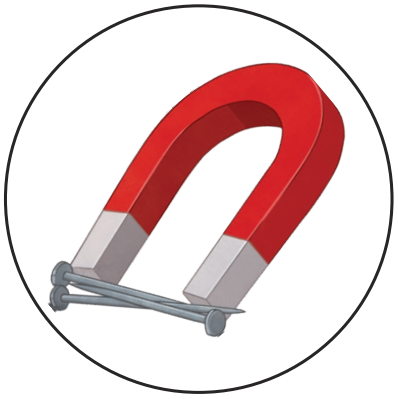
Magnets



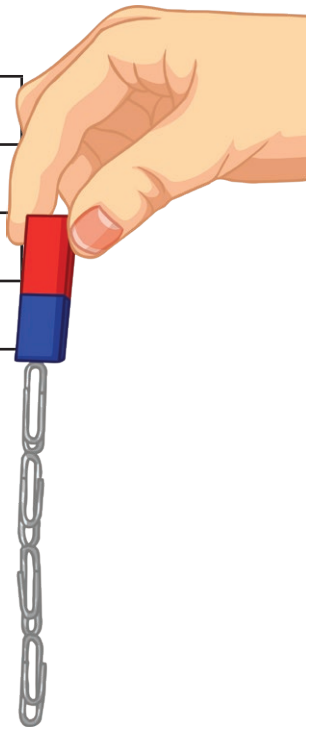
Magnetism is an invisible force. All magnets have a north and a south pole. Like poles repel – this means that the two poles will push away from each other. Opposite poles attract – this means that the invisible magnetic force between the magnets will force the poles together. Not all metals are magnetic. Iron, nickel and cobalt are the three magnetic metals. The earth has a magnetic inner core made of iron.

1. **Tick** which **two** metals will be attracted towards the magnet.

iron	☐	tin	☐
copper	☐	steel	☐
lead	☐	aliminium	☐

2. Describe what may happen to the magnets as one is moved closer to the other.

3. Beau and Jenson were investigating the strength of three magnets by finding out how many steel paperclips each magnet could hold. They recorded their results in the table below.



Type of Magnet	Number of Paperclips It Can Hold
horseshoe	2
bar	9
round	6

Using the results table, suggest which magnet was the strongest.

Explain how you decided which magnet was the strongest.

Magnets Answers

1. **Tick** which **two** metals will be attracted towards the magnet.

iron	✓	tin	
copper		steel	✓
lead		aliminium	

2. Describe what may happen to the magnets as one is moved closer to the other.
   The magnets will move apart as they will repel each other because like poles repel.

3. Using the results table, suggest which magnet was the strongest.
   The magnet that was the strongest was the bar magnet.

   Explain how you decided which magnet was the strongest.
   This is because it held the most paperclips.