

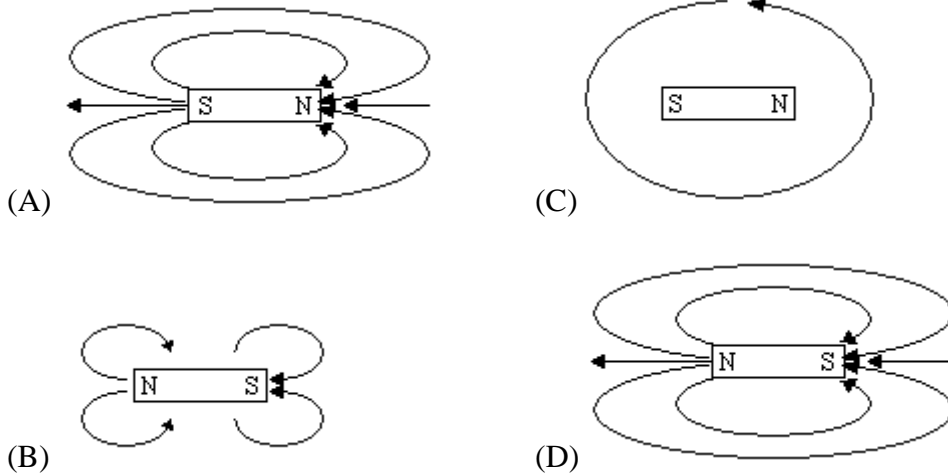
Clean Up This Mess Quiz

Magnetism: Describe the magnetic field of an electromagnet.

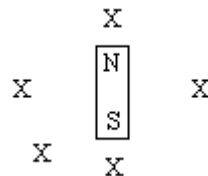
1. Circle the following items that are affected by a magnetic field.

Wood	Aluminum	Gold	Plastic
Brass	Steel	Silver	
Iron	Nickel	Lead	

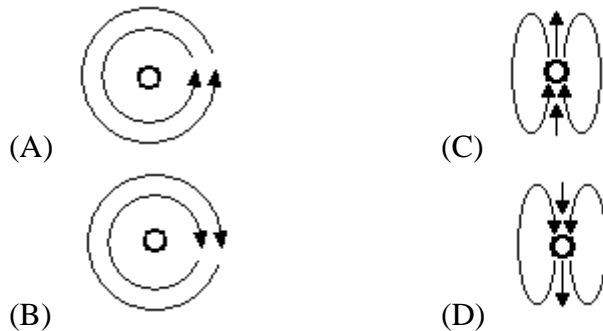
2. Which picture correctly shows the magnetic field around the magnet?



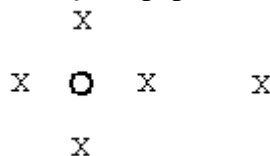
3. Draw arrows to show the direction of the magnetic field at the Xs around the magnet.



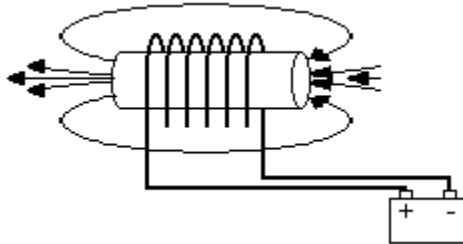
4. Which picture correctly shows the magnetic field around the wire (the circle) if the current is coming up out of the paper?



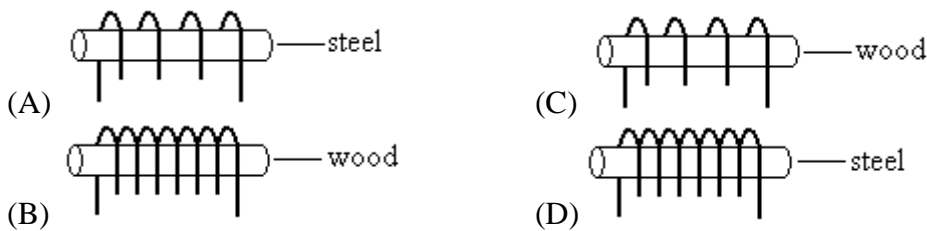
5. Draw arrows to show the direction of the magnetic field at the Xs around the wire if the current in the wire is coming up out of the paper.



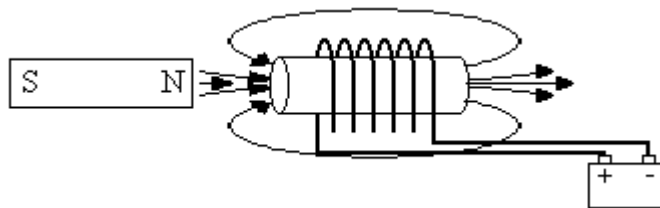
6. Which of the following best describes an electromagnet?
- (A) It is a magnet that produces electricity.
 - (B) It is a magnet produced by the magnetic fields of an electric current.
 - (C) It is a magnet that produces electric fields.
 - (D) It is electricity that has a magnetic field.
7. In the picture below, label the North and South poles of the electromagnet.



8. Which of the following actions will make an electromagnet stronger?
- (A) Wrap the wire carrying the current around a pencil.
 - (B) Make fewer loops with the wire carrying the current.
 - (C) Make more loops with the wire carrying the current.
 - (D) Decrease the current through the wire.
9. Which electromagnet is strongest?



10. A magnet is positioned next to an electromagnet as shown. The current in the electromagnet is then reversed. What will happen?



- (A) The magnet and electromagnet will repel each other.
- (B) The magnet and electromagnet will attract each other.
- (C) The magnet and electromagnet will cancel each other's fields.
- (D) Nothing different will happen.