**Measuring Electricity**

Use the chart below to find information about the objects that use electricity within our classroom.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Object | Hertz (Hz) | Volts (V) | Amps (A) | Ohms (**Ω**) | Watts (W) | Cost / Year |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Hertz is the electric \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It is the number of times that a generator spins per \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. In the US, generators are spun at \_\_\_\_\_\_\_\_\_\_ Hz.

Volts are a measure of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This is how hard electricity is being \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Amps are a measure of electric \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This is how \_\_\_\_\_\_\_\_ electricity is flowing. A lot of amps can cause a lot of \_\_\_\_\_\_\_\_.

Ohms are a measure of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. This is how hard it is for electricity to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through an object.

Volts = Amps x Ohms

\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| Current | Sensation | Body Resistance of 100,000 ohms | Body Resistance of 1,000 ohms |
| .001 amps | Tingling |  |  |
| .01 amps | Freezing Current |  |  |
| .1 amps | Fatal if continued |  |  |

*\_\_\_\_\_\_\_\_\_\_\_\_ are also important because that’s what electric consumers get billed for. Watts = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.*

*\*Use the formulas you learned to complete the chart at the top.*