

Elements, Compounds, and Mixtures

Quiz Notes

Remediation Assignment:

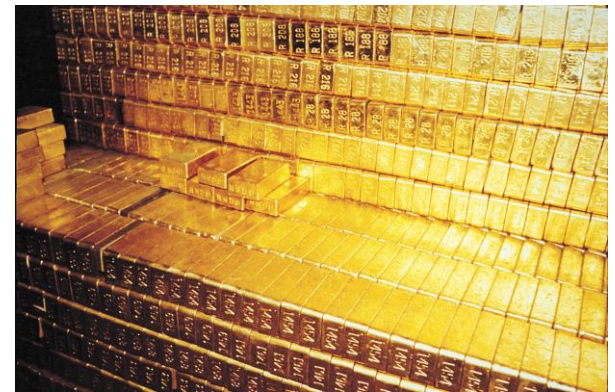
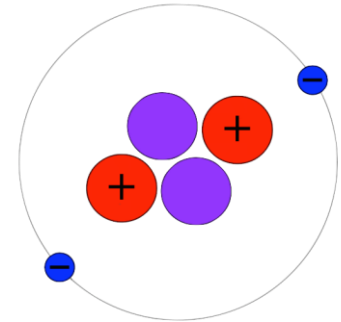
Write two facts from each slide. OR answer the questions on the slides.

Once you have finished the notes,
watch the E,C,M video.

Write five facts from the video.

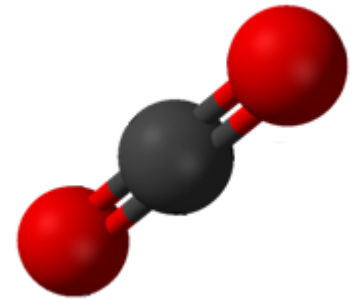
Elements

- Pure substances
- Made of only one type of atom
- Smallest part is an atom
- Found on the Periodic Table
- Example:
 - Neon
 - Helium
 - Gold



Compounds

- Made of elements
- Smallest part molecule
- Elements form in specific ratios
- Ex.
 - Water
 - Carbon Dioxide
 - Table salt



Properties

- Elements have unique physical and chemical properties
- Compounds have different properties than that of the elements which make it
 - Table salt NaCl: solid, edible, soluble
 - Na: solid, metal, explosive in water
 - Cl: gas, yellow, poisonous

Breaking Down

- Elements can not be broken down into simpler substances
- Compounds are Broken down by chemical changes
- Adding energy is one way to break down a compound
 - Apply heat
 - Apply electricity

Mixture

- The combination of two or more substances without a chemical reaction
- All components of a mixture retain their own chemical properties
- The components of a mixture do not have to be in a specific ratio
- Separating a mixture can be done through physical means
 - Distillation
 - Magnet
 - Centrifuge



Homogenous VS. Heterogeneous

- Homogenous mixtures are uniform (can not see pieces in the mixture)
 - Example: Koolaide
- Heterogeneous mixtures are not uniform (CAN see pieces in the mixture)
 - Example: Pizza

Types of Mixtures

1. Solutions are Homogenous
 - one substance dissolves into another
 - Example: sugar water
2. Suspensions are Heterogeneous
 - particles do not dissolve and separate out
 - Example: chicken noodle soup
3. Colloids are Homogenous
 - particles do not dissolve and do not separate out
 - Example: Jello

• Match the following descriptions to the correct substance picture:

- 1. Compound
- 2. Mixture
- 3. Element
- 4. Molecules of an element

