

Chemical Changes Exercises

Metals and oxides

A metal will react with oxygen to form a metal oxide. *Complete the blank spaces below:*

1. magnesium + oxygen → _____

2. copper + oxygen → _____

3. zinc + _____ → zinc oxide

4. _____ + oxygen → calcium oxide

Metals and water

Reactive metals will react in water to produce a metal hydroxide and hydrogen gas.

Complete the blanks below:

5. lithium + water → lithium hydroxide + _____

6. sodium + _____ → sodium hydroxide + hydrogen

7. _____ + water → calcium _____ + hydrogen

8. potassium + water → _____ + _____

Metals and acid

Metals will react with acid to form a metal salt and hydrogen

The name of the salt depends on the acid used.

Select the correct salt name from the acid used in the reaction:

Acid used	Salt name after reaction
Hydrochloric acid	
Sulfuric acid	
Nitric acid	

Fill in the blanks below:

9. zinc + hydrochloric acid → zinc chloride + _____

10. sodium + sulfuric acid → _____ + hydrogen

11. calcium + _____ acid → calcium nitrate + _____

12. _____ + _____ → magnesium chloride + hydrogen