

Power from Temperature Data

Step 1: Record the mass of the substance you are heating up along with the starting temperature and its specific heat. Then fill in the first two columns of the table below. Then in the space to the right of the table, show an example calculation for energy added to the substance. Finally, fill in all the calculated values for energy added.

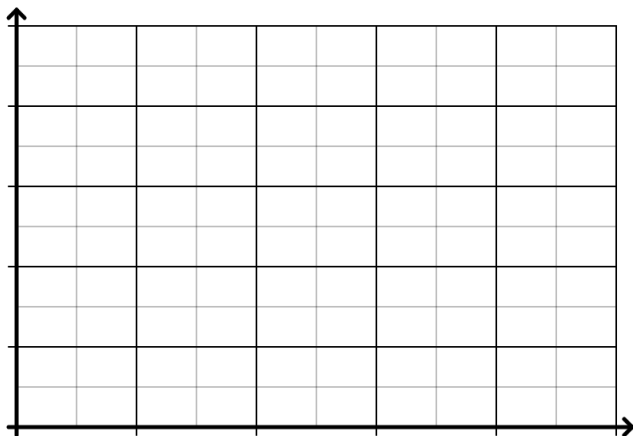
Mass:

Starting Temperature:

Specific Heat:

Time (s)	Temperature (°C)	Energy Added (J)

Step 2: Create a graph of energy added (y) vs. time (x) and then curve fit your graph and then draw the graph with the best fit line on the axes below. Write the equation of the line to the right of the graph.



Step 3: Use the graph to get the power of the appliance that is heating your substance and then find the time at which the appliance was turned on. Enter your values into the program to make sure you did everything correctly