

Magnetism Test 40

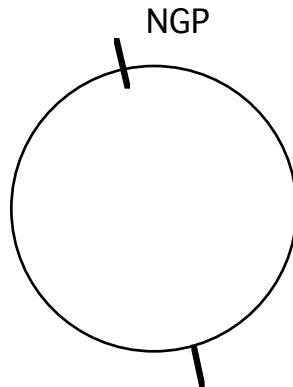
1) What is the name of a rock that is magnetic?

2) State whether the following are magnetic (m), nonmagnetic (n), or sometimes magnetic (s)?

- | | | | |
|-----------|-----------|-----------|------------|
| a) copper | b) iron | c) nickel | d) carbon |
| e) steel | f) cobalt | g) silver | h) plastic |

3)a) Who suggested that the Earth acted like it had a big magnet inside?

b) Draw the magnetic field around the Earth.

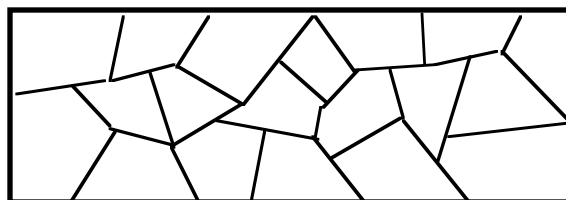


4) Which particle of the atom is responsible for the magnetic field?

5) Draw the magnetic field lines.



6) Show the domain directions inside the magnet. The North Pole is on the right.

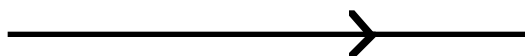


7)a) How can a magnet be ruined?

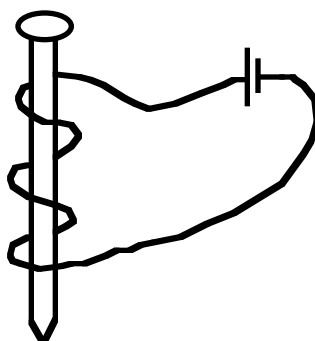
b) Explain what happens to the domains when this happens.

8) Who discovered that a magnetic field is created around a current carrying wire?

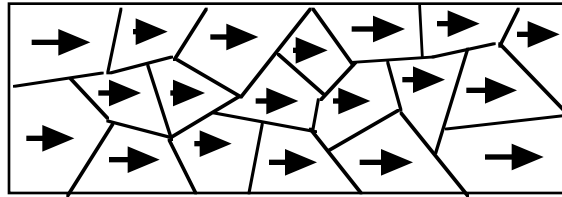
9) Draw the magnetic field around the wire. The direction of the conventional current is shown.



10) In the electromagnet below, use the right hand rule to find out which end of the nail is north.



Answers: 1) magnetite, 2) a) n, b) m, c) m, d) n, e) s, f) m, g) n, h) n., 3)a) Gilbert, b) See text., 4) electron, 5) See text., 6)

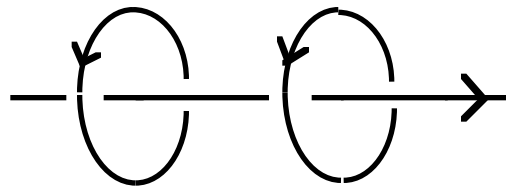


7)a) Heat it or hit it.

b) The domain directions will then point in all directions.

8) Oersted.

9)



10) The top of the nail is North.