

Name: Pa 5
Due: _____

MAGNETISM STUDY SHEET

Each of the following questions represents a concept discussed in class. Further information can be found in Chapters 19-20 of the text.

1. State the rule for magnetic attraction and repulsion.

Opposites Attract, Likes repel

2. List the 3 categories of magnetism found in various materials:

See note sheet

3. List the 4 elements that can be made into permanent magnets:

See note sheet

4. How can you make a temporary magnet? How does it differ from a permanent magnet?

Bring a magnet next to it and it lines up the domains. It does not stay magnetic

5. Can a magnet ever have just one pole? Explain what happens to a magnet cut in two.

No - 

6. Each electron in a piece of iron is like a tiny magnet (domain theory), but the iron as a whole is not a magnet. Explain how this is possible.

Domains cancel each other out, leaving no net magnetic field

7. What is the Curie Point? Why will heating or dropping a magnet weaken it?

A point at which a magnet or conductor loses its magnetic properties. unaligns domains.

8. Explain how a motor or generator works in terms of electric and magnetic field interaction.

9. What is Lenz's Law? How does it demonstrate conservation of energy?

10. On the back of this sheet, draw the magnetic field (flux) lines for the 4 configurations shown. Be sure to draw the field lines drawing arrows showing direction of the field.

