

# PHYSICS WORKSHEET

## UNIT 1 – MAGNETISM

Name : \_\_\_\_\_

Date : \_\_\_\_\_

1. Find out whether these magnets will *attract* or *repel*



[ attract/ Repel ]



[ attract/ Repel ]



[ attract/ Repel ]



[ attract/ Repel ]

2. A compass uses magnetism. Which way does a compass always point ?

East

West

North

South



3. Tick the metals that magnets can pick up :

Gold

Cobalt

Iron

Copper

Aluminium

Silver

Steel

Nickel

4. Complete the sentences using the word bank below

Repel    north    attract    south    pull    push

Magnets have two \_\_\_\_\_. One is called the \_\_\_\_\_. pole and the other is the \_\_\_\_\_ pole. When opposite poles are near one another, they \_\_\_\_\_ together. This means the two poles \_\_\_\_\_. When two of the same poles are near one another, they \_\_\_\_\_ away from one another. This means the two poles \_\_\_\_\_ each other.

5. If we do an investigation on different magnets to see how far away they were before they picked up a paper clip, what would we find out about the magnets?

How far is the paper clip

How strong is the magnet

6. Here are the result of the magnet investigation

a. Which is the strongest magnet ?

\_\_\_\_\_

b. Which is the weakest magnet ?

Magnet	Distance when attracted paperclip
Medium sized horseshoe magnet	6 cm
Large bar magnet	10 cm
Fridge magnet	2 cm
Magnet	Distance when attracted paperclip

7. Name each type of magnet below



a



b



c



d



e



f

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Circular magnet  
Cylindrical magnet  
Bar magnet

U-shaped magnet  
Horseshoe magnet  
Ring magnet

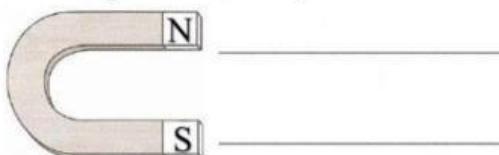
8. Write True (T) for the correct answer, and False (F) for the wrong sentences:

- Some magnets have just one magnetic pole [ ]
- Magnets can interact without touching [ ]
- Magnets produce an area of magnetic force called a magnetic field [ ]
- Iron , nickel, steel and cobalt are magnetic materials [ ]

9. Choose the right answer ;

- A magnet can attract any material that is made from \_\_\_\_\_  
{ wood      plastic      iron }
- An example of non – magnetic material is \_\_\_\_\_  
{ paperclip      glass cup      steel can }
- Magnetic force between two magnets gets weaker with increase in \_\_\_\_\_ between them  
{ Distance      attraction      metals }
- Maglev Trains use magnet to reduce \_\_\_\_\_ between the train and the tracks.  
{ speed      friction      gravity }
- A rectangle shaped magnet is called a \_\_\_\_\_ magnet  
{ u – shaped      bar      Ring }

10. Label the poles of the magnet below



11. Amira and Finda carried out a fair test to find out how many paperclips a magnet could hold. They wanted to know which magnet was the strongest. Use their table of result to answer the questions below ;

- Which magnet was the strongest ?

\_\_\_\_\_

- Which magnet was the weakest ?

\_\_\_\_\_

Type of magnet	Number of paperclips
circular	6
cylinder	18
horseshoe	2
bar	8
ring	10
U-shaped	3

12. How is a compass useful to us ?

- In finding the altitude of a place
- In finding only the north of a place
- In finding all the directions of a place
- In making artificial magnets

13. In which direction does a magnet always point when suspended freely ?

- South – west
- North – south
- East – west
- West – south

14. Three magnets A, B and C were dipped one by one in a heap of iron fillings. The picture shows the amount of iron fillings sticking to them. The strength of these magnets will be :

- A is the strongest, B is strong , and C is the weakest
- A is the weakest, B is strong and C is the strongest
- B is the strongest, C is strong and A is the weakest
- All magnets are equally strong

15. Where does a compass work ?

- Only in ocean or seas
- Only on land, where the earth's magnetic field is strong
- Only on high mountains
- At all the places within the earth's magnetic field