

# Pure Substances & Mixtures Practice

Name \_\_\_\_\_ Hour \_\_\_\_\_

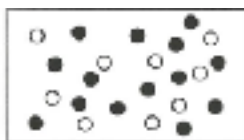
Classify each of the substances by placing the correct letter in the blanks below.

- A. Element
- B. Molecule/compound
- C. Mixture of elements
- D. Mixture of molecules/compounds
- E. Mixture of elements and molecules/compounds

Each circle represents an atom and each different color represents different kinds of atoms. If two atoms are touching they are bonded together.



1. \_\_\_\_\_



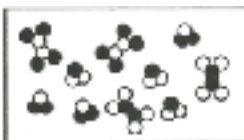
2. \_\_\_\_\_



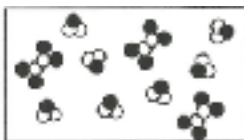
3. \_\_\_\_\_



4. \_\_\_\_\_



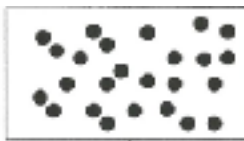
5. \_\_\_\_\_



6. \_\_\_\_\_



7. \_\_\_\_\_



8. \_\_\_\_\_



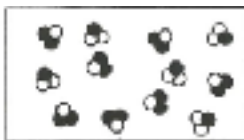
9. \_\_\_\_\_



10. \_\_\_\_\_



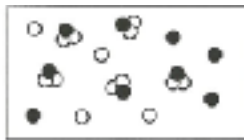
11. \_\_\_\_\_



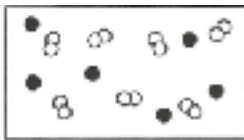
12. \_\_\_\_\_



13. \_\_\_\_\_



14. \_\_\_\_\_



15. \_\_\_\_\_

1. The substances in a mixture can be \_\_\_\_\_ based on \_\_\_\_\_ properties.
2. A \_\_\_\_\_ mixture is one when you can see the parts are different.
3. A \_\_\_\_\_ mixture is one when all parts of it look the same.
4. In a solution, the substance that gets dissolved is the \_\_\_\_\_.
5. In a solution, the substance that does the dissolving is the \_\_\_\_\_.



6. Two students were not being careful in the lab and dumped sand into iron filings (very small pieces of shaved iron) and they went even further and mixed the two together with their fingers.

How could you separate the two substances QUICKLY using the physical properties of the two substances?

\_\_\_\_\_

7. A \_\_\_\_\_ is two or more different substances together but NOT chemically combined.
8. Your friend knocked over the can of pop onto your kitchen counter, but you were lazy and didn't clean it up. You came back 3 hours later after you and your friend finished playing video games and all that was left was a sticky film on the counter. Where did the pop go?

\_\_\_\_\_

\_\_\_\_\_

9. Circle any of the following that are mixtures.

Carbon Dioxide(CO<sub>2</sub>)

Air

Hot Chocolate

Sugar(C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>)

Sand

10. A \_\_\_\_\_ is when there is only one type of particle in a substance.

11. Pure substances (can / cannot) be separated with physical means such as evaporation, magnetism, or pulling apart.