

# Find the magnetic field answer key

## Power Smart for Schools

### Prediction

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

*Predictions will vary.*

I think they will line up in a straight line.

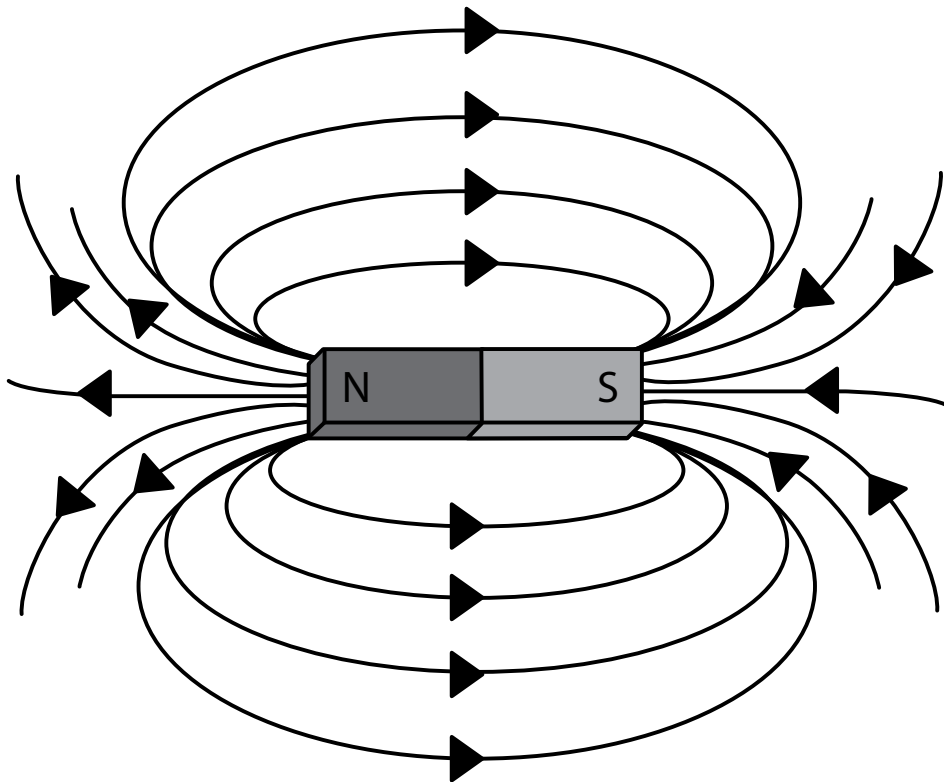
I don't think anything will happen.

I think they will arrange themselves in a rounded pattern.

### Observations

Make a sketch to show what you see.

The iron filings have made curved shapes around the magnet. At the ends of the magnet, the filings branch out and curved back around towards the magnet.



## Analysis and conclusions

Was your prediction accurate? Why or why not?

*Answers will vary.*

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

*When a magnet and iron filings are placed close together, the atoms in the iron filings line up with the magnetic field from the magnet and each iron filing becomes like a small bar magnet. The iron filings line up parallel to a magnetic field, making the pattern of the field visible.*

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

*Questions will vary.*