

Where the Buttercups Grow: A Teacher's Guide

General Themes and Connections:

Analysis of Themes:

- Mother Earth represents the planet on which we live: the Earth, and the natural processes which provide us with sunshine, fresh air, plants, food, flowers, and the other joys of nature.
- The buttercups and their songs represent every living thing on the Earth. This includes humans, animals, insects, plants, all wildlife, the oceans, rivers, lakes, and even the soil from which plants grow and on which creatures grow and live.
- The wrappers tossed aside by the children represent items of every kind which are discarded on our planet. This includes not only candy wrappers and food wrappers but all types of waste from garbage to cutting trees in the rainforests which leaves wildlife homeless.
- The silencing of the songs of the buttercups represents the extinction of species of all kinds including plants, animals, birds, reptiles, insects, and even water which becomes too polluted to allow people and wildlife to drink it or eat the fish living in it.
- The children who return to pick up the trash represent all humans who become concerned with the environment and act responsibly by recycling and placing trash in the proper place instead of littering.
- The return of the buttercups' songs represents the recovery of the environment when people become concerned and stop polluting and littering their home planet, the Earth.

Earth's Challenges:

- Every person, on average, discards over four pounds of trash each day, 84% of which could be recycled but most of which is not recycled and instead fills up the landfills.
- For every glass bottle which is recycled, the energy saved is enough to operate one lightbulb for one whole year!
- Creating aluminum cans - such as those in which soft drinks and juices are sold - from recycled aluminum saves 90% of the energy required to create new aluminum cans from non-recycled aluminum.
- Each week, the pulp from nearly one million trees is needed to produce the Sunday newspapers in North America alone (Canada and the United States).
- Every pound of recycled paper saves 17 trees from being cut down. Some of the trees cut down are over 100 years old while others are less than 20 years old.
- If one gallon of motor oil is allowed to escape into the water, it pollutes over two million gallons of water!
- People of every age and in every location can contribute to helping Earth overcome these challenges!

Environmental Discussion:

- The environment is composed of everything around us. This includes the air we breathe, the water we drink, the food we eat, the places we live, the places where wild creatures make their homes, and all the places where water flows and plants grow.
- Many items we buy are packaged in lots of materials which are not necessary and add to the trash discarded by the people who buy these products.
- People often think in the short-term; desiring to meet their immediate needs without considering what the Earth may be like for their children, grandchildren, and many generations to follow them who will need the Earth's resources in order to survive.
- We know that many, many years ago in the past, the dinosaurs were the dominate species on the Earth, much as humans are the dominant species today. We also know that when the dinosaurs became extinct, about 60% of other species living on the planet at that time also disappeared from existence. These species have never returned.
- Resources on Earth are slowly but surely being consumed and there will someday be too few resources to meet the needs of the humans living on Earth unless people become aware and act now.

Environmental Discussion Questions:

- Do you ever toss litter on the ground without thinking like the children in *Where the Buttercups Grow* did? Are you now aware of how this harms the Earth and will you stop littering starting today?
- Do you ever pick up trash which is tossed on the ground by others?
- Does your community have a recycling program for household trash? If so, do you and your family participate in this program regularly? If not, would you be willing to start recycling your home's trash items?
- Do you think young people can make an impact on the environment by making parents and friends aware of the harm being done to Mother Nature?
- Would you be willing to refuse to purchase a toy or type of food you like if you knew it was packaged in a way that produced too much unnecessary trash when the package was removed?
- Would you be willing to tell a friend who litters to stop throwing trash on the ground, even if you thought they might make fun of you for saying something about their bad habit?
- Can you imagine what life would be like if our Earth's resources such as trees to make paper and clean the air, clean water to drink and safe food to eat were to become so limited that you could not have enough of these things to live the way you do today? What changes might you have to make in your own life?
- Would you consider taking public transportation more often in order to save on the pollution caused by too many vehicles on the road? Do you ever travel by public transportation such as buses (other than school buses), trains, or subways?

Classroom Activities

- Ask children to bring a cleaned, empty plastic container of any type to class such as a juice bottle, milk bottle, or dishwashing liquid bottle. Download and print information from <http://www.ides.com/resources/plastic-recycling-codes.asp> which includes information about plastic recycling symbols and how this recycled plastic is used.
- Determine if the local area has a recycling program for homes. Discuss how they can help their parents and siblings participate easily to recycle items from their own homes.
- Bring in an item which is overpackaged. For ideas, visit <http://www.overpackaging.com/>. Discuss how the item could be packaged safely and effectively without using overpackaging and how much trash this might save if everyone in the room and their families chose to purchase only properly packaged items.
- Provide pictures of areas filled with trash, animals with plastic trapped on their heads or wings, oil spills, polluted water, and other images of pollution.
- Visit <http://www.endangeredspecies.com/> and choose some endangered species to discuss. Ask the children how they would feel if these species vanished forever from the Earth. .
- Discuss the recovery of the majestic Bald Eagle from near extinction because of simple changes in human behavior.
- Ask the children to list ways they can gently and politely prompt others to recycle and stop pollution.

Writing Exercises:

- Write a challenge or several challenges on the board created from the children's input, to set goals to encourage them to participate in recycling and stopping pollution and litter.
- Ask the children to write a report on ways they can save energy in their homes such as closing doors to keep hot air or cool air inside, incorporating more than one stop into an errand trip in the car, turning off lights when leaving the room, and other ideas.
- Write a short essay on an endangered species including reasons for the endangerment and what might be done to prevent extinction.
- Write about air pollution and the causes of it.
- Write an essay on what the Earth would be like if everyone, everywhere, did everything possible to protect Mother Nature.
- Write an essay about the things which nature provides to humans and why they are important to our survival.

Creative Art Activities:

- Create a painting with watercolors, crayons, or tempera paints of a field of buttercups with one standing straight and others fallen to the ground.
- Using paper-mache, have the children create a large round sphere to be painted as a globe or have each child create a smaller globe of their own and paint the globe.

- Create buttercups by cutting construction paper in yellow and green into the proper shapes and gluing the parts together.
- Use small yellow paper plates, small yellow cupcake papers to create buttercup blossoms. If available, use lengths of wooden dowels painted green to create stems and add construction paper leaves.

Classroom and Physical Enrichment Activities:

- Discuss the symbolism of each element of *Where the Buttercups Grow*.
- Plant a tree in the schoolyard and tell children to plant trees or other plants at home if their parents will allow them to do so.
- Play a game of "Buttercup Tag" on the playground. Cut small pieces of paper equal to the number of children minus one. These papers represent the candy wrappers in the book. Give all the papers to one child in the class who will represent the child who litters by discarding the candy wrapper first. Ask the students to stand randomly in the play area to represent the many buttercups. Ask the designated student to rush from student to student, giving each student one piece of paper which represents trash. Once the student is given the paper, he or she must crouch or lie down to represent fallen buttercups. Then, ask the designated student to represent the strong, upright buttercup. Other students should continue crouching down near the ground to represent the fallen buttercups. The upright buttercup "tags" another student. That student stands upright and joins in "tagging" other fallen buttercups. As each student becomes an upright, strong buttercup, they join into "tagging" other students until all the students become strong buttercups. Once all the students have become strong buttercups, they can sing a song together to represent the song of the buttercups.
- If the playground at the school contains litter, spend part of a class session picking up the litter and cleaning the playground. Make it more fun by play "Litter Relay". Determine a period of time for the game and have a watch or stop watch available for timing. Five minutes or ten minutes should be sufficient time unless the playground is especially large. Divide the students into two or more teams. Determine a starting point and place a trash receptacle for each team. Have each team line up behind their trash can. The first student on each team runs across the playground and locates a piece of litter and returns the litter to the trash can for their team. They then must touch the next student on their team and go to the end of the line of their team. The touched student runs to locate and remove litter, going to the end of the line of their team. This process is repeated as many times as possible during the allotted time period. Once time has run out, the pieces of trash in each team's trash can are counted and the team with the most trash collected wins the Litter Relay race.
- Save the trash created in the classroom for one day. Weigh this trash and show, using math, how much this trash would weigh during one full school year. Determine if any of the items can be recycled.
- Invite a representative of the local household recycling program to speak to the class.
- Invite a representative of a company which purchases aluminum cans for recycling to explain how recycling is performed and how important the process is to saving energy.

- Invite a representative of the local electric company to speak to the class about ways to save energy in their homes and daily lives.
- Explain to the classroom that each copy of *Where the Buttercups Grow*, as well as other books from Aspirations Publishing, which is purchased will result in the planting of one tree to help the Earth.