

BROWNSVILLE ISD

Curriculum Department



Science Science Streamlined

G08 Science 1-6W 1920

8th Grade

District 6 Weeks 1st
Regular English Version

Student ID

Student Name

Score(S)

DIRECTIONS

Read each question carefully. Determine the best answer to the question from the four answer choices provided. Then fill in the answer on your answer document.

- 1** A student performs a chemical reaction in the presence of her teacher during a science class. A chemical reaction occurs in an open container. During the reaction, bubbles are observed, and a gas is produced. During the post-reaction analysis, the student notices that the reactants weighed 20 grams when she started, and the product weighed 17 grams. What happened during this process?
- A** The reaction violated the law of conservation of mass.
 - B** The gas that was produced escaped.
 - C** Mass was destroyed during the chemical reaction.
 - D** Mass was created during the chemical reaction.
-
- 2** Chloe is currently watching a glass beaker undergo a chemical reaction. She then develops a chemical burn in her eyes requiring intervention. Which of the following would have prevented her from getting a burn in her eyes?
- F** Changing the container of the reaction
 - G** Wearing gloves
 - H** Wearing goggles
 - J** Moving the beaker towards her

3 Which of the following tools could be used to see what a cell looks like to the naked eye?

- A** An electron microscope
 - B** A spectrophotometer
 - C** A microscope
 - D** A magnifying glass
-

4

- Less dense than other metals
- Highly reactive with reactivity increasing moving down the group
- Largest atomic radius of elements in their period
- One valence electron

Which of the following groups of the periodic table is described in the list above?

- F** Noble gasses
- G** Halogens
- H** Alkali earth
- J** Alkali

5



Iron nail



Copper Penny



Steel paper clip



Rubber ball



Rubber band



Plastic spoon

Which of the following instruments would be ideal to measure the combined weight of a steel paper clip and a rubber ball?

- A** A graduated cylinder
- B** A thermometer
- C** A ruler
- D** A spring scale

6 Which of the following would be used to help stop a chemical burn on the hands?

- F** A pair of gloves
- G** A fire blanket
- H** Emergency shower/eyewash station
- J** A fire extinguisher

- 7 A student was learning how to heat butter on a stove in her cooking class when the pan caught on fire.



Which of the following devices could be used to quickly and safely put out a fire?

- A A pair of eye goggles
- B A fire extinguisher
- C An eyewash station
- D An apron

- 8 An atom was being analyzed by a spectrophotometer. The results of the unknown atom are the following:

- Protons: 15
- Neutrons: 30
- Electrons: 15

Which of the following is the correct mass of the atom?

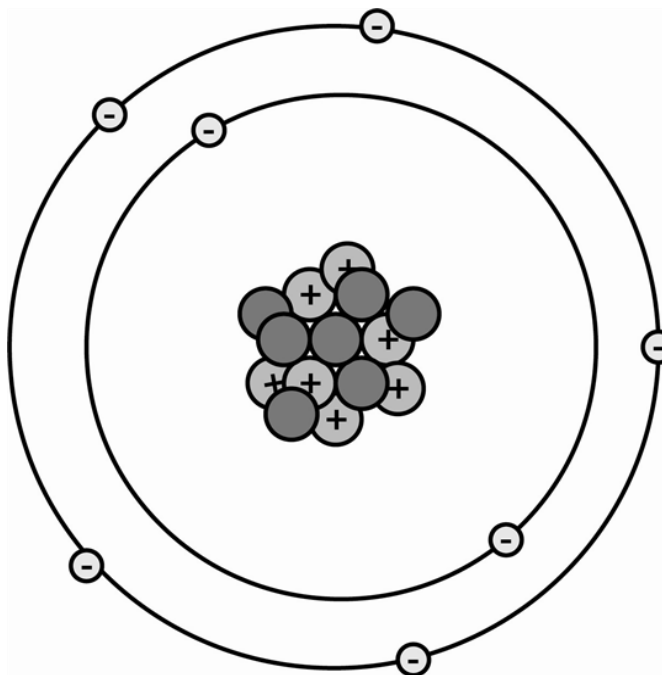
- F** 60 amu
- G** 15 amu
- H** 30 amu
- J** 45 amu

-
- 9 Students write the starting phase of matter, ending phase of matter, and note any observations in their lab notebooks. Their data table is shown below.

Experiment	Starting Phase	Ending Phase	Observations
1	Solid	Liquid	Bubbles appeared
2	Liquid	Liquid	Changed color from blue to orange
3	Gas	Gas	Blue flame emitted

Which of the following showed evidence of a chemical reaction?

- A** Experiment 1 only
- B** Experiment 1 and Experiment 2 only
- C** Experiment 3 only
- D** All three experiments showed evidence of a chemical reaction.



The portion of an atom which contains the highest mass, yet the smallest volume, would best be described as the —

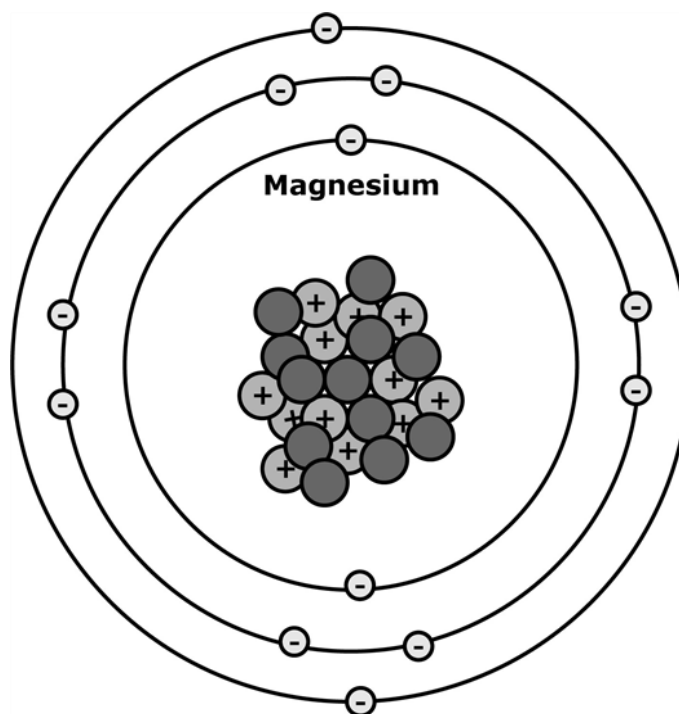
- F** orbitals
- G** protons
- H** nucleus
- J** electron cloud

- 11** Four students in Mr. Static's class were asked to name the parts of an atom that determine the atom's identity and chemical properties. The student's responses are shown in the table below.

Student	Part of Atom That Determines Properties	Part of Atom That Determines Chemical Properties
Sara	Electrons	Protons
Brittany	Neutrons	Electron cloud
Oanh	Valence electrons	Neutrons
Maggie	Protons	Valence electrons

Which student's response is correct?

- A** Maggie
- B** Sara
- C** Brittany
- D** Oanh



When studying an atomic model with the goal of identifying the element, the best way to determine an element's identity is to —

- F** determine the number of isotopes present
- G** identify the electrons in each orbital
- H** draw the electron configuration
- J** count the number of protons in the nucleus

13

Bleach (solid)	Sodium perborate	NaBO_3
Borax	Sodium tetraborate decahydrate	$\text{Na}_2\text{B}_4\text{O}_7 + 10\text{H}_2\text{O}$
Brimstone	Sulfur	S
Cream of tartar	Potassium hydrogen tartrate	$\text{KHC}_4\text{H}_4\text{O}_6$
Epsom salt	Magnesium sulfate heptahydrate	$\text{MgSO}_4 \& \text{H}_2\text{O}$
Freon	Dichlorodifluoromethane	CF_2Cl_2

Which compound in the chart above contains the largest amount of oxygen atoms?

- A Bleach
- B Borax
- C Epsom Salt
- D Cream of Tartar

14 The purpose of a subscript in a chemical formula is to —

- F describe how many atoms of an element make up the compound
- G describe how many atoms make up the compound
- H describe how many cations are needed to make a compound have an overall positive charge
- J describe how many anions are needed to make a compound have an overall negative charge

15 A student performs a chemical reaction in the presence of her teacher during a science class. A chemical reaction occurs in an open container. During the reaction, bubbles are observed, and a gas is produced. During the post-reaction analysis, the student notices that the reactants weighed 20 grams when she started, and the product weighed 17 grams. What happened during this process?

- A** The reaction violated the law of conservation of mass.
- B** The gas that was produced escaped.
- C** Mass was destroyed during the chemical reaction.
- D** Mass was created during the chemical reaction.



Student Name: _____ Student ID: _____

Teacher Name: _____ Score: _____

E G08 Science 1-6W 1920

Document ID:

Instructions: Bubble in your response for each question number that you answered.

1 (A) (B) (C) (D)

2 (F) (G) (H) (J)

3 (A) (B) (C) (D)

4 (F) (G) (H) (J)

5 (A) (B) (C) (D)

6 (F) (G) (H) (J)

7 (A) (B) (C) (D)

8 (F) (G) (H) (J)

9 (A) (B) (C) (D)

10 (F) (G) (H) (J)

11 (A) (B) (C) (D)

12 (F) (G) (H) (J)

13 (A) (B) (C) (D)

14 (F) (G) (H) (J)

15 (A) (B) (C) (D)

Etazo
by Tango Software™

Sign In

- Student
- Monitor
- Writing Scorer

Student Login

District ID:

Assessment ID:

Student ID:

Log In

Copyright 2019 Liberty Source L.P.
All Rights Reserved.

STAAR GRADE 8 SCIENCE REFERENCE MATERIALS

PERIODIC TABLE OF THE ELEMENTS

	<div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 5px;"> Atomic number — 14 Symbol — Si Atomic mass — 28.085 Name — Silicon </div> </div>																	
1	1 1A H 1.008 Hydrogen											2 2A He 4.0026 Helium						
2	3 Li 6.94 Lithium	4 2A Be 9.0122 Beryllium											5 3A B 10.81 Boron	6 4A C 12.011 Carbon	7 5A N 14.007 Nitrogen	8 6A O 15.999 Oxygen	9 7A F 18.998 Fluorine	10 Ne 20.180 Neon
3	11 Na 22.990 Sodium	12 Mg 24.305 Magnesium	3 3B Sc	4 4B Ti	5 5B V	6 6B Cr	7 7B Mn	8 8B Fe	9 8B Co	10 8B Ni	11 1B Cu	12 2B Zn	13 Al 26.982 Aluminum	14 Si 28.085 Silicon	15 P 30.974 Phosphorus	16 S 32.06 Sulfur	17 Cl 35.45 Chlorine	18 Ar 39.948 Argon
4	19 K 39.098 Potassium	20 Ca 40.078 Calcium	21 Sc 44.956 Scandium	22 Ti 47.867 Titanium	23 V 50.942 Vanadium	24 Cr 51.996 Chromium	25 Mn 54.938 Manganese	26 Fe 55.845 Iron	27 Co 58.933 Cobalt	28 Ni 58.693 Nickel	29 Cu 63.546 Copper	30 Zn 65.38 Zinc	31 Ga 69.723 Gallium	32 Ge 72.630 Germanium	33 As 74.922 Arsenic	34 Se 78.971 Selenium	35 Br 79.904 Bromine	36 Kr 83.798 Krypton
5	37 Rb 85.468 Rubidium	38 Sr 87.62 Strontium	39 Y 88.906 Yttrium	40 Zr 91.224 Zirconium	41 Nb 92.906 Niobium	42 Mo 95.95 Molybdenum	43 Tc 98.906 Technetium	44 Ru 101.07 Ruthenium	45 Rh 102.91 Rhodium	46 Pd 106.42 Palladium	47 Ag 107.87 Silver	48 Cd 112.41 Cadmium	49 In 114.82 Indium	50 Sn 118.71 Tin	51 Sb 121.76 Antimony	52 Te 127.60 Tellurium	53 I 126.90 Iodine	54 Xe 131.29 Xenon
6	55 Cs 132.91 Cesium	56 Ba 137.33 Barium	71 Lu 174.97 Lutetium	72 Hf 178.49 Hafnium	73 Ta 180.95 Tantalum	74 W 183.84 Tungsten	75 Re 186.21 Rhenium	76 Os 190.23 Osmium	77 Ir 192.22 Iridium	78 Pt 195.08 Platinum	79 Au 196.97 Gold	80 Hg 200.59 Mercury	81 Tl 204.38 Thallium	82 Pb 207.2 Lead	83 Bi 208.98 Bismuth	84 Po 209 Polonium	85 At 210 Astatine	86 Rn 222 Radon
7	87 Fr 223 Francium	88 Ra 226 Radium	103 Lr 260 Lawrencium	104 Rf 261 Rutherfordium	105 Db 262 Dubnium	106 Sg 263 Seaborgium	107 Bh 264 Bohrium	108 Hs 265 Hassium	109 Mt 266 Meitnerium	110 Ds 267 Darmstadtium	111 Rg 268 Roentgenium	112 Cn 269 Copernicium	113 Nh 270 Nihonium	114 Fl 271 Flerovium	115 Mc 272 Moscovium	116 Lv 273 Livermorium	117 Ts 274 Tennessine	118 Og 274 Oganesson
			Atomic masses are not listed for elements with no stable or common isotopes.															
Lanthanide Series			57 La 138.91 Lanthanum	58 Ce 140.12 Cerium	59 Pr 140.91 Praseodymium	60 Nd 144.24 Neodymium	61 Pm 145 Promethium	62 Sm 150.36 Samarium	63 Eu 151.96 Europium	64 Gd 157.25 Gadolinium	65 Tb 158.93 Terbium	66 Dy 162.50 Dysprosium	67 Ho 164.93 Holmium	68 Er 167.26 Erbium	69 Tm 168.93 Thulium	70 Yb 173.05 Ytterbium		
Actinide Series			89 Ac 227 Actinium	90 Th 232.04 Thorium	91 Pa 231.04 Protactinium	92 U 238.03 Uranium	93 Np 237 Neptunium	94 Pu 244 Plutonium	95 Am 243 Americium	96 Cm 247 Curium	97 Bk 247 Berkelium	98 Cf 251 Californium	99 Es 252 Einsteinium	100 Fm 257 Fermium	101 Md 288 Mendelevium	102 No 289 Nobelium		

Updated 2017