

9. Metals

Starter Quiz · 课前小测

IGCSE Chemistry

Name: _____ Score: _____

1. Metals conduct electricity because they have:

- ☐ free (delocalised) electrons
- ☐ free ions
- ☐ covalent bonds
- ☐ no electrons

2. Copper is used for electrical wiring because it is an excellent:

- ☐ conductor of electricity
- ☐ insulator
- ☐ magnet
- ☐ fuel

3. An alloy is:

- ☐ a mixture of a metal with other elements
- ☐ a pure metal
- ☐ a non-metal
- ☐ a type of acid

4. Which of these metals is the most reactive?

- ☐ potassium
- ☐ iron
- ☐ copper
- ☐ gold

5. Rusting of iron requires which two things? (Select all that apply.)

- ☐ water
- ☐ oxygen
- ☐ nitrogen
- ☐ sunlight

Tick every correct option.

6. A rock containing enough of a metal compound to extract is called an:

- ☐ ore

☐ alloy

☐ acid

☐ isotope

7. Which are typical properties of metals? (Select all that apply.)

- ☐ shiny
- ☐ malleable
- ☐ good heat conductors
- ☐ poor electrical conductors

Tick every correct option.

8. Iron is strong but a drawback is that it rusts.

☐ True ☐ False

9. Most metals have high melting points.

☐ True ☐ False

10. A metal's _____ properties (such as strength and conductivity) decide its uses.

IGCSE Chemistry

1. **free (delocalised) electrons**

Mobile electrons carry the current.

2. **conductor of electricity**

Copper conducts electricity very well.

3. **a mixture of a metal with other elements**

Alloys are mixtures based on a metal.

4. **potassium**

Potassium is near the top of the reactivity series.

5. **water; oxygen**

Both water and oxygen are needed.

6. **ore**

Metals are extracted from their ores.

7. **shiny; malleable; good heat conductors**

Metals are good electrical conductors, not poor ones.

8. **True**

Rusting is a downside of using iron.

9. **True**

Strong metallic bonding gives high melting points.

10. **physical**

Physical properties match the metal to the job.