Science Ch. 8 Electricity and Magnetism

1. The strength of a power source is its voltage.

2. The buildup of electrical charges on an object is called static electricity.

3. Materials that let charges flow through them easily are conductors.

4. The ability of a substance to oppose or slow down electric current is resistance.

5. The movement of an electromagnet causes vibrations in a diaphragm to produce sound.

6. When the north poles of two magnets are brought together, the magnets repel each other.

7. A wire coil will generate more electrical current.

8. A hiker in the woods can use a(n) compass and a map to make sure they does not get lost.

9. A(n) microphone receives sound and changes it into electrical signals.

10. When left to swing freely, a magnet will align with Earth's magnetic field.

11. Examples of static electricity are:

*rubbing the balloon on your hair and your hair will stick onto the balloon

*rubbing plastic pen or comb on a jumper & pieces of paper will stick onto it

*brushing your hair & hair will stick on your skin if you have a long hair

*if your hair's down, & you're going to put your sweater on your hair will stick onto your sweater

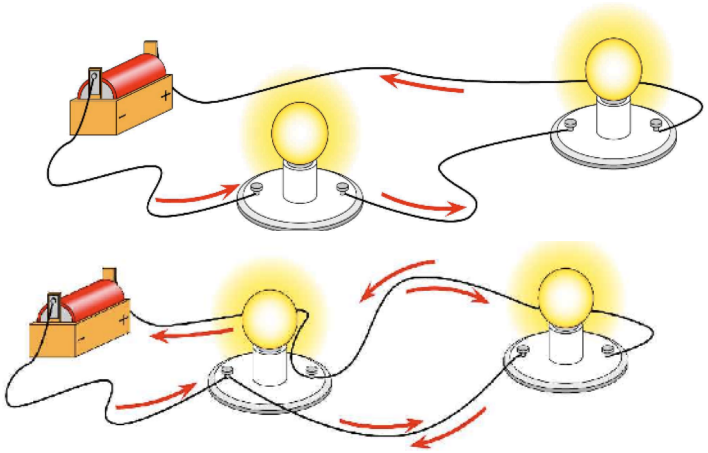
*lightning

12. A path with very little resistance is can be called a short circuit.

13. The strongest part of a magnet's magnetic field is at its north and south poles.

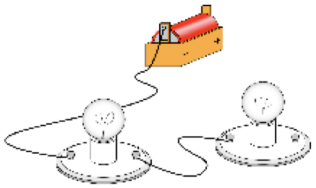
14. The needle on a compass points to the magnetic north pole.

15. When you move the north pole and the south pole of two magnets toward each other, they attract each other.



If a light bulb is missing or broken in a series circuit, will the other bulb light? Explain.
No because the path the electricity needs to follow is broken.

If a light bulb is missing or broken in a parallel circuit, will the other bulb light? Explain.
Yes because the electricity can travel along a different path and avoid the broken bulb.



Explain why the light bulbs won't light in the circuit pictured on the left.
The circuit does not have a wire that returns to the current to the battery's positive terminal.