



Green Values Club

A Living Green Values Story

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Front Cover Artwork
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Appreciation

Many thanks to the amazing team of Living Values Education educators in Brazil. Their idea of creating an LVE resource for living green values is a reflection of their strong commitment to serving young people and the environment, and helping create a better world for all.



Dedication

“Green Values Club” was extracted from *Living Green Values Activities for Children and Young Adults, A Special Rio+20 Edition*. That educational resource was dedicated to the Earth in honor of the United Nations Conference on Sustainable Development. The conference, also known as Rio+20, was convened in Rio de Janeiro, Brazil, in June 2012.



Dear readers,

I am delighted you love nature and want to help take care of our planet. I hope you enjoy the story – and reflecting and exploring how you can help our Earth and her ocean even more. Each one of us can and does make a difference.

Thank you for being a friend of the Earth. If you wish, send us your comments or news about your activities to lve@livingvalues.net.

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One

Out in the Dinghy

Katie felt worried when she woke up, not at all like her usual cheerful self. The sky was gray through the window. She pulled on her robe and slipped down to the kitchen. She could smell the coffee her mother was brewing. She hugged her mother from behind and asked, "Is Papa home yet?"

Her mother's tired face answered her as she turned around. "I'm sure he's fine, Katie. They've been late getting in before."

"Not this late."

"I know." Mama gave her a quick hug.

George ran into the kitchen, yelling, "Is Papa home yet?"

Their silence answered.

"Oh." George slid into a chair, looking dejected.

"Come, let's have breakfast," said Mama, "and try not to worry. Your Dad is very smart and his partner is a good one."

"But it's not even stormy, it's just overcast," protested Katie. "So why is the boat so late?"

"Unusual things can happen at sea," said Mama. "Let's just trust that all is well, and keep praying."

They said a prayer for Papa and Hector before eating breakfast.

"I got a special feeling just now," said Katie, "that Papa is all right."

"You know, I did too," said Mama. Her smile was full of relief. "But, since we're all a little worried, let's stay together today. It's early. Let's just do a few chores quickly and then I'll go out in the dinghy with you."

"You'll go out with us, Mama?" said George, shocked.

"I'm not as old as you think, George. I bet I can still swim faster than you and I'm sure I'm still good with an oar," laughed Mama.

"That I would like to see," laughed Katie. "Are you still a faster swimmer than me?"

"I don't know," smiled Mama, "you're growing up so fast, but I can still swim faster than a nine-year old," she said as she tousled George's hair.

It was fresh and bright by the time they got down to the dinghy. Katie and George were good rowers. Soon they were on their way out, enjoying the fresh air and the sparkle of the light on the blue of the water. The light shone like diamonds on the sea and an occasional splash from the oars shone through the air, landing on them to make them laugh.

Katie knew they were all watching for Papa's boat. As they rowed past the little island all of the sudden she saw it, "Look, look, it's Papa's boat!"

They waved and called and waved and called. Finally they were close enough for Papa to hear them. Papa came to the side of the boat and gave them a huge smile.

"Welcome! Am I glad to see you!" he called. "Be careful. Come up closely and avoid the fluke!"

The fluke? And then they noticed! Next to Papa's boat was a whale! It was so low in the water they hadn't noticed it.

"Am I glad you're here," Papa repeated. He gave them all a special hug as they climbed on board.

Papa and his partner looked really tired. Papa began to tell them the story. He had noticed a whale in the water as they were coming in at sunset the night before. "Hector and I almost didn't notice it," he said. "When we did see it, we thought it was dead as it was so still and just floating. Then it finally took a breath. It's caught in a net. The net was so heavy that it was dragging the whale down. It's even wrapped around the fluke."

Katie and George looked in awe at the whale. It looked like a young one, an adolescent — it didn't have many barnacles on him. But it sure was big, maybe 12 meters long.

"So," Papa continued, "at sunset we rigged a line to lift some of the weight of the net off the whale and help him stay afloat, but we had to wait until daylight till it was safe to start cutting the net off."

Papa looked at Mama, "I'm so sorry, Lisa, not to have been able to tell you. I knew you would worry, but hoped you could tune in and know I was safe. I just couldn't let the whale die."

"And that's one of the reasons I love you," Mama smiled.

Papa and Hector had been taking turns since daylight getting in the water to cut the strings of the net. It was a commercial net with strong nylon. Papa was thankful that they were there with the dinghy. There was a lot of net to cut and they could use some help. It would be safer and faster to cut from the little boat.

So Katie and George and Mama all got a chance to help. One of them would keep the dinghy steady from the rear with an oar and the other two would cut at the net, string by string. Papa jumped back in the water to cut near the tail. Papa wouldn't let them go near the fluke.

The whale seemed to understand what they were doing. Katie noticed that his eye was watching them. She reached over to pat him. "You've going to be okay," she said as she rubbed his skin.

"We've worked so hard the last three years to get fisherman to stop using driftnets since it's been banned in this area," said Papa. "It looks like someone out there doesn't care about whales, dolphins or our ecosystem."

They worked hard for an hour. Mama called, "The net is ready to fall away from the head now."

"Great," called Papa. "The middle section is already cut. I think I can ease the net off the fluke. Katie, he seems to like you patting him and looking at him. Keep doing that. We need him to stay still."

"Hector, are you ready to pull the net off?" Hector was poised near the pulley on the large boat.

So Katie, George and Mama stayed at the whale's head and patted him, as Papa carefully eased the cut net off one side of the fluke.

"Okay," called Papa, "back away slowly. Stay peaceful."

George backed the dinghy away from the whale as Papa swam to the side of the boat. Hector began to use the pulley to haul away the cut net from the whale.

The whale started to move his head and tail, and the line holding part of the net from the boat eased the cut net off the middle part of the whale and the rest of the tail. All of the sudden the whale seemed to realize it was free and took off!

"Hooray," shouted George and Katie.

They all cheered as the whale swam away. When the whale was out about 200 meters it curved around toward them and began to rise in the air, right out of the water. It breached again and again as though it wanted to tell them something special.

George said softly, "I think he's very happy and saying thank you."

Katie, Mama, Papa and Hector laughed. "I think you're right," they chorused.



If you wish, reflections and additional factual information!

- ◆ Unfortunately, many dolphins and whales are caught in nets every year and die. Occasionally, people have found them in time and have been brave and caring enough to set them free. Driftnets are banned in some areas but not in others.
- ◆ Would you want to help a whale or a dolphin if one was stranded? If "yes", why?
- ◆ What value do you have that makes you want to help?

Source: The following excerpts were taken from the website of One World One Ocean. <http://www.oneworldocean.org/pages/why-the-ocean>

"The ocean is Earth's life support. 50 to 70 percent of the oxygen we breathe comes from the ocean. That's more than every one of the world's rainforests combined. The ocean is the #1 source of protein for more than a billion people.

The ocean regulates our climate, absorbs carbon dioxide, holds 97% of Earth's water, and supports the greatest abundance of life on our planet. More than 60% of the world's population lives on or near the coast. The ocean provides a livelihood, recreation, beauty, wonder, and untapped scientific discovery, leading to new medications, foods, and advanced technologies. Everyone, everywhere depends on a healthy sea."

Source: <http://earthsky.org/water/how-much-do-oceans-add-to-worlds-oxygen>

"Scientists agree that there's oxygen from ocean plants in every breath we take. Most of this oxygen comes from tiny ocean plants — called phytoplankton — that live near the water's surface and drift with the currents. Like all plants, they

photosynthesize — that is, they use sunlight and carbon dioxide to make food. A byproduct of photosynthesis is oxygen.”

There are beautiful kelp forests in the ocean. They are phytoplankton and are essential for the health of the ocean, humans and animals as they provide much of the oxygen we breathe. They also provide food and shelter to thousands of species. Kelp forests also help to purify the ocean’s water.

The health and well-being of human beings depends on the well-being of the ocean, the marine life and the earth.

Possible Activities

Watch one of the One World One Ocean films, if possible, to experience the amazing beauty of the ocean and the importance of protecting our ocean. There is a 3D film about the ocean, another on humpback whales and also *To the Arctic*. Or, watch another film about the beauty of the ocean.

Draw or write on what you like about the ocean.

Google Kelp Forests and enjoy the beautiful pictures and the information that is provided on many sites.

Two Circling the Seagull

It was amazing to watch the whale they had just saved jump into the air again and again. He continued to breach, the sun glistening on sheets of water that came up into the air with him and splashed even wider as he landed. The whale seemed to be performing for them — communicating his joy at being free and alive.

Papa and Hector used the pulley to haul the huge net into their 15-meter boat.

"Wow, this is heavy," said George as he helped.

"Many nets are more than a mile long," said Papa. "So many animals get caught in them, and they kill many kinds of fish that the fishermen are not trying to catch. The use of driftnets must stop, it's depleting the ocean, hurting the environment and actually ruining the fishermen's trade in the long run."

"I'm so glad you saw the whale in time," said Katie.

Papa gave her a wide grin, "Me, too."

When the net was on board so it couldn't do further harm, Mama said, "Katie and George, do you want to take the dinghy in and enjoy a swim? Or shall we tie it to the boat and haul it in? I think your Papa's going to want to rest when he gets home. Yes, Luke?"

"That would be great," said Papa. He did look worn out.

"George, I want to row in and go for a swim. How about you?" asked Katie.

"Sounds terrific!" yelled George. "I'll beat you to the dinghy! Bye, Papa," he called as he gave him a quick hug and started over the side of the big boat. "Bye, Mama, bye Hector!"

Katie gave Papa and Mama a hug. "Is a couple of hours, okay, Mama?"

"Yes, enjoy," said Mama.

"You two were a great help," called Papa over the side of the boat as Katie and George began to row away in the dinghy.

Papa's boat soon overtook them and in ten minutes they saw it dock.

"Shall we swim at Blue Cove?" asked George.

"Great," said Katie. "And am I glad we packed a lunch!"

"Double hooray," said George, "I'm famished."

The beach wasn't too crowded and soon George found a few friends to body surf with while Katie took a long swim.

"Gosh, there's a lot of trash around today," said George, kicking away a couple of cans and a pile of bottle tops and plastic bottles mixed with seaweed as they found a sandy spot under a tree.

"The beach looks ugly with all this trash. Maybe some of it came down the river with the rain a couple nights ago," Katie said as she unpacked their lunch.

"As Mama would say, people just don't realize how important it is to not trash our world," said George. "Papa would be upset if he saw how it looks today."

"Yeah, I've never seen it look so bad," said Katie.

As they began to devour their apples and sandwiches, a few gulls flew in, interested in their food.

"Look at that gull," said Katie, pointing. One was hopping awkwardly near the tree. His head would jerk down as he stepped on a tattered plastic bag wrapped around its head and a leg. One wing was lower than the other.

"Poor thing," said George. "Wow, looks like that bag has been around him for a long time."

"And look how skinny he looks," said Katie, "think we can catch him and take it off so he'll be free?"

"Hey," said George, "think I can creep up on him?"

As fast as George was, the bird kept managing to get away, half walking, half flying.

"Let's borrow a towel from someone," suggested Katie.

"Maybe my friends can help," said George.

Soon there were five of them. "Let's make a very big circle around him," suggested Katie, "and pretend not to notice him. So they spread out and made a big circle around the gull.

"Stay peaceful," called George softly.

"Start to move in," called Katie softly. She was ready with the towel. As they circled in, Katie was soon close enough to throw the towel over the bird.

"Got it," yelled George, diving to secure one end of the towel as one of his friends secured the other end.

The boys watched as George and Tom held the protesting gull and Katie carefully took the tattered plastic bag off.

"Its wing is hurt," said Tom.

"Yes," said Katie, "looks like we'll have to take him home and see what Mama can do."

"You're lucky you got a Mom that knows how to do that," said Tom.

Katie gave him a smile. "She's great. Thanks for your help, guys."

It was tricky to row from Blue Cove to the dock with only one rower, but Katie and George took turns rowing and holding the gull.

"I think I'm as tired as Papa now," sighed George, "but what a day!" His smile was as wide as Katie's.



If you wish, reflections and additional factual information!

- ◆ The seagull in the story was hurt by trash, in this case a plastic bag. What other kinds of things discarded by humans can hurt animals?

Source: Dolphin Research Center's website,
http://www.dolphins.org/marineed_threatstodolphins.php

"The Pollution Problem: Marine debris is anything from a discarded sandwich bag to a lost fishing net. Every ocean in the world is littered with some form of debris, which resembles food for marine life. ...

Getting tangled up in floating debris is another serious and growing problem for marine mammals. At least 43% of all marine mammal species and 44% of all seabird species become entangled in or ingest marine debris each year. Some of these include the most endangered marine species in U.S. waters: Hawaiian monk seals, hawksbill and green sea turtles, West Indian manatees, and right whales.

Almost everything we use has the potential to become marine debris, from the bottle of milk in the refrigerator to the refrigerator itself. The largest source of marine debris is runoff from land-based sources, such as storm sewers and parking lots."

Possible Activity

There are a lot of problems on our Earth caused by people that don't pick up their trash. In the two chapters you read about nets and plastic bags causing problems.

- ◆ What kinds of trash do people leave where you live?
- ◆ What kinds of problems does that cause?
- ◆ What would it look like without that?
- ◆ What would you like to see instead?
- ◆ What is a solution?
- ◆ What value would help create this solution?

Fill in the columns below if you wish, starting with plastic bags!

1. TRASH	2. PROBLEM(S)	3. SOLUTION(S)	4. VALUES TO NOT CREATE TRASH
Plastic bags			

Three Toxic Plastic Soup

Note: Our oceans are dynamic systems, made up of complex networks of currents that circulate water around the world. Large systems of these currents, coupled with wind and the earth's rotation, create "gyres", massive, slow rotating whirlpools. There are five major gyres in the oceans of the world in which plastic trash has accumulated. (Source: <http://5gyres.org>)

Story

Katie and George took turns carrying the gull home after they tied the dinghy next to Papa's boat.

"He's heavier than he looks," panted George.

"I'll take him for a while," Katie replied, holding out her arms for the gull.

Papa and Mama were at the kitchen table when they got home. "Still hungry?" asked Papa. "You both did a lot this morning."

George and Katie told their story as they sat at the table while Papa poured some yummy smelling soup into two bowls.

Mama had taken the gull into her lap and was gently examining its wing. "He's had a rough time with that plastic bag, it looks like. Besides being underweight, it looks like he has a broken wing."

Mama soon had gauze tape wrapped around the gull to hold the broken wing still. "He should be almost as good as new in two or three weeks, unless he's been eating plastic," she said. "George, can you find a big box for him?"

"The beach was full of trash today," said Katie, "more than I've ever seen. Plastic caps and bottles, plastic cups and bags, food wrappers, Styrofoam cups, soda cans — it was terrible."

Papa frowned. "People!" He said it like a swear word.

"Papa, you sound more upset than usual about the trash," said George, bringing in a big cardboard box.

"Yeah, I am," said Papa. "Here, let me give you a hand." He grabbed a knife and helped George cut the top of the cardboard box for the gull.

"I've known for years that sea birds, dolphins, whales, seals, sea turtles and many marine animals get caught in nets, fishing wire and human trash, but I just learned last week that *over 40 percent* of marine mammals and seabirds get entangled in human trash or eat marine debris. When they eat plastic trash it causes internal injury, intestinal blockage and starvation. I had no idea the percentage of animals being hurt was that high."

"And the gyres in the ocean are growing," said Mama softly. "There are now five huge gyres in different parts of the world where the plastic trash is accumulating. The plastic breaks down into small pieces over time and the animals are mistaking it for food and eating it."

Papa and George had finished cutting off the top of the box. The family went outside with the box, Katie cradling the gull. The gull seemed to know it was being cared for. It had stopped squawking when Mama immobilized his broken wing. It was bright and beautiful outside, with a soft breeze. The trees gave some needed shade to the patio.

"You're going to be just fine," said Katie as she and George petted the gull. Katie brought some food for the gull and George brought some water. They were happy to see the gull eating. They arranged the box so the gull was safe, putting a heavy grill over the box and anchoring it with four stones so a cat couldn't get him.

"What can we do about it?" Katie asked.

"About what?" said Mama.

"About the animals getting all entangled and the gyres."

Papa and Mama looked at her and then at each other.

"You know, Katie, you and George are terrific about not trashing our world, and your Papa and I shop carefully, but I think it's time to think more and do more and spread the word. Our Earth, our ocean, is in trouble."

"I want to help," said George.

"Great," Mama smiled. "I think not being a litterbug is important and our family never uses Styrofoam which is full of toxins, but it's time to do much more than that. We need to not buy things that harm the Earth. What's creating the gyres in the ocean is plastic. Some of them are thousands of miles by thousands of miles — it's like toxic plastic soup! The North Pacific Gyre is twice the size of the United States."

"How about we don't buy plastic?" asked George.

"Well, not buying any plastic is not practical," said Mama slowly. "A lot of things are made of hard plastic, like computer keyboards, games and certain car parts. We can recycle those things when they get old — and buy fewer things. It's mostly the one-use disposal plastic that is the problem. So not buying that is a great idea. If we really try we could probably cut buying one-use disposable plastic things by at least 90%."

"Do you mean like plastic cups, plastic bags and water in plastic bottles?" asked Katie.

"Exactly," said Mama.

"That's going to be a little hard," said George. "Does that mean no sodas in plastic bottles?"

"Yes. Can you do that?" asked Papa with a questioning look.

George winched. "Maybe for the gulls and the seals and the dolphins I could."

"And we could bring our own cloth shopping bags to the store," said Katie.

"We could use a glass bottle or metal bottle when we want to bring water somewhere and we could use it over and over again."

“Terrific idea,” said Mama. “And I could shop locally at Farmers Markets and try to not buy food wrapped in plastic. And we can wash our sandwich bags and reuse them, or use waxed paper or banana leaves.”

“Your mother and I have been talking about this a lot the last few days,” said Papa. We’re going to see if the city council will ban plastic bags. Would you like to come to the city council meeting with us?”

“Maybe some of our friends could come too,” said Katie.

“Wow,” said George, his face lighting up, “what if everyone did this? Maybe we could stop the gyres growing. Toxic plastic soup does not sound good for animals or the ocean. What do you think Mr. Gull?” he asked, looking at the seagull.

Did the seagull just nod in approval?



If you wish, reflections and additional factual information!

- ◆ How could you help to not create more “toxic plastic soup” in the gyres?

Source: <http://5gyres.org>

“Just a generation ago, we packaged our products in reusable or recyclable materials — glass, metals, and paper, and designed products that would last. Today, our landfills and beaches are awash in plastic packaging ... These plastic water bottles, cups, utensils, electronics, toys, and gadgets we dispose of daily are rarely recycled in a closed loop. ...

In the ocean, some ... plastics ... and foamed plastics float on the oceans’ surface. Sunlight and wave action cause these floating plastics to fragment, breaking into increasingly smaller particles, but never completely disappearing ... This plastic pollution is becoming a hazard for marine wildlife

The North Pacific Gyre, the most heavily researched for plastic pollution, spans an area roughly twice the size of the United States — though it is a fluid system, shifting seasonally in size and shape. Designed to last, plastic trash in the gyre will remain for decades or longer, being pushed gently in a slow, clockwise spiral towards the center. Most of the research on plastic trash circulating in oceanic gyres has focused on the North Pacific, but there are 5 major oceanic gyres worldwide, with several smaller gyres in Alaska and Antarctica.

Reducing our consumption and production of plastic waste, and choosing cost-effective alternatives will go a long way towards protecting our seas ...”

Possible Activities

Look up pictures of the gyres. What messages do you wish the marine mammals and birds might wish to give to human beings? Create a poster with your message.

A Relaxation/Focusing Exercise: Send Peace to the Earth!

Sit comfortably and let yourself be still inside.... Relax the body and breathe in the light of peace.... Let the light of peace surround you Breathe out any tension ... and breathe in the light of peace.... Breathe out any tension ... and breathe in the light of peace.... This peace is quiet and safe ... it reminds me that I am peaceful inside.... Let yourself be very still and think ... I am me ... I am naturally full of peace and love.... Let your body relax even more ... and now focus on feeling peaceful.... As you feel peaceful that peace will naturally go outward to nature ... to the dolphins and the whales ... to the birds ... to the animals large and small.... I let myself be full of peace ... and that peace naturally goes outward to the Earth ... to the rivers and ocean ... to the trees and the meadows ... to the mountains and the sky.... I am full of peace.... I am one who is acting to help our Earth be healthy again.... This will happen in time.... Our planet will be well.... I picture the light of peace all around the Earth ... and our beautiful oceans being healthy again ... our beautiful Earth being healthy again.... Feeling relaxed and peaceful ... now begin to be aware of where you are sitting and bring your attention back to where you are. Wiggle your toes, feel the ground and breathe deeply.

Four

We Can Make a Difference

Katie talked to some of her friends at school on Monday. They were amazed to hear about the whale, felt sorry for the little gull, and totally didn't know about the gyres.

"Why don't you talk to the teacher?" asked Carol. "Let's see if she'll let you tell the class about the gyres and the poor animals that die because they eat plastic. Maybe we can all get involved in helping."

"You really think everyone will want to?" asked Katie.

"Well maybe not everyone," said Kinesha, "but kids our age have really good hearts. We care about our planet — and our animal friends."

The girls talked to their science teacher at break and she was delighted. "Great," Ms. Bennett said, "we're starting our unit on the environment today. Katie, it would be great to have you share your story, and then let's see what ideas everyone comes up with. Learning about things is good, but doing something for our Earth is proof that we care."

Katie shared her story about the whale, the seagull and learning about the gyres with the whole class. She was a little nervous, and kept clearing her throat. She shared the ideas she and her family had come up with about reducing their use of one-use disposal plastic by 90 percent. Katie was amazed at the interest and the willingness of most of the students to commit to using less plastic.

"No more plastic bottles for me," offered Dana.

"My aunt brings her own cup when she travels on planes," offered Ta.

"No more plastic cups when I'm out," said Maria, "I can ask for a real cup or bring my own."

"Great ideas," said Todd. "If it's going to help, I'm willing to not buy plastic bottles of stuff. But, what if it's really, really hot and I really want a soda? What if I buy it in a can?"

"Well, using an aluminum can is taking something you don't need from the Earth," said Ms. Bennett, "but IF you recycle it's not so bad. It's much better than using plastic."

"Well, I don't know," said a girl named Pam in a doubting voice, "why should we even try? If just a few of us do this, it's not going to help. We can't affect thousands of square miles of toxic plastic soup."

"Think of the one whale and the one seagull," said Katie, all of the sudden feeling confident. "It was a small group of people that made a difference for them. Small groups of people can make a difference — and imagine what would happen if kids all over the world did this. Some adults are really into this already. What if all the kids got all their parents to help?"

Katie shared her parents' idea about going to city council to ask for a ban on using plastic bags in the city. "I asked if I could invite some friends to go with us. Would anyone like to help?"

"Me," "me," "me" was heard all around the room. Katie, Carol and Kinesha beamed at everyone and Ms. Bennett looked pleased.

Ms. Bennett divided them into three action groups on Friday. One group was going to make posters to support the ban on plastic bags and another group was going to make up banners with slogans on respect for the ocean and the Earth by reducing the use of disposable plastic. The third group was going to create a petition to the superintendent to ban all Styrofoam and reduce the use of plastic.

Katie told Ms. Bennett that the city council meeting was going to be on Tuesday night and they were on the agenda. And Ms. Bennett told the whole class. "Everyone, if you want to go, you'll need to have an adult with you as it is not a school event."

"I'd love to go with you, Katie, to the city council meeting," said one of the girls shyly. Tanya rarely spoke to anyone and usually looked a little sad, "but I have to go home right after school and then I can't leave. My Mom is ... sick."

Katie looked at Tanya carefully. Interesting, she had never noticed before but Tanya's eyes were the same as George's friend Tom and her hair was the same color and texture, a soft, thin brown. "Tanya, are you Tom's big sister?" she asked.

"Yes, I am," Tanya softly. "Do you know Tom? I hope he behaved himself around you," she said, looking worried.

"He's a good lad," said Katie. "He was one of the boys who helped George and me with the gull."

"I'm glad," said Tanya with a little smile. "He could use a good experience."

Katie had a feeling that Tanya could use a good experience, too.

George didn't talk to his teacher, but he did talk to Tom, Hank and Kevin, his friends that had helped capture the seagull. They were amazed about the huge areas of toxic plastic soup in the ocean and appalled that so many animals were getting hurt.

"I want to help," Tom said.

"Me, too," said Hank and Kevin.

"Terrific," said George. "I have an idea."

George and Katie talked on the way home. Katie told all him all about Ms. Bennett's science class on the environment.

"She told us," said Katie, "that there are dead zones in the ocean where there is little or no oxygen due to fertilizer-run-off and nitrogen pollution. She said that there are 405 reported dead zones and that they are doubling every ten years!"

"That's terrible," said George. "So what happens in these dead zones?" asked George. "There isn't enough oxygen for most fish to live?"

"Good thinking," said Katie. "Unfortunately the fertilizer-run-off and nitrogen pollution and pesticides kill the kelp. She showed us some pictures of these really cool kelp forests. They are so beautiful. The kelp forests provide food and shelter to

thousands of species — and 50 percent of the world's oxygen! Ms. Bennett said it's just as important to keep the kelp forests healthy as it is to keep the rain forests healthy!"

"So how do we stop the fertilizer-run-off and nitrogen pollution?" asked George.

"George, that's a really great question, and we didn't ask it," said Katie. "Let's ask Mama and Papa when we get home."

Katie's mind flashed back. What had Ms. Bennett said?

"The chemical fertilizers and pesticides pollute the rivers and ocean," Ms. Bennett had said. "Unfortunately, this can also impact the ground water and negatively affect the quality of the soil. Food grown with pesticides has been shown to have harmful effects on humans, contributing to many different kinds of disease."

Ms. Bennett had assigned different groups to research specific components of fertilizers and pesticides. Tanya was part of the group Katie was in. "Wow," Tanya had whispered to Katie, "no wonder we have dead zones in the ocean! Gyres and dead zones. We humans are not taking good care of our world."

Ms. Bennett had overheard, "You're right, Tanya," she smiled. "It's important to take care of our world." Tanya blushed at the positive attention.

Ms. Bennett continued, "I want each of you to really think over the weekend — and the next couple of months — about what one thing you can do that would have the most beneficial effect on the Earth and Ocean. What would happen if everyone on the planet did the same thing?"



If you wish, reflections and additional factual information!

Source: The following excerpts were taken from the website of One World One Ocean. <http://www.oneworldocean.org/pages/why-the-ocean>

"There are a reported 405 ocean 'dead zones' — areas where there is little to no oxygen due to fertilizer run-off and nitrogen pollution. Dead zones are doubling every ten years.

Oceanographer Sylvia Earle says human actions over the next 10 years will determine the state of the ocean for the next 10,000 years."

Activities

Talk with your family and/or friends about one action you could implement locally that would help the environment. Start with something small! Make it practical and sensible. Perhaps your school could ban the use of Styrofoam if they haven't already.

Five

To the City Council!

School was fun, but it was nice to get home. At dinner time, Katie shared what Ms. Bennett said about the dead zones in the ocean as they sat around the kitchen table. The sunlight was still softly lighting the trees and flowers outside. Birds were chirping their last calls of the day and flying through the skies as they did every night at dusk. Katie took another bite of corn bread.

Papa nodded. "Yes, Katie, all of this is connected. What we do as human beings ripples out with all kinds of consequences for the world. One thing affects something else and sometimes many things, and each one of those things affects other things and those things affect something else. The artificial fertilizers and pesticides affect the soil, the plants that grow and add pollutants to the water. Those are like small amounts of poison."

"If we just take the effect on the water, then we could look at the effect on health of humans, the need for water purification systems and the effect of the run-off that your teacher described when it goes down rivers and into the ocean. In some rivers the fish are dying off and mutating as a result of the pesticides. When rivers with a lot of artificial fertilizers and pesticides go into the ocean, it kills kelp, coral and fish. When the kelp dies off in those areas there is not enough food and oxygen for many fish to live. Added to that, the kelp is affected by overfishing as the kelp needs the waste products of fish to live. One thing affects another thing."

"As human beings in this age," said Mama, "we are just beginning to learn that we have to look and see the effects of something before we act. It is called systems thinking now. But native cultures understood it well hundreds of years ago. They would say, think ahead for seven generations."

"George thought of a question I wish I'd asked Ms. Bennett," said Katie. "George?"

"So how do we stop the fertilizer-run-off and nitrogen pollution?"

Mama smiled, "Stop using artificial fertilizers and pesticides."

"Go organic?" asked Katie.

"Yes," said Mama. "It takes work because the soil needs to be made healthy again, and crops need to be rotated, but it would sure help our Earth and its oceans immensely, and all of us humans and animals!"

"Wow," laughed Katie. "Maybe you just gave me my homework answer!" She told them about Ms. Bennett's homework assignment.

Papa laughed. "That's a great homework assignment. "Shall we all think about that one?"

"It's good we're having this discussion," said Mama. "I buy organic vegetables when it isn't so expensive because I know it's better for us, but I never thought about how it is much better for the earth and the ocean."

"Mama, Papa, could we have a little organic garden?" asked Katie.

Papa looked at Katie with a little frown. "It's a great idea, Katie, but it would take some work. You know your Mama and I both spend a lot of time working and your Mama already has enough to do."

"I could help," said George.

Katie flashed him a smile.

"Are you sure?" asked Papa with a little frown.

George nodded seriously.

"Consistently?"

Both George and Katie nodded.

"Okay," laughed Papa. "I'll help too. I'll help with the first deep dig."

"Yea!" chorused George and Katie.

"I had an idea," said George. "You know how our family and our friends at school are promising to cut our disposable plastic use by 90 percent? Well, that helps stop the gyres from growing, but what about all the plastic trash now? Shouldn't we be picking that up and recycling it so it doesn't go into the ocean?"

Katie gave George a tap on his shoulder. "You're totally cool for a nine-year old."

"Smart, I'd say," smiled Papa.

Papa said he wouldn't have time to dig for a couple of weeks. The gull was doing quite well in his new home and getting stronger. Mama said he would be ready for a test flight in a week. He was getting fatter and healthier looking, much to Katie's and George's relief. They had named him Captain.

On Tuesday night, the family went to the city council meeting. Katie and George were really pleased to see so many of their friends and classmates. Even Ms. Bennett came. They all gathered outside with their posters, greeting each other and introducing their parents.

There weren't enough seats for them all in the city council chamber, so some stood at the back, holding their posters so the council members could see them. When their turn to speak came, Mama stood at the microphone and asked the city council members to approve a ban on plastic bags being offered to customers at stores in their city. She suggested paper bags be offered instead or that people bring their own bags to carry away their purchases. She spoke about gyres and how it was important for the health of marine animals, our ocean and humans to stop the toxic plastic waste.

When Mama finished, all the students and their parents applauded. The city council president looked around the room and said, "It looks like this suggestion has a lot of support — and it would certainly be good for our Earth. Would any of you young people like to speak?"

Carol and Kinesha looked at Katie, and Katie shook her head no. All of the sudden, Katie saw Tanya out of the corner of her eye with a woman who looked too old and frail to be her mother, and then there was Tom stepping up to the microphone.

"I think George's and Katie's mother is right," said Tom hesitantly. Then in one long breathe he said a bit louder, "There was a seagull the other day down at the beach that had an old plastic bag around it that must have been there for a long, long time and he was really hurt and we have to think about the ocean and the gyres or whatever they are called and the animals that get hurt and the Earth and stop being so selfish."

Everyone applauded. They clapped again when all the members of the city council voted for the ban on plastic bags.

Tanya gave a radiant smile to Katie before quietly slipping out with her mother and Tom.



If you wish, reflections!

- ◆ What values do you think Tom used in the story?
- ◆ What other values did you see?
- ◆ What effect did those values have in the story?
- ◆ What effect would they have for us in our current environment?

Possible Activities – Do one or more

Make a flow chart of the effects described in the below paragraph which was in the story. Start by placing the word "water" at the highest point of your paper and drawing three downward arrows, and then continuing to show how one thing affects other things.

"If we just take the effect on the water, then we could look at the effect on health of humans, the need for water purification systems and the effect of the run-off that your teacher described when it goes down rivers and into the ocean. In some rivers the fish are dying off and mutating as a result of the pesticides. When rivers with a lot of artificial fertilizers and pesticides go into the ocean, it kills kelp, coral and fish. When the kelp dies off in those areas there is not enough food and oxygen for many fish to live. Added to that, the kelp is affected by overfishing as the kelp needs the waste products of fish to live. One thing affects another thing."

Now add one more thing to your flow chart. Like, what would happen if lots of fish die off?

Or, write a poem or a song about any one of the topics in the story. Share it with someone in your family or with a friend.

Do the Relaxation/Focusing Exercise, Sending Peace to the Earth.

Six

Trees, Oxygen and Hope

Katie felt wonderful the next morning when she awoke. It was gray and overcast with a bit of wetness in the air. She slipped outside to feed the gull. "Did you hear, Captain?" she said softly, "The city banned plastic bags and we're all going to work together to try and make our oceans and beaches safe again so you and your friends can be healthy and free. We're going to have our first beach clean-up on Saturday."

The gull seemed to like her pats now. "And, you get to fly again on Saturday — in only four days! Mama said your wing is almost healed."

In science class they were now studying about the rain forest, deforestation, the interchange of oxygen and carbon dioxide between plants and humans.

"So what can we do to help?" asked Todd.

"Well, if humans need the oxygen to breathe, and trees and plants produce that and process the carbon dioxide we exhale, what do you think would help compensate for the deforestation?" asked Ms. Bennett.

"Plant plants?" said Todd.

"Good thinking. And what are durable, long lasting plants?" asked Ms. Bennett.

"Trees!" said Todd, with a few echoes from around the room.

"Great," smiled Ms. Bennett. "Actually, the United Nations Environmental Protection agency has a project asking people to plant one tree per person to help offset our carbon footprint. There was a one billion tree project in China and they achieved their goal of planting one billion trees. Green helps!"

"Speaking of green," she said, "Katie asked me if she could make an announcement just before the end of class."

Katie stood up in front of the class with Carol and Kinesha. "I've been talking with my family and Carol and Kinesha. My little brother wants to have a beach clean-up on Saturday. We could do it in the morning and play volleyball afterwards. Anyone interested?"

"Sounds great," "Sounds good." "Count me in," sprang from all corners of the room.

Katie, Carol and Kinesha beamed. "Terrific!"

"Ms. Bennett said maybe we could even do it as a school project," said Carol. "What do you think about calling it Seagulls?"

"What about the river that comes down into the cove?" asked Pierce. "Don't we want to clean that up too?"

"Yeah, maybe we need a name that would mean more to more people," said Megan. "Clean water?"

"How about Green Values Club?" suggested a small voice from the back of the room. Katie was surprised to hear Tanya speak up in class. Everyone else must have been surprised too because they all turned to look. Tanya blushed.

"Great idea," said Todd, looking at Tanya.

"Yeah, terrific idea," said Dana.

Katie smiled, and Carol and Kinesha looked pleased. "Everyone in agreement?" asked Katie.

Even Pam nodded yes.

The day of the Green Values Club beach and river clean-up was sunny and bright. A few parents and whole families joined them. Half of the helpers picked up plastic and other things they could recycle, and the other half picked up trash that could not be recycled. The bags got a little heavy, but Papa and a few other parents would meet them, take the full bags and give them empty ones. Papa had arranged with the city to pick up all the trash bags later.

Some of the kids met at the beach and others who lived closer to the river walked down the river while picking up trash and met them for volleyball at 11:00. The older kids played volleyball and George and his friends went body surfing.

Katie was feeling hot and sweaty after an hour of picking up trash when she heard her name being called. She was surprised to see Tanya running toward her.

"Hi, Katie, hi Carol and Kinesha, I got to come! I haven't been to the beach in years!"

As Carol and Kinesha went ahead, Katie waited for Tanya to catch up.

"Why haven't you been to the beach in so long?" asked Katie.

"Well," said Tanya, reaching down to pick up some trash, and turning a little away from Katie as she spoke in one long sentence, "the short story is my Dad got into drugs about four years ago, and got really mean, and then got killed in a fight two years ago, and my Mom got really depressed and started taking drugs too and so I had to be at home all the time with her because she won't let me go anywhere and was crying all the time, only Tom could go anywhere cause she couldn't handle him and he would just leave, and now with what we are doing with green values it's like she has hope and I told her about your organic garden you want to make and she used to live on a farm when she was little and loved to garden and when she went to college she was a botanist and she said that if we kids could do something for the world then she had better start getting her own act together and so she stopped the drugs and is in rehab and said I could come this morning and said if you want her to help she would be honored to help you with your garden because she was going to be okay again."

Tanya was still looking down.

Katie reached out and squeezed Tanya's hand. "I'm so glad you told me.... I would like your Mom to help me with the organic garden. Would you and Tom like to help too?"

Tanya looked up. "Love to," was all she could say.

Tom, Hank and Kevin came home with George after the beach and river clean-up to watch Captain being released.

"Do you think he's ready, Mama?" asked George.

"Let's see," smiled Mama.

"We'll leave the box out with food and water for a couple days just in case he's not strong enough to go far," said Papa.

The boys lifted the stones and grill off the box. Katie lifted him out and put him on the railing of the patio and Mama carefully took off the gauze tape holding the one wing. "Okay, Captain," she said, "you're free."

Captain looked at her, flapped his wings a few times and took off.

Shouts of "Look at him go!" and "Go, Captain!" filled the air as the gull flew into the blue sky.



If you wish, reflections!

- ◆ It sounded like Tanya's mother was very sad and had lost hope. Knowing that the young people were working to help do something positive for the environment gave her hope in the story. What is the feeling of hope? Do you think it increases our feelings of courage?
- ◆ Have you ever felt discouraged? What helps you feel encouraged again?

Human beings breathe in oxygen and breathe out carbon dioxide. The plants take in the carbon dioxide and create oxygen. The relationship between human beings and nature is very important. We help each other.

Activity

Do something with nature. Think about planting a tree or take a walk in a park and write a poem to a tree or a river or the ocean. Or have a tree write you a poem! What would the trees of the world say?

Do a relaxation/focusing exercise or sing a song about the beauty of the Earth or ocean.

Seven

An Organic Garden

A perfect day to dig," joked Papa the next weekend as they sat and ate breakfast at the kitchen table. "You kids sure do have us working!"

"Papa, I wanted to ask if we could do a beach clean up every week," said George.

"And never relax another weekend in my life?" Papa joked. He looked at George's disappointed face.

"George, the clean-up is a great idea and I know you're enthusiastic," Papa said more seriously, "but I would suggest once a month. You and everyone else can always pick up trash whenever you see it — but there are other things to do in life so you might get more people if you do it once a month. That way you can keep the enthusiasm high."

George nodded.

"What do you think, Lisa?" Papa asked.

"Well said! It's nice to relax and rest occasionally, you two!" Mama smiled at both George and Katie. "But, I was thinking it would be nice to have a picnic on the beach the next time we do a clean-up."

George gave her a wide grin, "Could we?"

A few days earlier, Katie had asked if Tom, Tanya and Tanya's mother could come and help in the garden. The three of them came over after breakfast. They arrived a little shyly, quietly knocking on the front door and saying very little. Tom hung back, unlike his usual boisterous self. Katie noticed how pale their mother looked. But, she had a pretty smile and was soon digging with Papa and Katie, George, Tanya and Tom.

It was a beautiful morning outside. The sun was slanting down, creating pools of light on the greens, blues, yellows and pinks. The earth smelled good as they dug.

"I've been missing the earth," Tanya's mom said when she finally spoke. "We live in a little apartment so it's really nice to be here and feel the soil. This looks really healthy — and you have great worms."

She had brought some seeds and small vegetable plants with her and soon they were all chatting and planting the seeds and plants in the fresh new rows of earth. Tanya's mom told them in which direction to make the rows so the plants would get maximum sun, and showed them how deep to plant the seeds and plants.

It took a long time to dig and make the rows, so Mama invited them for lunch. The little family of three looked happy as they left.

When they were leaving, Tanya hung back to whisper to Katie, "Thank you, thank you, thank you."

Katie had told Mama and Papa what Tanya had told her about her mom.

"How sad," Mama said. Papa had nodded.

"Why would she take drugs when she didn't like her husband taking drugs?" asked Katie.

"Well, it sounds like things were really rough," said Mama. "Sometimes people take drugs because they have emotions they can't deal with, like hurt or fear. When so many bad things happen, life can feel overwhelming. I'm glad you welcomed them to come and help in the garden," said Mama. "People need to have hope and something valuable to do."

"Aristotle used to say that happiness is a result of virtue. Doing something good will help her be happy again," said Papa.

Later in the weekend, Katie announced at dinner, "I've decided on my answer to Ms. Bennett's homework question about one thing we can do that will most benefit the planet."

"What's that?" asked Mama.

"Be a vegetarian that eats organic food," said Katie.

"How would that help?" asked George looking puzzled.

"Well," said Katie enthusiastically, "if everyone was a vegetarian then people wouldn't fish and we wouldn't be overfishing and killing millions of fish, and if we all ate organic food then we wouldn't be poisoning the ocean and creating dead zones and the oceans would have healthy kelp forests and enough oxygen for a healthy ocean and enough fish again for the whales and the whales and dolphins wouldn't be getting trapped in nets because no one would be using nets!"

"You've really been thinking about this," said Papa, looking a little surprised.

"And," said Katie with a big smile, "that's not all. If everyone was a vegetarian, then we wouldn't be deforesting the Amazon because of the production of cattle and the demand for meat and the output of greenhouse gasses would be less so the whole planet would be healthier."

"Good reasoning," said Mama.

"But you're not really going to do it are you?" asked George.

"Do what?" asked Katie.

"Be a vegetarian."

"Well," said Katie, with a pause and a pleading look at her parents, "I was thinking that maybe I can't be a vegetarian that eats *only* organic food, but I could be a vegetarian that eats as much organic food as we can get." She took a deep breathe as she looked at Mama and Papa. "I would really like to try it. Can I please? I really do think it would help our planet."

Mama looked at Katie, and then at Papa. "Luke?"

Papa looked at Mama. "It's okay with me. She has some great reasons. Is it okay with you?"

"Oh Katie," Mama said a tiny worried look. "You would have to promise me that you would eat healthy."

"The World Health Organization says it's the healthiest diet for human beings," said Katie.

"If you eat healthy," said Mama firmly. "Promise?"

"Yes."

"Okay. Then it is okay with me," Mama said.

Katie sprang up and gave Mama and then Papa a big hug.

"I am proud that you've really thought about it and want to help our planet," said Mama.

"Is it okay if I'm a vegetarian with her for two months and see if it works for me?" Papa asked Mama with a quizzical look.

Mama just laughed as she looked at her husband. Then she looked at her son with a questioning look. "George?"

"Not me," cringed George. "It wasn't my homework!"

"Okay," laughed Mama. "Two veggies and two non-veggies. But if you two don't eat healthy, I'm changing my mind!"



If you wish, reflections!

- ◆ Aristotle, a famous philosopher from the time of the ancient Greeks, said that happiness is a result of virtue. What do you think that mean?
- ◆ Remember a time when you were especially kind. How did you feel afterwards?

Activity

Do a relaxation/focusing exercise, sending peace to the Earth.

Eight Carbon Footprints

Vocabulary word: Carbon footprint

To reduce your carbon footprint means that you are reducing your negative effect on the Earth. The Time for Change website defines it as: “Your carbon footprint is the sum of all emissions of CO₂ (carbon dioxide), which were induced by your activities in a given time frame. Usually a carbon footprint is calculated for the time period of a year. (<http://timeforchange.org/what-is-a-carbon-footprint-definition>)

Story

“It’s sort of like anything,” laughed Papa, “it’s easy *after* you figure it out!” It was early Monday morning and he and Katie and Mama were laughing as they ate breakfast and talked about what to pack for their Papa’s and Katie’s vegetarian lunch. They usually had fruit and oatmeal for breakfast, so breakfast was easy.

Katie and George went out after breakfast to water their organic vegetable garden before school.

“Look, these little plants over here must have grown a whole inch since Saturday!” said George. They were delighted with their garden.

But it was a bit of a rough day for Katie at school. She didn’t have the usual lunch at school because it had meat in it and a couple of kids gave her a hard time when she told them she was going vegetarian.

“Oh, leave her alone,” said Kinesha after one of the students said, “What are you going to eat when we have a barbeque, a carrot?”

“They act like there’s nothing to eat if you’re a vegetarian,” said Katie, swallowing a lump in her throat.

“Just stay in self-respect,” said Carol. “Some people get upset with others sometimes when someone does something they feel they should do but don’t have the strength to do.”

“It’s not like I’m saying I’m better than them,” said Katie forlornly. “I respect their choices. I don’t make fun of them.”

“And that’s one of the reasons you’re so wonderful, Katie,” said Carol. “You really do respect every one.”

It was a relief to be in science class as all the students were part of the Green Values Club and supported whatever anyone was doing to help the environment, even Pam. When she heard from a friend that Katie was going to be a vegetarian, she smiled at Katie and said, “You have more determination than I do. Good for you.”

Katie was surprised. “Thanks, Pam.”

Ms. Bennett taught a class on greenhouse gases and the effect on global change. She explained more about the gases released by using cars, planes and buses as well as the raising and slaughtering of pigs, cows, sheep, turkeys and chickens.

"I saw a commercial when I went to Denmark," offered Megan. "It showed a man who was a vegetarian driving a large car and another man on a bicycle who was not a vegetarian and asked which one had a bigger carbon footprint. The surprise answer was the vegetarian driving the big car had less of a carbon footprint! I had no idea being vegetarian could help so much."

Kinesha and Carol looked at Katie and smiled.

At the end of class they spent time talking about how to reduce their use of electricity and gas. There were the usual things like turning down the heat and wearing a sweater when it's cool, turning up the thermostat and taking off the sweater when it's hot, and bicycling and walking more when possible. Ms. Bennett also introduced them alternative green technology.

"Solar power is really advancing," she said, "and becoming more affordable. Some schools are converting to solar power for their electricity, and some of the electricity-recharging stations for the electric-powered cars are being powered by solar power — so there are no emissions at all."

The students had a great time researching the subject and were delighted to find a new technology that could convert disposable plastic back into petroleum. "The challenge of course," said Ms. Bennett, "is making that sort of thing widely available. It'll be wonderful to see all the things that are invented in the next decade to help."

One day they discussed reducing their consumption of "things" and the importance of considering what you are taking from the Earth when purchasing. "Not something most teenagers want to hear," smiled Ms. Bennett.

The next couple of months were great. Tanya, Tom and their mother, Nancy, were coming over once a week to help with the vegetable garden. Their mother was looking less pale and much stronger. She was teaching Katie and George about composting. And they had beach and river clean-ups every month, with volleyball and swimming afterwards — and picnics every other time. George was so pleased. More kids and their families were getting involved and picking up trash whenever they saw it and the beaches and rivers were much cleaner.

"Class," said Ms. Bennett one day, "three months ago I asked you to think about what one thing you could do that would have the most beneficial effect on the Earth and ocean — and what would happen if everyone on the planet did it? Your project will be due next week. On Wednesday, one-third of you will be able to present your proposal, with another one-third of you on Thursday and the last third on Friday. You can mind-map your ideas or present your ideas on poster board. Those of you who wish to give a PowerPoint presentation for your three to five minute talk may do so, but you will also need to create a poster. The following week I will ask those with similar ideas to get together in groups and create songs, poems or skits/dramas. We will end the semester with those. So, ladies and gentlemen, begin creating!"



If you wish, reflections and additional factual information!

- ◆ How do you think Katie felt when someone made fun of her being a vegetarian?
- ◆ How do you feel when others make fun of you or a friend of yours?
- ◆ What anti-value are they using?
- ◆ What value could they use instead?
- ◆ Knowing which of your values helps you stay in self-respect?
- ◆ Have you thought about the homework that Ms. Bennett gave to Katie's class?
What is one thing you can do that will help our Earth and the ocean — and what would the effects be if everyone in the world did that?

Source: <http://timeforchange.org/what-is-a-carbon-footprint-definition>

“When you drive a car, the engine burns fuel which creates a certain amount of carbon dioxide, depending on its fuel consumption and the driving distance. When you heat your house with oil, gas or coal, then you also generate carbon dioxide. Even if you heat your house with electricity, the generation of the electrical power may also have emitted a certain amount ... When you buy food and goods, the production of the food and goods also emitted some quantities of CO₂.

- ◆ How can you use less electricity?
- ◆ What if the electricity is solar powered — would that be better for the planet than using electricity made from coal or oil? Why?
- ◆ Would walking and bicycling more help reduce your carbon footprint?

Possible Activity

If you wish to, draw a large footprint on a piece of paper. Inside the footprint write all the things that contribute to your carbon footprint. Think about the things you can do to reduce your carbon footprint. For example, you can walk or bicycle more or not buy so many material things. Some people repair or recycle their toys and other material things. They can also reduce their footprint by planting a tree. Make your ideal footprint that is smaller and write around it everything that makes it smaller!

Send peace to the Earth for a few minutes.

Nine Living Green Values

You could feel the excitement of the students in science class on Wednesday. Ms. Bennett had posted a sign-up sheet for the presentations on Monday. Some of the kids wanted to be first and some wanted to be last, so those spots were taken first. Empty spaces were awaiting their posters on the wall.

"I just want to get it over with," Carol had muttered.

Todd had already signed up for the first spot. He gave a very good presentation on the beneficial effects of solar and wind power on the climate. He thought switching from carbon-based energy production to renewable sources would stop the rising temperature of the planet and consequent slow melting of the ice caps and rising sea levels. He showed the system changes it would make, including cleaner air, the savings of not moving entire island-based communities, and the many health benefits, such as less children being affected by lead poisoning near freeways. He ended to applause from the class — and gave his classmates a smile of relief. "Glad it's over!" he said.

Carol was second. She was also a little nervous. "I will start with a song," she said to everyone's surprise. Her clear voice was pretty as she sang ... and comical as she slowed down dramatically on the last line of each stanza.

Be friends with each other,
Be respectful and kind,
To children and adults and all of humankind,
Don't forgot the animals on the earth and in the sea,
Be friends to them all, like you are to me.
Friends ... pick up ... their ... trash

Don't pollute the water,
Don't waste things please,
Don't poison the ground,
the water, sky or trees.
Pick ... up ... your trash!

If we can do this,
Imagine what will occur,
Kelp forests will blossom,
And land mines disappear!
Pick ... up ... your trash!

Humans are smart,
But learn to be kind,
Then we'll all live safely,
And have a wonderful time.
Pick ... up ... your trash!

Everyone laughed and sang the last line with her. Picking up trash was the center circle of Carol's mind map poster. She had cleverly defined trash as anything that was harmful to humans or animals, so land mines were included. Each branch radiating from the middle was filled with factual details showing the many effects of picking up trash. Under clearing land mines was the increase in agricultural land and food production, reduced deaths and amputees, lower medical costs, greater well-being of families and increased production for society.

Each and every presentation was filled with good reasoning and enthusiasm. Some students were more nervous than others, but their work and determination showed through. Some were creative, some funny and some artistic. A lot of good ideas came out.

Katie was a little nervous about presenting her mind map. She'd worked hard on the facts and had taken pictures of the organic garden. She had many branches coming from the center circle that noted the benefits, included a reduction in greenhouse gasses, pollution of rivers and dead zones in the ocean, and an increase in the nutritional value of food and healthy kelp forests. Katie gave the class a big smile when the clapping finished.

The presentations continued Thursday and Friday. The last name on the sign up list was Tanya's. Tanya came up slowly to the front of the class with a big roll of paper. It was much bigger than the other posters that had been presented.

Tanya stood up and smiled at everyone. Katie noticed that Tanya was less pale and looked more confident than she'd ever seen her look before. "Would someone please help me by holding this?" she asked.

Todd and Pam were there before Katie was halfway out of her seat. When the very large poster was unrolled all the students gasped and Ms. Bennett started to laugh.

The poster was gorgeous. The circle in the middle was a picture of the Earth from space and there was a green circle around that with white letters. There were an amazing number of branches and sub-branches on the mind map and each and every inch of the poster was covered with fine writing and hand-drawn pictures. Around the picture of the Earth the words written were, *Living Green Values, Respect and Care for Earth, and its Humans and Animals.*

Everyone started clapping. They clapped so long Katie could see Tanya's eyes swimming in happy tears.

"I thought that if we really respected the Earth and all humans and animals we would do all the things we've been talking about," said Tanya. "So I just wrote them down."

The next week was fun. Ms. Bennett had them get together in small groups to create skits/dramas on the environment and songs and poems. Pam asked if they could do a show for the other students at their school and at the primary school. Pam sure was smiling a lot more now. "Hmm," thought Katie, "I think she has more hope."

Ms. Bennett accepted Papa's offer to take the whole class out on his work boat for a picnic on the little island near the place where Papa had found the whale. George and his friends, Mama, and Tanya's mom, were coming too.

"But," said Katie to the class with a somewhat worried look, "everything's going to be organic and vegetarian. Is that okay?"

Shouts of "Yes!", "Hooray!" and "Let's hear it for veggie burgers!" filled the air.



If you wish, reflections and additional factual information!

- ◆ In addition to learning about the environment, what else do you think Katie's class learned?
- ◆ What are other values besides respect and love that you think would benefit the Earth?
- ◆ What was your answer to Ms. Bennett's homework question?

Send peace to the Earth and its creatures large and small.



If you, your friends or family are interested in further activities to help the environment, you may wish to look at Lesson 17, "Environmental Projects and Service-Learning Activities" in the Young Adult section of *Living Green Values Activities for Children and Young Adults*. It is available for free download on the www.livingvalues.net website.

References

Books

Tillman, Diane. *Living Green Values Activities for Children and Young Adults*.

www.livingvalues.net.

Tillman, Diane. *Living Values Activities for Young Adults*. Deerfield, FL: HCI, 2000.

Websites

5Gyres. <http://5gyres.org> Accessed April 2012.

About.com, Environmental Issues. <http://environment.about.com/od/globalwarming/a/greenhouse.htm> Accessed May 2012.

Dolphin Research Center. http://www.dolphins.org/marineed_threatstodolphins.php Accessed April 2012.

Earth Sky. <http://earthsky.org/water/how-much-do-oceans-add-to-worlds-oxygen> Accessed April 2012.

Marion Institute. <http://timeforchange.org/what-is-a-carbon-footprint-definition> Accessed May 2012.

National Geographic.

<http://environment.nationalgeographic.com/environment/global-warming/deforestation-overview/> Accessed May 2012.

One World, One Ocean. <http://www.oneworldocean.org/pages/why-the-ocean> Accessed April 2012.

Planet Green. <http://planetgreen.discovery.com/videos/blue-august-plastic-is-forever.html> Accessed May 2012.

Saving a humpback whale from fisherman's nets.

<http://www.youtube.com/watch?v=eG0cWYsfvKo> Accessed April 2012.

Think Green Act Green.

http://www.thinkgreenactgreen.org/greenstory_view.php?storyid=1955&title=Plant%20for%20the%20Planet%20-%20The%20Billion%20Tree%20Campaign Accessed April 2012.

United Nations Conference on Sustainable Development.

<http://www.uncsd2012.org/rio20/history.html> Accessed May 2012.

Worldwatch Institute. <http://www.worldwatch.org/going-green-12-simple-steps-2012-0> Accessed May 2012.

About Living Values Education

Living Values Education is a way of conceptualizing education that promotes the development of values-based learning communities and places the search for meaning and purpose at the heart of education. LVE emphasizes the worth and integrity of each person involved in education, in the home, school and community. In fostering quality education, LVE supports the overall development of the individual and a culture of positive values in each society and throughout the world, believing that education is a purposeful activity designed to help humanity flourish.

LVEP is a comprehensive values education program. This innovative global endeavor offers training, a practical methodology and a wide variety of experiential values activities to educators, facilitators, parents and caregivers to help them provide the opportunity for children and young adults to explore and develop universal values and associated intrapersonal and interpersonal social and emotional skills. The curriculum includes Living Values Activities for peace, respect, love, cooperation, happiness, honesty, humility, responsibility, simplicity, tolerance, freedom and unity. Used in formal and informal settings, LVEP also has special materials for use with children affected by war, children in difficult circumstances (street children), young offenders and youth in need of drug rehabilitation.

The implementation of Living Values Education is in more than 60 countries is facilitated by the Association for Living Values Education International (ALIVE International), a non-profit-making association of organizations around the world concerned with values education.

For more information and to access values posters, or to share your comments, go to www.livingvalues.net.

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Thank you to those reading this for your love
for the Earth and her ocean.



About the Author

Diane G. Tillman coordinates content for the Association for Living Values Education International (ALIVE). She is the primary author of the award-winning Living Values Series of five books, and eleven additional educational resources, including Living Values Activities books for street children, children affected by war, children affected by earthquakes, young offenders, at-risk youth, youth in need of drug rehabilitation and Living Green Values. A Licensed Educational Psychologist and Marriage and Family Therapist, Ms. Tillman worked in a California public school system for 23 years as a school psychologist. She has worked with Living Values Education since its inception in August of 1996. Ms. Tillman has traveled to more than 30 countries to conduct training and LVE seminars at conferences and refugee camps, for educators, UNESCO and street-children agencies. She is on the International Advisory Committee of the Association for Living Values Education International. She deeply cares about children and our Earth, and feels values education can help create a better world for all.