

Review for Ch 2 Test:

Mixture, Element, or Compound:

1. orange juice
2. helium (He)
3. air
4. H₂O
5. sulfuric acid (H₂SO₄)
6. rain water
7. iron (Fe)
8. neon (Ne)
9. hydrochloric acid (HCl)

Heterogeneous or Homogeneous:

1. Skittles
2. Air
3. Rain water
4. sand
5. milk

Atoms vs. molecules:

1. Draw a picture of each.
2. Difference in words?

Counting Atoms / Understanding Chemical Formulas:

1. H₃PO₄
2. 3 H₂SO₄
3. 4 Na₃PO₄
4. 3 C₁₂H₂₂O₁₁

Chemical or Physical Properties?

1. density
2. boiling point
3. ability to rust
4. ability to burn
5. ability to dissolve (solubility)
6. freezing point
7. red

Chemical or Physical Changes?

1. burning gasoline
2. condensation of water vapor to make clouds
3. rusting of car
4. heating a cup of coffee
5. melting steel
6. Alka-seltzer in water

Phases:

	Phases	Definite shape?	Definite volume?	Spacing of molecules	Speed of molecules	Energy (high, low, etc)
1						
2						
3						

Phase Changes:

1. **S** **L** **G** *(fill in diagram w/ phase changes)*
2. What happens to the speed of molecules as you move to the right on the SLG diagram?
3. What happens to the spacing of molecules as you move to the right?
4. What happens to the energy of the molecules as you move to the right?
5. Temperature at which a:
 - a. solid changes to a liquid?
 - b. liquid changes to a gas?
 - c. liquid changes to a solid?

Phase Change Diagrams: *(you may look at diagram in NOTES)*

1. What variable changes during a phase change?
2. What variable remains the same during a phase change?