

Chapter 3 Matter YSBAT

1. Is glass a solid or a liquid? Why?
2. Explain why the ion Mg^{+2} has a +2.
3. What are the 8 most abundant elements in the earth's crust?
4. Of the 8, which are the two most abundant?
5. Make sure you know the common changes of state from page 12 of your notes.
6. Circle the pH that is more acidic: pH 2 or pH 6.
7. Is the following equation balanced? Explain Why or Why not? $2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$
8. What are valance electrons and why are they important?
9. Define Ionic bonds
10. Define Covalent bonds
11. How many atoms are present in the following molecule? H_2CO_3 _____
12. Define solid
13. Define liquid
14. Define gases
15. Define acid
16. Define base
17. Define mixture
18. Define solution

19. What subatomic particles are found in the nucleus?

20. Define homogeneous mixture

21. Define heterogeneous mixture

22. Define element

23. Define energy level

24. Define proton

25. Define neutron

26. Define electron

27. Define atomic number

28. Define atomic mass

29. Why do isotopes of the same element have the same chemical properties?

30. Fill in the following chart

Element	Number of Protons	Number of Neutrons	Number of Electrons	Atomic Number	Atomic Mass (rounded off)
1. Carbon	6				12
2. Nitrogen		7	7		
3. Argon		22		19	