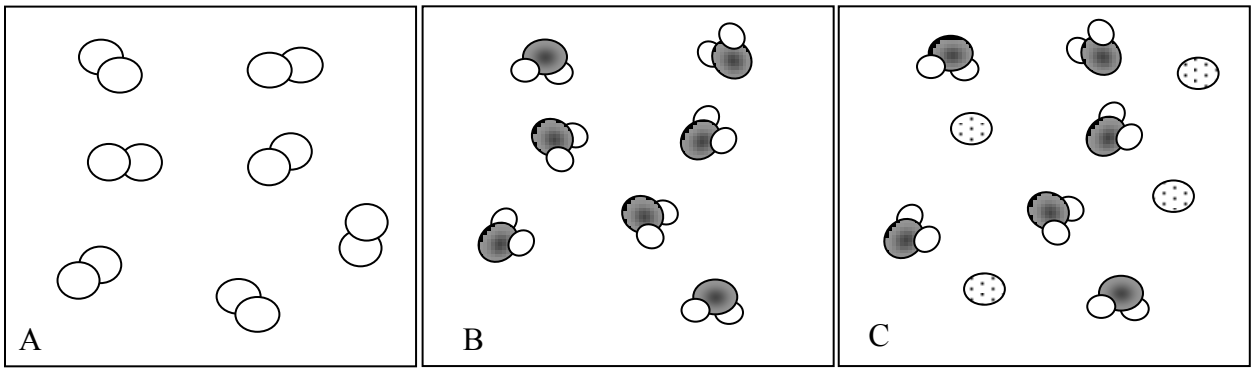
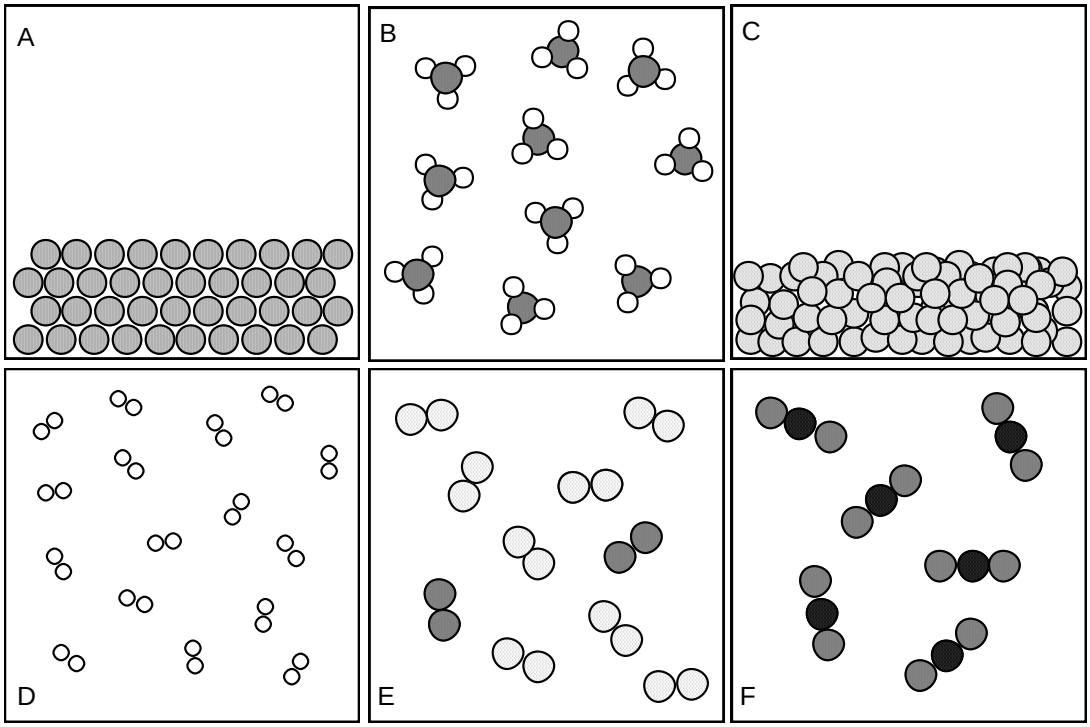
Matter Worksheet **Names** _____



Are the gases above elements, compounds, or mixtures?

A=_____ B=_____ C=_____

Circle the type of matter and the physical state for each of the images below:



A.	element	compound	mixture	solid	liquid	gas
B.	element	compound	mixture	solid	liquid	gas
C.	element	compound	mixture	solid	liquid	gas
D.	element	compound	mixture	solid	liquid	gas
E.	element	compound	mixture	solid	liquid	gas
F.	element	compound	mixture	solid	liquid	gas

Draw the following pictures using circles to represent atoms.

4 atoms of solid Na	4 molecules of F_2 gas
3 molecules of CO gas	A gas mixture containing one atom of He and one molecule of CO_2

Classify each of the following as chemical (C) or physical (P) change.

burning gasoline _____, heating tea _____, exploding fireworks _____, rusting a car_____,

cutting a board _____, melting butter _____, condensing alcohol _____,

digesting dinner _____, freezing jello shots_____, subliming dry ice_____

In the description of the compound below, classify the properties as chemical (C) or physical (P) properties.

White crystalline solid _____, oxidizes rapidly in air _____, low odor_____,

smooth surface _____, cancer suspect agent _____, explosive with water _____,

and toxic when in prolonged contact with respiratory tract _____.

Questions. Circle your answers:

1. Which state of matter has atoms in a fixed pattern vibrating? solid liquid gas
2. Which state of matter does not have its own shape or volume? solid liquid gas
3. Which state of matter has atoms touching and rolling around each other? solid liquid gas
4. Which state of matter has atoms very far apart? solid liquid gas
5. Which element is a metal? Cu He H Si N
6. Which element is a semimetal? Cu He H Si N
7. Which element is a nonmetal? Cu Na N Al Pb
8. Which is typically shiny and hard? Metal Nonmetal Semimetal
9. Which element is diatomic? Cu He C Si N
10. Which element is a diatomic gas? Br I Cl C He
11. Which element is a diatomic liquid? Br I Cl C He
12. Which element is a diatomic solid? Br I Cl C He
13. Which element is a liquid? Cu Pb Hg Mg He
14. Which element is a solid? H He C F Br