**BEST Plots Energy Exercises**

A British thermal unit (**BTU**) is a unit of energy. It is defined as: “the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.”

**1.** One gram of switchgrass yields 16 BTU of energy. In 2011, the BEST Plots produced an average of 300 grams of switchgrass for every square meter of area. How many BTU could the BEST plots produce per square meter?

**2.** Now pick your school and see how it compares to the average (if there are two entries for your school, either pick one, or average them). How many BTU/m2 could your school produce?

**3.** Now add up the total BTU each plot produced (“Total BTU” column). What could we power with all the plots:

**a.** Heat my swimming pool for two days (1,666,000 BTU)

**b.** Heat my small house for one hour (155,000 BTU)

**c.** Run the local power plant for one day (240,000,000 BTU)