

Black Rock Forest Electrical Energy Consumption versus Solar Energy Incidence.

Student Worksheet #1.

Questions for Thought and Discussion.

1. Think about the amount of sunlight energy falling on the roof of the Black Rock Forest Science & Education Center. Do you think the amount of sunlight energy is more than, less than, or the same as the amount of electrical energy used inside the SEC? Explain your answer:

2. How much land area do you think would be needed to collect sunlight with the same amount of energy as the amount of electrical energy used by the SEC building? Is it the size of a window? The size of the footprint of the building? 10 times that size? 100 times that size? More? Less? Choose one answer.

3. Is there enough solar energy falling on the roof of the building to supply the electrical needs of the building in winter? in summer?

4. What data (information) would you need to answer these questions?

5. Why are these questions important.