

9. The magnetic force exerted by an electromagnet depends on three factors:

- 1) The amount of _____ in the wire.
- 2) The amount of _____ or _____ in the core.
- 3) The number of _____ in the coil.

10. Name the two types of charged particles that are contained in an atom.

11. Atoms themselves act like tiny _____ with _____ and _____ poles!

12. Why don't we usually notice the magnetism from atoms?

13. How do permanent magnets work?

14. In magnetic materials, such as _____, the atoms are free to _____ and _____ their individual north and south poles. This is why magnetic materials always _____ your magnet regardless of whether your test magnet approaches with it's _____ or _____ pole.

15. Why are most materials nonmagnetic?