

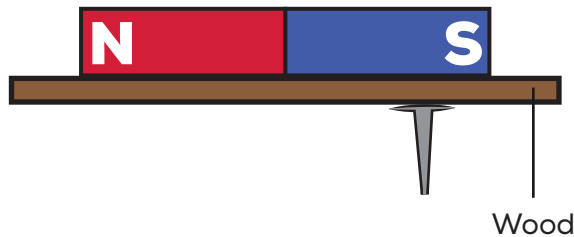
COMPLETE CONCEPT INTEGRATION™ SCIENCE

# 3 RULES OF MAGNETISM

**1 THE MAGNET'S MAGNETISM ACTS AT A DISTANCE.**



**2 THE MAGNET'S MAGNETISM CAN PASS THROUGH NON-MAGNETIC MATERIALS.**



**3 MAGNETS ATTRACT MAGNETIC MATERIALS.**

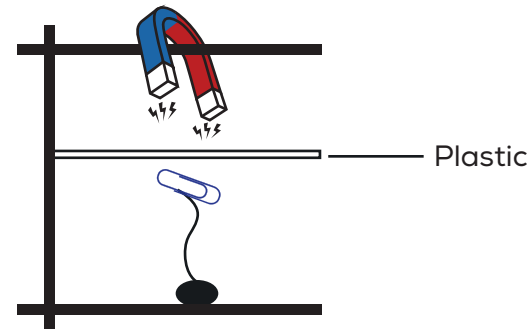
**Magnetic materials are:**

- Steel
- Iron
- Nickel
- Cobalt



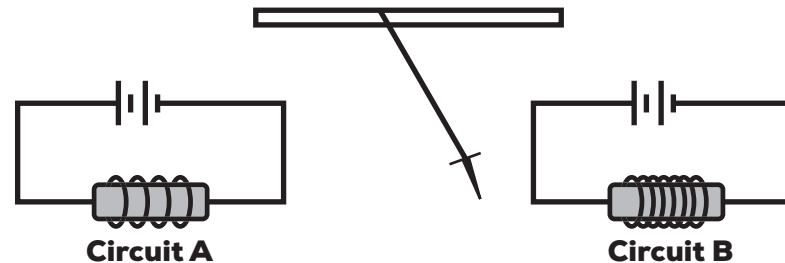
**HOW TO USE 3 RULES OF MAGNETISM TO ANSWER QUESTIONS?**

**1) Why is the paper clip floating in the air?**



The U-shape magnet's magnetism **acts at a distance** and can **pass through the plastic**, which is **made of a non-magnetic material**, to attract the paper clip, which is made of magnetic material.

**2) Why did the steel nail move towards the iron rod in circuit B?**



**Tip: Comparison terms**

There are **more** coils of wire around the iron rod in Circuit B. Thus, the iron rod in Circuit B becomes a **stronger** electromagnet and its magnetism **acts at a distance** to attract the steel nail, which is **made of a magnetic material** with a **greater** magnetic force of attraction.