

Unit 2 Review

Name: _____ Period: _____ Date: _____

Define the following terms:

1. Nucleus

check your notes for these

2. Proton

3. Neutron

4. Electron

5. Atomic number

6. Mass number

7. Isotopes

Remember to Add In

*Radiation terms: Alpha, Beta,
Gamma, Fission, Fusion*

8. Diatomic

9. Family or Group

10. Metal

13. Fill-in the missing information in the chart below:

Atom or ion	Symbol	Atomic #	# Protons	# Electrons	# Neutrons	Mass #
Atom	${}^1_1\text{H}$	1	1	1	0	1
Atom	${}^2_1\text{H}$	1	1	1	1	2
Atom	${}^3_1\text{H}$	1	1	1	2	3
Atom	${}^{86}_{38}\text{Sr}$	38	38	38	48	86
Atom	${}^{16}_8\text{O}^{2-}$	8	8	8	8	16

No
Ions

yet!

CLASSIFY each of the following as an (E) for element, (C) for compound, (HO) homogeneous mixture, or a (HE) for heterogeneous mixture. **It can only be one**

C NaCl

C water

HE salad

E silver

HO steel

HO brass

C table salt

HE sand in water

1. A Which of the following is a heterogeneous mixture?
a) oil and water b) steel c) aluminum d) air
2. B Water can be broken down into hydrogen and oxygen: thus H_2O is a(n)
a) element b) compound c) homogeneous mixture d) solution
3. B Which one of the following is a chemical property?
a) It boils at $36^\circ C$ b) It burns in air c) it is less dense than water d) It has a strong odor
4. A Which is a chemical change?
a) frying an egg b) grinding coffee c) ice freezing d) laundry drying
5. B Which of the following is **NOT** a physical property.
a) The boiling point of a certain alcohol is $78^\circ C$ c) Anthracite coal is black and shiny.
b) Gold has no stable oxide. d) A metal wire conducts electricity.
6. C Which of these is a chemical property?
a) Water boils at $100^\circ C$ c) Argon is very non reactive
b) Lithium is a soft, shiny metal d) Metals have relatively low specific heats
7. D Which of the following is an element?
a) sugar b) salt c) air d) oxygen
8. D Which of the following is a heterogeneous mixture?
a) coffee b) brass c) salt water d) Italian dressing
9. A Which of the following is a compound?
a) KCl b) K c) saltwater d) trailmix
10. B Pure water can be broken down into hydrogen gas and oxygen gas by hydrolysis: thus water is a(n)
a) element b) compound c) heterogeneous mixture d) solution
11. A Which is a heterogeneous mixture?

- a) pizza b) soda c) salt water d) none of these are

12. B Which one of the following is a chemical property?
a) It boils at 100°C b) It's flammable c) it is less dense than water d) It has a strong smell

13. A Which is a chemical change?
a) tooth decay b) grinding coffee c) ice freezing d) laundry drying

14. B Which of the following is NOT a physical property.
a) The boiling point of a certain alcohol is 78°C c) Anthracite coal is black and shiny.
b) Sugar ferments(changes) into alcohol. d) A metal wire conducts electricity.

15. B The new properties observed during a change of state are not signs of a chemical change because
a) the new properties are temporary. c) the color of the substance has changed.
b) the chemical identity of the substance has not been altered. d) a gas is not produced.

16. C Which of the following involves a chemical change?
a) boiling water c) cooking an egg
b) melting ice d) none of the above

17. C Which of the following involves no chemical change?
a) rusting iron c) boiling water
b) digesting food d) they all involve a chemical change

18. C Which of these is a chemical property?
a) ice melts at 0°C c) Neon is very non reactive
b) Sodium is a soft, shiny metal d) Water has a high specific heat