



Rosary School - Marj Elhamam
Worksheet (1)

Name: Answers
Grade: 8th (A, B, C, D)

Date: 9/2025
Subject: Chemistry

Question one:

1 a Describe what you would see if a small piece of sodium was added to a trough of water.

fizzing/bubbles, melts into a silver ball

b Write the word equation for the reaction of sodium with water.

Sodium + water → Sodium hydroxide + hydrogen

2 a Describe what you would see if a piece of zinc was added to dilute hydrochloric acid in a test tube.

bubbles / fizzing.

b Write the word equation for the reaction between zinc and hydrochloric acid.

Zinc + hydrochloric acid → Zinc chloride + hydrogen

3 a Describe what you would see if a piece of magnesium ribbon was placed in the flame of a Bunsen burner.

magnesium burns, bright white light, white powder left.

b Explain why the reaction in a is an oxidation reaction.

magnesium gains oxygen.

4

Separate samples of three metals, L, M and N, were added to water, added to dilute hydrochloric acid, and heated in air. The results are shown in the table.

Metal	Added to water	Added to dilute hydrochloric acid	Heated in air
L	no reaction	no reaction	reaction
M	reaction	reaction	reaction
N	no reaction	reaction	reaction

Write the metals in order of reactivity, with the most reactive first.

Most reactive M

N

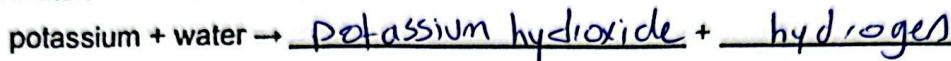
Least reactive L

Question two:

1 Potassium, sodium and calcium react with cold water to form metal hydroxides and a gas.

hydrogen	oxygen	potassium hydroxide	potassium sulfate
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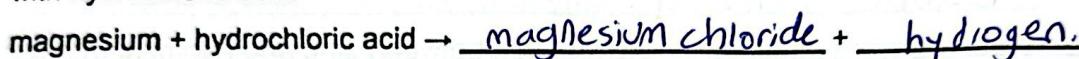
Select substances from the box to complete the word equation for the reaction of potassium with water.



2 Magnesium, zinc and iron react with dilute acids to form a salt and a gas.

hydrogen	oxygen	magnesium chloride	magnesium oxide
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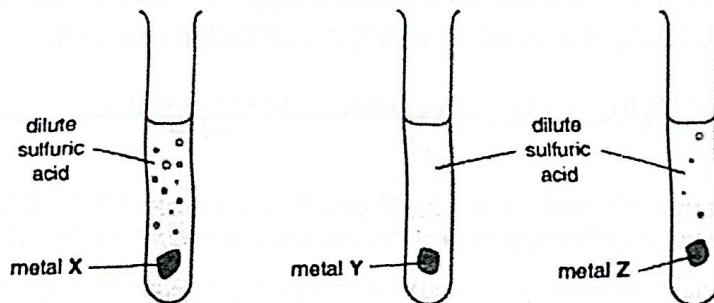
Select substances from the box to complete the word equation for the reaction of magnesium with hydrochloric acid.



3 Write the word equation for the reaction between zinc and oxygen to form zinc oxide.



4 Three metals, X, Y and Z, were placed in separate test tubes of dilute sulfuric acid. The results are shown below.



Use the information in the diagram to put the metals in order of reactivity.

Most reactive X

Z

Least reactive Y