

1. What are the 5 main branches of chemistry? Briefly explain each.
2. List any 4 pieces of evidence that a chemical change has occurred.
3. Copy and categorize the following as (C)hemical or (P)hysical properties:
  - a. Boiling point
  - b. Corrosive
  - c. Flammable
  - d. Soluble
4. Copy and classify the following as E,C,S, or M (element, compound, solution, or mixture)
  - a. Tap water
  - b. Paint
  - c. Air
  - d. Sugar
  - e. Steel
  - f. Pizza
  - g. Lead
5. What is the one word that classifies matter that is made up of only one kind of particle, regardless of the actual type of particle.
6. Use one word that classifies matter that is made up of more than one kind of particle.
7. What are the 4 particles of matter? Briefly describe each one.
8. Explain a similarity and difference between an *ion* and a *formula unit*.
9. What is the difference between an intensive property and an extensive property?
10. How many phases are in a solution?
11. How many phases are in a heterogeneous mixture?
12. Earlier in class, we had the chance to see sulfur dioxide react with sugar. What were some of the clues that a chemical change had occurred?
13. Both filtration and distillation are used to separate mixtures but how are they different from each other?
14. Explain how you could test the law of conservation of mass.