

That's Shocking! Quiz

Formulas

$$I=V/R$$

$$\text{Power} = \text{current} \times \text{voltage}$$

Word Bank

fuses metalloids decreases circuit breaker stays the same lower two
metals increases nonmetals alternating higher one direct

T or F 1. 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.