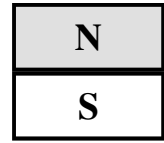


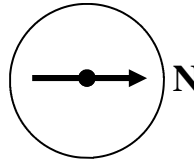
2008 Magnetism 1

- If the ring magnet is repelling the square magnets, label the ring magnet in *Diagram 1*.
- Why can't I isolate a north pole? (Why can't I ever split a north from a south pole?)
- Is a magnet attracted to aluminum?
- Is a magnet attracted to steel?
- Moving electricity always causes _____.

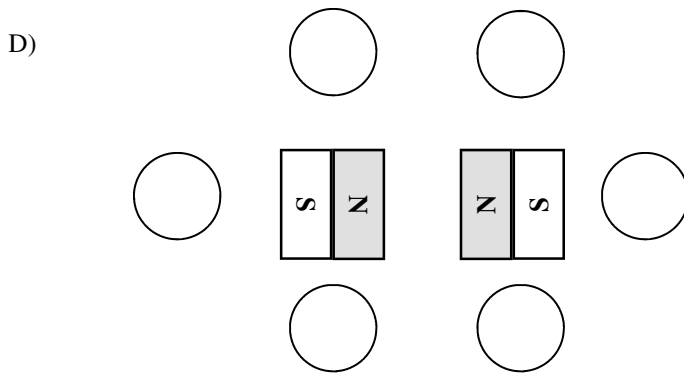
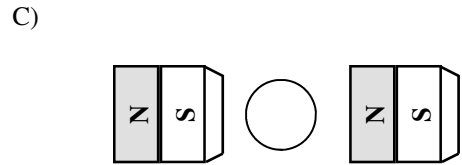
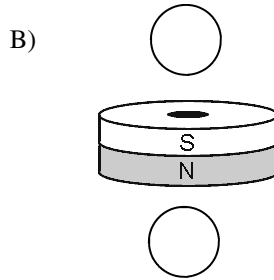
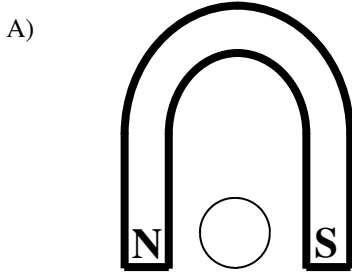
Diagram 1



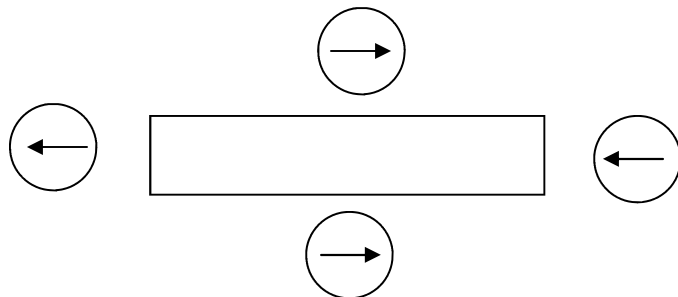
A compass can turn in the earth's magnetic field because it is a magnet, too. The red side of a compass is its north pole. On our homework we will use an arrow, instead.



- So, a compass needle points toward which pole of a magnet?
- For the following diagrams, draw the arrow inside the compasses to show which way the compass will point.



- Mark the north and south poles of the bar magnet at the right.

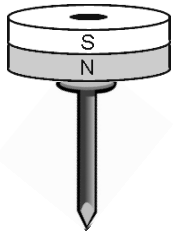


- Moving magnets always cause _____.

2008 Magnetism 1

10. Find the following somewhere in your book or online, etc.
 A. Where does the earth's magnetic field come from?

B. Why is the earth's magnetic field important for life on our planet?

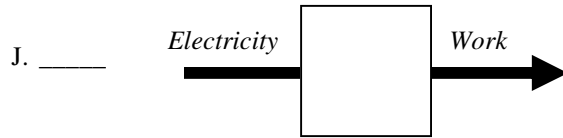
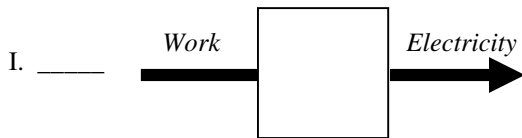


11. A. Label the north and south poles of the nail magnet.
 B. Will the nail stay a magnet when removed from the bar magnet?
 C. Is the nail a temporary or permanent magnet?

12. Motor, Generator, or Both?

- A. ___ Creates electricity.
 B. ___ Has loops of wire in it.
 C. ___ Creates motion.
 D. ___ Is turned by a force.

- E. ___ Can make electricity.
 F. ___ Used in a hydroelectric dam.
 G. ___ Used in open or close windows in a car.
 H. ___ Turns when electricity is applied to it.



13. Use the electromagnets at the right to answer the following.

- A. ___ Which is stronger: A or B?
 Why?
 B. ___ Which is stronger: C or D?
 Why?
 C. ___ Which is stronger: A or D?
 Why?
 D. ___ Which is stronger: B or C?
 Why?
 E. Which is the strongest of all of them?

