

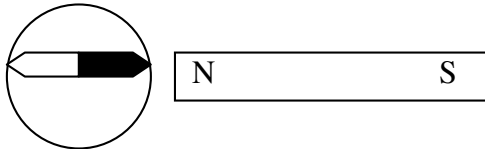
Electricity and Magnetism Review

Electricity

1. What kind of energy transformation takes place when a light bulb is lit?
2. In a simple light circuit with a battery, which way do the electrons flow?
3. Differentiate insulators and conductors of electricity.
4. Define electric current and voltage difference.
5. _____ is used to measure the voltage.
6. _____ is used to measure the current.
7. _____ is the unit of voltage and _____ is the unit of current
8. Differentiate series and parallel circuit.
Which circuit is mainly found in households?
Which circuit when one branch of the circuit is opened, the current will continue to flow through the other branches?
Which has lower current flowing through the circuit?
9. Draw a parallel circuit using a battery and three light bulbs.
10. Draw a series circuit using a battery and three light bulbs.
11. Compare and contrast the flow of water through a pipe and the flow of electrons through a wire.
12. Explain why the light bulb gets brighter when the voltage increases.
13. What are three ways to change the wire to increase the resistance in the wire?

Magnetism

14. Explain how magnetic force depends on the distance between the magnet and the object.
15. Where on the bar magnet is the magnetic field the strongest?
16. What happens to the poles of the bar magnet when the magnet is cut in half?
17. Compass needle is a thin _____ suspended in air on a thin point.
- 18.



Is the black part of the compass needle S or N?

19. What are two ways to increase the strength of a simple nail electromagnet?
20. What three materials would work as an electromagnet?
21. What type of transportation uses magnetic levitation?
22. Explain how to use a compass to determine which end of the electromagnet nail is north and south.
23. Name three devices that use magnetism and electricity.