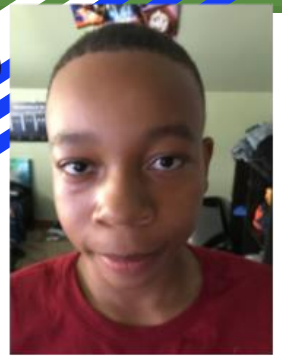
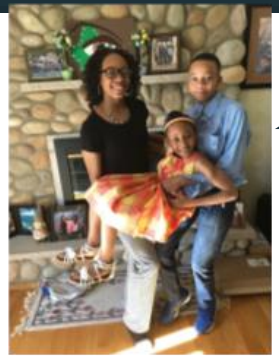
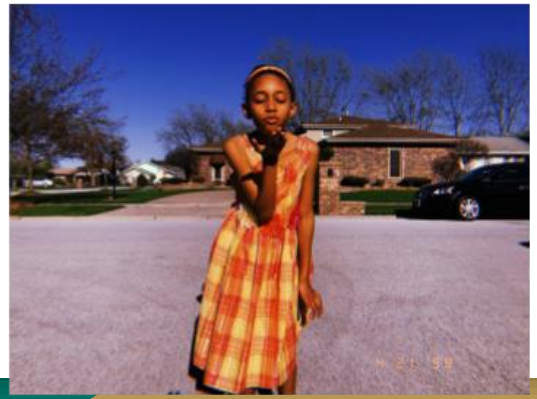




The Maxey Family Energy Challenge




Task list:

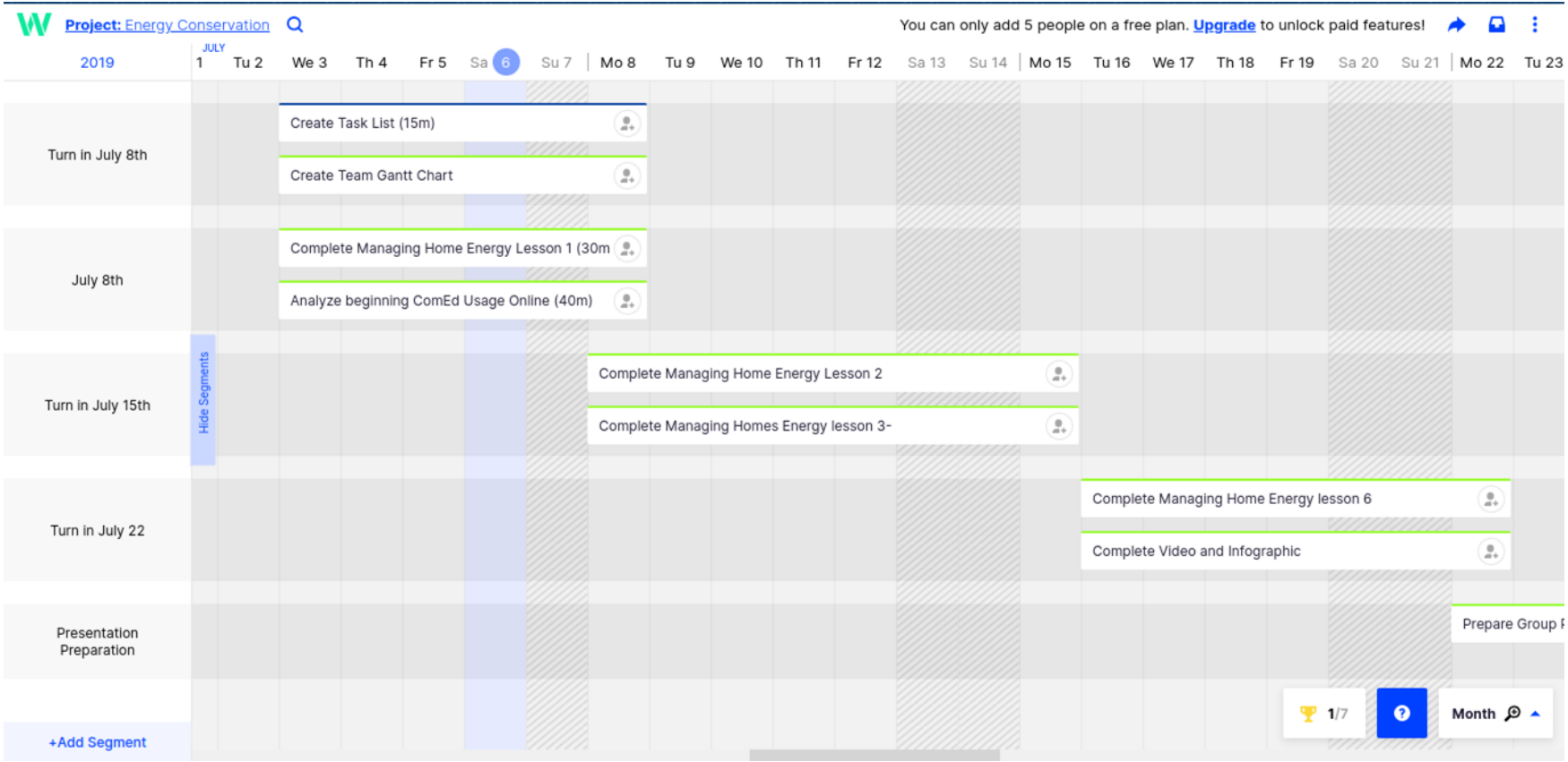
Vice Project Manager- Theia Hudson-Maxey: Oversees the project and ensures all projects are completed on time.

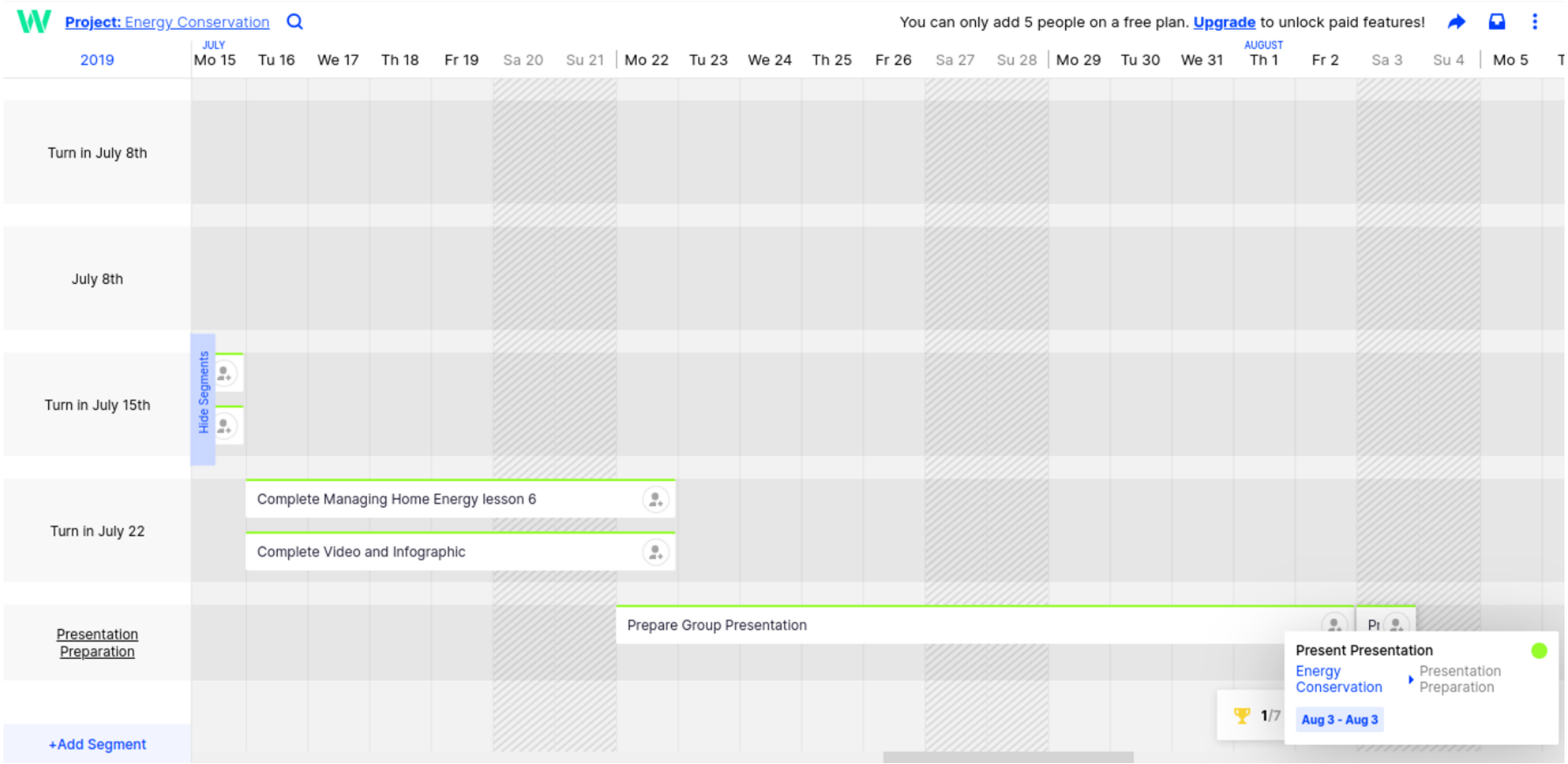
Project Manager Assistant- Kalen Maxey: Assists in as many projects as possible and helps the Vice Project manager.

Residential Testing Scientist- Kaleia Maxey: Completes Managing Energy home assignments and collect all the data.

Assistant Residential Testing Scientist- Kalel Maxey: Assist in the completion of assignments and data collection.

Results Analyzer- Kaleia Maxey: Analyzes data and comes to a sound conclusion about the next steps that should be taken.


Project: Energy Conservation
You can only add 5 people on a free plan. Upgrade to unlock paid features!
2019
JULY
1 Tu 2 We 3 Th 4 Fr 5 Sa 6 Su 7 Mo 8 Tu 9 We 10 Th 11 Fr 12 Sa 13 Su 14 Mo 15 Tu 16 We 17 Th 18 Fr 19 Sa 20 Su 21 Mo 22 Tu 23
Turn in July 8th
Create Task List (15m)
Create Team Gantt Chart
July 8th
Complete Managing Home Energy Lesson 1 (30m
Analyze beginning ComEd Usage Online (40m)
Hide Segments
Turn in July 15th
Complete Managing Home Energy Lesson 2
Complete Managing Homes Energy lesson 3-
Turn in July 22
Complete Managing Home Energy lesson 6
Complete Video and Infographic
Presentation Preparation
Prepare Group
+Add Segment
1/7
Month


Project: Energy Conservation
You can only add 5 people on a free plan. Upgrade to unlock paid features!
2019
JULY
Mo 15
Tu 16
We 17
Th 18
Fr 19
Sa 20
Su 21
Mo 22
Tu 23
We 24
Th 25
Fr 26
Sa 27
Su 28
Mo 29
Tu 30
We 31
AUGUST
Th 1
Fr 2
Sa 3
Su 4
Mo 5
Turn in July 8th
July 8th
Turn in July 15th
Hide Segments
Turn in July 22
Complete Managing Home Energy lesson 6
Complete Video and Infographic
Presentation Preparation
Prepare Group Presentation
Present Presentation
Energy Conservation
Presentation Preparation
Aug 3 - Aug 3
1/7
+Add Segment

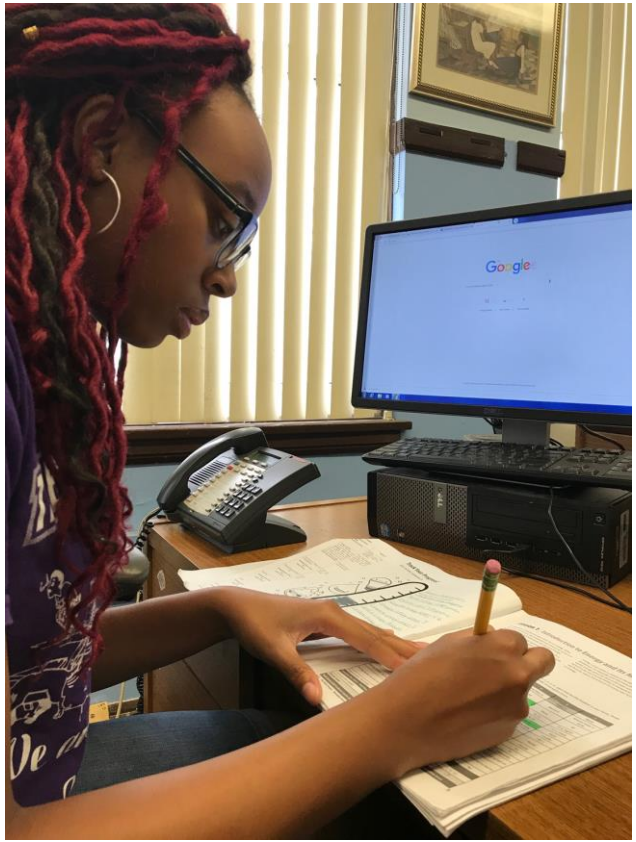
Mission statement:

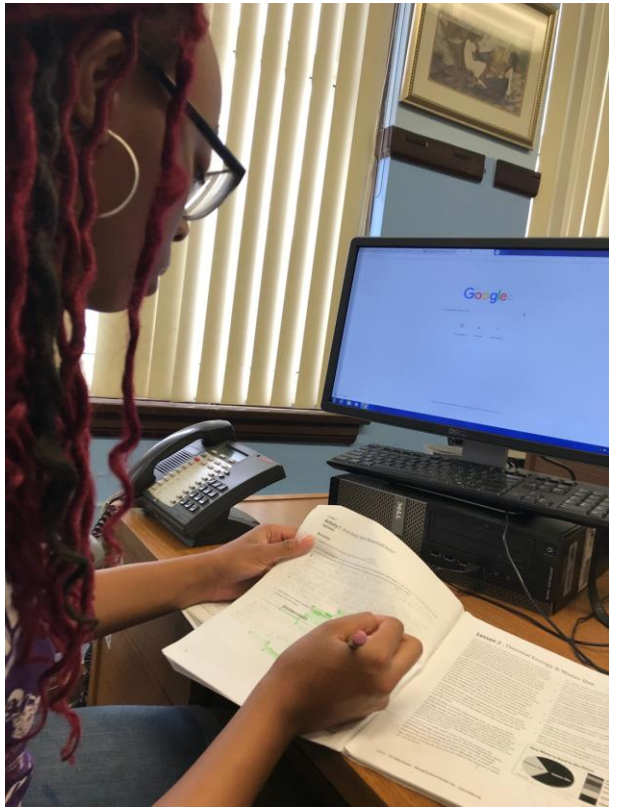
As a family, we aim to win the competition while learning about the most efficient way to save energy and money. Our goal is to improve our smart score by at least 5 points, which will allow us to become a perfect Energy-Efficient home.

When completing these Managing Home and Energy Lessons, the team gathered a more profound knowledge of what it means to be an energy-efficient household. The first assignment we completed was 'Track your Progress' page, which we instilled a goal to work towards. Our goal was to become a more energy efficient household, which we achieved by the time we completed the packet and its contents.

Lesson 1

Lesson 1 *‘Introduction to Energy and Its Management’* was the next lesson to be completed in the booklet. This lesson allowed us to get acquainted with our energy score by giving us a checklist which measured the Energy-Efficiency of our home. The table is rated from 4 to 1; 4 being the highest and 1 being the lowest. When completed, our home turned out to receive more 4’s than any other number, which we decided to be a positive attribute. Our beginning smartscore was 52 out of 64. We decided in order to increase this score, we would have to decrease the amount of phantom electronics, stop running the computer when its not in use, and fill laundry loads all the way up before washing.

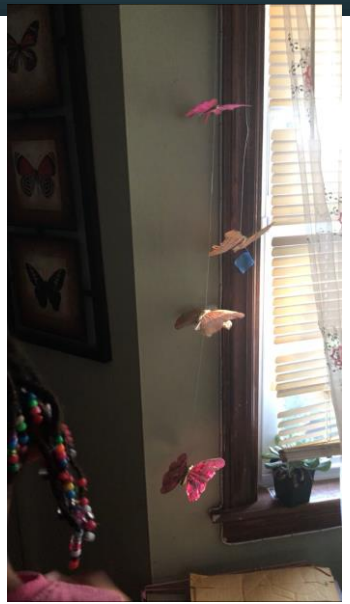


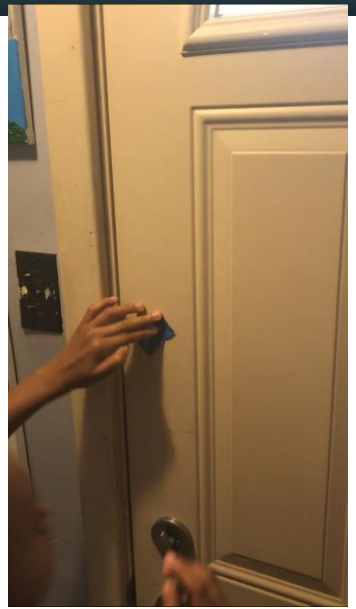


Kaleia answers the Lesson 1 Survey and Discussion questions….

Lesson 2

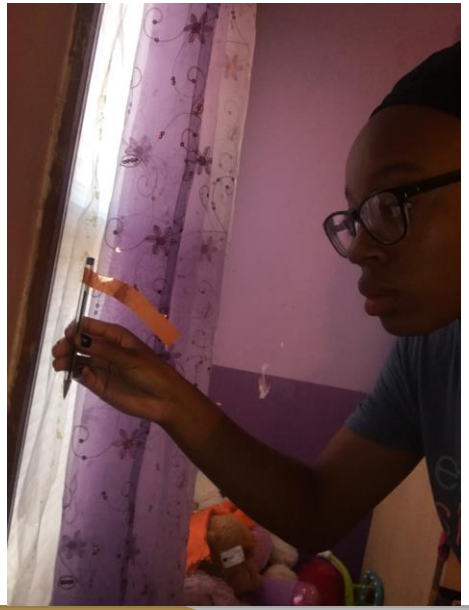
Lesson 2 was the '*Thermal Energy and Water Use*' lesson in which we learned about home water usage and its effect on the energy of the house. We learned about the different water uses in a home and how each strategy comes to play. The 'Seal of Approval' activity was one of the most eye-opening things I did in this book, for we learned how small airways mean insulation may need to be changed. We learned our Fiberglass thickness is called a 'Batt'. It reassured us to know that our attic was properly insulated because that decreases possible cost. We also learned that it is good to allow a tiny amount of fresh air through the cracks in the house because it improves temperature regulation and breathing safety. In another activity in Lesson 2, we measured the hot water temperature and water flow rate of all the sinks and bathrooms. To our surprise, the upstairs bathroom was the hottest temperature of 150+, which differed greatly from other sources. When we installed the aerator, the sinks temperature decreased by a whole 10 degrees. Due to this data, we are also considering to buy more aerators because of how efficient it is in regulating temperature and water flow (water flow decrease in gallons with the new showerhead and aerator.) The last activity in this lesson is the 'We can't take the heat' activity, in which we had to use a thermometer to measure the temperature of food in the freezers and microwaves to ensure they are food safe. It was nice to see that our refrigerator temperatures are safe and sufficient.

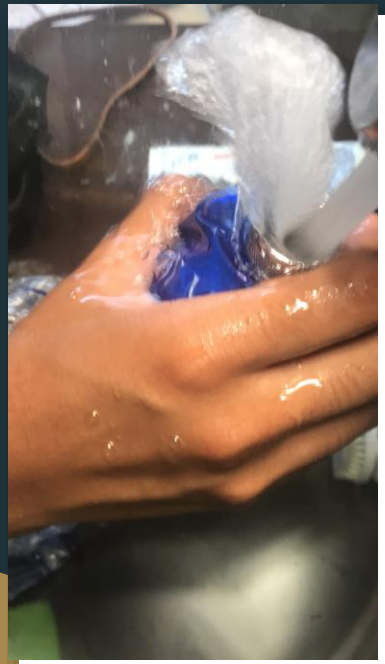




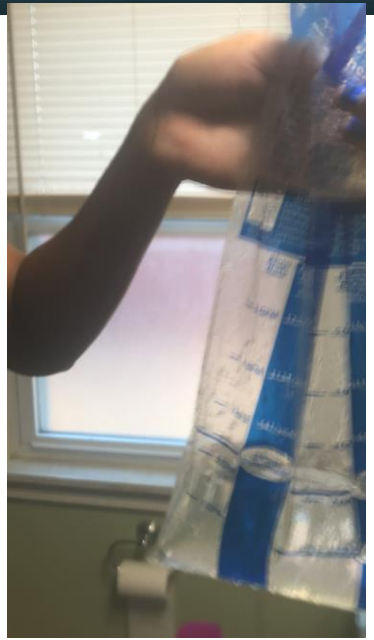
Pictures of Kalen Maxey placing tape on the windows and doors that were tested to need insulation.

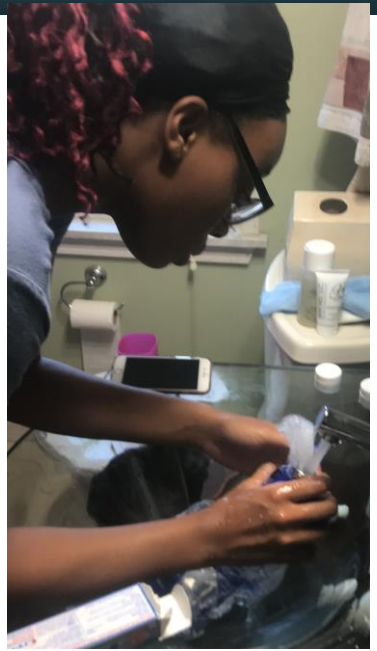
Kaleia tests her bedroom window for escaping airways. This is Lesson 2 (Activity 1).





Kalel measures the gallons per minute of the upstairs shower and sink.

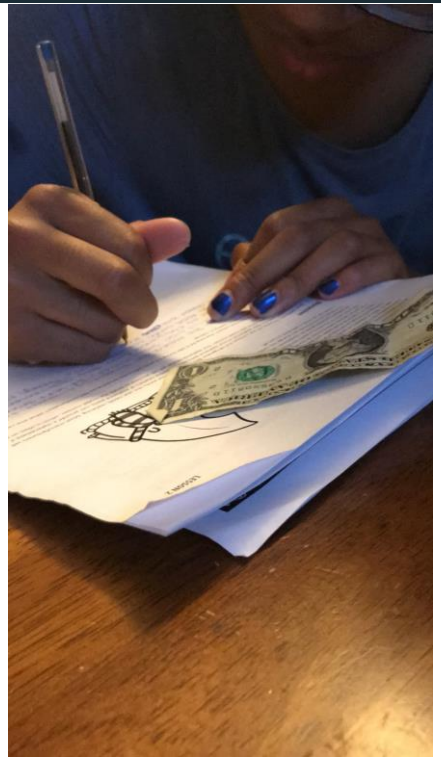




Kaleia measures sink water flow rate and holds it up for the camera to see.

Infographic

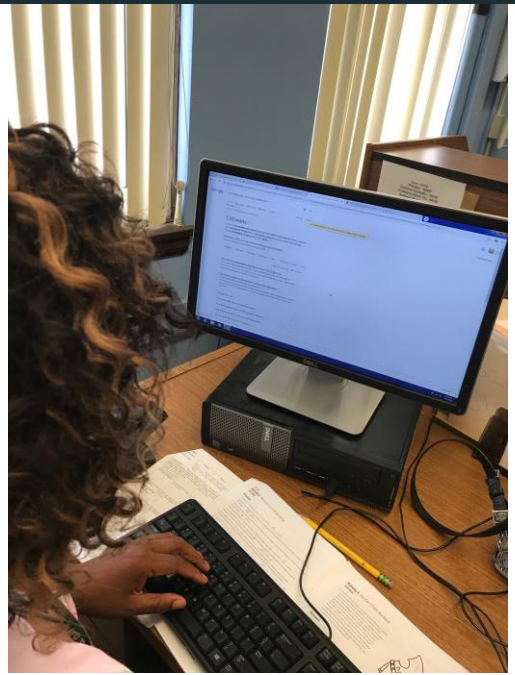
https://create.piktochart.com/output/39985332-untitled-infographic

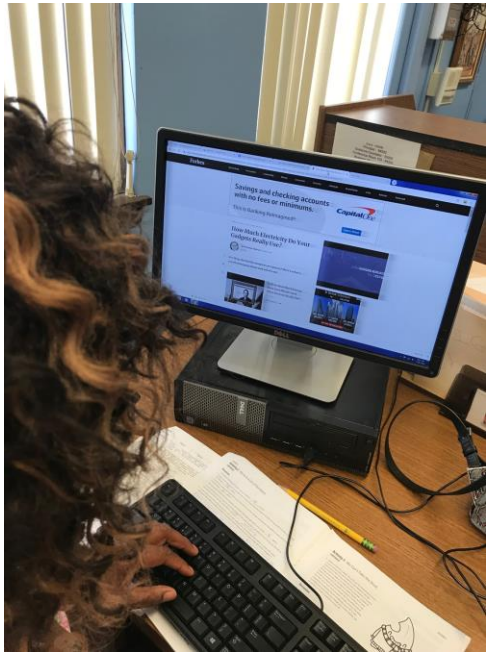


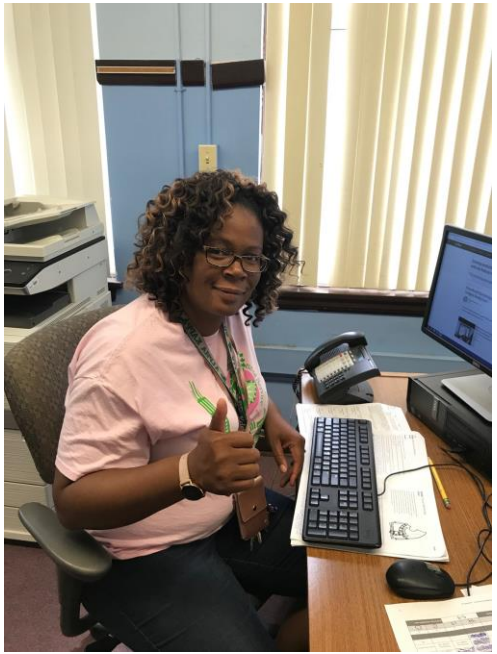
Kaleia and Kalel test the insulation on the refrigerator and freezer using the dollar bill test is lesson 2 (Activity 3).

Lesson 3

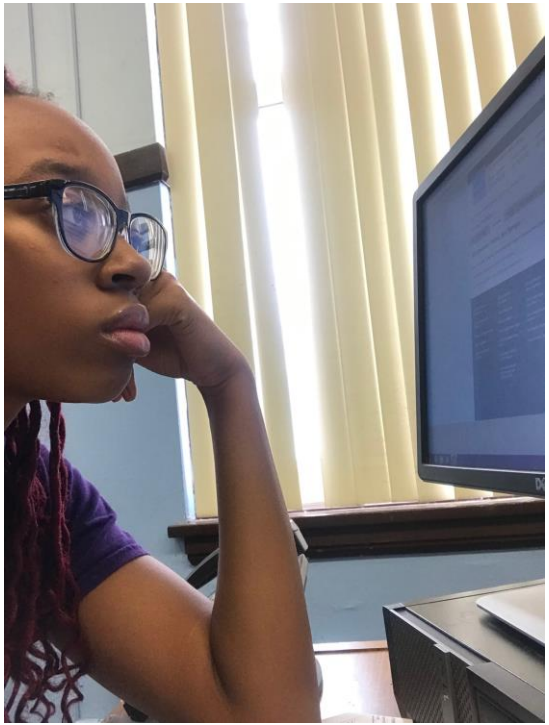
Lesson 3 was the ‘Electricity’ Unit, we took part in two activities. The first activity was called ‘Morning Money Crunch’. In this unit, we learned about the amount of power and energy we use up in one morning. Our overall morning cost is .383, which is considerably a decent score for a family of five each morning. The microwave was found to be the most expensive part of our morning, and the coffee maker are more expensive than we assumed it was going to be. The second activity is ‘Amp Up the Efficiency’, we compared the price and wattage of an Energy Star appliance and the same regular appliance. Predictably, the Energy Star’s appliance was considerably cheaper in overall expenses.

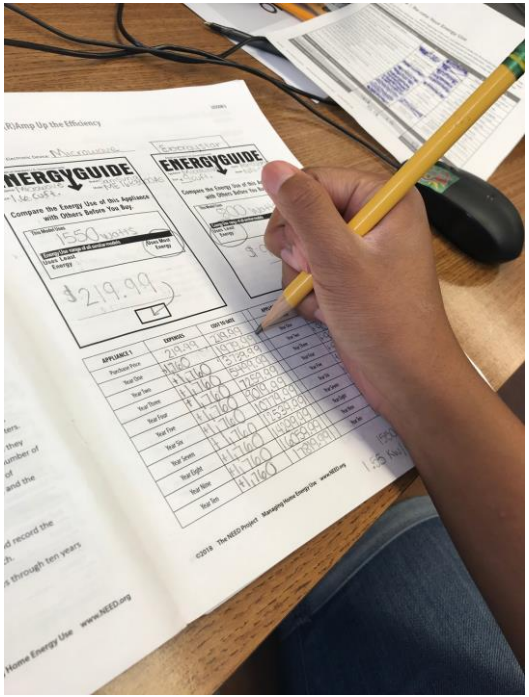






Theia Hudson-Maxey researching Ul labels and the average power usage of gadgets to complete Lesson 3 (Activity 1)

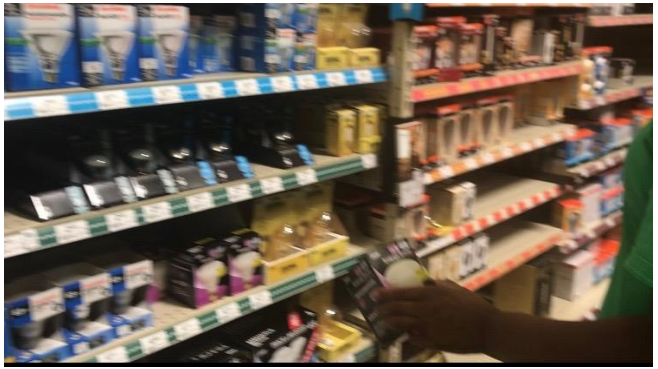




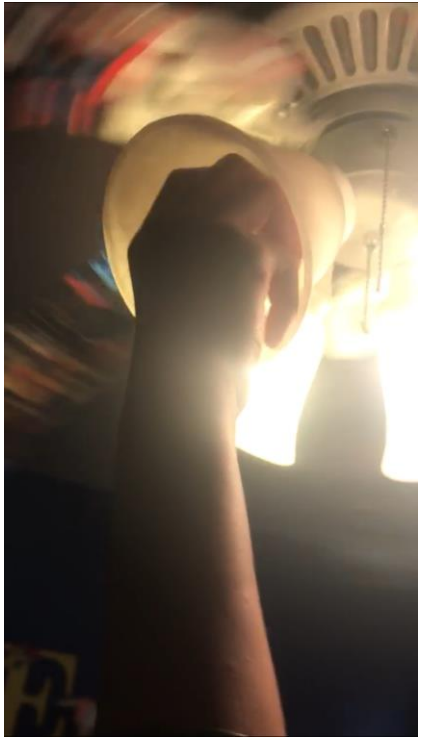
Kaleia Researches Energy star and Non Energy star appliances to compare in Lesson 3 (Activity 2).

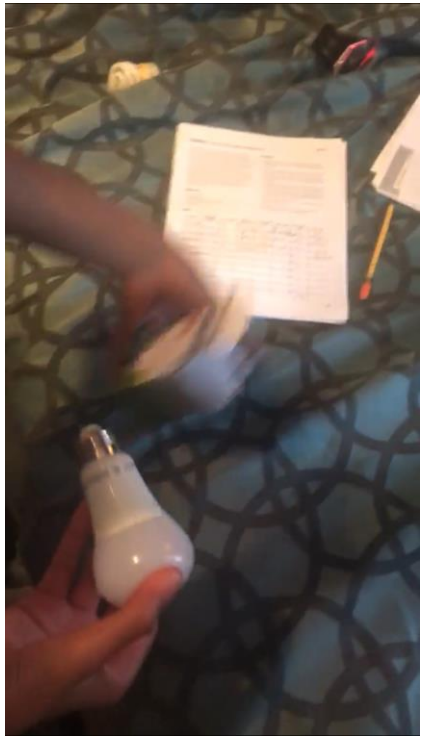
Lesson 4

In Lesson 4, we learned about the concept ‘lighting’ and its effects on the home. The first activity is “This is your light!’, we picked the same lumens and recorded data about an Incandescent, Halogen, Compact Fluorescent, and LED light bulb. The light-emitting diodes turned out to be the most cost-efficient and cheap. We did realize that we could definitely replace 10 of the lights in our home with a more efficient style. On Activity 2, ‘Shed a Little Light on Efficiency’, we analyzed the cost of different light bulbs around our house and found most of the data consistent. We only use LED and Compact Fluorescent lights so there was very little variation in cost (unless we use it very little or too much). We also noticed the need to change lights in the living room, kitchen, and hallway.



Theia Hudson-Maxey shops and explores the light bulb aisle. This shopping trip helped her answer Lesson 4 (Activity 1).





Kalel changes a lightbulb in his room with the kit's LED when he finds out how un-efficient it is.

Lesson 5

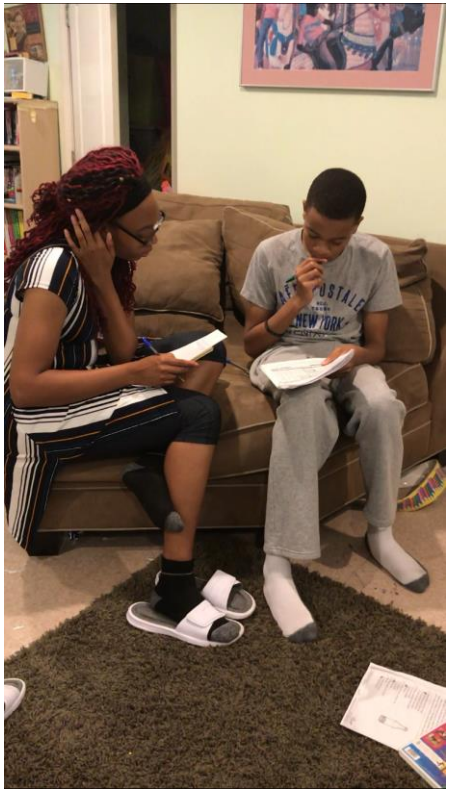
Lesson 5 is the ‘Home Systems’ activity, we focused on the different functions of home systems and their age affects how efficient the system works. Activity 1 is called ‘Well, Well, Well, What do we have here’, and we tested the different types of cooling, heating, humidification, water heating, appliances, windows, and insulation we have inside the house. What stood out the most was that there were a lot of system’s that need to be replaced. Our home needed the following system’s : Insulation, windows, and heating. However, there were appliances that needed more immediate attention, such as: the dishwasher and hot water tank.

Kalen, Kalel, and Theia look at the Furnace and Air conditioner to finish the checklist in Lesson 5.

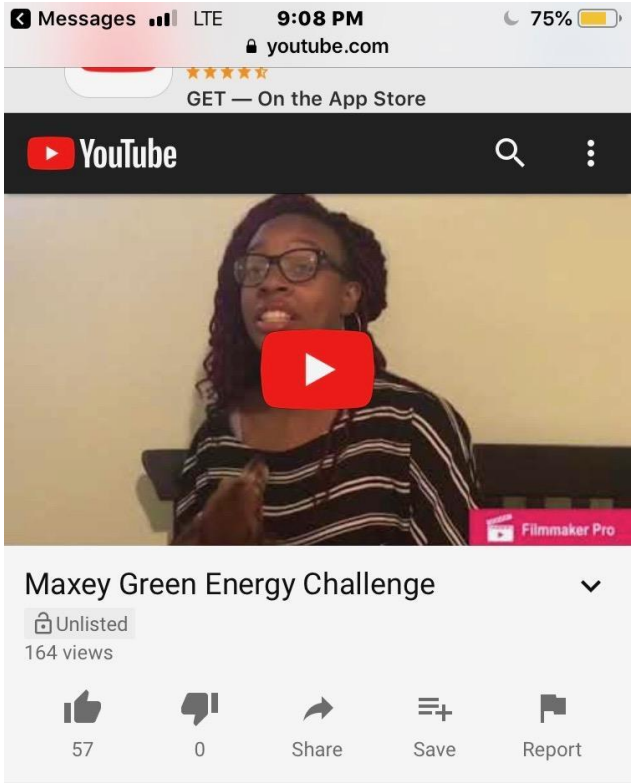
Lesson 6

In conclusion, Unit 6 ‘Re-rate Your Energy Use’. In this lesson, we simply did the same checklist Lesson 1 and observed our growth. A perfect household score is 64, and in the beginning we received 52 points. In the end, we received 59 points which exceeded our goal and mission statement, we grew 7 points. We improved tremendously, and from now on… our house will always be more energy efficient.

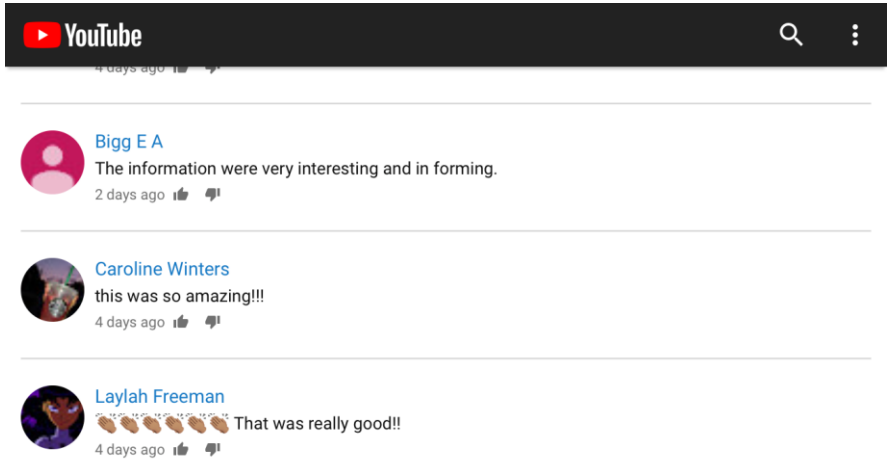
Kaleia and Kalel Maxey discuss the energy efficiency and conservation of the house and calculate the re-score.

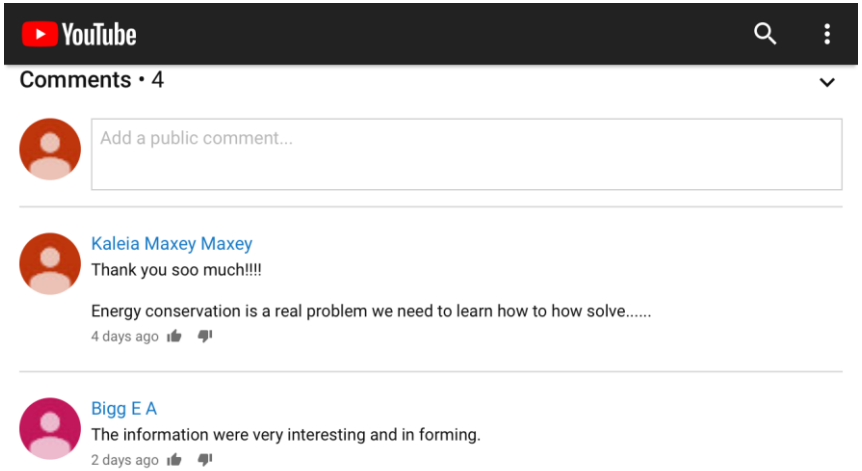


Social Media Campaign



We also answered the comments!!!!





Thank you!

Finishing Comments!!!!