Analyzing the Cost of Using Electricity

Graph Data
Use the graphs below to answer the questions that follow.

Questions
Look at the graphs for the past 12 months. In which month did this family use the most kWhs of electricity?
Month: ____________     ________kWh     Utility bill amount $__________
Give two probable reasons why this family used more energy during this month.
1. 
2. 

Questions
During this billing cycle, on which day did the family consume the most kWhs of electricity?
Day of the week: ____________     Date: ____________     ________kWh
How much did they pay for electricity on this day? $_____________
Understanding Baseline and the Electric Tier System

Background

As your family uses more energy each billing cycle, the cost of a kWh of electricity increases. Electric tiers work like many mobile phone plans—you get a low rate when your use stays within certain limits. If you go over your allotted kWh, you will be charged a higher rate, just as if you went over the allotted minutes or data in your mobile phone plan. Many utilities across the country use a tier rate structure where each additional increment, or tier, of use beyond the baseline level is charged at a higher price.

In this graph, Tier 1, Tier 2, and Tier 3 are different shades. As the family used more energy during the billing cycle, they used more than their baseline allotment, and moved into Tier 2 and then Tier 3. This family could have received a text message from their utility company alerting them they were moving into a more expensive tier.

Questions

1. What are some immediate actions the family could take to use less energy and save more money at the end of this billing cycle?
   A. 
   B. 
   C. 

2. How could monitoring their energy usage using a smart meter benefit this family?

3. Log into your account and review your family’s energy use over the past year. What is your family’s baseline amount this season? Has your family paid for electricity above your baseline? Why do you think that happened? How will you be aware so it doesn’t happen again?

Conclusion

1. What action can you take to keep your family’s use within your baseline this month?