

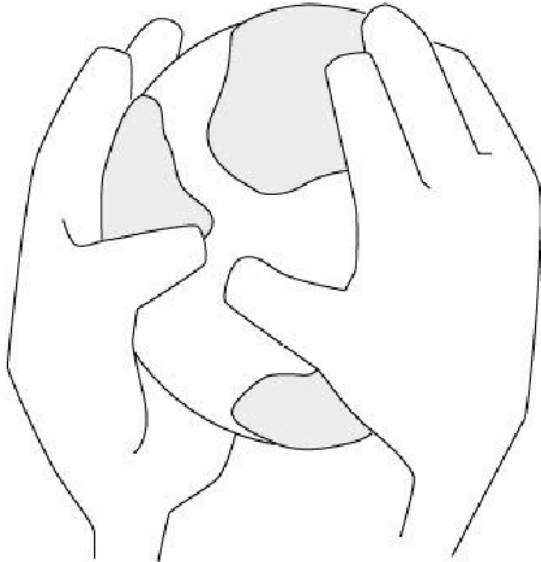


Maggie's Activity Pack

Name _____

Date _____

Earth Day: You Can Make a Difference



Earth Day is a special day. On April 22, we support our home planet. But we should think about helping the Earth every day and not just on its special day. This math and science activity helps you to think about a way you can help Mother Earth throughout the year.

1. Drinking water is important for our health. Our muscles need it to work well. This means you need to keep drinking water. You should drink about 17 ounces of water two hours before you exercise.

If your baseball game begins at 5:30 pm,
what time should you begin to drink water?



Water is important for YOUR health. Now let's think about how your choices about water can keep the Earth healthy.

2. People in the United States only recycle about 20% of the water bottles they use. When water bottles are not recycled, they end up in landfills. If one neighborhood used 200 water bottles, about how many of these bottles can we expect to be recycled?

Bottled water can cost a lot! Did you know that many kinds of bottled water come from city water supplies, just like tap water in the United States?

3. If you drink just one glass of tap water a day for a year, this will cost about 10¢ for the entire year. If you buy just one water bottle, that water bottle often costs about \$1.00. How much more does bottled water cost you in a year (365 days) than using tap water?

Recycling and the cost of water bottles is not the only issue with drinking bottled water. We need to think about the energy that is used to make these bottles.

4. In one year people in the U.S. might use about 29 billion bottles of water. It takes about 17 million barrels of oil each year to make these plastic bottles. How many barrels of oil would be needed to make water bottles over 2 years?

Dear Colleagues,

We, at Maggie's Earth Adventures, believe everyday should be Earth Day and we are delighted to see that many of you support this philosophy, too. As we visit with teachers we hear about the many wonderful activities you are doing and the ways you are integrating important Earth-friendly activities into goals and objectives. This week we offer you a science and math activity to help you celebrate this special day.

We hope you will expand this into other math and science activities. Ideas include: ask students to take a poll of how people plan to spend Earth Day (or if later, what they did on this special day), research more about transportation costs to get bottled water to stores, or even discover where manufacturers get their bottled water. Students can write questions for one another based on the poll information or transportation costs. They might create posters advertising the point of origin for a popular brand of water. What key decisions could students advocate for based on the information they discovered?

This is a helpful way for you to teach more about using sources, thinking critically, and presenting information, all aligned with Common Core ELA. Then take your activities a step further and ask children to write an opinion essay about bottled water using facts they have gathered.

Happy teaching,
Dr. Kathy

Answer Key:

1. 3:30 pm
2. 40
3. \$364.90
4. 34 million

Goals:

Students will read an informational text about the energy, cost, and environmental issues of using plastic disposal water bottles. They will use these facts to solve math problems. Several follow-up activities are suggested in the Dear Colleague letter to help celebrate Earth Day. The WAP is available on the intermediate and primary levels with a companion Emergent readers also available. This activity correlates with "Operations and Algebraic Thinking of Mathematics Common Core and with "Using mathematics and computational thinking" of the Next Generation Science Standards.