

Classification of Matter Review – Chemistry

Know the definitions and be able to list examples of the following (where applicable):

Matter
chemistry
solid
liquid
gas
plasma
pure substance
mixture
element
compound
solution
suspension
colloid
solute
solvent
saturated
heterogenous
homogenous
chemical properties
physical properties
 MP, BP, FP, density, color, mass, size...
signs of chemical change
signs of physical change
 state changes
 dissolving
density =
chromatography
fractional distillation
particle size of solutions, suspensions, and colloids
Tyndall Effect
endothermic
exothermic
filtering
precipitate
filtrate
distillate

Labs and Laboratory Procedures:

Chemical and Physical Properties – lab
All Bent Out of Shape – lab on density and graphing techniques
Arson Case – MP and BP determination
Density Scenario – lab, measure mass and volume of both solids and liquids then calculate their densities
 be able to use a density table
Soup or Solid – lab on definitions of solids and liquids
Properties of Mixtures – lab on solutions, suspensions and colloids
Oil Fractions – fractional distillation
Candy Chromatography – paper chromatography

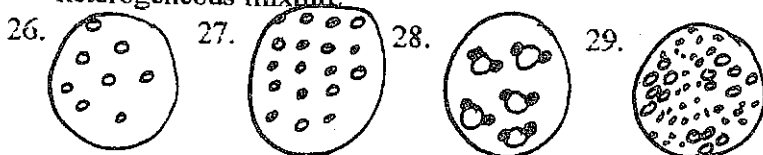
REVIEW QUIZ
UNIT 2 - CLASSIFICATION OF MATTER,
PROPERTIES, AND MEASUREMENTS

1. What is the test called that detects the size of particles in a solution by shining a light through the mixture?
2. This type of mixture has definite layers or phases.
3. This is made of one type of atom.
4. This type of matter has a variable composition.
5. What is the symbol for Helium, #2 on the periodic table?
6. This type of homogenous mixture does not settle but has the Tyndall effect.
7. This type of homogenous mixture has the Tyndall Effect but will eventually separate.
8. This is calculated by dividing mass by volume.
9. The temperature at which a liquid becomes a gas.
10. A separation technique that uses paper and a solvent.
11. This has particles that vibrate in fixed positions, has its own shape, and its own volume.
12. This state of matter has particles that move the fastest.
13. This has mass and takes up space. It is studied in Chemistry.
14. These are made of two or more different elements chemically combined.
15. Elements and compounds are in this classification.
16. This state of matter has the volume and shape of its container.
17. A concentration unit.
18. Whatever there is more of in a solution.
19. Whatever there is less of in a solution.

Classify the following as Chemical or Physical changes.

20. boiling water
21. ammonium nitrate and water are mixed, the temperature drops 5 degree Celsius
22. when HCl and AgNO₃ are mixed (both clear liquids) a cloudy substance appears
23. ~~water~~ burning paper
24. loss of magnetic properties when sulfur and iron are heated
25. dissolving sugar in a cup of coffee

Classify the following drawings as: element, compound, homogenous mixture, heterogeneous mixture.



Make the following measurements in the lab.