## Saint Agnes Goes Green Saint Agnes School Advisor: Kelley Schleg

We are the 4th and 5th graders from St. Agnes' energy team. We have worked to accomplish several goals this year. We taught our school about the uses of energy and nonrenewable versus renewable sources through an energy carnival during our "Green Apple Day of Service". We had booths that students went up to and learned about energy in fun ways. We expanded composting from just our kitchen prep area to the entire school and we did an energy building survey and had planned to present our findings to the teachers, but due to Covid-19, school ended before we could present. Lastly, we researched about the sources of energy and made slide shows that we presented to grades K-5.

## Goal 1

Energy Carnival at our school.

#### **Activities:**

- Plan the Energy Carnival with our Middle School team and coordinate activities
- Use NEED resources to learn about Energy and use the Energy Carnival workbook to help plan games
- We played Energy Knockdown and Energy Pictionary
- Plan activities for the entire school for the Green Apple Day of Service and Learning
- Invite the school and community to attend our event







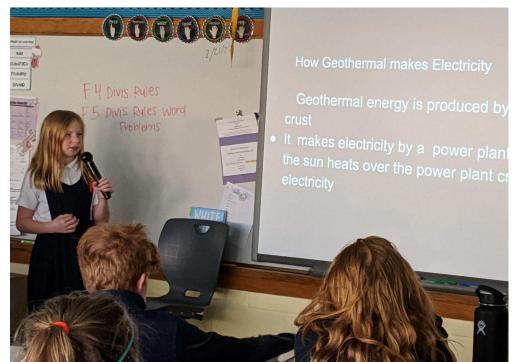
## Goal 1 continued....

### Leadership:

We worked together and planned 2 different games, Energy Knockdown and Energy Pictionary. 4th graders planned one game and 5th graders planned another. We worked together to make sure our games were different. We created a schedule and made our games using recycled materials. We researched to learn about energy content and we used NEED materials to guide us. We created slide shows and went into grades K-5 to present about the sources of energy.



## **Presenting to grades K-5**





COAL 2: Increase composting on our school campus and reduce the amount of water runoff from our roof.

AC	TIVITIES:	At our school every	y grade allows student	s to eat healthy	snacks during the mo	ornina
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- ☐ We made signs to put in every classroom that showed what food scraps could be composted.
- ☐ We got containers together to put in each classroom for students to put their compostable food into.
- We spoke to Mrs. Daly (our Principal) to make sure we could start composting within the whole school.
- ☐ We spoke on our morning news explaining what can be composted and procedures to get composting to the kitchen.
- ☐ We spoke to our kitchen staff to ensure they would take the food scraps to our composter outside.
- We spoke with our Facilities Manager to find a place to put our rain barrel. We set up a 5 gallon bucket under a drain pipe to measure how much rain would run off and we collected money to purchase a rain barrel.
- □ Video teaching the school about our composting plan:
  <a href="https://photos.google.com/share/AF1QipOMZyy10Sn0Hl-EgnMiJHkGkPjuCVtMclek3k3o4sDcrSv\_9iCn">https://photos.google.com/share/AF1QipOMZyy10Sn0Hl-EgnMiJHkGkPjuCVtMclek3k3o4sDcrSv\_9iCn</a>
  Ydol8VoaebzN8Q?key=Q3ZVcHpkSWhsel94UllzUkxPVIRyTVBiQ2xGSmhB

# GOAL 2 CONTENUED

 For the rain barrel we had a speaker from Louisville Metro Sewer District (MSD) speak to us about rain runoff, drainage and flooding.

She spoke to us about rain gardens and rain barrels and problems associated

with runoff.





### Goal 2 Continued

Collecting data from amount of water that comes out of one of the down spouts on

our campus. We raised enough money to buy a

Rain barrel for our school campus and plan to

Use the rainwater we collect to water our

Pollinator garden and our flowers and shrubs

Around our campus. Due to the virus and

School closing, we did not get the opportunity

To set up the rain barrel or measure more than once.



## GOAL 3

Our third goal was to complete an energy audit at Saint Agnes.

#### **Activities:**

- Go around to each classroom and measure the plug load on the chromebook/ipad carts
- Measure how much energy is used for charging before, during, and after school hours.
- Monitor which classrooms left lights on when the room was empty, and took measurements of classroom temperatures.
- Shared findings with school teachers and staff.



# GOAL 3 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
- Plug Load Meter

## Link to data for our School Building Energy Inventory

https://docs.google.com/spreadsheets/d/1mDVw6sbVX3U-pVt1JLrldOvhRw0 BoUCCer-2\_SjTUys/edit?ts=5e971bc1#gid=0





## **Evaluation**

- We planned and carried out an energy carnival with the middle school energy team.
- 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 350 students, teachers, parents and community members about energy.
- ☐ We studied about the forms and sources of energy
- ☐ We made powerpoint projects and taught students in grades K-5 about the sources and forms of energy
- ☐ We increased awareness of composting in our school by sharing on the news how to compost and the importance of composting.
- ☐ We used recycled containers and provided one for every class so they could compost in their classrooms

### Evaluation cont.

- We talked with the administration, the kitchen staff, and the building maintenance supervisor to ensure we could compost and the best way to get the compost to our compost bin.
- We taught the students in every grade as well as the teachers and staff about what can be composted.
- We made signs to hang in each classroom to remind students and teachers about what can go in the compost.
- We measured the rain runoff by using a 5 gallon bucket to catch the water
- We raised funds to purchase a rain barrel that we will utilize on our campus to water our plants in our butterfly garden.

## Evaluation cont.

- ☐ We were able to get enough money and we purchased the rain barrel.
- We had a speaker from MSD talk with us about water runoff and ways to improve our campus using rain barrels and rain gardens.
- ☐ 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.
- We had a speaker from an energy company talk with us about how our school could reduce our carbon footprint.

While we did not get to collect all our data or have a meeting to share our results from the building inventory due to Covid-19 and school closing, we learned a great deal and taught many others about the things we learned.