

Chemistry First Nine Weeks Exam Review Sheet

Measurement and Matter

1. Define the following terms and give examples.

- a. matter –
- b. mixture-
- c. pure substance-
- d. homogeneous mixture-
- e. heterogeneous mixture-
- f. solution-
- g. physical change-
- h. chemical change-
- i. physical property-
- j. chemical property-
- k. intrinsic (intensive) property-
- l. extrinsic (extensive) property-

2. Metric System

Prefix	Exponential Value
Giga	
Mega	
Kilo	
Hecto	
Deca	
Deci	
Centi	
Milli	
Micro	
Nano	

3. Determine the number of significant figures are in the following:

- a. 356
- b. 6800
- c. 6800.
- d. 0.0023
- e. 0.000670

4. Put the following numbers in scientific notation.

- a. 7400
- b. 0.00932
- c. 0.00000342
- d. 82300000

5. Put the following numbers in standard notation.

- a. 2.5×10^{-3}
- b. 2.5×10^3
- c. 4.15×10^{-5}
- d. 4.15×10^3

Atomic Theory and Atomic Structure

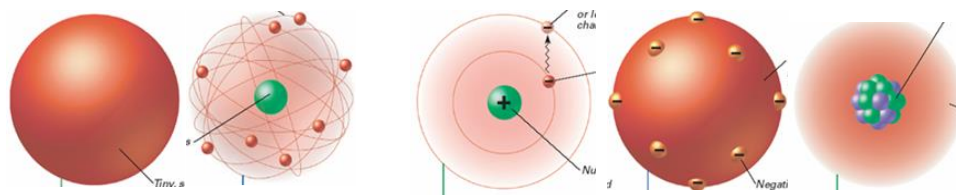
6. Who discovered...

- a. nucleus
- b. proton
- c. electron
- d. neutron

7. Who conducted the following experiments...

- a. Gold-foil
- b. cathode ray tube
- c. canal ray tube
- d. oil drop

8. Identify the following Atomic Models



9. Describe the subatomic particles (relative size, charge, location).

10. What is an isotope?

11. Complete the following chart.

Isotope Name	Symbol	Atomic Number	Mass Number	# of protons	# of electrons	# of neutrons
Potassium-40						
Arsenic-75						

12. Identify the shape the s, p and d sublevels.

13. Emission of light from an atom occurs when an electron moves from a _____ to a _____ energy level.

14. Write the electron configuration and orbital notation for the following.

a. Calcium

b. Scandium

15. What is the (average) atomic mass of an element?