

Name: Pd 1
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:

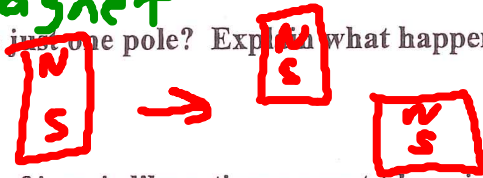
See note sheet

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

Attach conductor
to a real magnet

Doesn't keep its charge

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.

The domains cancel each other out

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

Temp. at which magnet loses its properties

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



Electric flow
to generate
magnetic field

Work to turn the magnet
to generate a magnetic field and
push e^- through a nearby wire

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

An induced emf always gives rise to a current whose
Magnetic field opposes orig. force.

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.

