

Name _____

Date _____ Period/Teacher _____



1. What physical properties are used to classify elements as metals, non-metals, or metalloids?

- A. Color, smell, physical state
- B. Reactivity, streak, hardness
- C. Ability to burn, mass, density
- D. Luster, conductivity, malleability

6.6A

2. Which of the following situations provides evidence that a chemical change has taken place?

- A. Water, when boiled, evaporates and turns to vapor.
- B. Sugar, when added to ice tea, dissolves into the liquid.
- C. Two liquids are mixed, and a solid substance forms.
- D. A piece of paper is cut into many small pieces.

3. Which element is one of the most abundant in both solid parts of the earth and in living matter?

- A. Carbon
- B. Oxygen
- C. Nitrogen
- D. Phosphorus

6.6A

4. Which **BEST** describes the form an element, in Group 18 on the periodic table, takes at room temperature?

- A. a shiny solid
- B. a dark liquid
- C. a gas
- D. a clear mix of liquid and solid

6.6A

5. Fill in the blanks with the following terms:
 chemical simpler element one
 atom compound periodic table

An _____ is a substance that cannot be broken down into _____ substances. An _____ is the smallest particle of an element that maintains the _____ identity of the element. All known elements are represented on the _____ of Elements. These elements are represented on this table by symbols made up of _____ or two letters. A substance that consists of two or more different elements is a _____.

6.5A

6. Which correctly lists the metalloids of the periodic table of elements?

- A. oxygen, boron, chlorine, sodium, arsenic, silicon, germanium
- B. hydrogen, silicon, aluminum, tellurium, arsenic, gold
- C. potassium, magnesium, zinc, silicon, antimony, neon, copper
- D. boron, silicon, germanium, arsenic, antimony, tellurium, astatine

6.6A

Use the periodic table to answer questions 7 and 8.

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|----|----|----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|--|--|--|--|-------|
| | IA | | | | | | | | | | | | | | | | | | | | | | | | | | VIIIA |
| 1 | 1 | | | | | | | | | | | | | | | 2 | He | | | | | | | | | | |
| 2 | 3 | 4 | | | | | | | | | | | | | | | 5 | 6 | 7 | 8 | 9 | 10 | | | | | |
| | Li | Be | | | | | | | | | | | | | | | B | C | N | O | F | Ne | | | | | |
| 3 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | | | | | | | | 13 | 14 | 15 | 16 | 17 | 18 | | | | | |
| | Na | Mg | Al | Si | P | S | Cl | Ar | | | | | | | | | Al | Si | P | S | Cl | Ar | | | | | |
| 4 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | | | | | | | | | |
| | K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Kr | | | | | | | | | |
| 5 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | | | | | | | | | |
| | Rb | Sr | Y | Zr | Nb | Mo | Tc | Ru | Rh | Pd | Ag | Cd | In | Sn | Sb | Te | I | Xe | | | | | | | | | |
| 6 | 55 | 56 | 57 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | | | | | | | | | |
| | Cs | Ba | La | Hf | Ta | W | Re | Os | Ir | Pt | Au | Hg | Tl | Pb | Bi | Po | At | Rn | | | | | | | | | |
| 7 | 87 | 88 | 89 | 104 | 105 | 106 | 107 | 108 | 109 | | | | | | | | | | | | | | | | | | |
| | Fr | Ra | Ac | Rf | Db | Sg | Bh | Hs | Mt | | | | | | | | | | | | | | | | | | |
| Lanthanides | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | | | | | | | | | | | | | |
| | Ce | Pr | Nd | Pm | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | | | | | | | | | | | | | |
| Actinides | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | | | | | | | | | | | | | |
| | Th | Pa | U | Np | Pu | Am | Cm | Bk | Cf | Es | Fm | Md | No | Lr | | | | | | | | | | | | | |

7. Which element is LEAST likely to chemically react with any other elements?

- A. rubidium (Rb)
- B. zinc (Zn)
- C. selenium (Se)
- D. krypton (Kr)

8. How many groups or families of elements are on the periodic table?

- A. 18
- B. 7
- C. 10
- D. 3