**Answers to the Blue Review Packet**

1. Chemistry – this is what we have been studying since Chapter 2
2. (Old Aunt Hilda Eats Animal Crackers)
   1. Observation – using your senses to gather info
   2. Ask Questions
   3. Hypothesis – your proposed answer or educated guess
   4. Experiment – testing the hypothesis
   5. Analysis/Conclusion – does data support hypothesis? Share your information with others.
3. Mass
4. Volume
5. Gram
6. Liter
7. Meter
8. Find the mass of the container, Find the mass of container + liquid, Subtract
9. Centi
10. Milli
11. Kilo
12. Blue – greatest density on bottom
13. D = m/V = 15g/5ml = 3 g/mL
14. D = m/V ===🡺 5 g/mL = 6g/V ==🡺 V = 6/5 or 1.2 mL
15. Physical Change – change appearance but not identity, Chemical Change – Make a new substance
16. Element & Compound
17. Heterogeneous – see the parts of the mixure, Homogeneous – Everything looks the same, cannot see the parts
18. Solid – Low energy, vibrate in place, Liquid – Medium Energy, move freely, Gas – High energy, move rapidly and randomly
19. Solid – Definite shape and volume, Liquid – Definite Volume but takes the shape of container, Gas – No definite shape nor volume
20. Melting
21. Sublimation
22. Vaporization
23. Condensation
24. Freezing
25. Deposition
26. Chemical Symbol
27. Proton, Electron
28. Proton, Neutron
29. Proton, Neutron
30. Isotopes
31. 9 Protons + 10 Neutrons = 19
32. Electron Clound – protons & neutrons in the nucleus, electrons found in different energy levels called clouds. Clouds are areas where an electron is likely to be found.
33. Mass – atomic number = 56 – 26 = 30
34. Mendeleev
35. Groups or families
36. Periods
37. 7
38. By atomic number
39. Metals – to the left of the semimetals, nonmetals – to the right of the semimetals, Metalloids – jagged line
40. Metals – good conductors, high melting points, luster, malleable, Nonmetals – poor conductors, brittle, low melting points, Metalloids – properties of both, semiconductors
41. Last column on right – filled duet or octet
42. Alkali metals – 1, alkaline earth metals – 2, halogens – 7, noble gases – 8 (except Helium which only has 2
43. Two rows at the bottom of table
44. Halogens
45. Alkali Metals
46. Transfer of electrons, strong, attraction between positive & negative ions, metals & nonmetals together
47. Metals & nonmetals
48. Sharing of electrons, single, double, triple, pure, polar, nonpolar,
49. Nonmetals & Semimetals
50. Na3PO4
51. CaCl2
52. Filtration – separation by size of particles, Distillation – separation by boiling points
53. On your own
54. If mass changes or if volume changes
55. See #19
56. See #44
57. Same family or group
58. Alkali metals, halogens – reactive, Noble Gases – unreactive because they have filled duets or octets
59. React with water