

### I. Pure Materials

1. How are elements and compounds similar? How are they different?
2. What does it mean for a material to be pure?
3. What is the smallest representative particle of an element? Of a compound?

### II. Elements, Compounds & Mixtures

4. Classify each of the following substances as; an element (E), a compound (C), a homogeneous mixture (hom), or a heterogeneous mixture (het).

a. Air	b. Carbon Dioxide
c. Potassium	d. Caesar Salad
e. Oxygen	f. Vegetable Soup
g. Kool Aid	h. Hydrogen Peroxide
i. Steel (an alloy)	j. Carbon
k. Salt	l. Copper
m. Pure Water	n. Calcium Nitrate
o. Salt Water	p. Tylenol (acetaminophen)
q. Apple Pie	r. Neon
s. Sugar Water	t. Selenium
u. Coffee	v. Lead
w. Raisin Bran	x. Apple Juice

### III. The Periodic Table

5. What is the property by which the periodic table is ordered?
6. What are the columns in the periodic table called? What are the rows called?
7. Name two elements that have properties similar to those of the element potassium (K). To those of krypton (Kr).

