

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

## Magnetism Worksheet #1

Draw the magnetic field patterns around:

1. A bar magnet
2. A horseshoe magnet
3. Two magnets placed opposite pole to opposite pole
4. Two magnets placed like pole to like pole

See Class  
notes for Answers.

**Circle the correct answer**

6. Four circular pieces of metal were brought close to one another during a laboratory experiment. Only one of these pieces of metal is a MAGNET.

The following table shows whether or not these pieces of metal attracted one another.

Combination	Attraction	
	Yes	No
Piece 1 and piece 2		X
Piece 1 and piece 3		X
Piece 1 and piece 4		X
Piece 2 and piece 3	X	
Piece 2 and piece 4	X	
Piece 3 and piece 4		X

Which piece of metal is a magnet?

a. Piece 1

b. Piece 2

c. Piece 3

d. Piece 4

*Attracts both  
3 & 4.*

2. Four objects W,X,Y and Z were brought close together two at a time. One of these objects is magnetic, one is nonmagnetic and two are ferromagnetic. The results were as follows:

OBJECTS	RESULT
W and <input checked="" type="radio"/> X <i>X = Magnet</i>	The objects attracted each other
<input checked="" type="radio"/> X and Y	The objects attracted each other
W and Y <i>Ferromagnetic</i>	Nothing happened
X and <input checked="" type="radio"/> Z <i>← Non-magnetic</i>	Nothing happened

Which of these objects is nonmagnetic?

a. W

b. X

c. Y

d. Z