

Name _____

Discovering Magnet Magic: Finding the North and South Poles

Short Answer Key

1. A compass helps identify the north and south poles of a magnet because it contains a small magnet that aligns itself with the Earth's magnetic field. When you place a magnet near a compass, the end of the magnet that attracts the north end of the compass needle is the south pole of your magnet.
2. When you bring the north pole of one magnet close to the south pole of another, they attract each other due to the magnetic forces between opposite poles. They do not repel each other.
3. Iron filings can be used to visualize the magnetic field around a magnet by aligning themselves in curved lines, following the magnetic field lines. The pattern of iron filings reveals the shape and direction of the magnetic field surrounding the magnet.
4. If a floating magnet aligns itself with one end pointing north, that end represents the north pole of the magnet. The opposite end, which points south, represents the south pole.
5. Understanding the concept of magnetic poles and their behavior is important in everyday life because it allows us to navigate using compasses, develop and use various magnetic technologies, and understand natural magnetic phenomena.

