

Name _____

Hour _____

Chemistry Part 2 - Study Guide

GOAL 1:

1. Give an example that proves a single element is different than a compound that contains that element. Explain why they are different.

2. What elements make up the compound Na_2Cl_3 ? How many atoms of each element are in a molecule of that compound?

3. What elements make up the compound K_2O_3 ? How many atoms of each element are in a molecule of that compound?

Directions: For the following statements, decide if the statement is true or false. If it is false, explain why it is false on the line.

4. There are less than 100 known elements that exist. _____

5. There are only naturally occurring elements and compounds. _____

6. Two or more elements chemically joined together are considered compounds. _____

7. Elements and compounds make up only living things. _____

GOAL 2:

8. Define mixture:

9. Define pure substance:

10. Define solution:

11. Define element:

12. Define compound:

13. Define visible mixture:

14. Given these items in the table below, identify each as either a mixture or pure substance and then identify the substance as **an element, compound, solution, or visible mixture.**

Item	Mixture OR Pure Substance?	Element, compound, visible mixture, OR solution?
Chicken Noodle Soup		
Salt (NaCl)		
Hydrogen		
Kool-aid		
Ocean water		
Chalk (CaCO ₃)		
Syrup		

15. Todd made lemonade by mixing water and lemonade powder. (2 pts.)

What was the solute? _____

What was the solvent? _____

16. Define soluble:

Give 2 examples:

17. Define insoluble:

Give 2 examples:

GOAL 3:

18. How do you separate a mixture of lemonade? Explain how you would separate each part specifically.

19. You have iron paper clips and plastic paper clips. What is the best way to separate this mixture? Be specific.

20. What method of separation would you use to see what colors make up a black marker?

21. You want to eat chips and salsa, but you don't like the chopped up onions and peppers inside it. What method would you use to separate it out the fastest? Explain how you separate each part specifically.

22. You want to separate M&Ms by color because you don't like the yellow ones. What method would you use?

23. You have a mixture of sand, salt, and iron filings. How will you separate this mixture? Explain how you separate each part specifically.
