Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade-Period: \_\_\_\_\_\_\_\_\_

**Power Up!**

Google “Power Up Game” and click the first link “Power Up! – Science NetLinks”

Click START.

**You will have to design the power grid for a city.**

**TIPS:**

* **You must create enough energy for the city (FULL POWER).**
* **You cannot have too great an impact on the environment.**
* **You cannot spend all of your money. Even if you get to full power if you are out of funds, you will lose.**
* **If you hover your mouse over the plant type when choosing, it will give you the amount of power it produces (not the # of squares it will move), the cost of the plant, and the impact it will have on the environment. Use these numbers to help make your decisions.**

**Fill out the tables below for each of your trials. YOU WILL NEED TO MAKE TALLY MARKS FOR EACH POWER PLANT TYPE AS YOU GO OR YOU WON’T KNOW HOW MANY OF EACH YOU USED.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Power Plant Type** | **How many?** | **Power Plant Type** | **How many?** | **Did it Work?** |
| **Natural Gas** |  | **Geothermal** |  | YES  NO |
| **Oil** |  | **Coal** |  |
| **Wind** |  | **Solar** |  |
| **Trash** |  | **Hydroelectric** |  |
| **Nuclear** |  | **Why didn’t it work?** | Ran out of Money! | Poisoned the Earth! |
|  |  |

**When finished, answer these questions:**

1. What was your most successful trial? Why do you think it was successful?
2. Would your idea work in Dallas? Why or why not?
3. Do you think this simulation is realistic? Why or why not?