Chapter 17 Section 2 Guided Reading

1.	What is an electromagnet and how do you make one?
2.	Describe the right-hand-rule.
3.	You can switch the north and south poles of an electromagnet by the direction of the current.
4.	Electromagnets are preferable to permanent magnets in: a) You can switch the north and south poles b) Electromagnets can be much stronger because the current can be large c) You can change the strength of the magnet d) All of the above
5.	Name three examples of electromagnets that are used in every day life:
6.	How does an electromagnet work in a toaster?
7.	Draw a simple electromagnet circuit.
8.	the current makes an electromagnet stronger. Two ways to
	increase the current is to apply more voltage by adding a
	; or add more of around the nail.

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 magneti	c materials		
	always your magnet regardless of whether your test magnet			
	approaches with it's or pole.			
15.	Why are most materials nonmagnetic?			