

Review for Chemistry Quiz #2

1. Match the words in the box to the definitions below.

Mixture	Corrosion	Compound	Pure substance
Heterogeneous Mixture	Solution	Element	

<u>Corrosion</u>	Reaction of a metal with oxygen to form a metal oxide.
<u>Heterogeneous</u>	A mixture where you can see the separate parts.
<u>Solution</u>	A mixture that looks the same throughout.
<u>Mixture</u>	Matter that is made of two or more substances (two or more types of particles)
<u>Pure Substance</u>	Made of only one substance (one type of particle)
<u>Element</u>	Simplest type of pure substance that is made of one type of atom.
<u>Compound</u>	A pure substance that is made of two or more elements that are bonded together

2. Fill in the following boxes.

Symbol	Element Name
H	Hydrogen
Ca	Calcium
Si	Silicon
K	Potassium
Be	Beryllium
Cl	Chlorine
Mg	Magnesium
Li	Lithium
P	Phosphorus
Ne	Neon
Cu	Copper
Ag	Silver
Zn	Zinc

Symbol	Element Name
O	oxygen
B	boron
Na	sodium
Ar	argon
C	carbon
Al	aluminum
S	sulfur
F	fluorine
N	nitrogen
He	helium
Au	gold
Pb	lead
Hg	mercury

3. Calcium sulfate (also known as Plaster of Paris) has a chemical formula of CaSO_4 .

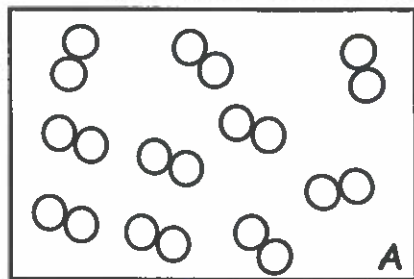
a. List the elements in calcium sulfate, and the number of atoms of each element.

calcium - 1 oxygen - 4
sulfur - 1

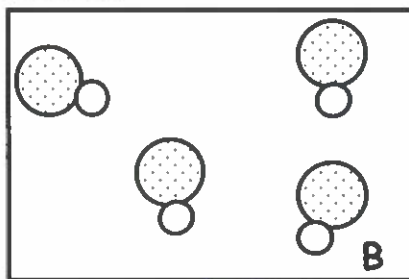
b. How many atoms are there in total in a molecule of calcium sulfate? 6

c. Is calcium sulfate an element or a compound? compound

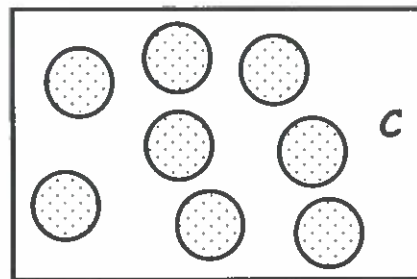
4. Classify the following pictures as pure substances or mixtures. Further classify the pure substances as elements or compounds.



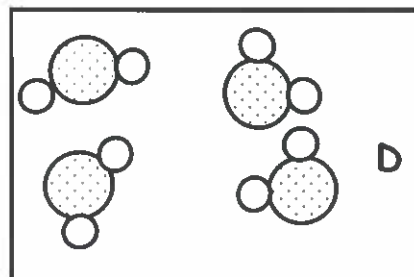
pure substance
element



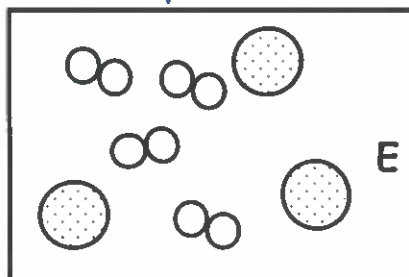
pure substance
compound



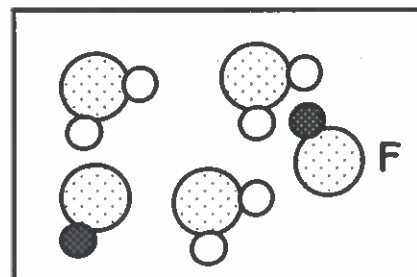
pure substance
element



pure substance
compound

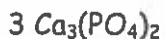


mixture



mixture

5. Fill in the following chart:



Element	Number of Atoms
calcium	$3 \times 3 = 9$
phosphorus	$1 \times 2 \times 3 = 6$
oxygen	$4 \times 2 \times 3 = 24$
Total # of Atoms:	39

6. Complete the following chart.

Substance:	Pure Substance or Mixture	Element, Compound, Heterogeneous or Homogeneous Mixture
Pizza	mixture	heterogeneous mixture
Sugar	pure substance	compound
Chlorine	pure substance	element
Air	mixture	homogeneous mixture.