Green Stewards Saint Agnes School

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We are 5th and 6th graders from Saint Agnes' energy team. We have worked to accomplish several goals this year. Our first goal was to teach our school about the uses of energy, kinetic and potential energy and nonrenewable versus renewable sources through an energy carnival during our "Green Apple Day of Service". We had booths that students went to and learned about energy in fun ways. For our 2nd goal we did an energy building survey and we created Christmas Cards for Nursing Home Residents using diodes, LED light bulbs and batteries that our teachers learned about at a NEED training. For our 3rd goal, we used the "Cool Coal Story" to present to other students about where our energy comes from and we created an Energy Bingo Game that went with the story. We presented this to our 4th grade students and we will be going to 2 other schools in May to present to their 3rd graders.

Goal 1

Energy Carnival at our school

Activities:

- Plan the Energy Carnival activities for our school students and families.
- We used the Energy Carnival workbook to help plan games
- We played Energy Knockdown, Compostable vs Non-Compostable Hopscotch, Kinetic vs Potential Red Light/Green Light game, and Wheel of Energy game.

Resources NEED booklets NEED website



Goal 1 continued....

Leadership:

We worked together and planned 4 different games, Energy Knockdown, Kinetic and Potential Red Light/Green Light, Compostable vs Non-Compostable Hopscotch, and Wheel of Energy. We created our games using recycled materials and materials we already had at school. We researched to learn about energy content and we used NEED materials to guide us. We played our games with about 100 people throughout the day. We were outside with the lights off to conserve energy for the day and we worked with our cafeteria staff to plan a lunch of sandwiches in order to keep the ovens off and not use power in the kitchen!



GOAL 2: ENERGY SURVEY AND CIRCUITS

- For this goal we wanted to learn about energy use in our building. We learned how to take temperatures, test lighting, check for electronics that were on when not in use and look for ways to improve our use of energy in our building. We found out that our windows and doors to the outside are not very efficient. We spoke to our leadership team and they had plans already to remodel the front entrance where this is the biggest concern!
- □ We learned about circuits at Christmas time and decided we should use them to create Christmas Cards for Residents of a Nursing Home nearby. Our teachers learned about this at a NEED training and we thought it would be a fun activity and give to others in the process. We used batteries and led light bulbs to make a Christmas Tree light up, Rudolph's nose have a light and a lit star.



GOAL 2 CONTINUED

Leadership: We worked together to be aware of the energy usage of our school. Every morning for a month we measured the energy usage in our school. We monitored teachers who left their doors open, their lights on, or their projector on.

Resources:

- NEED Monitoring and Mentoring booklet
- IR Thermometer
- Light Meter

Link to data for our School Building Energy Inventory

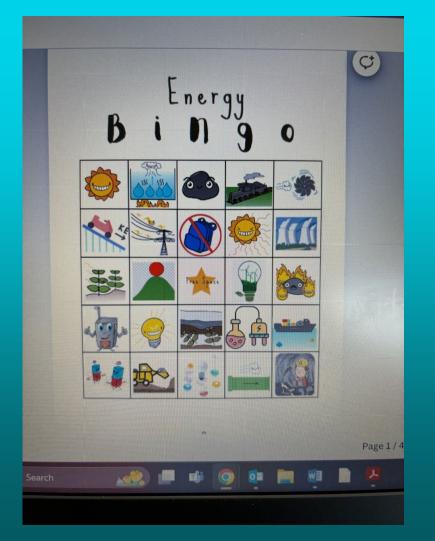
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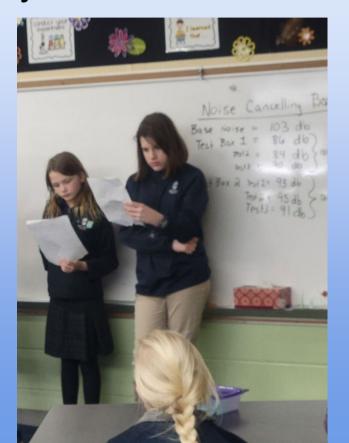
Goal 3: Presenting to grades 3-4

We took the "Cool Coal Story" from the NEED website and made a short skit. We presented the skit to our 4th graders in our school and in May we will be presenting in 2 other schools to teach 3rd graders about where our energy comes from! We created an Energy Bingo game to play with the students so they might remember more about energy.



Goal 3 Continued: Cool Coal Story





Evaluation

- □ We planned and carried out an energy carnival for the whole school and educated about 100 people about energy.
- ☐ We reduced our carbon footprint by not using any lights, turning off our ovens for one day during our Green Apple Day of Service.
- □ We used NEED activities to plan and organize the Energy Carnival. We used recycled materials and taught about 100 students, teachers, parents and community members about energy.
- We studied about the forms and sources of energy
- We used the Cool Coal story to teach about where our energy comes from and we created and played an Energy Bingo game with students in 4th grade at Saint Agnes and we will be taking our skit and game on the road to 2 other schools in May to teach 3rd graders.

Evaluation cont.

- □ We learned about series and parallel circuits
- □ We took what we learned about circuits and made light up Christmas Cards using diodes and batteries
- ☐ We then donated our Christmas cards to a neighborhood Nursing Home
- ☐ We did a building inventory of the energy use in our buildings.
- ☐ We collected data using NEED instruments like the IR thermometer and the light meter.
- ☐ We spoke with our Maintenance staff about types of lights we use.