1. What is the name for the points where the force fields are strongest on a magnet? 
   Poles
2. What is the direction of the lines of force outside the magnet? 
   North to South
3. What is the direction of the lines of force inside the magnet? 
   South to North
4. How do like poles of magnets affect each other? 
   Repel
5. How do unlike poles of magnets affect each other? 
   Attract
6. How do magnetic lines of force affect each other? 
   Repel
7. How do you block magnetic lines of force? 
   Deflect lines with magnetic screen
8. What is the term used to describe the property of a material to resist the setting up 
   of lines of flux? 
   Reluctance
9. What is the best material for a magnetic screen? 
   Soft iron
10. What is magnetic induction? 
    Magnetism induced from being close to a magnet
11. Do magnetic lines of force intersect or cross? 
    No
12. What are two methods of producing artificial magnets? 
    Electric Current and stroking with a magnet
13. How is the strength of field in a coil of wire increased? 
    Reduce spacing between coils, Increase number of coils, Increase current, Change 
    core material
14. When demagnetizing a magnet using electricity, what type of current is best? 
    AC current
15. What is the Curie temperature of a material? 
    Point where the magnetic structure realigns itself and alignment of domains is lost
16. How do you avoid accidentally demagnetizing a magnet? 
    Avoid heat, avoid AC fields, avoid excessive vibration, do not store around other 
    magnets
17. What is a magnet “keeper”? 
    Soft iron bar placed across the poles of a magnet
18. What is the relationship between moving charges and magnetic fields? 
    They are inseparable (You can’t have one without the other)
19. What happens to magnetic lines of force as new ones are created because of an 
    increase in current through a conductor? 
    Expand outward
20. How does the intensity of lines of force compare to the distance from the source? 
    Inversely proportional
21. What happens to the lines of force when current decreases?
   Collapse inward
22. What happens to magnetic lines of force when current is reversed in a conductor?
   Change direction
   What rule is used to determine the direction of the lines of force around a conductor? Left Hand
23. What do the dot and cross represent on a cross section of a conductor? Dot is current towards you and cross is current away from you.
24. When conductors are placed close to each other and they carry current in the same direction, what is the effect of the fields on each other? They attract and combine.
25. What effect does winding a conductor into a coil have on the magnetic field?
   Increases
26. What is a helix? Spiral shaped coil
27. What is the left hand rule for coils? Fingers in direction of current thumb points to North pole
28. What factors affect the strength of a coil? 4 Number of turns in coil, spacing between coils, magnitude of current, and core material
29. What is the most practical method for controlling the strength of an electromagnet? Vary current
30. What is magnetic flux? Total number of flux lines in a magnetic circuit
31. What is magnetomotive force? Force that causes flux lines to be set up
32. What is reluctance? Opposition to setting up lines of flux
33. What is permeability? Measure of how easy lines of flux are set up in a length and cross section of material
34. What is residual magnetism? Amount of flux density remaining in material when magnetizing force is removed
35. What materials are best suited for cores of magnetic circuits? High Permeability and low reluctance
36. What is the purpose of having a core for a magnetic circuit formed into several loops? Concentrates the lines of flux in the core
37. What is the purpose of laminating the core of a magnetic circuit for AC voltage? Reduce Eddy Currents
38. How does an air gap affect the reluctance of a circuit? Increases reluctance
39. What are some applications of solenoids? Lifting magnets, relays, buzzers and bells
40. What device is used to control a large amount of current with a small amount of current? Relay