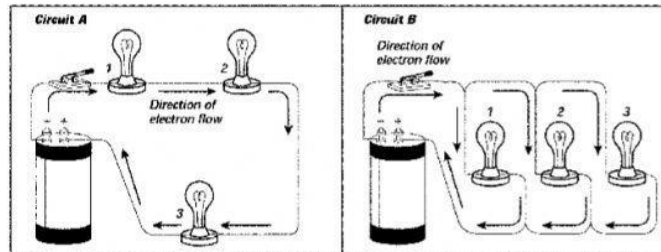
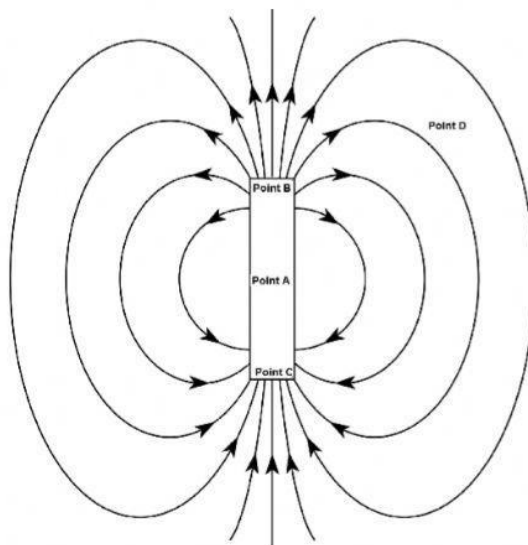


16. What happens if you break a magnet in half?
- One half will have a north pole only and one half will have a south pole only.
  - Neither half will be able to attract or repel.
  - Each half will be a new magnet, with both a north and a south pole.
  - Neither half will have a pole.
17. What does a transistor do?
- convert an analog signal into a digital signal
  - allow a current to flow in one direction only
  - amplify (change) an electronic signal
  - combine thousands of diodes and resistors

Series and Parallel Circuits



18. What would happen if the switch in circuit B was opened?
- all of the bulbs would go out
  - only bulb 2 would go out
  - only bulb 1 would go out
  - only bulb 3 would go out
19. In circuit A, which bulb(s) would be the brightest?
- 1 and 3 would be brightest
  - 2 would be the brightest
  - 1 would be the brightest
  - All would be the same
20. You can increase the strength of an electromagnet's field by
- increasing the thickness of the insulation on the wire.
  - using a stronger ferromagnetic material for the core.
  - decreasing the number of loops in the wire.
  - decreasing the current in the wire.
21. Moving charges, like those in an electric current produce
- protons
  - electrons
  - magnetic fields
  - neutrons
22. The ampere is a unit of
- electric current.
  - temperature.
  - magnetism.
  - electric charge.
23. For charges to flow, the wire must always be connected in a closed path or
- magnetic field line.
  - electric circuit.
  - electrical resistance.
  - magnetic pole.
24. Resistance is measured in a unit called the
- ohm
  - ampere
  - colt
  - coulomb



25. At which point or points would the magnetic force be the strongest?
- Point A
  - Points B and C
  - Point D
  - Points A, B and C