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## Hawks Go Green-Building a Recycling Program

A 3rd grade project at High Point Academy SFW Fort Worth, TX

Advisor Shelly Vierkant

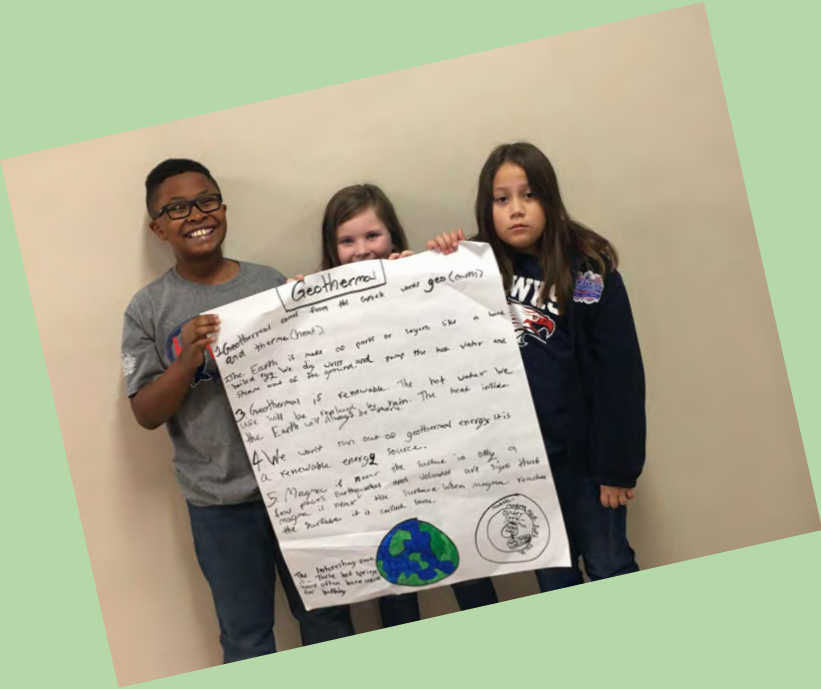
When our class of 3rd graders reached the energy unit of science we explored all of the different forms of energy using the NEED.org material. We made posters of all the different types of energy to hang in our hallways. After learning so much about energy we thought it was time we take an energy survey around school and at home. The results of our survey showed that the teachers thought our school needed to do a better job at recycling.

We first we contacted the City of Fort Worth to talk about how we could start a school wide recycling program and a guest speaker from the city showed us the proper way to recycle. We then joined the City of Fort Worth and became a school green team. 3rd-5th grade teachers were given a bin to recycle to collect paper. Our green team collected the bins once a week and weighed and graphed how much we collected. We also decided our recycling should help others so we collected pop tops for the local Ronald McDonald House (RMH) of Fort Worth which recycle and use the money to help the house provide for the families who stay at RMH.

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# Goal #1- Learn about Energy

It was time for us to learn about energy during science class. We knew about some form of energy like sound and light but our teacher wanted us to learn more so she gave us the Energy Information booklets from Need.org. We were broken up into groups of 3 and given a different form of energy to become experts about and teach not only our classmates but also make poster to put up in the hallway for other students to learn from.



- Coal makes heat and light energy
- Coal is a fossil fuel
- Coal is nonrenewable
- There is enough coal to last over 100 years
- If the coal is deep in the ground, it is called coal seam
- Machines dig the coal and carry it to surface
- If coal is near the surface, mining is done by open-pit or strip mining
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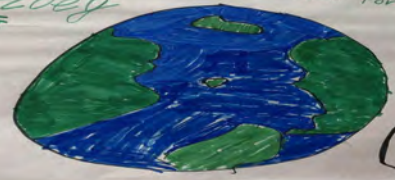
# makayla's GEOTHERMAL

- Geothermal comes from the Greek words geo (Earth) and thermo (heat).
- Geothermal energy is heat from the Earth.
- Magma heats the water under ground - the heated water is dug up and used in wells.
- Geothermal is a renewable energy source
- Lava most of the geothermal energy in the United States is found on the west coast and in Hawaii
- hot springs have often been used for bathing.

Jordan

makayla zoey  
Champion

car

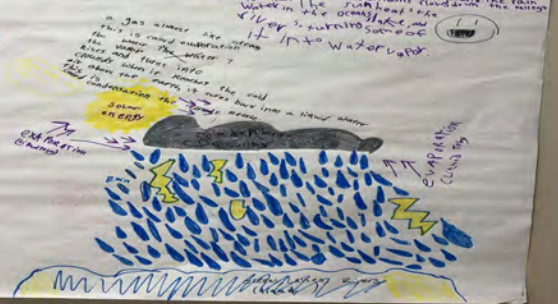


craft

## Hydropower

Team work

Naomi  
gabby  
Kari  
Daphne



Hydro power comes from the Greek word *hydro* (water) and *power* (force). It is the force of falling water that turns the turbine. The turbine is connected to the generator which produces electricity. The water is then released back into the river or lake.

Hydro power is a clean and renewable source of energy. It does not produce any greenhouse gases or air pollution. The only environmental impact is the construction of the dam, which can affect the local ecosystem. However, the benefits of hydro power far outweigh the costs.

# Goal #2 How is school saving energy?

energy conservation SURVEY

NAME: Y FOR 605 OR N

Do you turn off the lights when you leave a room? \_\_\_\_\_

Do you make sure the refrigerator door is closed when use? \_\_\_\_\_

Do you make sure faucets are turned off tightly? \_\_\_\_\_

Do you save hot water by taking showers instead of baths? \_\_\_\_\_

Do you turn off electronics (tv, computer, tablet, stereo, video games, etc) when leaving the room? \_\_\_\_\_

Do you open blinds or curtains during sunny days before deciding to turn on lights? \_\_\_\_\_

Do you turn off your water while brushing your teeth? \_\_\_\_\_

Do you make sure chargers for electronics are unplugged when not in use? \_\_\_\_\_

Do you try to use a fan before switching on the AC in the summer? \_\_\_\_\_

If you HAVE to use the AC, do you make sure windows and doors are closed while it is running? \_\_\_\_\_

Do you put on a sweatshirt or use a blanket when you are cold instead of immediately turning up the heat? \_\_\_\_\_

Does your family use energy efficient lightbulbs at home? \_\_\_\_\_

Do you walk, ride the bus, or ride your bike to places closer by instead of taking your car? \_\_\_\_\_

When you notice a leaky faucet, do you tell your parents right away? \_\_\_\_\_

Do you reuse scrap paper before throwing it out? \_\_\_\_\_

Does your family use power strips at home to plug more than 1 electronic device into at a time? \_\_\_\_\_

Do you recycle? \_\_\_\_\_

Have you ever planted a tree to help create shade? \_\_\_\_\_

Do you keep a pitcher of water in the fridge for drinking? \_\_\_\_\_

Do you keep the water running while washing dishes? \_\_\_\_\_

HPA energy conservation teacher SURVEY

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After learning all about the different forms of energy we wanted to see how well our parents and our school so we conducted an energy conservation survey. Some of our teachers let us come interview them. After collecting all the surveys we noticed that all of the teachers wanted a recycling program here on our campus.



## We interviewed our family at home about our energy use and recycling

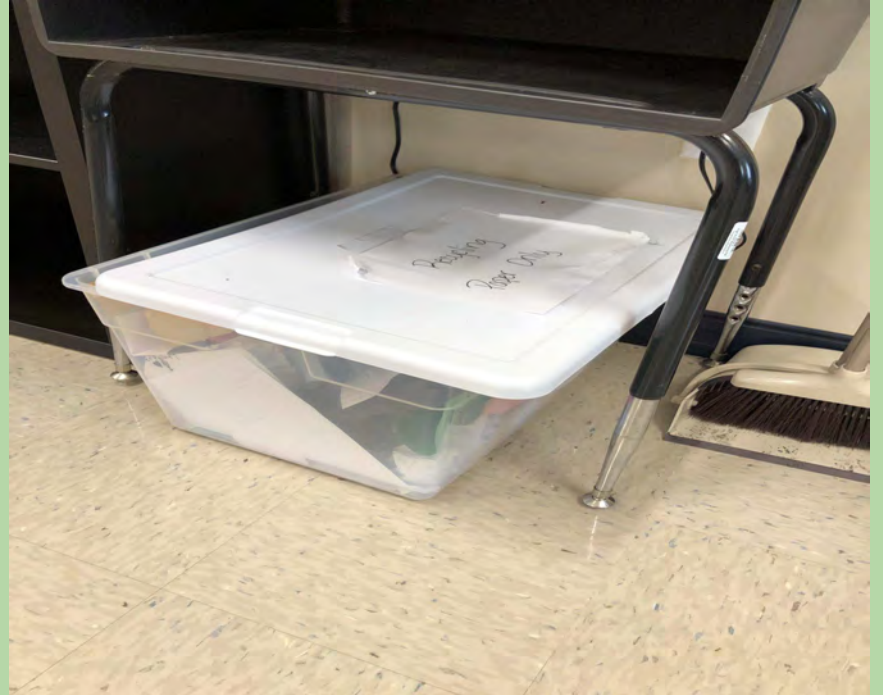


# Goal #3- Start recycling program



Ms. Ruth from the City of Fort Worth came to teach us about the proper way to recycle. We were so excited to learn how easy it was to recycle, and we knew that we could start this on our campus just like our survey results said. We didn't have a big recycle dumpster so we decided to start with just 11 classrooms. Each Friday we collect the bins, weigh them, record our results on our table and our sponsor takes home the box of recycling to put in her recycle bin. We hope that by keeping track of how much we collect might convince our school to get a recycle dumpster in the future.

We collected bins from 9 classrooms, the teacher workroom, and the front office every Friday. We began our collection in January and collected until the first week in March. We would have continued but we did not go back to school after spring break due to Covid-19.





# Hawks Go Green Recycle To

|               | Friday 1/17 | Friday 1/24 |             |                    |     |      |      |
|---------------|-------------|-------------|-------------|--------------------|-----|------|------|
| Cramer        | 2.4         | 0           | 6.3         | 38                 | 32  | 30   | 30   |
| Goodwin       | 4.8         | 6.8         | 2.6         | 02                 | 42  | 2.6  | 3.6  |
| Grayson       | 11.2        | 4.8         | 0.0         | 38                 | 40  | 5.0  | 7.6  |
| Rhone         | 0           | 4.4         | 42          | <del>100</del> 8.4 |     | 1    |      |
| Cummings      | 7.8         | 6.4         | 11.6        | 82                 | 70  | 3.6  | 3    |
| Dean          | 3.6         | 9.4         | 6.00        | 56                 | 58  | 42   | 60   |
| D'Agostino    | 3.6         | 5.4         | 4.8         | 48                 |     | 68   | 64   |
| Vierkant      | 10.0        | 11.0        | 30          | 88                 | 48  | 12.6 | 10.2 |
| Cruyer        | 9.5         | 0           | 0.0         | 30                 | 220 | 44   | 88   |
| Work room     | 12.8        | 16.6        | 7.8         | 6.2                | 5.0 | 7.8  | 7.4  |
| Front Office  | 4.7         | 3.4         | 0.0         | 58                 | 54  | 4.2  | 4.2  |
| Tota / pounds | 70.4 pounds | 76.2 pounds | 32.4 pounds | 634 pounds         | 698 | 0.0  | 50.2 |

We weighed each of our bins and kept a weekly chart. Most weeks we collected over 50 pounds of paper in just 9 classrooms, work room and office. The teachers wanted to know who recycled the most each week like they were in a competition. After teachers saw what we were doing some who weren't recycling at first wanted to join what we were doing.



April 4, 2020

Dear Mrs. Stellar,

My school has been recycling a lot and we need a dumpster. Recycling is good for the environment. If nine classes, the workroom, and the office recycled 50 pounds a week just think how much the whole school would recycle! I would estimate the whole school would recycle 140 pounds per week. That is why we need a dumpster just for recycling. If kids learn to recycle at school than they will probably do it at home too! Here are some interesting facts I found about paper. The amount of wood and paper we throw away each year is enough to heat 50,000,000 homes for 20 years. Approximately 1 billion trees worth of paper are thrown away every year in the U.S. Each ton (2000 pounds) of recycled paper can save 17 trees. That 17 trees can absorb a total of 250 pounds of carbon dioxide from the air each year.

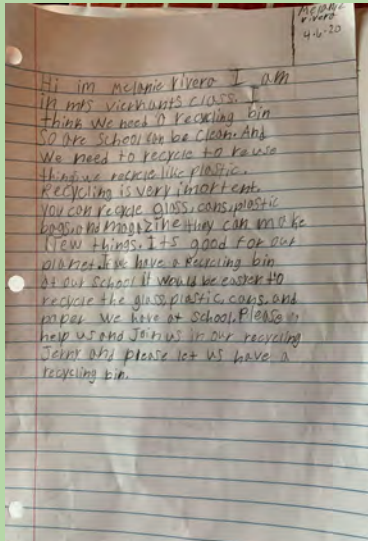
Sincerely,

Alexander Jordan

3<sup>rd</sup> grade, Mrs. Vierkant

**After collecting so much paper in such little time our recycling team decided to write to our CEO/Superintendent to get a big recycle bin for the school for next school year. We even got our parents and teachers to write letters too.**

Hello, my name is Claudia Monjaras. I am in third grade. I would like you to please provide us with a recycling box for my school. Now more than ever we must take care of the environment. I am very concerned about the well-being of my planet and the recycling box would help us a lot. Please help us to take care of our world, Claudia Monjaras





**We wanted to do something good for our community with our recycling project so students decided to collect pop tops. We made posters to hang in the hallways, put a reminder in our weekly schoolwide email to families, and even wrote notes to teachers asking each class to help. We collected pounds of pop tops to take to our local Ronald McDonald House**

Dear Mrs G,

Help us collect pop tops  
to help Ronald McDonald's  
house today !!! And we  
finish collecting pop tops  
on March 20th. Bring to  
Mrs Vier Kant.

Thank you !!!

from Kayla

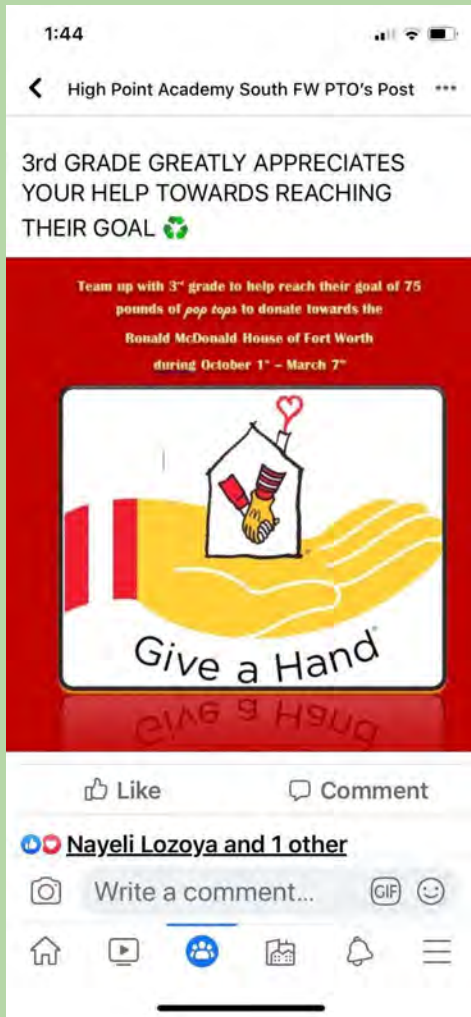
3 grade

Dear Mrs. Tipton We 3rd grade  
are collecting pop tops this year  
and I was wondering if you  
can help us collecting more pop  
tops. We will also collect them  
into March 20th.

thank you from Vanessa  
3rd grade. @

**We wrote to all of our teachers on campus to help us collect pop tops for Ronald McDonald House. We gave them all food storage bags to collect any pop tops.**





Our PTO got the word out to the rest of the school. Everyone started saving pop tops for us. We collected over 60 pounds of pop tops. We can't wait to bring them to our local Ronald McDonald House.





Our project was a huge success. We had fun learning and helping our school go greener.

