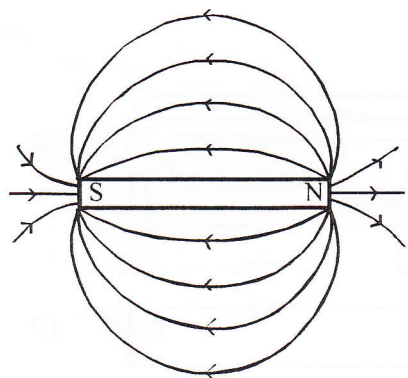


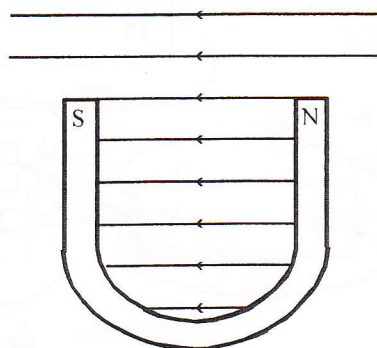
Magnetic field worksheet

1. A magnet is surrounded by a magnetic field which is shown by lines of force. Which one of the following diagrams correctly represents the magnetic lines of force around a magnet?

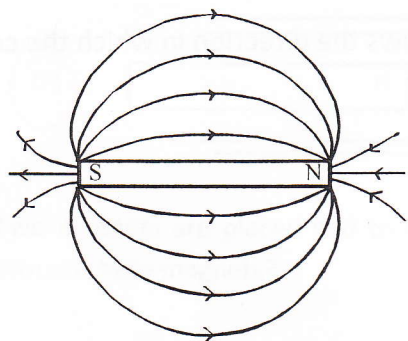
A)



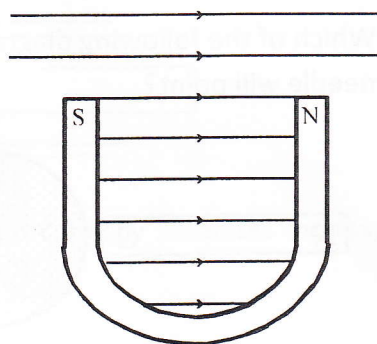
C)



B)



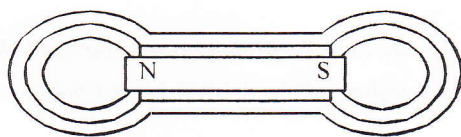
D)



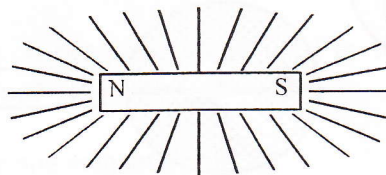
2. Maria sprinkles iron filings on a piece of cardboard placed on top of a bar magnet.

Which configuration will the iron filings take?

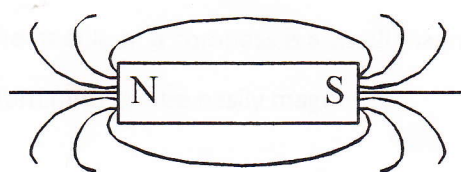
A)



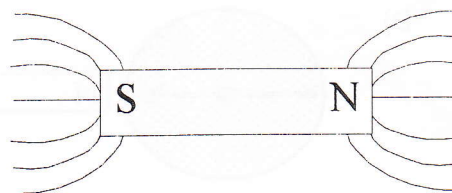
C)



B)

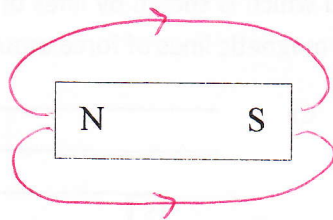


D)

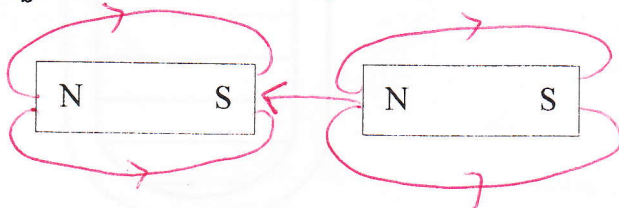


3. Draw the magnetic lines of force on the diagrams below.

a-



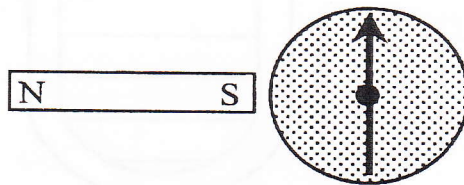
b-



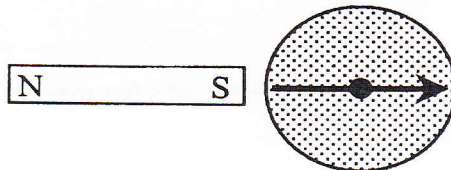
4. A magnetic compass is placed at one of the ends of a bar magnet.

Which of the following diagrams correctly shows the direction in which the compass needle will point?

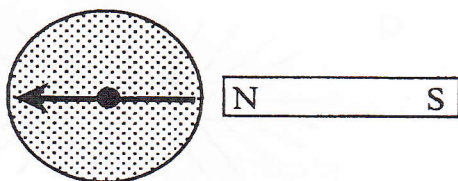
A)



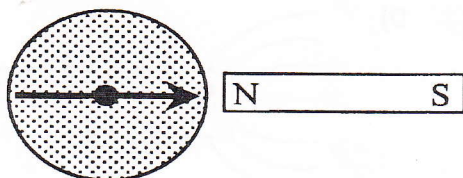
B)



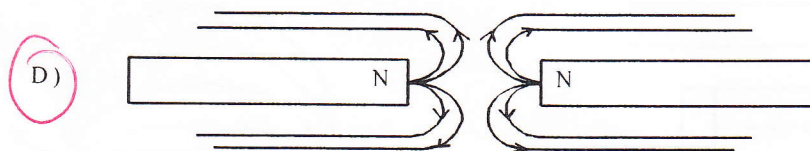
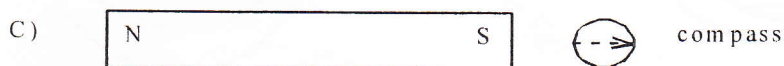
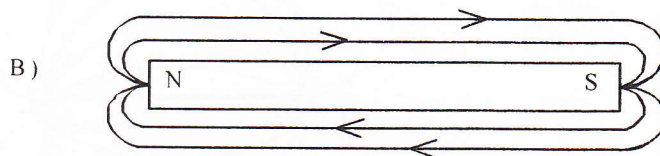
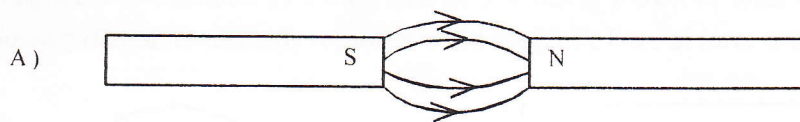
C)



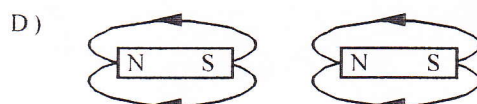
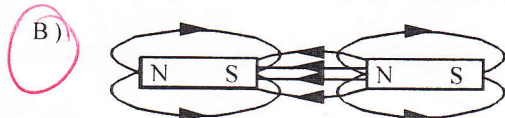
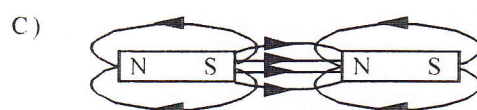
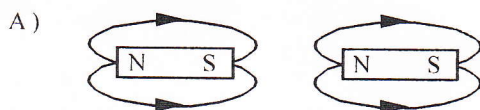
D)



5. Among the following diagrams, which correctly illustrates a magnetic field?



6. Two magnets are placed end to end. Which diagram correctly illustrates the magnetic fields around these magnets?



7. A magnet creates what is known as a magnetic field. A compass can be used to show the magnetic field. Which of the following statements are true?

1. If a bar magnet is broken in two, each piece will only have one magnetic pole.
2. Like poles repel each other.
3. The needle of a compass is a small magnet.
4. Aluminum can be easily magnetized.