Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_

**That's Shocking! Quiz**

**Formulas**

**I=V/R Power= current x voltage**

**Word Bank**

fuses metalloids decreases circuit breaker stays the same lower two

metals increases nonmetals alternating higher one direct

T **or F** I. **The** shorter a wire is the greater its resistance.

2. If a circuit has a current of 10 mA and you add another battery to the circuit, which doubles the voltage,

what would the current be now?

3. As a wire cools down, its resistance \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. The electric current you are using when you plug your phone in to recharge it is a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

current.

5. If the current coming out of the outlet has a frequency of 60 hertz, what does that mean?

6. As you add more light bulbs to a series circuit, what happens the amount of resistance in the whole circuit?

7. Dew Fuss says that changing the amount of resistance does not affect the power of circuit. Klu Less says

that it does. Who is right and why?

8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are better than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because they can be used over and over.

9-11. Semiconductors are made out of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and are unique because they conduct current

 in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ direction and have a lower resistance at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ temperatures.

T or F 12. Nonmetals have a higher resistance than metals.

T or F 13. Resistors are objects that decrease the amount of electricity that passes through them.