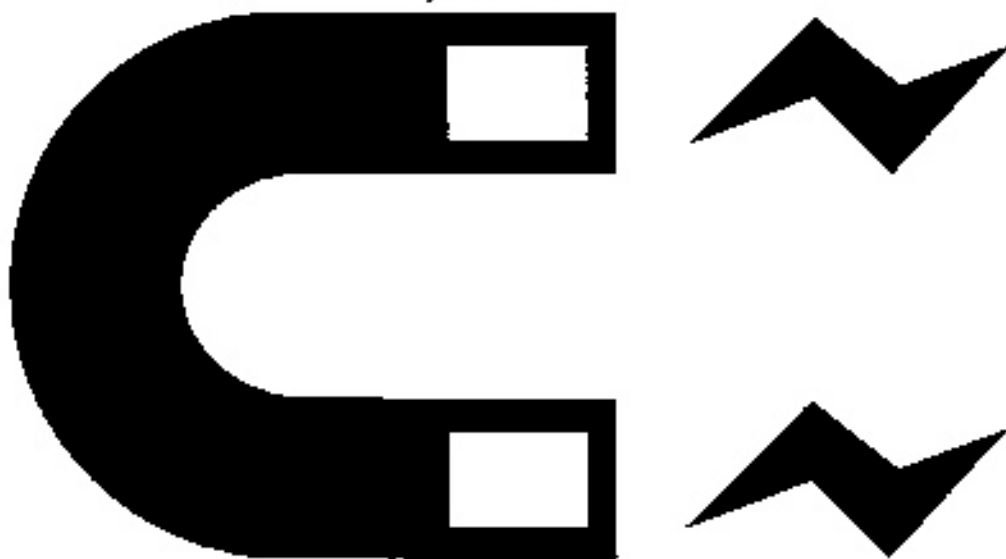


Magnetism - Magnets: Types and Uses

by ReadWorks



Magnets come in a wide variety with an equally wide variety of uses. The most common are bars or disks. Because they stick to certain metals, these magnets are used to fasten and latch things, like a cabinet door. Huge horseshoe magnets have a U shape. They are used to move iron and steel scrap. Tiny magnets on audiotape and videotape store sound and images.

Magnets are everywhere. They help to make life more convenient. They also help us to get around more quickly. For example, many electrical motors require electromagnets to run. The magnetic force that runs the motors is created when an electrical current flows through a coil of wire. Motors with electromagnets help run many household appliances. The same electromagnetic force is also used in the motors of cars, trains, and airplanes.

Magnets are so useful they're even being used to improve the health of some people. Huge magnets in a special machine can now give doctors detailed pictures within the body. The pictures help doctors find and treat problems inside the body, without having to make an incision.

People's reliance on magnets only continues to grow. In Japan, magnets are being used in some amazing new ways. For example, Japan now has a special train that runs on magnets. It literally levitates over the tracks. The magnetic force helps to provide a fast smooth ride. Hopefully, America will have a train like this very soon.

Name: _____ Date: _____

1. Which sentence best describes the main idea of this passage?
 - A. Magnets come in a wide variety with many uses.
 - B. Magnets are everywhere.
 - C. Motors with electromagnets help run many household appliances.
 - D. Tiny magnets on audiotape and videotape store sound and images.

2. Which of the following is an opinion?
 - A. Huge horseshoe magnets have a U shape.
 - B. Hopefully, America will have a train like this very soon.
 - C. Many electrical motors require electromagnets to run.
 - D. Tiny magnets on audiotape and videotape store sound and images.

3. People _____ use magnets in the home.
 - A. rarely
 - B. always
 - C. often
 - D. like to

4. According to the passage, you can tell that **convenient** means
 - A. easy
 - B. uncomfortable
 - C. difficult
 - D. solemn

5. The passage describes all of the following uses of magnets *except*
 - A. a latch for a cabinet door.
 - B. a motor for a household appliance.
 - C. a device to predict powerful storms.
 - D. a machine that shows pictures within the body.

6. How might you describe Japan's use of magnets?

7. According to the passage, how have magnets helped doctors?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Many electrical motors require electromagnets to run _____ the magnetic force that runs the motors is created when an electrical current flows through a coil of wire.

- A. despite
- B. against
- C. across
- D. since

9. Answer the following question based on the sentence below.

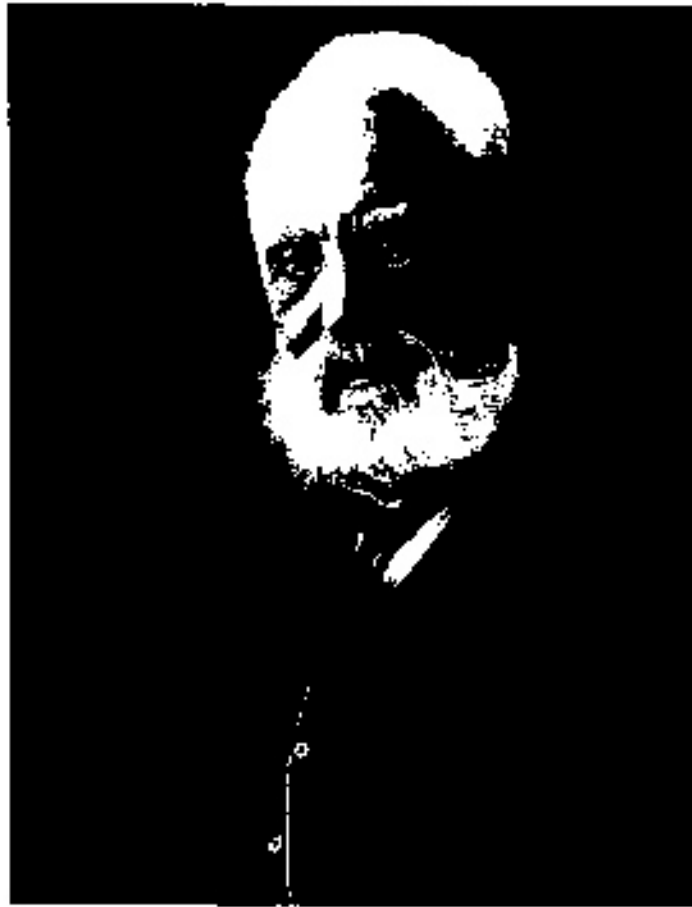
Magnets fasten and latch cabinet doors because they stick to certain metals.

In the sentence, the word magnets best answers which question?

- A. Who?
- B. What?
- C. Where?
- D. Why?

Famous Inventors - Alexander Graham Bell: You Rang?

by ReadWorks



Have you heard of Alexander Graham Bell? He invented something that you probably use every day. He invented the telephone.

Bell became interested in communication because his mother was deaf. His parents communicated with each other through sign language. He wanted to help everyone communicate better. Bell studied speech patterns and discovered that they could be sent in electric waves. In 1876, he and his partner Thomas Watson invented the telephone. The first words ever spoken over a telephone were "Mr. Watson, come here. I want to see you." Watson heard Bell clearly. Their invention worked.

It took many years before the telephone was commonly used. By the 1930s many homes had telephones.

If it were not for the invention of the telephone, we might be writing letters instead of making phone calls.

Name: _____ Date: _____

1. Bell's interest in communication began because

- A. he grew up on a farm far away from other people.
- B. he wanted to speak to his partner Watson at any time.
- C. his mother was deaf and his parents used sign language.
- D. he knew he could make a lot of money from telephones.

2. Why does the author describe the background of Bell's interest in communication?

- A. to give biographical information that affected his career as an inventor
- B. to show that the telephone was almost never invented
- C. to show why Bell needed help from Watson with the invention
- D. to tell the story of how Bell discovered electric waves

3. Why does the author most likely include the information that Bell discovered that speech patterns could be sent in electric waves?

- A. to show that Bell studied many scientific issues besides communication
- B. to say that Bell was actually not the first person to invent the telephone
- C. because that information helped Bell and Watson invent the telephone
- D. because Bell only had a small part in the invention, and Watson did the rest

4. Read the following sentences: "It took many years before the telephone was commonly used. By the 1930s many homes had telephones."

The word **commonly** means

- A. in a polite manner
- B. no longer, not anymore
- C. for business purposes
- D. often, by many people

5. What is the main purpose of this passage?

- A. to explain why telephones were not very popular for years after their invention
- B. to describe the invention of the telephone and the man who invented it
- C. to tell the story of the childhood of Alexander Graham Bell
- D. to show how many important inventions are only invented by accident

6. What were the first words ever spoken on a phone?

7. Explain why the fact that Bell's mother was deaf had an impact on his career as an inventor.

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

Bell became interested in communication _____ his mother was deaf.

- A. before
- B. so
- C. even though
- D. because