

METALS AND NON-METALS

Key Concepts

- Metals are shiny, conduct electricity, and are malleable.
- Non-metals are dull, poor conductors, and brittle.



Key Facts to Remember

- Metals are found on the left side of the periodic table and are generally good conductors of heat and electricity, malleable (can be hammered into shape), ductile (can be drawn into wires), and shiny.
- Non-metals are located on the right side of the periodic table and are usually brittle, dull, and poor conductors of heat and electricity.
- Many non-metals, such as oxygen and nitrogen, are essential for life.
- Alloys are mixtures of metals (or metals combined with non-metals) designed to improve properties. Examples include steel (iron and carbon) and brass (copper and zinc).
- Metals tend to lose electrons in reactions, forming positive ions, while non-metals gain electrons to form negative ions.

Quick Questions

1. Name two properties of metals.
2. Is sulfur a metal or non-metal?
3. What is an alloy?
4. Give an example of an everyday use of metals.
5. Why are metals good conductors of electricity?
6. Name a property of non-metals that makes them useful in insulation.
7. How do alloys improve the properties of pure metals?
8. What is the difference between malleability and ductility in metals?

Fun Fact

Copper is used in coins because it doesn't rust!