

Name: _____
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.

(samzies)
Opposites attract, likes repel

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


See notes

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

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

Align Domains. Temporary

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

No → 

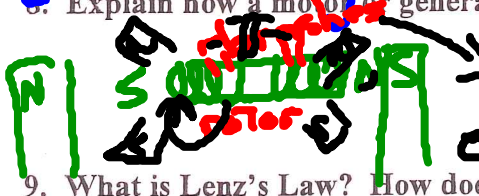
6. Each electron in a piece of iron is like a tiny magnet (domain theory), but the iron as a whole is not a magnet. Explain how this is possible.

Domains cancel each other out

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

Where a magnet or conductor lose their magnetic properties. Unalign Domains

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

 → needs electricity → work to turn the magnet with wires nearby so electrons flow in wires

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

cooper → magnet slowly falling → causes electrons in conducting wire to move → this in turn causes a magnetic field that opposes the falling motion.

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.

