Name _____ Date _____

Energy Mix Scenarios

Part 1. Choose a location: coastal city, mountain town, or plains city. Create two scenarios for your town's electricity source mix that each add up to 100%. Then write the rationale behind your choices for each scenario.

Location (circle one): coastal city mountain town plains city

	Scenario 1 (percentages)	Scenario 2 (percentages)
Hydro		
Solar		
Wind		
Coal		
Petroleum		
Natural Gas		
Nuclear		
	=100%	**=100%**

Rationale for Scenario 1: _____

Rationale for Scenario 2: _____

Part 2. Enter each scenario into the interactive You Have the Power (ConnectEnergyEd.org/energy-interactive). In the interactive, the goal is to provide 100% of a community's electricity needs while staying within a budget of $1,000,000. Then answer the following questions.

1. Was scenario 1 accepted? (Was it a success?) Why or why not? _____

_____

_____

Energy Mix Scenarios, continued

2. Was scenario 2 accepted? (Was it a success?) Why or why not? _____

_____

_____

Part 3. Predict the energy mix scenario for your town or city. Then use the U.S. EPA "Power Profiler" (www.epa.gov/cleanenergy/energy-and-you/how-clean.html) to check your predications against reality and answer the questions.

	Predicted Energy Mix	Actual Energy Mix
Hydro		
Solar		
Wind		
Coal		
Petroleum		
Natural Gas		
Nuclear		
	=100%	**=100%**

Were you surprised by any aspect of your town's energy mix? Explain. _____

_____

_____

_____