

Y3 Magnetic Poles

KS2 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

A north pole faces a south pole. Predict what will happen.

Step 1 · Are the poles the same or different?

Different (N and S)

Step 2 · What is the rule for different poles?

Different poles attract

Answer: They will attract — pull together.

Check: N-S or S-N → attract.

2. Now try one with the steps

A south pole faces a south pole. Predict what will happen.

Step 1 · Are the poles the same or different?

Step 2 · What is the rule for the same poles?

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. How many poles does a bar magnet have?

2. What are the two poles of a magnet called?

3. What does 'repel' mean?

4. What happens when a north pole faces a north pole?

5. What happens when a north pole faces a south pole?

6. What happens when a south pole faces a south pole?

7. Where is a bar magnet's pull strongest?

8. Finish the rule: The same poles ... ; different poles ...

9. Two magnets are placed: N-S N-S. Which poles are facing? Will they attract or repel?

10. Two magnets are placed: S-N N-S. Will they attract or repel?

11. A bar magnet picked up 8 paper clips at each end and 0 in the middle. How many did it pick up altogether?

12. The labels have rubbed off a magnet. How could you find out which end is north, using a magnet that is labelled?

13. Why is repelling a better test than attracting for finding a pole?

14. Sanjay floats ring magnets on a pencil. One ring snaps down onto the one below. What has he done?

4. Before you hand it in

Two north poles attract because they are 'friends'.

The same poles repel; different poles attract.

Looking at the far ends of the magnets to predict.

Find the two ends that are closest together, then use the rule.

A magnet is equally strong all along it.

A bar magnet's pull is strongest at its poles.

If you cut a magnet in half, you get a north piece and a south piece.

Every magnet always has two poles, a north and a south.