Chemical Reactions

CHEM

Name_____ Class_____ Date_____

1 **Atoms** in a molecule are **held together by**

A the nucleus
B neutrons and electrons
C chemical bonds
D glue

2 Which of the following represents a **balanced** reaction?

A $N_2 + H_2 \rightarrow 2NH_3$
B $NaCl \rightarrow 2Na + Cl_2$
C $2Mg + Cl_2 \rightarrow MgCl_2$
D $2K + Br_2 \rightarrow 2KBr$

3 What has taken place in this picture?

A a chemical reaction

4 What is the **difference** between a **synthesis reaction** and a **decomposition reaction**?

A A synthesis reaction has one product and a

5

7

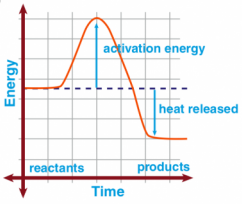
A lower the temperature of the reactants
B raise the concentration of the reactants
C crush the reactants so they are in powdered form
D add a catalyst to the reactants

active metal?

A synthesis
B decomposition
C single replacement
D combustion

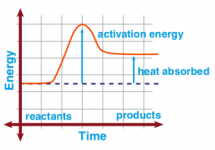
9 The graph below plots the **energy levels** of a **chemical reaction**. What is a **correct** statement for this reaction?

A it is exothermic
B it is endothermic
C it is neither exothermic nor endothermic
D it requires no activation energy



10 What evidence is there that this graph represents an **endothermic reaction**?

A heat was released
B heat was absorbed
C the products finished with less energy than the reactants
D the products finished with the same energy as the reactants



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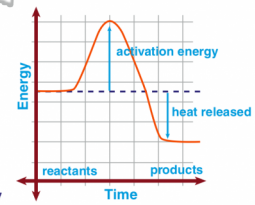

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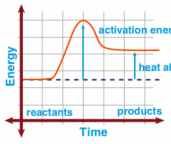

B