

# Find the magnetic field worksheet

**Power Smart** for Schools

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

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

## Materials

- Piece of white paper
- Tape
- 1 bar magnet
- Container of iron filings and a spoon
- Pencil

## Safety

Iron filings must be kept away from the eyes and mouth. Try not to touch the filings (keep them on the paper) and wash your hands after the activity.

## Prediction

What do you think will happen when you put loose iron filings near a magnet?

---

---

---

---

---

Why do you think this will happen?

---

---

---

---

---

## Procedure

- Tape a bar magnet to the centre of the piece of paper so it stays in place.
- Turn the paper over so that the magnet is underneath.
- Carefully sprinkle some of the iron filings on the paper around the area of the magnet. Try to keep the filings on the paper.
- Gently shake the paper and observe what happens to the iron filings.
- Record your observations on the next page and answer the questions that follow.
- Carefully remove the magnet and shake the filings back into the container.

## Observations

Make a sketch to show what you see.

## Analysis and conclusions

1. Was your prediction accurate? Why or why not?

---

---

---

---

---

---

---

---

2. Why do you think the iron filings moved the way they did?

---

---

---

---

---

---

---

---

3. What questions do you have about magnetism and how it relates to the real world?

---

---

---

---

---

---

---

---