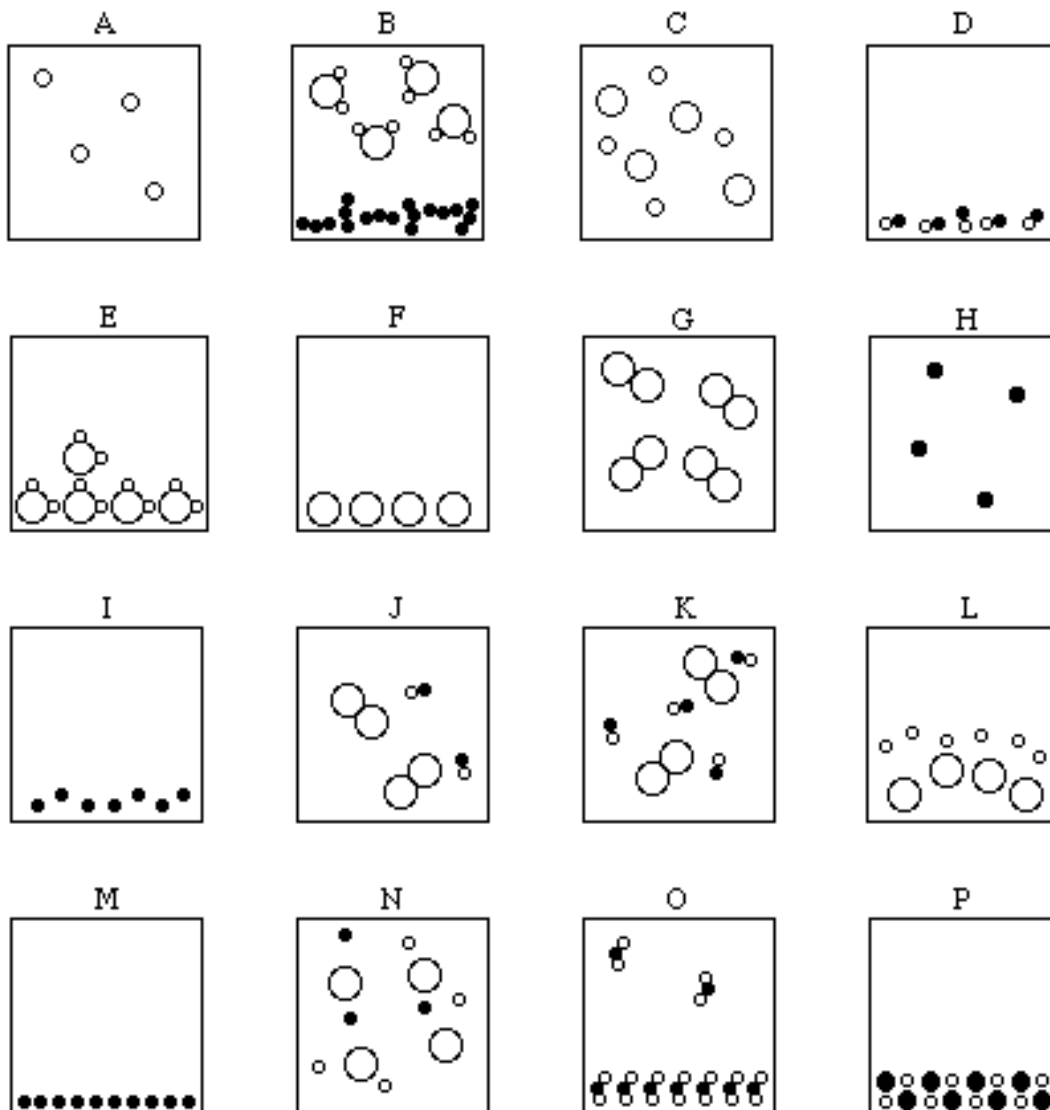


ICE1.5. Each diagram (A - P) show a sample of substances as viewed at the atomic level.
 Characterize the contents of the container in terms of each of the following categories:

- Category I. Homogeneous mixture, heterogeneous mixture or pure substance
- Category II. Element(s), compound(s) or both
- Category III. Solid, liquid, gas or combination of phases

As an example consider diagram A. Category I: pure substance; Category II: element; Category III: gas phase. It is a pure substance since there is a single type of matter in the container. It is an element since it exists as a monoatomic substance. Finally it is in the gas phase due to the totally random distribution of particles.



ICE1.5. (Continued)

Diagram	Category I	Category II	Category III
A			
B			
C			
D			
E			
F			
G			
H			
I			
J			
K			
L			
M			
N			
O			
P			

PS1.10. Perform the following conversions;

- a) 100.0 yards to kilometers (use at least 3 conversions)

- b) 355 mLs (cm^3) to quarts

- c) 295 pounds to kilograms

- d) 3.00 km to micrometers

- e) 4.56 nanometers to decimeters

- f) $5.10 \times 10^3 \text{ ft}^3$ to cm^3

- g) 1.1 gigawatts to watts