something.
- i. A thick cereal or soup that is made by boiling oatmeal or other grains in milk or water.

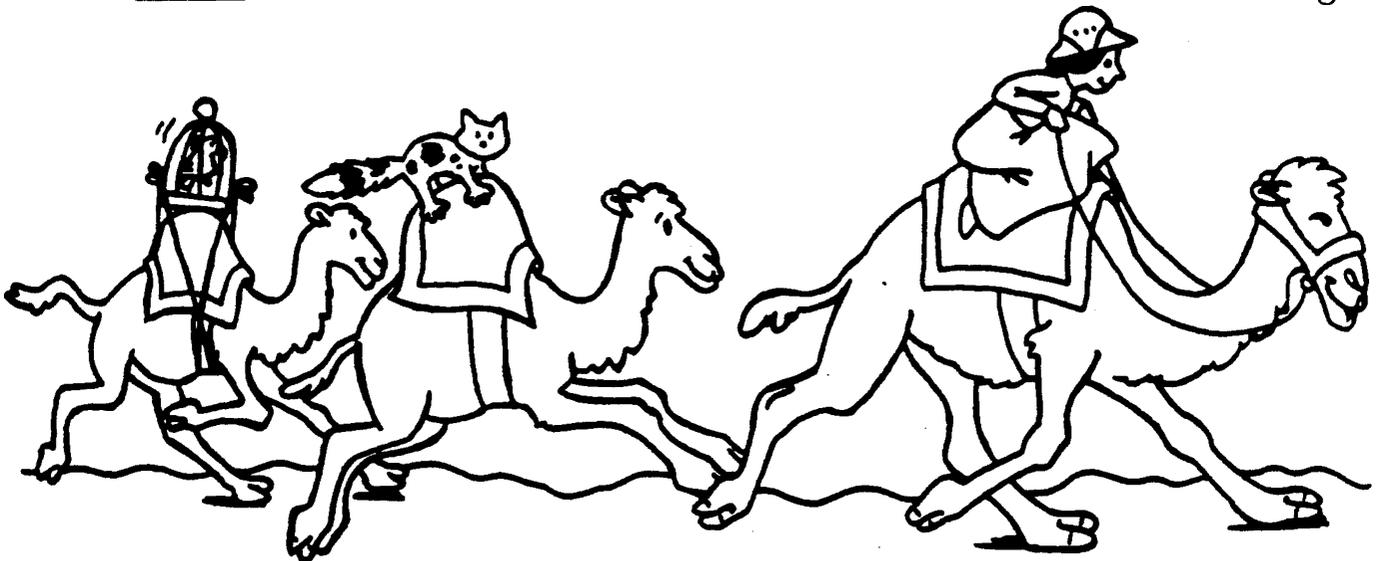
# MISS RUMPHIUS

Name \_\_\_\_\_

Read each sentence carefully.

Underline the story word that fits in each blank.

1. The little girl sat on her front \_\_\_\_\_.      bushes      stoop      street
2. He was \_\_\_\_\_ something with his knife.      sleeping      watching      carving
3. Can you \_\_\_\_\_ this job for me?      finish      grow      want
4. It was a cold \_\_\_\_\_ day outside.      sunny      hot      wintry
5. Would you like a \_\_\_\_\_ of this fruit?      top      juicy      slice
6. It is not \_\_\_\_\_ to ride your bike.      foolish      happy      around
7. The farmer ordered five \_\_\_\_\_ of seed.      gifts      gloves      bushels
8. She \_\_\_\_\_ her book across the room.      asked      drove      flung

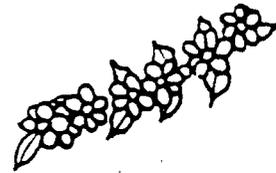
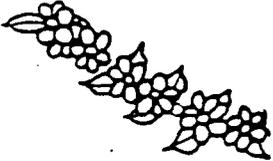


Name \_\_\_\_\_

Date \_\_\_\_\_

# Miss Rumphius

Answer the questions below using complete sentences.



1. What was the Lupine Lady called when she was little?

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2. When the Lupine Lady worked in the library, what was she called?

---

3. Give two reasons why Miss Rumphius stopped traveling.

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4. How did Miss Rumphius make the world beautiful?

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5. What man-made place is almost like a tropical isle?

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6. Why did Miss Rumphius feel she had to make the world more beautiful?

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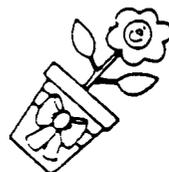
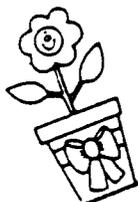
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Name \_\_\_\_\_

Date \_\_\_\_\_

# Miss Rumphius

Number the following sentences in the order that they happened in the story.



\_\_\_\_\_ Miss Rumphius traveled to a tropical island where she met Bapa Raja.

\_\_\_\_\_ Miss Rumphius decided that she wanted to go to faraway places, live by the sea, and make the world more beautiful.

\_\_\_\_\_ Miss Rumphius bought a house by the sea.

\_\_\_\_\_ A young girl named Alice Rumphius lived with her grandfather by the sea.

\_\_\_\_\_ Miss Rumphius spent all summer scattering lupine seeds all over the country.

\_\_\_\_\_ Alice grew up and set out to do the three things.

\_\_\_\_\_ Miss Rumphius told her niece that she must also do something to make the world more beautiful.

\_\_\_\_\_ Miss Rumphius hurt her back getting off a camel in the Land of the Lotus-Eaters.

\_\_\_\_\_ Miss Rumphius planted a lupine garden around her house.

\_\_\_\_\_ Miss Rumphius got a job working in a library.

---

# MISS RUMPHIUS

Name \_\_\_\_\_

Look at the words below. Circle the six descriptions that tell about Alice, Grandfather, and Bapa Raja. Each word or phrase must fit all three people. Write your six choices in the box.

**A** ugly

**B** nice to know

**C** caring

**D** red-haired

**E** a leader

**F** thin

**G** likes to paint

**H** lives by the sea

**I** mean

**J** sets goals

**K** shares

**L** friendly

**M** crazy

**N** gray-haired

**O** lonely

**P** lazy

These are my six choices.  
They fit Alice, Grandfather,  
and Bapa Raja:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_



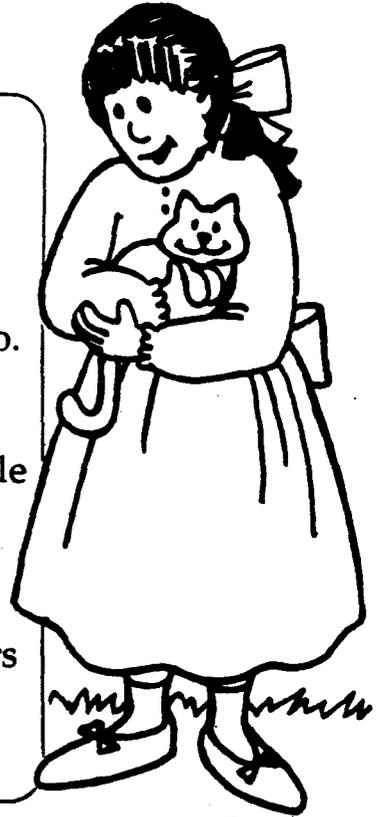
# MISS RUMPHIUS

Name \_\_\_\_\_

Read the story summary and answer the questions.

## STORY SUMMARY:

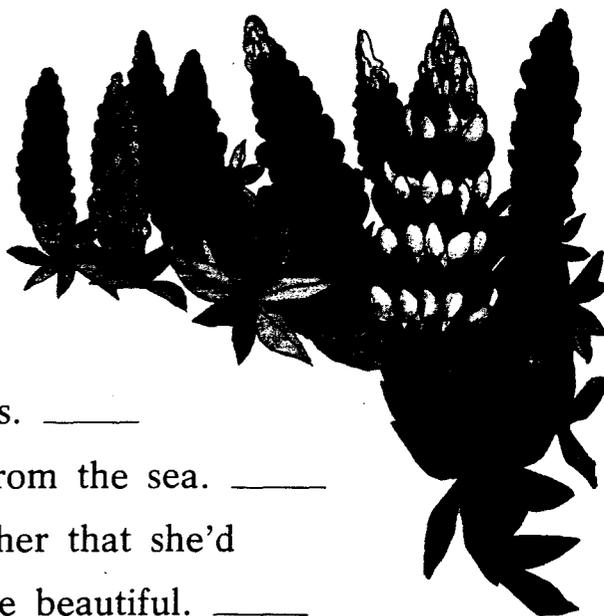
As a young girl, Alice Rumphius dreamed of traveling to faraway places when she grew up. She also wanted to live by the sea — just as her grandfather had done. Grandfather told her about one more thing she must do. Alice must do something to make the world more beautiful. When Alice grew up, she did travel to faraway places around the world. She also found a little house by the sea — just as she had dreamed of doing. Finally, she found the one thing she could do to make the world more beautiful. She could plant lupine seeds all over the town. In the spring, when the flowers came up, the whole town was covered with beautiful blue and purple and rose-colored flowers.



1. What did Alice want to do when she grew up?
  - a) become a painter.
  - b) grow flowers.
  - c) visit faraway places.
2. Why did Alice want to live by the sea?
  - a) so she could have flowers.
  - b) because her grandfather did.
  - c) because it was cooler.
3. What was the third thing Alice's grandfather said she must do?
  - a) make the world more beautiful.
  - b) make a town more beautiful.
  - c) find a house by the sea.
4. What happened after Alice planted the seeds?
  - a) The town was covered with flowers.
  - b) Alice got very tired.
  - c) Alice went traveling.

# Miss Rumphius

● Think about the story “Miss Rumphius.” Read each group of sentences. Number the sentences 1, 2, and 3 to show the order in which things happened.



- 
1. Miss Rumphius helped her grandfather paint skies in his paintings. \_\_\_\_\_  
Miss Rumphius moved to a city far from the sea. \_\_\_\_\_  
Miss Rumphius promised her grandfather that she'd do something to make the world more beautiful. \_\_\_\_\_
- 
2. Miss Rumphius went to visit a tropical island. \_\_\_\_\_  
Miss Rumphius traveled to other faraway places. \_\_\_\_\_  
Miss Rumphius became a librarian in the city far from the sea. \_\_\_\_\_
- 
3. Miss Rumphius hurt her back getting off a camel. \_\_\_\_\_  
Miss Rumphius planted flowers in the rocky soil around her house by the sea. \_\_\_\_\_  
Miss Rumphius found her place to live by the sea. \_\_\_\_\_
- 
4. Miss Rumphius sowed lupine seeds everywhere. \_\_\_\_\_  
Miss Rumphius fulfilled her promise to make the world more beautiful. \_\_\_\_\_  
Miss Rumphius saw how well the seeds from her lupines traveled. \_\_\_\_\_

# MISS RUMPHIUS

Name \_\_\_\_\_

Alice Rumphius traveled to many faraway places. Think of a place far away you would like to visit. Answer the questions below and then make a travel poster advertising your special place.



1. This is where I would like to travel to someday: \_\_\_\_\_

2. I want to go there because: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_

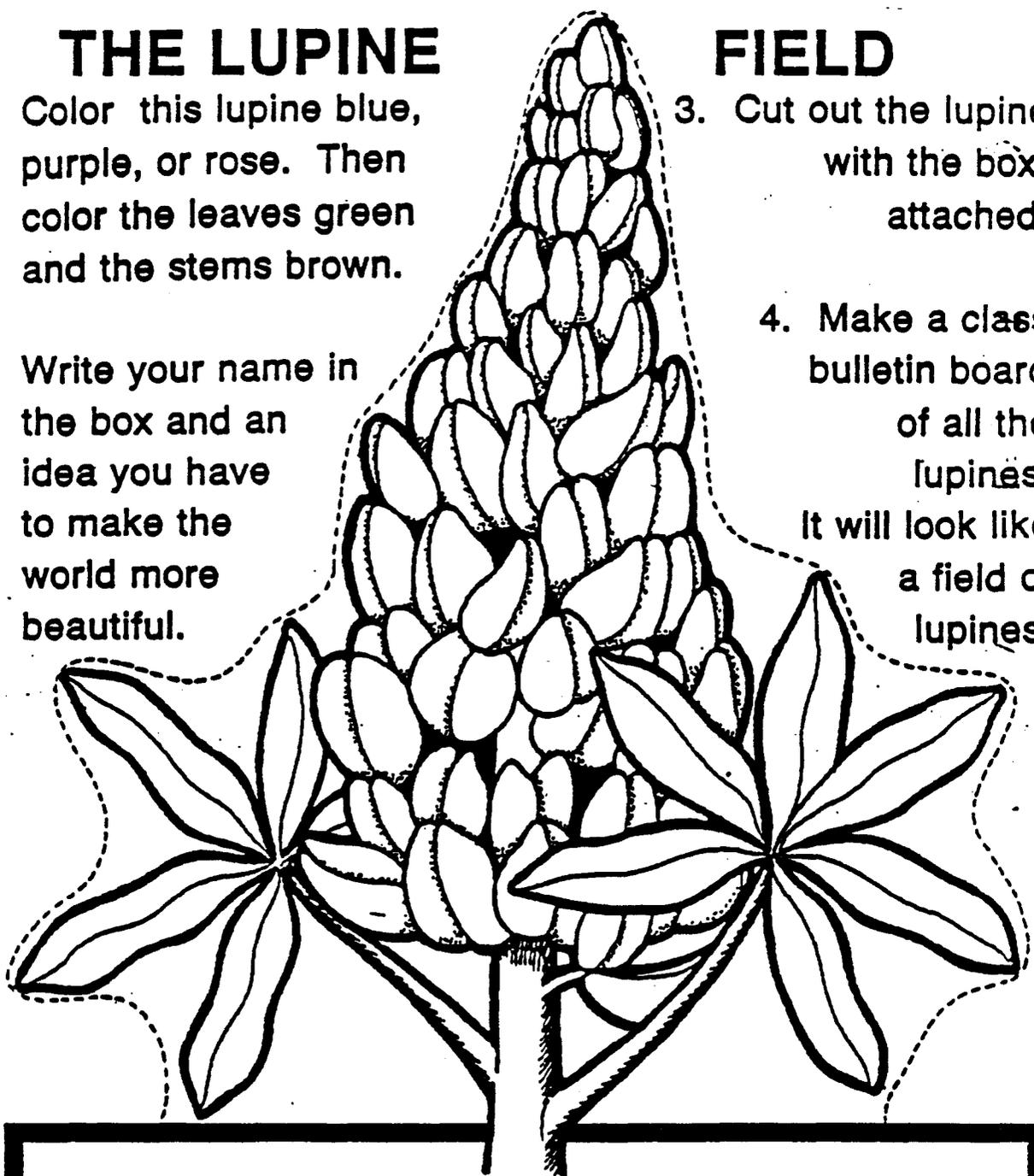
# Miss Rumphius

## THE LUPINE

1. Color this lupine blue, purple, or rose. Then color the leaves green and the stems brown.
2. Write your name in the box and an idea you have to make the world more beautiful.

## FIELD

3. Cut out the lupine with the box attached.
4. Make a class bulletin board of all the lupines. It will look like a field of lupines!



<b>NAME:</b> _____
<b>Something I can do to make the world more beautiful:</b>
_____
_____

Date \_\_\_\_\_

Your Name \_\_\_\_\_

Partner's Name \_\_\_\_\_

## Understanding Empathy

Our feelings are an important part of ourselves. How we feel can affect how we behave towards other people. Our feelings can also affect how well we pay attention and work together with our friends, with our families, and even in class. Understanding how you feel and why you feel that way can help make things clearer so you can make better choices during problems.

Understanding how other people feel is also very important because we work with other people most of our lives. The ability to understand other people's feelings is called empathy. This exercise is to help you understand what empathy is all about.

**Directions:** Work with a partner. Take turns, asking each other the questions below. Answer the questions as honestly as possible. Write your partner's answers in the blank spaces below.

1. Describe the last time you felt happy. Why did you feel happy?

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2. Describe the last time you felt sad. Why did you feel sad?

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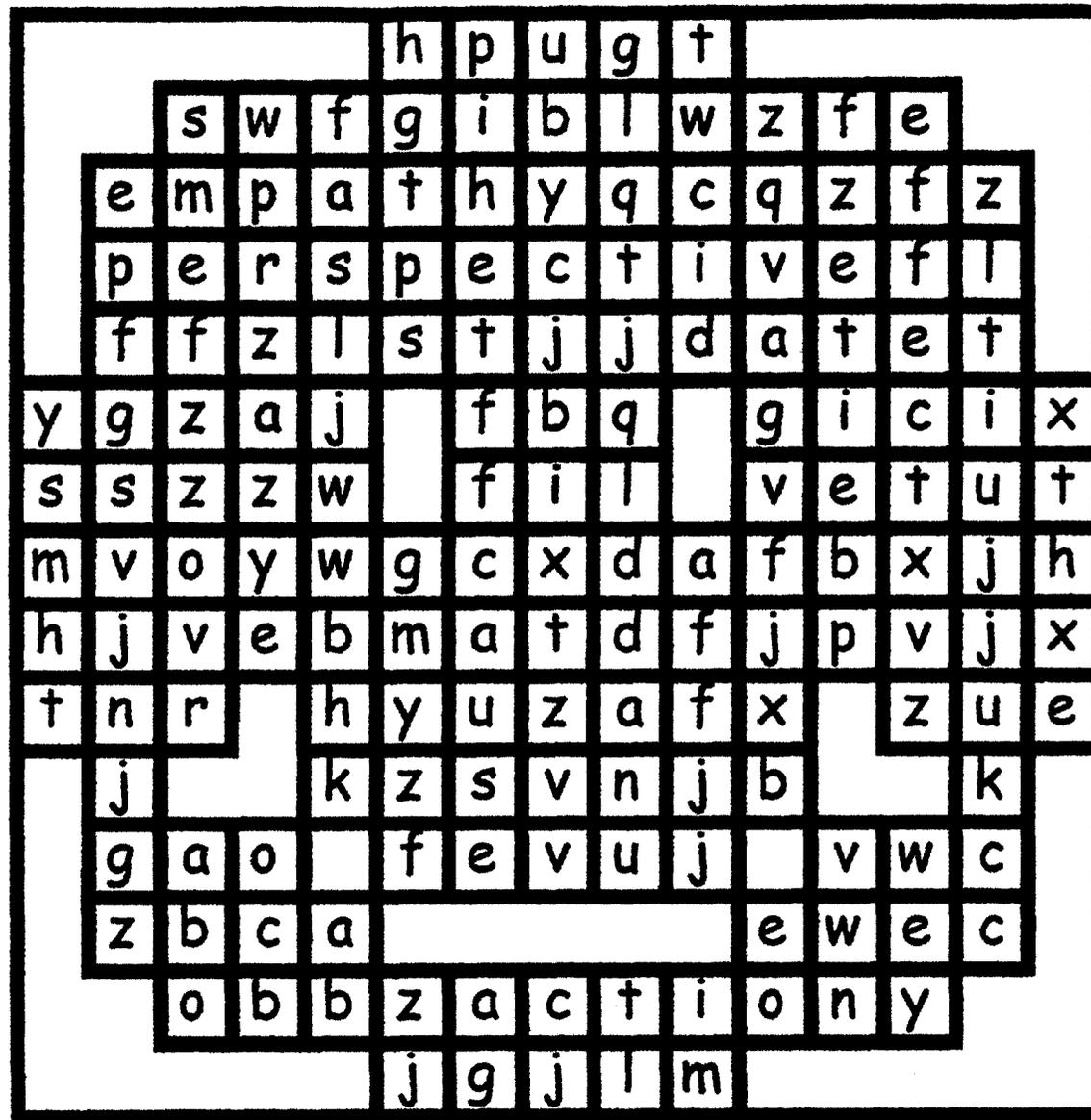
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# Word Search: Empathy



empathy

perspective

cause

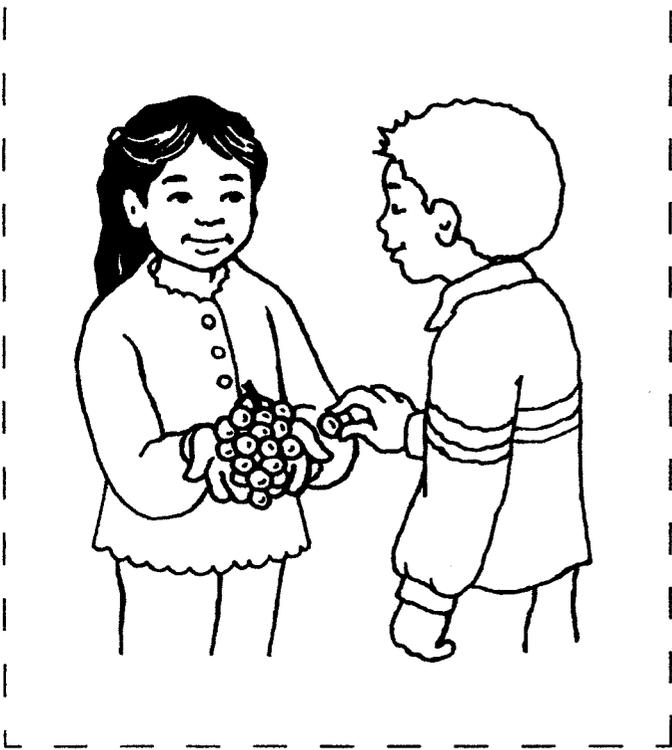
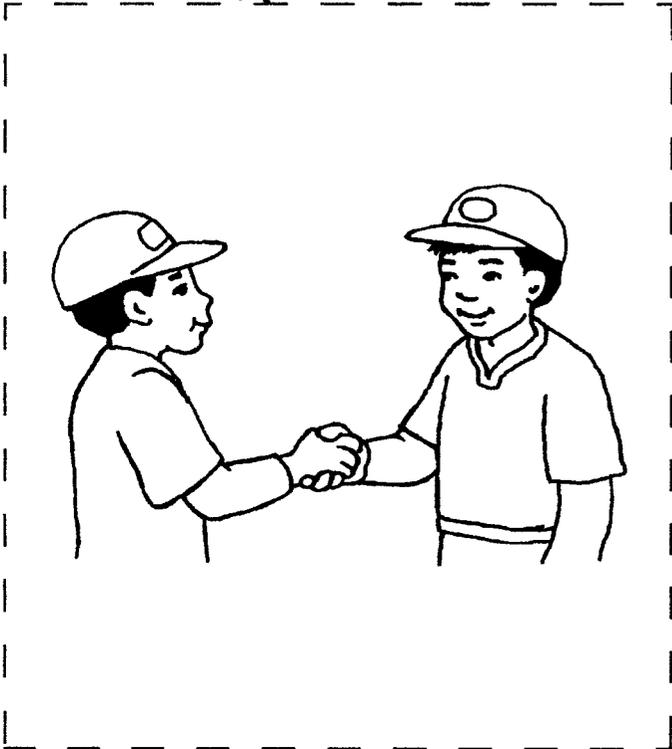
effect

action

affect

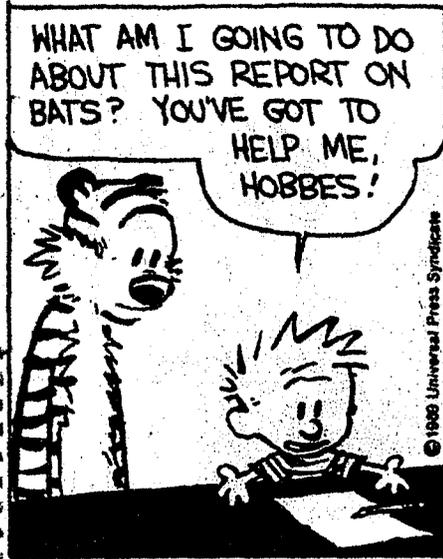
Name: \_\_\_\_\_

# Being a Good Citizen

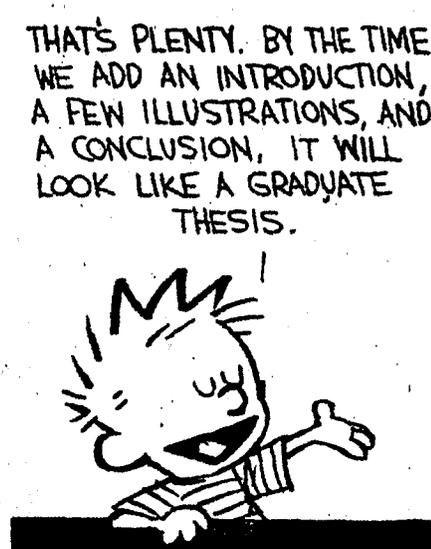


**Instruction** Have children color and cut apart the cards. Have pairs of children discuss each illustration. Have them decide if it shows fair play, good sportsmanship, respect, or the Golden Rule and explain why.

**CALVIN & HOBBS** By Bill Watterson



**CALVIN & HOBBS** By Bill Watterson



## DESCRIBE THE PROBLEM

### INSTEAD OF ACCUSATIONS



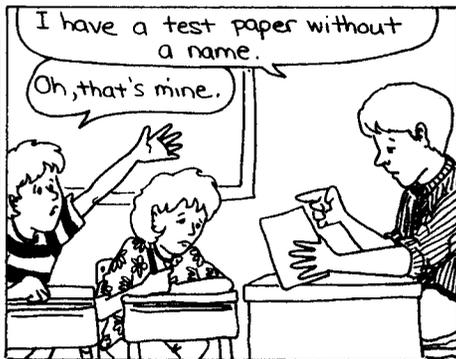
### DESCRIBE THE PROBLEM



### INSTEAD OF SARCASM



### DESCRIBE THE PROBLEM



### INSTEAD OF ORDERS



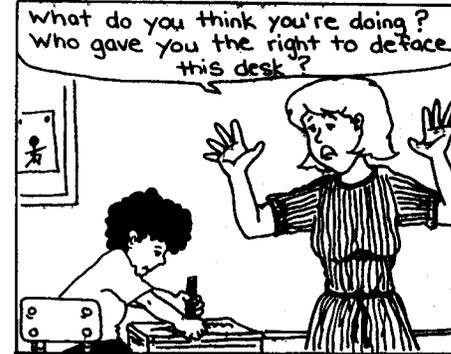
### DESCRIBE THE PROBLEM



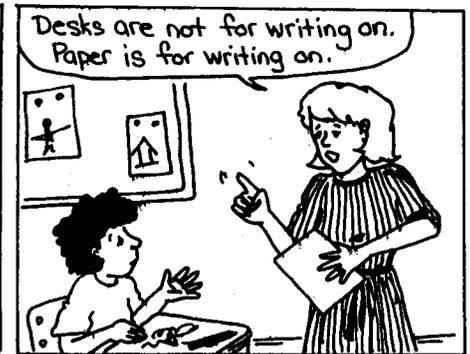
When teachers describe the problem, instead of accusing or giving commands, students are more willing to behave responsibly.

## GIVE INFORMATION

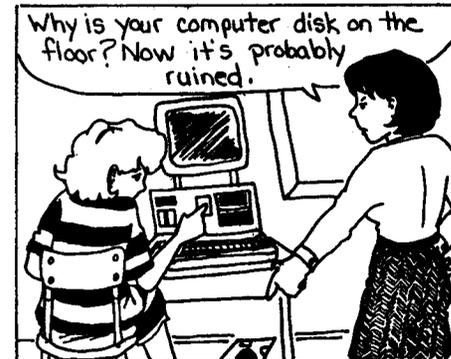
### INSTEAD OF ACCUSATIONS



### GIVE INFORMATION



### INSTEAD OF BLAME



### GIVE INFORMATION



### INSTEAD OF A PUT-DOWN

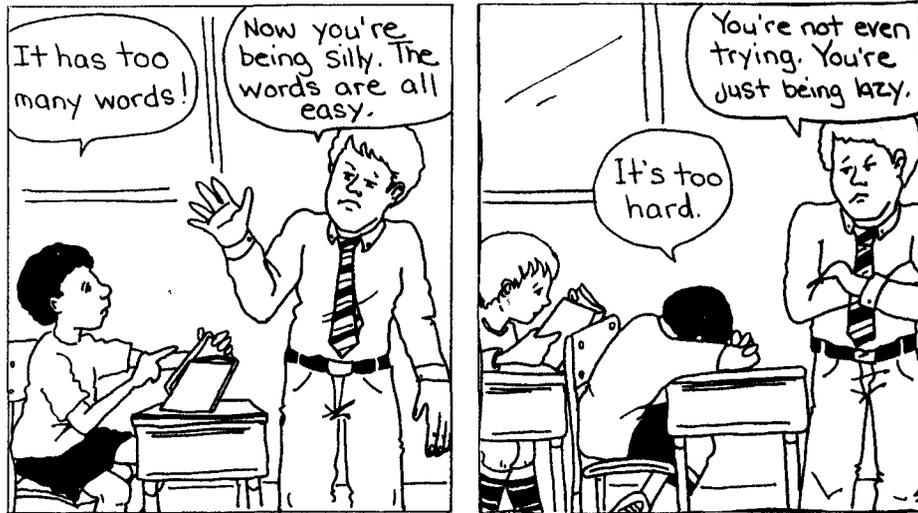
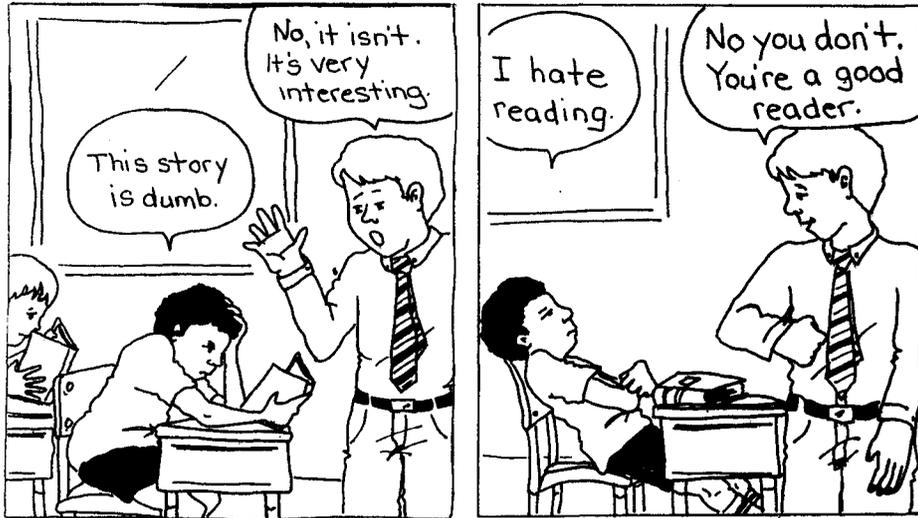


### GIVE INFORMATION



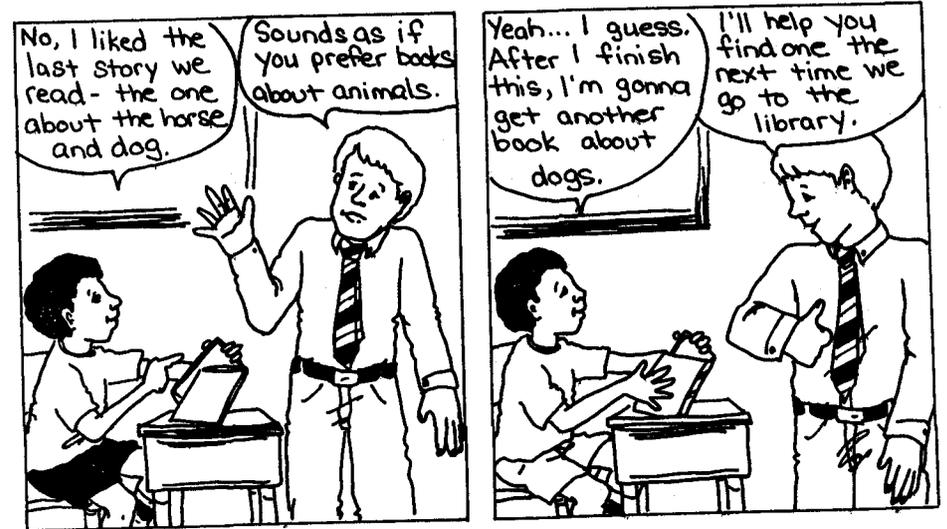
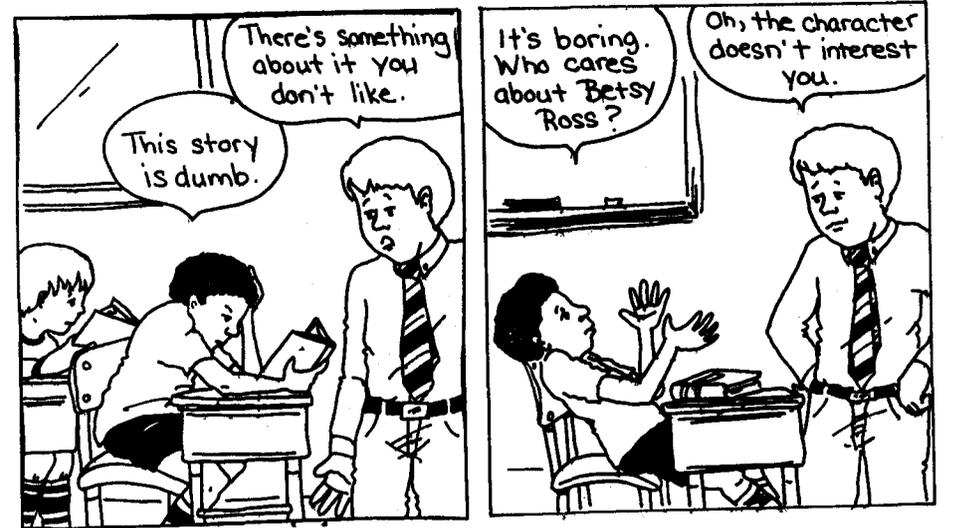
When teachers give information, without insult, students are more likely to change their behavior.

## INSTEAD OF DENYING FEELINGS



When feelings are denied, a student can easily become discouraged.

## PUT THE FEELINGS INTO WORDS



When negative feelings are identified and accepted, a student feels encouraged to continue to strive.

## INSTEAD OF IGNORING FEELINGS



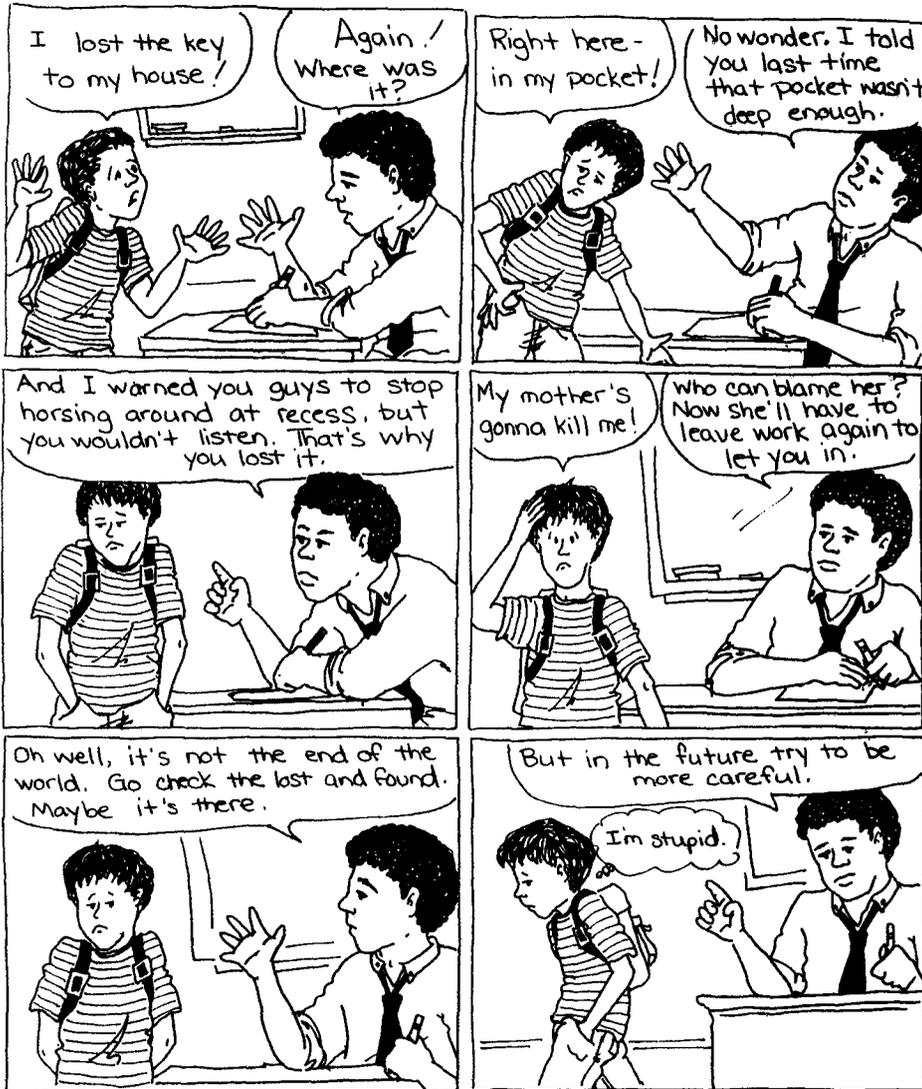
It's hard for children to change their behavior when their feelings are completely ignored.

## ACCEPT FEELINGS EVEN AS YOU STOP UNACCEPTABLE BEHAVIOR



It's easier for children to change their behavior when their feelings have been accepted.

## INSTEAD OF CRITICISM AND ADVICE



The teacher means well, but when a student is bombarded with criticism and advice, he finds it difficult to think about his problem or take responsibility for it.

## ACKNOWLEDGE FEELINGS WITH A WORD OR SOUND ("OH" OR "MMM" OR "UH" OR "I SEE")



By responding to a student's distress with an attitude of concern and an occasional nod or "grunt" of understanding, we free him to focus on his problem and possibly solve it himself.

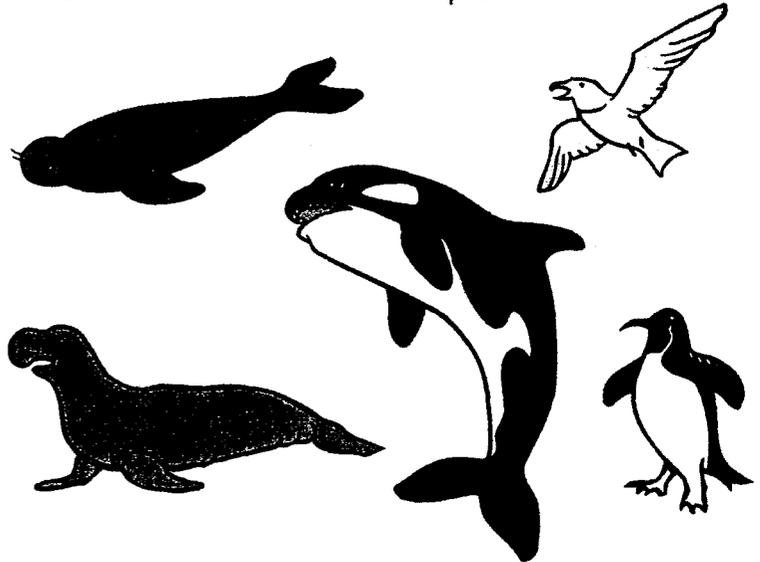
Name \_\_\_\_\_

Date \_\_\_\_\_

# Recognizing Details: The Coldest Continent

**Directions:** Read the information about Antarctica. Then answer the questions.

Antarctica lies at the South Pole and is the coldest continent. It is without sunlight for months at a time. Even when the sun does shine, its angle is so slanted that the land receives little warmth. Temperatures often drop to 100 degrees below zero, and a fierce wind blows almost endlessly. Most of the land is covered by snow heaped thousands of feet deep. The snow is so heavy and tightly packed that it forms a great ice cap covering more than 95 percent of the continent.



Considering the conditions, it is no wonder there are no towns or cities in Antarctica. There is no permanent population at all, only small scientific research stations. Many teams of explorers and scientists have braved the freezing cold since Antarctica was sighted in 1820. Some have died in their effort, but a great deal of information has been learned about the continent.

From fossils, pieces of coal and bone samples, we know that Antarctica was not always an ice-covered land. Scientists believe that 200 million years ago it was connected to southern Africa, South America, Australia and India. Forests grew in warm swamps, and insects and reptiles thrived there. Today, there are animals that live in and around the waters that border the continent. In fact, the waters surrounding Antarctica contain more life than oceans in warmer areas of the world.

1. Where is Antarctica? \_\_\_\_\_

2. How much of the continent is covered by an ice cap? \_\_\_\_\_

3. When was Antarctica first sighted by explorers? \_\_\_\_\_

4. What clues indicate that Antarctica was not always an ice-covered land?  
\_\_\_\_\_

5. Is Antarctica another name for the North Pole?

Yes

No

# Reading Comprehension: The Arctic Circle

**Directions:** Read the article about the Arctic Circle. Then answer the questions.

On the other side of the globe from Antarctica, at the northernmost part of the Earth, is another icy land. This is the Arctic Circle. It includes the North Pole itself and the northern fringes of three continents—Europe, Asia and North America, including the state of Alaska—as well as Greenland and other islands.

The seasons are opposite at the two ends of the Earth. When it is summer in Antarctica, it is winter in the Arctic Circle. In both places, there are very long

periods of sunlight in summer and very long nights in the winter. On the poles themselves, there are six full months of sunlight and six full months of darkness each year.

Compared to Antarctica, the summers are surprisingly mild in some areas of the Arctic Circle. Much of the snow cover may melt, and temperatures often reach 50 degrees in July. Antarctica is covered by water—frozen water, of course—so nothing can grow there. Plant growth is limited in the polar regions not only by the cold, but also by wind, lack of water and the long winter darkness.

In the far north, willow trees grow but only become a few inches high! The annual rings, the circles within the trunk of a tree that show its age and how fast it grows, are so narrow in those trees that you need a microscope to see them.

A permanently frozen layer of soil, called “permafrost,” keeps roots from growing deep enough into the ground to anchor a plant. Even if a plant could survive the cold temperatures, it could not grow roots deep enough or strong enough to allow the plant to get very big.



1. What three continents have land included in the Arctic Circle?

\_\_\_\_\_

2. Is the Arctic Circle generally warmer or colder than Antarctica?

\_\_\_\_\_

3. What is “permafrost”?

\_\_\_\_\_

4. Many tall pine trees grow in the Arctic Circle.

Yes

No

# Main Idea: The Polar Trail

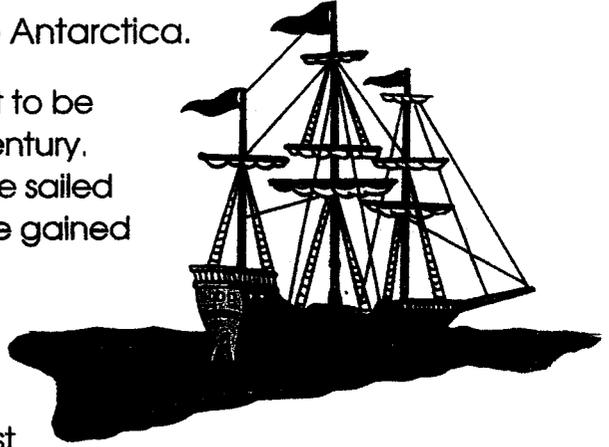
**Directions:** Read the information about explorers to Antarctica.

A recorded sighting of Antarctica, the last continent to be discovered, was not made until the early nineteenth century. Since then, many brave explorers and adventurers have sailed south to conquer the icy land. Their achievements once gained as much world attention as those of the first astronauts.

Long before the continent was first spotted, the ancient Greeks suspected there was a continent at the bottom of the Earth. Over the centuries, legends of the undiscovered land spread. Some of the world's greatest seamen tried to find it, including Captain James Cook in 1772.

Cook was the first to sail all the way to the solid field of ice that surrounds Antarctica every winter. In fact, he sailed all the way around the continent but never saw it. Cook went farther south than anyone had ever gone. His record lasted 50 years.

Forty years after Cook, a new kind of seamen sailed the icy waters. They were hunters of seals and whales. Sailing through unknown waters in search of seals and whales, these men became explorers as well as hunters. The first person known to sight Antarctica was an American hunter, 21-year-old Nathaniel Brown Palmer in 1820.



**Directions:** Draw an **X** on the blank for the correct answer.

1. The main idea is:  
 Antarctica was not sighted until the early nineteenth century.  
 Many brave explorers and adventurers have sailed south to conquer the icy land.
2. The first person to sail to the ice field that surrounds Antarctica was:  
 Nathaniel Brown Palmer  
 Captain James Cook  
 Neal Armstrong
3. His record for sailing the farthest south stood for:  
 40 years  
 50 years  
 500 years
4. The first person known to sight Antarctica was:  
 an unknown ancient Greek  
 Captain James Cook  
 Nathaniel Brown Palmer
5. His profession was:  
 hunter  
 ship captain  
 explorer

Name \_\_\_\_\_

Date \_\_\_\_\_

# Recognizing Details: The Frozen Continent

**Directions:** Read the information about explorers. Then answer the questions.

By the mid-1800s, most of the seals of Antarctica had been killed. The seal hunters no longer sailed the icy waters. The next group of explorers who took an interest in Antarctica were scientists. Of these, the man who took the most daring chances and made the most amazing discoveries was British Captain James Clark Ross.

Ross first made a name for himself sailing to the north. In 1831, he discovered the North Magnetic Pole—one of two places on Earth toward which a compass needle points. In 1840, Ross set out to find the South Magnetic Pole. He made many marvelous discoveries, including the Ross Sea, a great open sea beyond the ice packs that stopped other explorers, and the Ross Ice Shelf, a great floating sheet of ice bigger than all of France!

The next man to make his mark exploring Antarctica was British explorer Robert Falcon Scott. Scott set out in 1902 to find the South Pole. He and his team suffered greatly, but they were able to make it a third of the way to the pole. Back in England, Scott was a great hero. In 1910, he again attempted to become the first man to reach the South Pole. But this time he had competition: an explorer from Norway, Roald Amundsen, was also leading a team to the South Pole.

It was a brutal race. Both teams faced many hardships, but they pressed on. Finally, on December 14, 1911, Amundsen became the first man to reach the South Pole. Scott arrived on January 17, 1912. He was bitterly disappointed at not being first. The trip back was even more horrible. None of the five men in the Scott expedition survived.



1. After the seal hunters, who were the next group of explorers interested in Antarctica?

---

2. What great discovery did James Ross make before ever sailing to Antarctica?

---

3. What were two other great discoveries made by James Ross?

---

4. How close did Scott and his team come to the South Pole in 1902?

---

5. Who was the first person to reach the South Pole?

---

Name \_\_\_\_\_

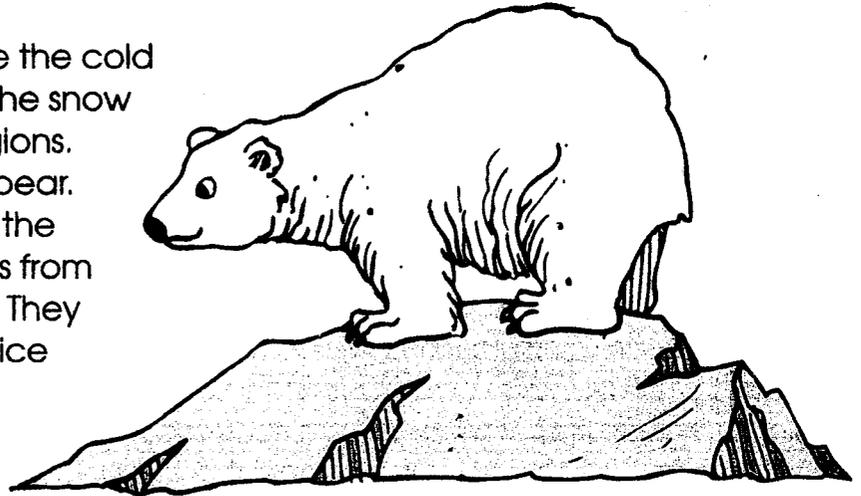
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# Reading Comprehension: Polar Bears

**Directions:** Read the information about polar bears. Then answer the questions by circling **Yes** or **No**.

Some animals are able to survive the cold weather and difficult conditions of the snow and ice fields in the Arctic polar regions. One of the best known is the polar bear.

Polar bears live on the land and the sea. They may drift hundreds of miles from land on huge sheets of floating ice. They use their great paws to paddle the ice along. Polar bears are excellent swimmers, too. They can cross great distances of open water. While in the water, they feed mostly on fish and seals.



On land, these huge animals, which measure 10 feet long and weigh about 1,000 pounds, can run 25 miles an hour. Surprisingly, polar bears live as plant-eaters rather than hunters while on land. Unlike many kinds of bears, polar bears do not hibernate. They are active the whole year.

Baby polar bears are born during the winter. At birth, they are pink and almost hairless. These helpless cubs weigh only two pounds—less than one-third the size of most human infants. The mother bears raise their young in dens dug in snowbanks. By the time they are 10 weeks old, polar bear cubs are about the size of puppies and have enough white fur to protect them in the open air. The mothers give their cubs swimming, hunting and fishing lessons. By the time autumn comes, the cubs are left to survive on their own.

- |  |     |    |
|--|-----|----|
| 1. Polar bears can live on the land and the sea.               | Yes | No |
| 2. Polar bears are excellent swimmers.                         | Yes | No |
| 3. Polar bears hibernate in the winter.                        | Yes | No |
| 4. A newborn polar bear weighs more than a newborn human baby. | Yes | No |
| 5. Mother polar bears raise their babies in caves.             | Yes | No |
| 6. Father polar bears give the cubs swimming lessons.          | Yes | No |

Name \_\_\_\_\_

Date \_\_\_\_\_

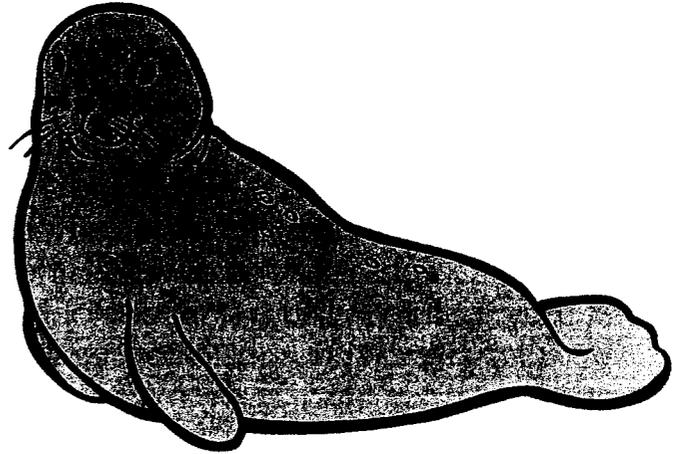
## Context Clues: Seals

**Directions:** Read the information about seals. Use context clues to determine the meaning of the bold words. Check the correct answers.

Seals are **aquatic** mammals that also live on land at times. Some seals stay in the sea for weeks or months at a time, even sleeping in the water. When seals go on land, they usually choose **secluded** spots to avoid people and other animals.

The 31 different kinds of seals belong to a group of animals often called pinnipeds meaning "fin-footed." Their fins, or flippers, make them very good swimmers and divers. Their nostrils close tightly when they dive. They have been known to stay **submerged** for as long as a half-hour at a time!

Seals are warm-blooded animals that can adjust to various temperatures. They live in both **temperate** and cold climates. Besides their fur to keep them warm, seals have a thick layer of fat, called blubber, to protect them against the cold. It is harder for seals to cool themselves in hot weather than to warm themselves in cold weather. They can sometimes become so overheated that they die.



1. Based on other words in the sentence, what is the correct definition of **aquatic**?

- living on the land
- living on or in the sea
- living in large groups

2. Based on other words in the sentence, what is the correct definition of **submerged**?

- under the water
- on top of the water
- in groups

3. Based on other words in the sentence, what is the correct definition of **secluded**?

- rocky
- private or hidden
- near other animals

4. Based on other words in the sentence, what is the correct definition of **temperate**?

- rainy
- measured on a thermometer
- warm

Name \_\_\_\_\_

Date \_\_\_\_\_

## Reading Comprehension: Walruses

**Directions:** Read the information about walruses. Then answer the questions.

A walrus is actually a type of seal that lives only in the Arctic Circle. It has two huge upper teeth, or tusks, which it uses to pull itself out of the water or to move over the rocks on land. It also uses its tusks to dig clams, one of its favorite foods, from the bottom of the sea. On an adult male walrus, the tusks may be three and a half feet long!

A walrus has an unusual face. Besides its long tusks, it has a big, bushy mustache made up of hundreds of movable, stiff bristles. These bristles also help the walrus push food into its mouth. Except for small wrinkles in the skin, a walrus has no outer ears.

Like a seal, the walrus uses its flippers to help it swim. Its front flippers serve as paddles, and while swimming, it swings the back of its huge body from side to side. A walrus looks awkward using its flippers to walk on land, but don't be fooled! A walrus can run as fast as a man.

Baby walruses are born in the early spring. They stay with their mothers until they are two years old. There is a good reason for this—they must grow little tusks, at least three or four inches long, before they can catch their own food from the bottom of the sea. Until then, they must stay close to their mothers to eat. A young walrus that is tired from swimming will climb onto its mother's back for a ride, holding onto her with its front flippers.



1. The walrus is a type of seal found only \_\_\_\_\_.

2. List two ways the walrus uses its tusks.

3. A walrus cannot move quickly on land.

Yes

No

4. A walrus has a large, bushy mustache.

Yes

No

5. A baby walrus stays very close to its mother until it is two years old.

Yes

No

6. Baby walruses are born late in fall.

Yes

No

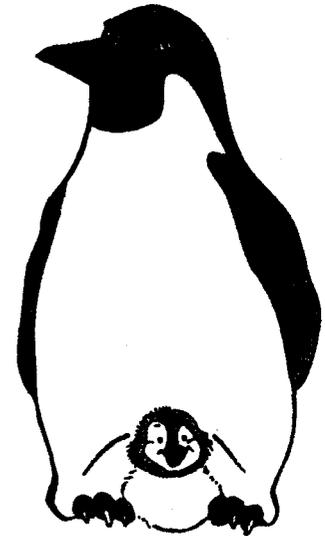
# Main Idea: Penguins

**Directions:** Read the information about penguins.

People are amused by the funny, duck-like waddle of penguins and by their appearance because they seem to be wearing little tuxedos. Penguins are among the best-liked animals on Earth, but are also a most misunderstood animal. People may have more wrong ideas about penguins than any other animal.

For example, many people are surprised to learn that penguins are really birds, not mammals. Penguins do not fly, but they do have feathers, and only birds have feathers. Also, like other birds, penguins build nests and their young hatch from eggs. Because of their unusual looks, though, you would never confuse them with any other bird!

Penguins are also thought of as symbols of the polar regions, but penguins do not live north of the equator, so you would not find a penguin on the North Pole. Penguins don't live at the South Pole, either. Only two of the seventeen **species** of penguins spend all of their lives on the frozen continent of Antarctica. You would be just as likely to see a penguin living on an island in a warm climate as in a cold area.



**Directions:** Draw an **X** on the blank for the correct answer.

1. The main idea is:
  - Penguins are among the best-liked animals on earth.
  - The penguin is a much misunderstood animal.
2. Penguins live
  - only at the North Pole.
  - only at the South Pole.
  - only south of the equator.
3. Based on the other words in the sentence, what is the correct definition of the word **species**?
  - number
  - bird
  - a distinct kind

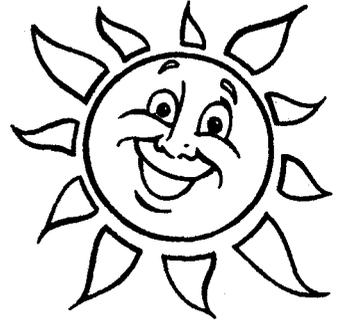
**Directions:** List three ways penguins are like other birds.

Name \_\_\_\_\_

Date \_\_\_\_\_

# Review

**Directions:** Write your answers on the lines.



1. Which contains the South Pole—the Arctic or Antarctica?

\_\_\_\_\_

2. Would you like to live in either the Arctic or Antarctica?  
Why or why not?

\_\_\_\_\_  
\_\_\_\_\_

3. What adaptations would people who live (even for a short time) in these areas have to make?

\_\_\_\_\_  
\_\_\_\_\_

4. What characteristics are common to animals who live in the polar regions?

\_\_\_\_\_  
\_\_\_\_\_

5. Name two animals that live in the polar regions.

\_\_\_\_\_

6. Write three facts you learned about one of the animals that live in the polar regions.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. On each of the poles, there are six months of sunlight and six months of darkness each year. How do you think this would affect you?

\_\_\_\_\_  
\_\_\_\_\_

8. Write three facts you learned about explorers to the North or South Pole regions.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# What Makes Your State Special?

ALABAMA ... Was the first place to have 9-1-1, started in 1968.

\*

ALASKA ... One out of every 64 people has a pilot's license.

\*

ARIZONA ... Is the only state in the continental US that doesn't follow Daylight Savings Time.

\*

ARKANSAS ... Has the only active diamond mine in the US

\*

CALIFORNIA. Its economy is so large that if it were a country, it would rank seventh in the entire world.

\*

COLORADO ... In 1976 it became the only state to turn down the Olympics.

\*

CONNECTICUT ... The Frisbee was invented here at Yale University.

\*

DELAWARE ... Has more scientists and engineers than any other state.

\*

FLORIDA ... At 759 square miles, Jacksonville is the US's largest city.

\*

GEORGIA ... It was here, in 1886, that pharmacist John Pemberton made the first vat of Coca-Cola.

\*

HAWAII ... Hawaiians live, on average, five years longer than residents in any other state.

\*

IDAHO ... TV was invented in Rigby, Idaho, in 1922.

\*

ILLINOIS .. The Chicago River is dyed green every St. Patrick's Day.

\*

INDIANA ... Home to Santa Claus, Indiana, which gets a half million letters to Santa every year.

\*

IOWA ... Winnebagos get their name from Winnebago County. Also, it is the only state that begins with two vowels.

\*

KANSAS ... Liberal, Kansas, has an exact replica of the house in The Wizard of Oz.

KENTUCKY ... Has more than \$6 billion in gold underneath Fort Knox.

\*

LOUISIANA ... Has parishes instead of counties because they were originally Spanish church units.

\*

MAINE .. It's so big, it covers as many square miles as the other five New England states combined.

\*

MARYLAND ... The Oujia board was created in Baltimore in 1892.

\*

MASSACHUSETTS ... The Fig Newton is named after Newton, Massachusetts.

\*

MICHIGAN ... Fremont, home to Gerber, is the baby food capital of the world.

\*

MINNESOTA ... Bloomington's Mall of America is so big, if you spent 10 minutes in each store, you'd be there nearly four days.

\*

MISSISSIPPI ... President Teddy Roosevelt refused to shoot a bear here... that's how the teddy bear got its name.

\*

MISSOURI ... Is the birthplace of the ice cream cone.

\*

MONTANA .. A sapphire from Montana is in the Crown Jewels of England.

\*

NEBRASKA ... More triplets are born here than in any other state.

\*

NEVADA ... Has more hotel rooms than any other place in the world.

\*NEW HAMPSHIRE ... Birthplace of Tupperware, invented in 1938 by Earl Tupper.

\*

NEW JERSEY ... Has the most shopping malls in one area in the world.

\*

NEW MEXICO ... Smokey the Bear was rescued from a 1950 forest fire here.

\*

NEW YORK .. Is home to the nation's oldest cattle ranch, started in 1747 in Montauk.

\*

NORTH CAROLINA .. Home of the first Krispy Kreme doughnut.

\*

NORTH DAKOTA ... Rigby, North Dakota, is the exact geographic center of North America.

\*

OHIO ... The hot dog was invented here in 1900.

\*

OKLAHOMA ... The grounds of the state capital are covered by operating oil wells.

\*

OREGON ... Has the most ghost towns in the country.

\*

PENNSYLVANIA ... The smiley, :) was first used in 1980 by computer scientists at Carnegie Mellon University.

\*

RHODE ISLAND . The nation's oldest bar, the White Horse Tavern, opened here in 1673

\*

SOUTH CAROLINA ... Sumter County is home to the world's largest gingko farm.

SOUTH DAKOTA .. Is the only state that's never had an earthquake.

\*

TENNESSEE .. Nashville's Grand Ole Opry is the longest running live radio show in the world.

\*

TEXAS ... Dr. Pepper was invented in Waco back in 1885.

\*

UTAH ... The first Kentucky Fried Chicken restaurant opened here in 1952. (Humm.....and I figured the first KFC was in Kentucky)

\*

VERMONT ... Montpelier is the only state capital without a McDonald's

VIRGINIA ... Home of the world's largest office building ... The Pentagon.

\*

WASHINGTON ... Seattle has twice as many college graduates as any other state.

\*

WASHINGTON D.C. . Was the first planned capital in the world.

\*

WEST VIRGINIA .. Had the world's first brick paved street, Summers Street, laid in Charleston in 1870.

\*

WISCONSIN ... The ice cream sundae was invented here in 1881 to get around Blue Laws prohibiting ice cream from being sold on Sundays.

\*

WYOMING ... Was the first state to allow women to vote.

# CHILDREN OF PREHISTORY

Stone Age kids left their marks on cave art and stone tools

BY BRUCE BOWER

**W**alk about 300 meters into Rouffignac Cave in southern France, turn left into a dark chamber, raise a lantern, and gaze up at a prehistoric marvel. A welter of undulating, curving, crisscrossing lines blankets the ceiling in abstract abandon. Single, double, and triple sets of lines zigzag and run together in swirls. In other parts of the cave, similarly configured lines appear beside, inside, underneath, and on top of drawings of now-extinct mammoths. Archaeologists refer to such marks as finger flutings, the lines that human fingers leave when drawn over a soft surface. In Rouffignac Cave, finger flutings cut through pliable red clay to expose hard white limestone underneath.

Soon after the discovery of Rouffignac's finger flutings about 50 years ago, researchers started speculating about the mysterious marks. One influential account referred to the decorated ceiling as the "Serpents' Dome." Others interpreted the finger flutings as depictions of mythical creatures or streams of water, symbols from initiation rites into manhood, or shamans' ritual signs.

New evidence, gathered by Kevin Sharpe of the University of Oxford in England and Leslie Van Gelder of Walden University in Minneapolis, challenges those assertions. They argue that 2-to-5-year-old kids generated the bulk of Rouffignac's ancient ceiling designs. Teenagers or adults must have hoisted children so that the youngsters could reach the ceiling and run their fingers across its soft-clay coat.

Sharpe and Van Gelder's study joins a growing number of efforts aimed at illuminating the activities of Stone Age children. Researchers who conduct such studies regard much, but certainly not all, of prehistoric cave art as the product of playful youngsters and graffiti-minded teenagers.

Stone Age adults undoubtedly drew the famous portrayals of bison, mammoths, and other creatures at sites such as France's

Lascaux Cave and Spain's Altamira Cave. However, less attention has focused on numerous instances of finger fluting, pigment-stained handprints and hand outlines, and crude drawings of animals and people, all of which may have had youthful originators.

"Kids undoubtedly had access to the deep painted caves [during the Stone Age], and they participated in some of the activities there," says Jean Clottes, a French archaeologist and the current president of the International Federation of Rock Art Organizations. "That's a hard fact."

Moreover, archaeologists suspect that many of the relics found at prehistoric stone-tool sites around the world are the largely unexamined handiwork of children and teenagers who were taking early cracks at learning to chisel rock.

"I suspect that children's products dominate stone-tool remains at some of those sites," remarks archaeologist John J. Shea of Stony Brook (N.Y.) University.

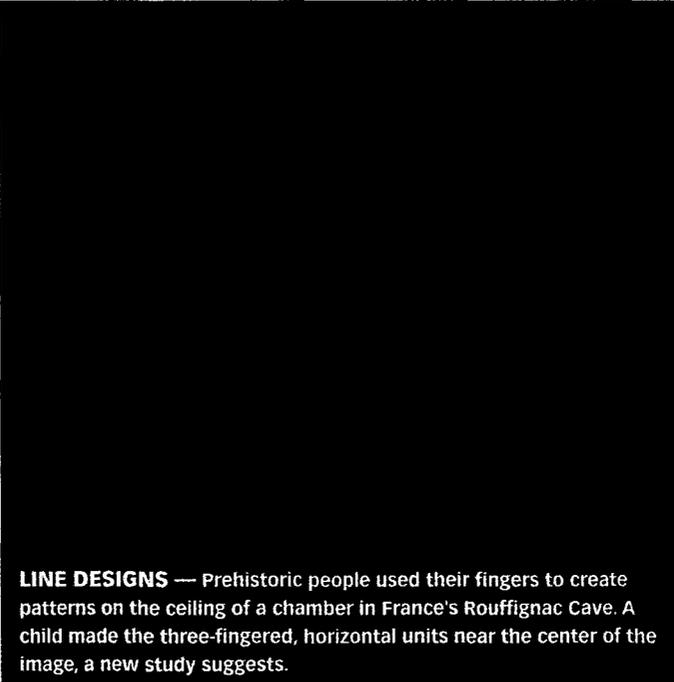
**CAVE TOTS** Sharpe and Van Gelder have long speculated that prehistoric kids created many of the patterned lines that adorn caves such as Rouffignac. Their suspicion was kindled in 1986, when Australian archaeologist Robert G. Bednarik published the first of several papers contending that the walls and ceilings of caves in western Europe and southern Australia contained numerous examples of child-produced grooves as well as some made by adults. He coined the term finger fluting for this practice.

Bednarik, who heads the Australian Rock Art Research Association in Caulfield South, noted that, because of the spacing and width of the marks, a

large proportion of the grooves must have been the work of small fingers. "Approximately half the markings were clearly made by children, even infants," he says.

To date, Bednarik has investigated finger fluting in about 70 Australian and European caves. Analyses of wall and ceiling sediment in a portion of these caves indicate that the line designs originated at least 13,000 years ago, and in some cases 30,000 years or more ago.

At Rouffignac, Sharpe and Van Gelder took Bednarik's ideas an empirical step further. First, the researchers asked children and adults to run the fingers of one hand across soft clay. The scientists then measured the width of the impressions of each individual's central three fingers. Participants included 124 pupils and 11



**LINE DESIGNS** — Prehistoric people used their fingers to create patterns on the ceiling of a chamber in France's Rouffignac Cave. A child made the three-fingered, horizontal units near the center of the image, a new study suggests.

teachers from four schools—three in the United States and one in England. Their ages ranged from 2 to 55. The volunteers held their fingers close together during the exercise, mimicking the finger-fluting style at Rouffignac. Even with adult assistance, 2- to 3-year-olds usually just smacked the clay with an open hand.

Comparisons of modern finger widths with those arrayed on the French cave's ceiling indicate that 2-to-5-year-olds made the vast majority of Rouffignac markings, Sharpe and Van Gelder reported in the December 2006 *Antiquity*. Either teenagers or adults crafted a few finger flutings at the site, since members of these age groups possess similar, larger finger widths than children do. In the modern sample, a 12-year-old girl and a 14-year-old boy displayed wider fingers than any adult did. Hand sizes of late Stone Age people are comparable to those of people today, Sharpe says.

A 5 foot, 10 inch-tall person standing on tiptoes could just reach the ceiling of the Rouffignac chamber, Sharpe notes.

Adults must have hoisted children on their shoulders while weaving their way through the inner sanctum, so that their passengers could trace curved, elongated lines. This activity occurred sometime between 27,000 and 13,000 years ago, according to estimates of the extinction dates of animals depicted in drawings in the cave.

Perhaps finger fluting was simply a playful exercise, a form of ancient finger painting, Sharpe suggests.

While Bednarik welcomes the new evidence on youthful finger fluting, he suspects that such marks mimicked visual sensations produced by reactions of the brain in response to prolonged darkness and sensory deprivation deep inside caves. In such situations, people—and especially children, in Bednarik's view—temporarily see wavy lines, points of light, and other geometric shapes.

Stone Age kids at Rouffignac may have translated these visions into finger fluting without adult assistance, Bednarik holds. Since soil movements can alter the height of cave floors, prehistoric children might once have been able to reach the chambers' ceilings on their own, he suggests.

In contrast, Clottes accepts the notion that prehistoric adults lifted young finger fluters at Rouffignac. However, he hypothesizes that ancient people regarded caves as portals to spirit worlds and as places for important rituals. "Children were brought inside the caves to benefit from the supernatural power the caves held by touching the walls, putting or printing their hands on the walls, drawing lines, and perhaps occasionally sketching animals or geometric signs," Clottes says.

Paul Bahn, an independent archaeologist in England, sees no way to confirm Clottes' contention. "Finger fluting may have been deeply significant or may have been almost mindless doodling," Bahn remarks. "The fact that some kids were lifted up by bigger people in no way helps us to decide."

**HANDY BOYS** In September 1940, three teenage boys in rural France set out to find a rumored underground passage to an old manor. Their search led them to a small opening in the ground that had been blocked off to keep away livestock. After returning the next day with a lamp, the boys crawled into the hole and entered the Lascaux cave with its gallery of magnificent Stone Age drawings.

Caves exerted a hypnotic pull on boys long before Lascaux's dis-

covery, says zoologist R. Dale Guthrie of the University of Alaska in Fairbanks. In fact, he contends, teenage boys played a big part in producing the prehistoric cave art, not just in finding it thousands of years later.

Guthrie, who studies the remains of Stone Age animals and is himself an artist, made his case in a 2005 book titled *The Nature of Paleolithic Art* (University of Chicago Press).

Adolescent boys, at times joined by female peers and children, decorated cave walls and ceilings for fun, not to commune with spirits, Guthrie holds. Exploring caves and decorating underground chambers with personal marks provided an outlet for creative play that readied boys for the rigors and challenges of big-game hunting as adults, he suggests.

Youngsters made up a hefty proportion of ancient populations. In a Stone Age band of roughly 35 people, about two dozen individuals were in their twenties or younger, Guthrie estimates. Few elders lived past age 40.

Several European Stone Age caves contain sets of footprints of teens and children, suggesting that prehistoric kids of different ages went exploring together, Guthrie says.

The most extensive evidence of a youth movement in ancient cave art comes from Guthrie's comparison of the size of hand impressions at some sites with corresponding measurements of people's hands today. In at least 30 European caves, ancient visitors rendered hand images by pressing a pigment-covered palm and fingers against a wall or by blowing pigment against an outspread hand held up to a wall to create a stenciled outline.

Guthrie assessed nine different dimensions characterizing each of 201 ancient hand impressions. He obtained the corresponding hand measurements for nearly 700 people, ages 5 to 19, in Fairbanks.

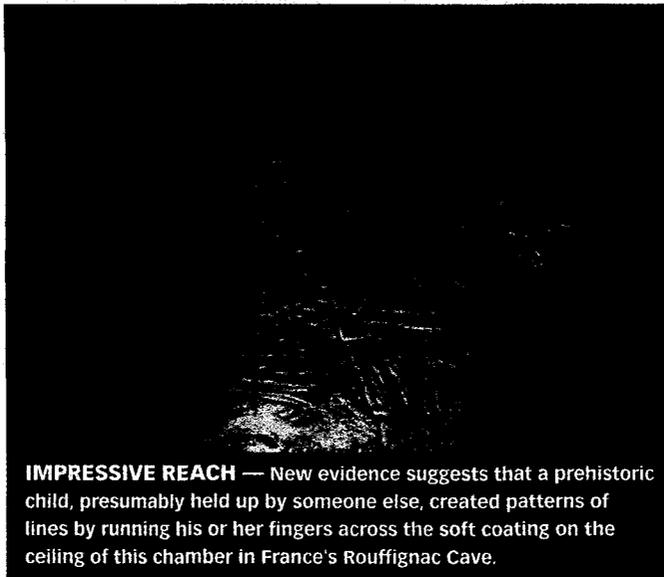
Teenagers ranging in age from 13 to 16 left most of the prehistoric handprints, Guthrie concludes. He classifies 162 prints as those of adult or teenage males, based on traits such as relatively wide palms and thick fingers. The remaining 39 prints belong either to females or to young boys.

Guthrie contends that much Stone Age cave art was concocted hastily, yielding simple, graffiti-like images with no deep meaning. For instance, a few caves contain hand outlines with missing fingers or other deformities that teenage boys with normal hands made for fun, in Guthrie's view. He has replicated the "maimed-hand look" by spattering paint around his own bent fingers onto flat surfaces.

Stone Age caves also contain many unfinished or corrected sketches of animals as well as drawings of male and especially female sexual parts. Small groups of boys, flush with puberty but not yet old enough for adult duties; probably invested considerable energy in exploring caves and expressing their hopes and fears on chamber walls, Guthrie proposes.

"Paleolithic art books are really biased in showing only beautiful, finished cave images," he asserts. "The possibility that adolescent giggles and snickers may have echoed in dark cave passages as often as did the rhythm of a shaman's chant demeans neither artists nor art."

Sharpe, a supporter of Guthrie's conclusions, notes that teenage boys apparently jumped up and slapped the walls of chambers in Rouffignac and in a nearby French cave, making hand marks about 2.5 m above the floor.



Clottes, however, doubts that youthful thrill seekers took the lead in generating prehistoric European cave art. "In most caves, images were made by adults," he says. "A majority of those images display both artistic mastery and technical expertise."

**KNAP TIME** Guthrie's labeling of prehistoric teenagers as big-time cave artists stimulated a related insight by John Shea. The Stony Brook researcher realized, after reading Guthrie's book, that nearly every set of stone tools and tool-making debris found at Stone Age sites includes the likely handiwork of children.

"Almost every stone-tool assemblage includes unusually small, simple artifacts, overproduced in an obsessive way, that children could have made," Shea says.

These tiny, rudimentary implements—many dating to hundreds of thousands of years ago—were made from poor-quality rock, an additional sign that they were fashioned by kids taking early whacks at tool production, Shea asserts. Seasoned stone-tool makers used high-quality rock.

Shea teaches a college class in stone-tool making, also known as flint knapping. Observations of novice flint knappers, combined with the likelihood that prehistoric people learned to make stone tools at young ages, bolster his argument—published in the November-December 2006 *Evolutionary Anthropology*—that children produced many previously discovered small stone arti-

facts. Researchers have already established that modern children can learn to make basic stone tools starting at age 7.

Shea plans to develop criteria to distinguish beginners' stone artifacts from those of experienced flint knappers. For instance, he has noted that beginners create lots of debris as they experiment with tool-making techniques. Also, the shape and quality of their finished products vary greatly from one piece to the next, unlike experts' uniform implements.

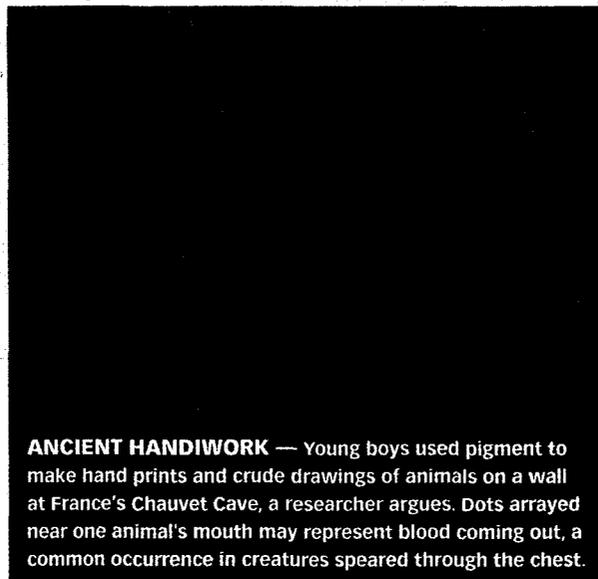
As early as 1998, Harvard University archaeologist Ofer Bar-Yosef suggested that Stone Age kids may have watched adults making tools, picked up toolmakers' discarded stones, and tried to imitate what their elders had done. At the time, his suggestion went largely unnoticed.

"Children's activities have been ignored at [Stone Age] sites and at most later archaeological sites as well," remarks archaeologist Steven L. Kuhn of the University of Arizona in Tucson.

Questions remain about whether children and other novices invariably generated smaller stone artifacts than experienced tool makers did, Kuhn says. Research into children's activities in modern hunter-

gatherer societies might offer clues to youngsters' behavior long ago, in his view.

Stone Age kids may eventually rewrite what scientists know about ancient stone tools and cave art. It's enough to make a prehistoric parent proud. ■



**ANCIENT HANDIWORK** — Young boys used pigment to make hand prints and crude drawings of animals on a wall at France's Chauvet Cave, a researcher argues. Dots arrayed near one animal's mouth may represent blood coming out, a common occurrence in creatures speared through the chest.

GUTHRIE

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## pullout

# Mayan Culture Today

## Using Multiple Resources to Learn about a Living Culture

Steve Barrett

**In this lesson**, students will use art, music, children's literature, drama, and writing as invitations into the study of the Mayan culture of Guatemala.

The procedure described here may be applied to the study of any culture. This pullout presents an example of how teachers may use multiple sign systems (that is, systems that we use to construct meaning) as entries for students as they begin the study of a given culture.

### "Graffiti Boards"

During this lesson, students will use graffiti boards (newsprint or chart paper for writing down ideas and data quickly) as the medium for their reflection on the Maya. In small groups of no more than four, students will make hypotheses about the culture as they are exposed to aspects of it through several media. Each student will choose a corner of the newsprint or chart paper to work on. Students will record their hypotheses in "graffiti form" (that is, short and to the point) at moments indicated by the teacher. Students may write and draw. Each group should have a supply of markers, crayons, and colored pencils.

### Mayan Culture

During this lesson, the teacher reads aloud *Abuela's Weave*, a children's story by the Guatemalan author, Omar Castañeda. A brief synopsis follows.

Esperanza, a young Mayan girl in Guatemala, learns the weaving tradition of her family from her grandmother, Abuela. Esperanza must work very hard so that she will have many wares to sell at a fair in the capital, Guatemala City, which will be well attended by Guatemalan and international tourists. The grandmother's birthmark causes many people to believe that she is a witch. She and Esperanza must appear to be strangers to one another, both on the bus ride to the capital and when they arrive at the fair, so that Esperanza will sell their weavings. The story relates the fear experienced by Esperanza on being left on her own in the big city and her anxiety over whether she would sell many weavings. A poor day at the market would represent a significant financial loss for her family.

The story *Abuela's Weave* provides a view of the present-day Maya of Guatemala, a culture that still flourishes. This is a country in which some 20 Mayan languages are spoken, and

many people continue to practice the religion and cosmology passed down through the centuries from their ancestors. Too often, the Mayan civilization is presented as something that existed strictly in the past. Stories such as *Abuela's Weave* provide examples of living societies that textbooks often portray as relics from another time.

### Time Required for the Lesson

This lesson could be taught in two 50-minute periods.

### Materials

- Omar Castañeda, *Abuela's Weave*<sup>1</sup>
- CD of marimba music from Guatemala<sup>2</sup>
- "Artifacts" of art from the Maya<sup>3</sup>
- Five or six large sheets of newsprint hung on the wall
- Five or six sets of markers, crayons, and colored pencils

### Performance Expectations for the Early Grades

- 1 **CULTURE:** Social studies programs should include experiences that provide for the study of culture and cultural diversity, so that the learner can ...
  - b. give examples of how experiences may be interpreted differently by people from diverse cultural perspectives and frames of reference;
  - c. describe ways in which language, stories, folktales, music, and artistic creations serve as expressions of culture and influence behavior of people living in a particular culture;
  - d. compare ways in which people from different cultures think about and deal with their physical environment and social conditions ...

From National Council for the Social Studies, *Expectations of Excellence: Curriculum Standards for Social Studies* (Washington, DC: NCSS, 1994): 49.

## Procedures

1. The teacher explains and demonstrates how one can take down quick notes on a graffiti board.

2. The teacher breaks up the class into groups of four students each, and demonstrates how to split up the surface of the graffiti board so that each student has his or her own space in which to write or draw.

3. The teacher explains that we can make guesses (hypotheses) about what a culture is like, and how a people live, from an artifact. Holding up a toothbrush (or other common item from our own culture), the teacher gives some examples of what an anthropologist might suppose from this item (that grooming was important to this society).

4. The teacher displays the illustration of Mayan artwork and asks the students to record their hypotheses about the culture that produced these works on their groups' graffiti board.

Some guiding questions (Handout 1) that teachers may use to stimulate inquiry and new ideas include:

- What does the art (music, and/or literature) tell you about the Maya?
- What do these items tell you about what is important to people of Mayan culture?
- What can you predict from this item about the daily lives, beliefs, and values of the Maya?

5. Students listen to a selection from the marimba CD. They record any new hypotheses about the culture on the graffiti boards.

6. The teacher reads aloud *Abuela's Weave*, a children's story by the Guatemalan author, Omar Castañeda.

7. Read *Luis's Story* (Handout 2) and discuss the questions.

8. The students revisit their graffiti boards, adding further hypotheses about Mayan culture as it exists today.

9. At this point, each group can share with the class at large some of their hypotheses. Students may also discuss whether the information they gleaned from the stories confirmed or disconfirmed their earlier hypotheses. They should also share what they think about the stories. The teacher may ask them to discuss themes that ran through the stories, such as child labor and discrimination, the virtue of courage, and the interdependence of family members.

10. On the following day of class, back in their small groups, the students choose a scene or theme from *Abuela's Weave* that they would like to portray to the entire class. They should be allowed 15 to 20 minutes to practice, and then 2 or 3 minutes to present their vignette.

11. Following the presentations students in the audience should share any new insights into the culture sparked by the skits they have just seen and participated in.

12. Share graffiti boards. Students could make a tour of the room to see what the others groups have written. The teacher

can confirm or disconfirm various hypotheses according to his or her knowledge of Mayan culture. It is appropriate for the teacher to mark some items "Unknown: requiring further research." For example, students might guess that children in rural Guatemala receive little public schooling, and have to work instead. The teacher or students may then refer to background reading, and report back to the class with the results. Or the question may be answered in material presented later in a unit of study on Latin America.

13. Hang the graffiti boards so that students can revisit them during the course of their study of the Mayan culture.

14. When they have completed their study, students may summarize the information on the graffiti boards, adding any new information, to demonstrate their new understandings.

## Conclusion

Introducing cultures through multiple sign systems provides students with the opportunity to learn through various learning styles that may better suit them than the traditional lecture. It also allows them the possibility of creating their own understandings and confirming and/or modifying those understandings in each successive activity. This exploration may lead students to choose topics for further research or reading, topics such as child labor and discrimination, or other themes related to Mayan history, geography, anthropology, and archaeology. These inquiries should help shape the direction the curriculum will take, in addition to the content that the teacher may have planned. 🌐

## Notes

1. Omar Castañeda, Enrique O. Sanchez, illus., *Abuela's Weave* (New York: Lee and Low, 1995).
2. Teclas De Guatemala, *Music of the Marimba* (Los Angeles, CA: JVC Compact Discs, 1989).
3. Elizabeth Baquedano and Michel Zabe, *Aztec, Inca, and Maya* (New York: DK Publishing, 2005); Kristine L. Franklin and Nancy McGirr, *Out of the Dump: Writing and Photographs by Children of Guatemala* (New York: HarperCollins, 1996).

## Background Reading for Teachers

Green, Linda. *Fear as a Way of Life: Mayan Widows in Rural Guatemala*. New York: Columbia University Press, 1999.

Handy, Jim. *Gift of the Devil: A History of Guatemala*. New York: Hushion House, 1984.

**STEVE BARRETT** is a consultant for CEIPA (Centro Ecumenico de Integracion Pastoral), a project that supports street and working children and adolescents in Quetzaltenango, Guatemala. He is also a clinical associate at the University of Missouri-Columbia. He can be reached at [swbelsa@yahoo.com](mailto:swbelsa@yahoo.com).

# Examples of Mayan Culture

Use this sheet to list your observations and also make guesses, or hypotheses, about Mayan culture.

Question	Art	Music	Literature
What does this item tell you about the Maya?			
What does this item tell you about what is important to the Maya?			
What can you predict from this item about the daily lives, beliefs, and values of the Maya?			



## Handout 2

Read this short description aloud to your students and then use the discussion questions to start a conversation. I have met many children like Luis through my work with Maya in Guatemala. —*Steve Barrett*

## Luis's Story: Making Gravel at Ten Years Old

Luis, a 10-year-old Maya-K'iche' youth spends much of his day chipping river rock to make gravel. (The K'iche' are the largest Mayan group in Guatemala.) His family sells the gravel to people driving by on the highway from their roadside stand.

Luis, his mother, and his sisters and brothers, must make gravel and sell it in order to have money for food. It is dangerous, tedious work. Tiny slivers of rock sometimes fly up into Luis's eyes. He does not have safety glasses to wear. The shock of the constant chipping can lead to nerve damage in the hands. Luis and his family don't make much money for their labor and must work all day, including Saturdays, under the hot Pacific coast sun. Their need to work prevents Luis and his siblings from attending school.

Luis's father is an undocumented immigrant in the United States who finds work for short periods of time and sends money to his family when he can. The work he finds, however, does not pay very much, and he lives under the constant threat of being send back to Guatemala. Many present-day Maya live under these conditions.

### Discussion Questions

1. How do Luis and his family meet their need for food?
2. What does it mean that Luis' father is an "undocumented immigrant" in the United States?<sup>2</sup>
3. Why doesn't Luis wear safety glasses as he works, do you think?
4. Are there young children in your community who have to work so that their families can buy food?
5. What do you think about the life of Luis and his family?
6. Congress first passed a law limiting child labor in 1933, under President Franklin Delano Roosevelt's New Deal. Why wouldn't such laws apply to Luis?<sup>3</sup>
7. What might citizens of the United States do to improve the life of someone like Luis who lives in another country?<sup>4</sup>

### Notes

1. Steve Barrett is a consultant for CBIPA (Centro Ecumenico de Integracion Pastoral), a project that supports street and working children and adolescents in Quetzaltenango, Guatemala. He is also a clinical associate at the University of Missouri-Columbia. He can be reached at [svbets@yahoo.com](mailto:svbets@yahoo.com).

2. See the article on page 8 of this issue of SOCIAL STUDIES AND THE YOUNG LEARNER, "Children of Migrant Workers: Exploring the Issues."

3. Susan Campbell Bartoletti, *Kids On Strike!* (Boston, MA: Houghton Mifflin, 1999).
4. One place to look for ideas is the International Center on Child Labor and Education, [www.iccle.org](http://www.iccle.org).

# WORD FIND MOTIVATION!

Below you will see a word find activity. Your goal is to find the words that demonstrate motivation, which are listed at the bottom of the page. Being able to understand these words will assist you in telling and showing others that you are motivated.

S R N P A G H I F D E T E R M I N A T I O C  
N E Y H N E W W T N S I H L E C B D P G P N  
L E S R Q Z T I V I B N T M F Q E G C N R D  
I H S C Y L E A Q C B D S S M A Q I J Q I D  
N D E S I R E Q A Y S O L I G E A N N O D E  
C H N H Z T N N A I E T L O E T I S F L E V  
E T N I H Z Z E R H O P U C I T L P I H D O  
N A S A R H Q E E J E A T R A T E I D D E T  
T C H L E P A S S I O N M I O A H R E E H I  
I C D A A K I P I N M Q A R A N E A N A E O  
V P A M B I T I O N C E N D S N T T C U P N  
E N T Y S N S M A N H C S A E S P I E T H S  
A B R B A G S A A S A I Y S P L Y O C I T A  
V F O C U S R S T L E E T E P I M N T E D T  
M H Y G A T T I P E R S I S T A N C E P C I  
A N O V A E T I P S T H E L E A P T M N T A

## HIDDEN WORDS:

DESIRE  
INSPIRATION  
PERSISTANCE  
INCENTIVE  
PASSION

PRIDE  
AMBITION  
DETERMINATION  
DEVOTION  
FOCUS