

L41 — Magnetic Fields

Read Aloud Passage

The magnetic field is the invisible region around a magnet where its force can act. Field lines run from the North pole to the South pole. Where they bunch up close together, the field is strongest.

A magnetic field is a three-dimensional shape surrounding a magnet on every side, not a flat pattern. A magnet's field is strongest right at its surface and fades quickly with distance, until it's too weak to feel.

Two magnetic fields combine into one: they strengthen each other when opposite poles face, and push apart when matching poles face. Moving electric current also creates a magnetic field, which is how an electromagnet works, and it can be switched on and off.

Activity 1

Match each word from the word box to its definition. Write the word in the blank.

Word Box: *magnetic field field line magnetic shielding electromagnet*

1. ____ — The invisible region surrounding a magnet where its force can pull or push on magnetic materials.
2. ____ — A line tracing the direction of a magnetic field, running from the North pole to the South pole. Bunched lines mean a stronger field.
3. ____ — Using thick iron or steel to redirect a magnetic field around sensitive equipment, weakening the field that reaches it.
4. ____ — A magnet made by coiling wire carrying electric current around iron, which can be switched on and off by connecting or disconnecting the current.

Activity 2

Each phrase below is a fragment, not a full sentence. Add what is missing to make a complete sentence.

1. *the invisible region surrounding a magnet where its force can pull or push on magnetic materials*

2. *running from the North pole to the South pole*

Activity 3

Combine the short sentences below into one smooth sentence.

1.

- Field lines run from the North pole to the South pole.
- The magnetic field is the invisible region around a magnet where its force can act.

Combined sentence:

2.

- A magnetic field is a three-dimensional shape surrounding a magnet on every side, not a flat pattern.
- A magnet's field is strongest right at its surface and fades quickly with distance, until it's too weak to feel.

Combined sentence:

Activity 4

Each sentence below is a run-on. Rewrite it correctly.

1. The magnetic field is the invisible region around a magnet where its force can act field lines run from the North pole to the South pole.

Correction:

2. A magnetic field is a three-dimensional shape surrounding a magnet on every side, not a flat pattern a magnet's field is strongest right at its surface and fades quickly with distance, until it's too weak to feel.

Correction:
