

Worksheet # C9 : Classifying Matter

1. Complete the following statements:

a. Matter is anything that has _____ and takes up _____.

b. An element is a pure substance made up of only one kind of _____.

Ex: _____

c. A compound is made up of _____.

Ex: _____

d. Can a pure substance be a compound? _____

2. What's the difference between a physical and a chemical change?

a. A physical change _____

b. A chemical change _____

3. Classify each of these as a physical change (PC) or a chemical change (CC):

a. Meat blackens when cooked too long on a barbecue. _____

b. A rock crumbles, eroding a mountain. _____

c. The steel in a car rusts. _____

d. Milk curdles if a few drops of vinegar are added. _____

e. Salad dressing separates into layers after standing. _____

f. Water boils, producing steam. _____

g. A bomb made of gunpowder explodes. _____

4. What's the difference between a mixture and a pure substance?

a. A mixture _____

b. A pure substance _____

5. What's the difference between a homogenous mixture and a heterogeneous mixture?

a. A homogeneous mixture _____

b. A heterogeneous mixture _____

6. Classify each as a pure substance, a homogenous mixture or a heterogeneous mixture

a. distilled water _____

b. pond water _____

c. air _____

d. aluminum _____

e. steel _____

f. a bag of variously colored marbles _____

g. blood _____

h. a sugar cube _____

i. a calculator _____

j. helium gas _____