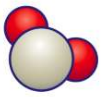
Chemical reactions

Sci H

Name _____ Class _____ Date _____

1 What type of chemical reaction is shown in the diagram below?

$2H_2 + O_2 \longrightarrow 2H_2O$



A double replacement
B synthesis
C decomposition
D single replacement

2 The total mass of **oxygen** on **each side** of this chemical equation is _____.

$2H_2 + O_2 \longrightarrow 2H_2O$

A 4 amu
B 16 amu
C 32 amu
D 64 amu

3 In the reaction shown below, the **mass** of the reactant on the left **equals** the mass of the reactants on the right. What law is illustrated by this fact?

$2H_2 + O_2 \longrightarrow 2H_2O$

A Newton's first law

4 What **type** of chemical reaction is shown in the reaction below?

$CaCl_2 + F_2 \longrightarrow CaF_2 + Cl_2$

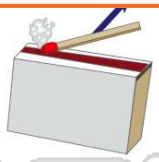
A single replacement
B double replacement

5

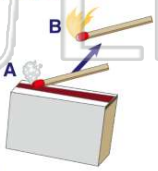
7

A to provide a reactant
B to soften the match
C to provide activation energy
D to add another reactant

B sound
C change of shape
D change in mass



9 What **two terms** accurately describe the two steps shown here from A to B?

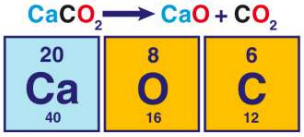


A endothermic, then exothermic
B only physical changes for both steps
C exothermic for both steps
D activation energy, then exothermic

10 The equation below shows how $CaCO_3$ decomposes into CaO and CO_2. How many **grams** of $CaCO_3$ must be broken down in order to produce **112 grams** of CaO and **88 grams** of CO_2?

$CaCO_2 \longrightarrow CaO + CO_2$

A 112
B 24
C 200
D 224



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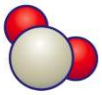
ANSWER KEY

What type of chemical reaction is shown in the diagram below?

$2H_2 + O_2 \rightarrow 2H_2O$



b

A double replacement
B synthesis
C decomposition
D single replacement

The total mass of **oxygen** on **each side** of this chemical equation is _____.

$2H_2 + O_2 \rightarrow 2H_2O$

c

A 4 amu
B 16 amu
C 32 amu
D 64 amu

In the reaction shown below, the **mass** of the reactant on the left **equals** the mass of the reactants on the right. What law is illustrated by this fact?

$2H_2 + O_2 \rightarrow 2H_2O$

b

A Newton's first law
B law of conservation of mass
C Pascal's law
D

What **type** of chemical reaction is shown in the reaction below?

$CaCl_2 + F_2 \rightarrow CaF_2 + Cl_2$

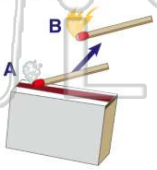
a

A single replacement
B double replacement
C synthesis

C to provide activation energy
D to add another reactant

D change in mass

What **two terms** accurately describe the two steps shown here from A to B?



d

A endothermic, then exothermic
B only physical changes for both steps
C exothermic for both steps
D activation energy, then exothermic

The equation below shows how $CaCO_3$ decomposes into CaO and CO_2. How many **grams** of $CaCO_3$ must be broken down in order to produce **112 grams** of CaO and **88 grams** of CO_2?

$CaCO_2 \rightarrow CaO + CO_2$

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A 112
B 24
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