

## Honors Chemistry: Homework Set 1-9

- Explain how mixtures are different from compounds.
- Distinguish between a heterogeneous mixture and a homogeneous mixture. Provide an example of each.
- Explain how filtration and distillation are used to separate particular kinds of mixtures. Provide a specific example in which each can be used.
- Identify each of the following as an element, a compound, a heterogeneous mixture, or a homogeneous mixture.

(a) mouthwash

(d) diamond

(b) baking soda

(e) orange juice

(c) chocolate chip granola bar

(f) dry ice

- Each circle represents an atom and each different color represents a different kind of atom. If two atoms are touching then they are bonded together. Classify each of the diagrams below by placing the correct label in the blanks below.

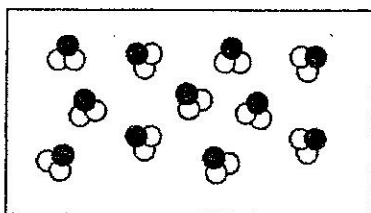
A = element

B = compound

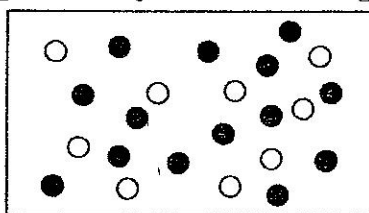
C = mixture of elements

D = mixture of compounds

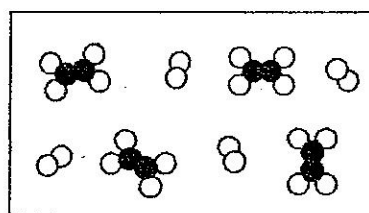
E = mixture of elements and compounds



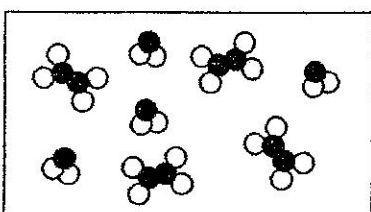
1) \_\_\_\_\_



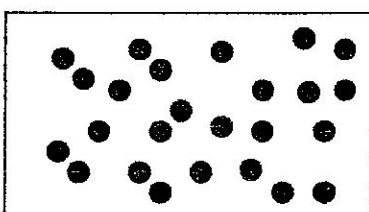
2) \_\_\_\_\_



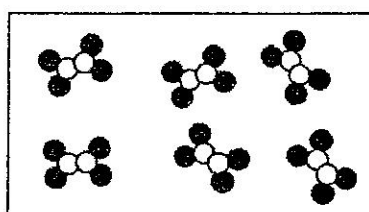
3) \_\_\_\_\_



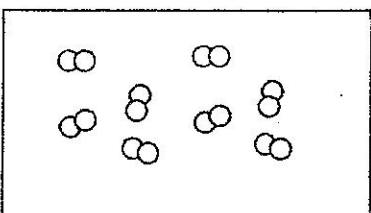
4) \_\_\_\_\_



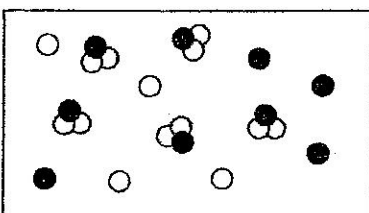
5) \_\_\_\_\_



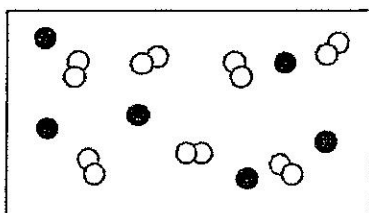
6) \_\_\_\_\_



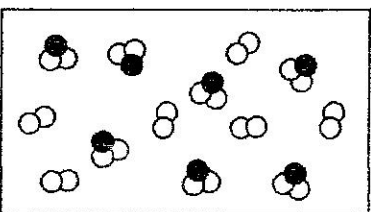
7) \_\_\_\_\_



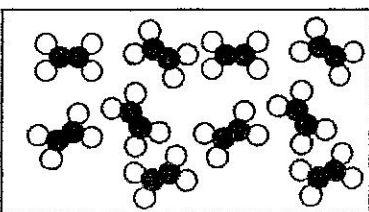
8) \_\_\_\_\_



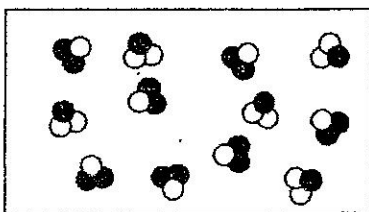
9) \_\_\_\_\_



10) \_\_\_\_\_



11) \_\_\_\_\_



12) \_\_\_\_\_