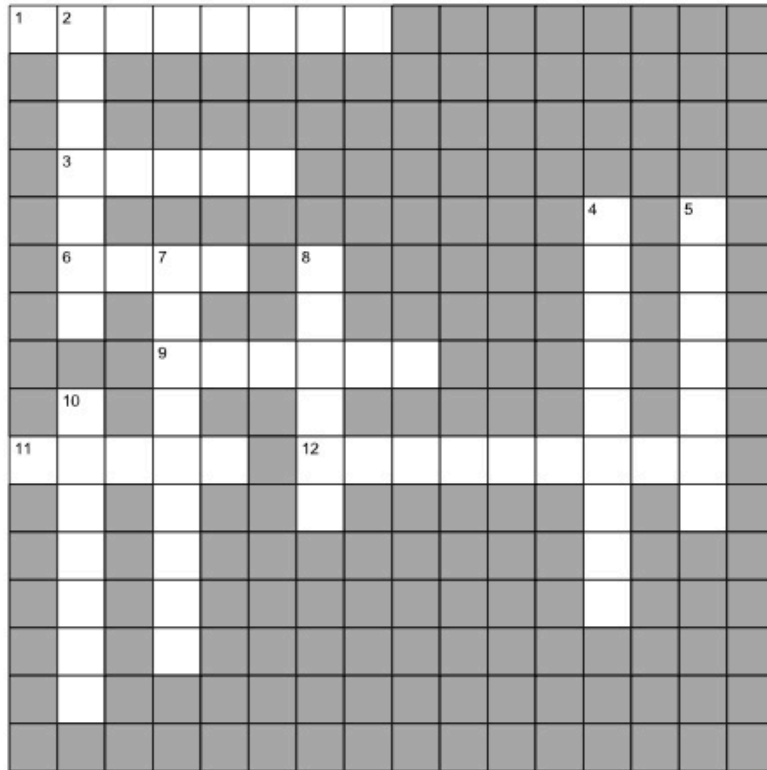




READ-A-THON

February 27&28, 2014

Use the Force

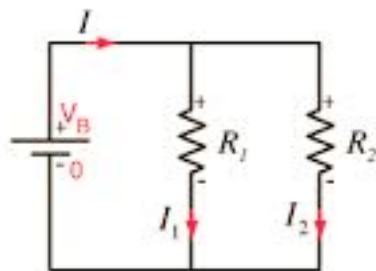


Across

1. In ___ circuits, additional branches decrease resistance.
3. Similar poles ___ each other.
6. Loops of wire stacked one on top of another
9. In ___ circuits, additional resistors increases resistance.
11. The extent of a magnet's force.
12. Copper is a good ___. It allows the flow of electrical charge

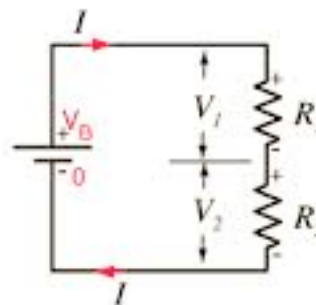
Down

2. Opposites _____.
4. An attractive force.
5. Converts chemical to electrical energy.
7. Glass is an ___; it resists the flow of electrical charge.
8. Can be open/closed to complete/disrupt a circuit.
10. A complete ___ allows the flow of electricity.



Parallel resistors

$$\frac{1}{R_{\text{equivalent}}} = \frac{1}{R_1} + \frac{1}{R_2}$$



Series resistors

$$R_{\text{equivalent}} = R_1 + R_2$$

In these circuit diagrams, V = voltage, I = current, and R = resistor.