

DATE:

NAME: Key

CLASS:

TOPIC 8

BLM 2-16

VOCABULARY CHECK

# Rates of Reactions

Goal • Review your understanding of Topic 8.

## What to Do

Use the clues to fill in the blanks and solve the hidden word.

- 1 C a t a l y s t
- 2 c o r r o s i o n
- 3 e n z y m e s
- 4 i n h i b i t e r
- 5 m o i s t u r e
- 6 R u s t
- 7 M e t h a n e
- 8 G a l v i n i z a t i o n
- 9 i r o n o x i d e
- 10 R e a c t i o n r a t e

## Clues

1. Substances are often added to a chemical reaction to speed up a reaction. If such a substance does not get changed in the reaction, it is called a .... catalyst
  2. The oxidation of metals or rocks in the presence of air and moisture corrosion
  3. Natural catalysts such as those in the saliva in your mouth are known as.... enzymes
  4. This slows down a reaction inhibitor
  5. Computer equipment is often shipped with a small package of desiccants. Silica gel is a desiccant used to absorb .... from the air. moisture
  6. <sup>Product</sup> ~~Type of corrosion~~ Rust
  7. CH<sub>4</sub> methane
  8. Coating metals with a thin layer of zinc galvanization
  9. Fe<sub>2</sub>O<sub>3</sub> iron oxide
  10. The measure of how fast a reaction occurs is known as the .... Reaction Rate
- HIDDEN WORD Combustion

DATE:

NAME:

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CLASS:

TOPIC 8

BLM 2-18

ASSESSMENT

## Topics 7-8 Test

**Goal** • Test your understanding of Topics 7 and 8.

## True and False

Write true or false on the line in front of each statement.

- |          |  |        |
|----------|--|--------|
| <u>F</u> | 1. Aluminum oxidizes quickly.  | sulfur |
| <u>F</u> | 2. Coal is a chemical mixture of carbon, silicon, and other elements.              |        |
| <u>T</u> | 3. Electrophoresis is a technique of separating ions.                              |        |
| <u>T</u> | 4. Proteases are a group of enzymes.   |        |
| <u>F</u> | 5. The combustion of coal produces coal, gas, and oil.                             |        |
| <u>F</u> | 6. Endothermic reactions give off heat and light.                                  |        |
| <u>T</u> | 7. Catalysts do not get changed during a chemical reaction.                        |        |
| <u>T</u> | 8. Inhibitors slow down a chemical reaction.                                       |        |
| <u>T</u> | 9. Symbols are used in chemical reactions to indicate the state of matter created. |        |
| <u>F</u> | 10. Enzymes are manufactured by chemists.  |        |

## Fill in the Blanks

Fill in the correct answer in the following sentences. Be sure to spell the words correctly.

11. The chemical name for rust is iron oxide and the chemical equation for the reaction is  $Fe(s) + O_2(g) \rightarrow Fe_2O_3(s)$ .
12. The process of coating metals with a thin layer of zinc is called galvanization.
13. The process of electroplating uses the chemical reaction of electrolysis.
14. Write the chemical reaction for: propane + oxygen  $\rightarrow$  carbon dioxide + water + energy (heat)  
 $C_3H_8(g) + O_2(g) \rightarrow CO_2(g) + H_2O(g) + \text{heat}$
15. Name two conditions that may increase the rate of corrosion of a metal:  
 (a) more moisture (b) more oxygen
16. Chemical reactions can be indicated by a change in colour, temp, or products.  
odour
17. Write the word equation for this reaction:  $2Mg(s) + O_2(g) \rightarrow 2MgO(s) + \text{light}$   
2 molecules of magnesium + oxygen  $\rightarrow$  2 molecules of magnesium oxide
18. When baking soda is used in baking cookies, the two gases  $CO_2(g)$  and  $H_2O(g)$  are responsible for puffing up the cookies.
19. Hair can be bleached using the compound hydrogen peroxide.  $H_2O_2$
20. Smog is created when sunlight reacts with pollutant chemicals produced by burning fuels.

DATE:

NAME: *Key*

CLASS:

UNIT 2

BLM 2-19

ASSESSMENT

## Unit 2 Test

**Goal** • Test your understanding of Topic 2, Matter and Chemical Change.

### Matching

Match the phrase in column A with the term in column B. Write the letter in the blank at left.

A

G

H

K

C

D

E

A

F

B

1. Location of the neutron in the atom
2. A positive, subatomic particle
3. The number of protons in a nucleus
4. Results from shared electrons
5. Formed by the attraction of opposite charges
6. Physical property
7. Chemical property
8. A halogen
9. A noble gas

B

- (a) combustibility
- (b) neon
- (c) molecular compound
- (d) ionic bond
- (e) ductility
- (f) fluorine
- (g) nucleus
- (h) proton
- (i) electron
- (j) mass number
- (k) atomic number

### True or False

Circle T or F to show whether the statement is true or false.

T

F

10. Oxygen is a diatomic molecule.

T

F

11. Combustion is endothermic.

T

F

12. Chemical reactions create new elements.

T

F

13. A lithium atom has more protons than a hydrogen atom.

T

F

14. The proton is found in the nucleus of an atom.

T

F

15. A chemical bond is an attractive force between atoms.

T

F

16. Molecular compounds are produced when metal and non-metal atoms bond.

T

F

17. Catalysts decrease the speed of chemical reactions.

T

F

18. Alkali metals are unreactive.

T

F

19. John Dalton discovered the electron.

T

F

### Short Answer

Answer the questions in the space provided.

20. Give the word equation and chemical equation for a common chemical reaction.

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21. Draw WHMIS symbols for three hazardous materials below or on the back of this page. Explain the meaning of each.