

**Recycle Problem Solving**

You will need a piece of *Centimeter Grid Paper* to complete this problem.

Luis and Jerome discovered an interesting fact while studying recycling. The energy saved from recycling one glass bottle will light a 100-watt bulb for four hours.

- Use this fact to complete the data table.

Energy Saved

<i>N</i> Number of Recycled Glass Bottles	<i>T</i> Time (in hours) a 100-Watt Bulb can Burn
1	4
3	
	20
7	

- Make a graph comparing the (*N*) Number of Recycled Glass Bottles to (*T*) Time a 100-watt bulb can burn.
 - How many hours can a 100-watt bulb burn from the energy saved from 4 recycled glass bottles? Show your work on your graph.
 - If you recycled 10 glass bottles, how many hours can a 100-watt bulb burn with the energy saved? Show or tell how you solved this.
 - Write a ratio that compares time to number of glass bottles.
 - Write two ratios equivalent to the ratio in Question 2D.