SPH 4U

**MAGNETISM REVIEW**

Refer to Section 8.1, p. 378 in the textbook for help with these questions.

1. What is the Law of Magnetism?
2. What are magnetic field lines?
3. Does every magnet have a north and a south pole? Explain.
4. What would happen to a magnet if you broke it in two pieces?
5. What is the Domain Theory?
6. Using the domain theory, explain the following
   1. A magnet attracts an unmagnetized ferromagnetic material.
   2. Stroking a nail with a magnet magnetizes the nail.
   3. A metal table leg affects a compass.
7. Why does heating a bar magnet decrease its magnetic properties?
8. Why is it difficult to get an accurate bearing with a magnetic compass near the poles?
9. Draw the field lines around the Earth and label the magnetic North and geographic North on your diagram.
10. Draw the field lines that would result if the two south poles of two bar magnets were facing each other.
11. Draw the field lines around a horseshoe magnet.