

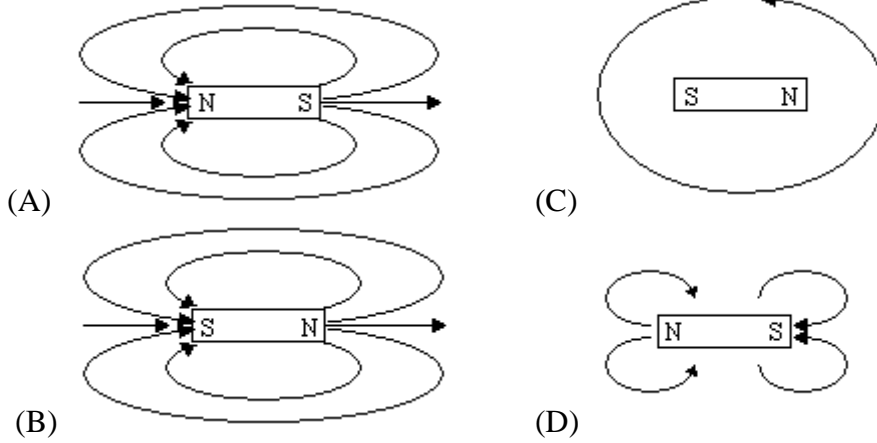
Magnetic Field Check

I. Describe the magnetic field of a permanent magnet.

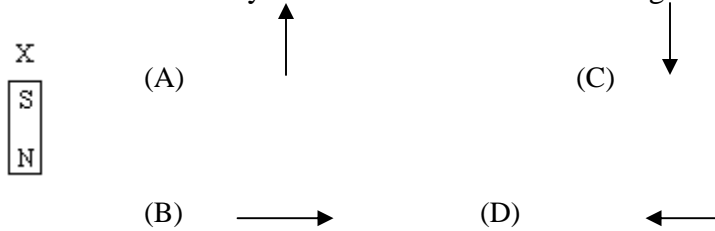
1. Which of the following materials is NOT magnetic?

- (A) Iron (B) Aluminum (C) Steel (D) Nickel

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



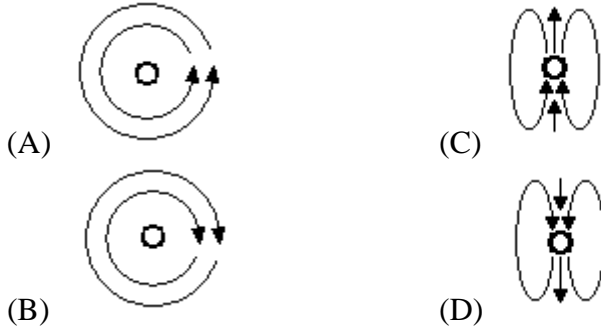
3. Which arrow correctly shows the direction of the magnetic field at X?



II. Describe the magnetic field of an electrical current.

4. Which of the following situations will produce a magnetic field?
- (A) A wire is not connected to a battery and carries no current.
 - (B) A wire is connected to a battery but a switch is open so there is no current flow.
 - (C) A wire is connected so that current flows from the negative to the positive terminal of the battery.
 - (D) A compass is placed next to a wire.

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



6. Which arrow correctly shows the direction of the magnetic field at X if a wire goes through the page at the circle and current flows *down into* the paper?

