



Chemistry

Name: _____

Section _____

ORGANIC REACTIONS WS

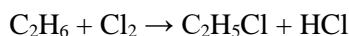
Date: _____

Directions (1-7): For each statement or question, choose the word or expression that, of those given, best completes the statement or answers the question.

- 1 Which formula correctly represents the product of an addition reaction between ethene and chlorine?

(1) CH_2Cl_2 (3) $\text{C}_2\text{H}_4\text{Cl}_2$
(2) CH_3Cl (4) $\text{C}_2\text{H}_3\text{Cl}$

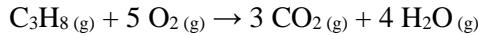
- 2 Given the equation:



This reaction is best described as

- (1) addition involving a saturated hydrocarbon
(2) addition involving an unsaturated hydrocarbon
(3) substitution involving a saturated hydrocarbon
(4) substitution involving an unsaturated hydrocarbon

- 3 Given the balanced equation representing a reaction:



The type of reaction represented is

- (1) addition (3) combustion
(2) fermentation (4) esterification

- 4 The reaction that joins thousands of small, identical molecules to form one very long molecule is called

(1) esterification (3) polymerization
(2) fermentation (4) substitution

- 5 Which reaction results in the production of soap?

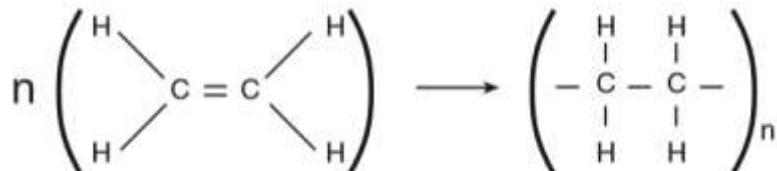
(1) esterification (3) polymerization
(2) fermentation (4) saponification

- 6 The reaction between an organic acid and an alcohol produces

(1) an aldehyde (3) an ether
(2) a ketone (4) an ester

- 7 Which type of reaction is represented by the equation below?

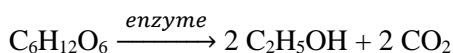
Note: n and n are very large numbers equal to about 2000.



- (1) esterification (3) saponification
(2) fermentation (4) polymerization

Directions (8-13): Answer the following questions based on your knowledge of chemistry.

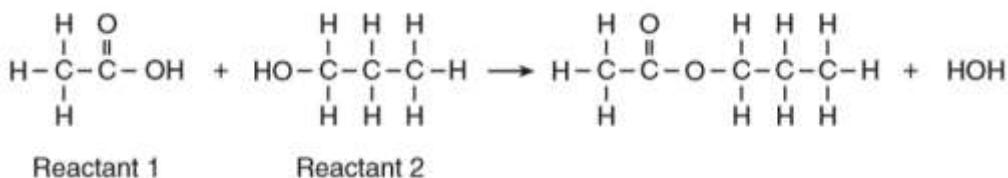
- 8 Given the unbalanced equation:



Identify the type of reaction represented. _____

Base your answers to questions 9 through 11 on the information below.

Many artificial flavorings are prepared using the type of organic reaction shown below.



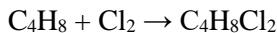
- 9 What is the name of this organic reaction? _____

- 10 To what class of organic compounds does reactant 2 belong? _____

- 11 In the space provided below, draw the structural formula of an isomer of reactant 2.

Base your answers to questions 12 and 13 on the information below.

Given the reaction between 1-butene and chlorine gas:



- 12 Which type of chemical reaction is represented by this equation? _____

- 13 In the space provided below, draw the structural formula of the product 1,2-dichlorobutane.