

Chapter 8: Magnets and Forces

Lesson A: Magnets and Magnetic Materials (8.1)

Name : _____

Date : _____

1. In this exercise, you will apply what you know about magnets.

Decide whether each metal in the table is magnetic or non-magnetic.

| metal | magnetic / non-magnetic |
|-----------|-------------------------|
| cobalt | |
| aluminium | |
| gold | |
| nickel | |
| copper | |
| silver | |

2. For each pair of magnets, write repel or attract.



3. Raji has two big magnets.

He puts the magnets in different positions.

Complete the sentences under each diagram.



In this position the magnets will _____.

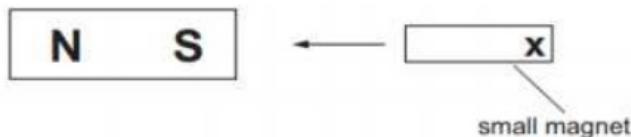


In this position the magnets will _____.

c. Raji puts a small magnet next to a big magnet.

The small magnet moves towards the big one.

Look at the small magnet. What is the pole at X? _____



4. Some objects are attracted to magnets.

Colour the objects that are attracted to magnets.

| | | |
|---------------|--------------|-------------|
| aluminium can | cobalt balls | nickel coin |
| iron nail | copper pipe | gold ring |

5. A soft drink can is made of metal, but it is not attracted to magnets. Why?

6. Fill in the blanks. Use the words in the word bank.

You may use any word once, more than once or not at all.

| | | | | | |
|--------|-----------|-----------|----------|---------|------------|
| closed | magnetism | repulsion | magnetic | bar | attraction |
| poles | south | north | repel | attract | steel |

a. A magnet can attract certain objects. Examples are pins and nails.

They are made of _____. Materials that are attracted by magnets are called _____ materials.

b. A fridge door has strip magnets down the side of the door.

These magnets help keep the door _____ firmly.

This force is called the magnetic force of _____.

c. A magnet has a north pole and a _____ pole.

d. Like poles _____ one another.

e. Unlike poles _____ one another.

f. Magnets can _____ magnetic materials such as iron, nickel and cobalt.