**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* ***Can I describe electrical currents using models and explain the relationship between current, resistance and voltage?***

***V=RI (voltage = resistance x current)***

***[](http://images.google.com/imgres?imgurl=http://projects.ischool.washington.edu/tabrooks/343INFOAutumn09/SilverlightTextFont/SilverlightTextFont.Web/ClientBin/river.jpg&imgrefurl=http://projects.ischool.washington.edu/tabrooks/343INFOAutumn09/SilverlightTextFont/SilverlightTextFont.Web/SilverlightTextFontTestPage.html&usg=__dxO4pLT0cGgsZE3eTXDn2PB5m1c=&h=292&w=393&sz=113&hl=en&start=5&um=1&itbs=1&tbnid=CtJha1gm36LtPM:&tbnh=92&tbnw=124&prev=/images?q=river&um=1&hl=en&safe=active&sa=N&tbs=isch:1)Sample Analogy:*** *An electric circuit is like a river—the flowing water is like current (amps) and the energy of the water, its ability to do work is like voltage (volts). As the river narrows, just as much water flows along the channel but with greater pressure therefore it has more energy to move rocks along the bottom. Electrons flowing through a load have more resistance so if we want to same number of electrons to flow through the circuit, we need more voltage.*

**Create your own analogy to describe an electric circuit.**

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