Chemistry Test Review to Date

1) What is matter?

2) What is the difference between “Physical Property” and “Physical Change”?

3) What are the 9 types of Physical properties/changes that we looked at”
   a. _____ : _____
   b. _____ : _____
   c. _____: _____
   d. _____: _____
   e. _____: _____
   f. _____: _____
   g. _____: _____
   h. _____: _____
   i. _____: _____

4) What is the difference between “Chemical Property” and “Chemical Change”?

5) What are the 3 main types of chemical change/property that we discussed in class:
   a. _____: _____
   b. _____: _____
   c. _____: _____

6) What are the 5 clues that a chemical change has occurred:
   a. _____
   b. _____
   c. _____
   d. _____
   e. _____

7) Fill in the blanks:
   a. Pure substance contain only _____ type of particle. They can be _____ and _____. Pure substances cannot be broken down, therefore, _____ and _____ cannot be broken down.

b. Mixtures contain at least _____ different _____.

c. There are two types of mixtures. They are _____ mixtures and _____ mixtures.

d. _____ mixtures, every part of the mixture is the same. You _____ see the different components making up the solution.

e. _____ mixtures, every part of the mixture is not the same. You _____ see the different components making up the solution.

8) Explain the statement “All compounds are molecules but not all molecules are compounds” .

9) Give me an example of

a. Element: _____ b. Compound: _____ c. Molecule: _____

10) Sketch a flow chart for the following word:

a. Pure Substance , mixture , element , compound , molecule , atom, heterogeneous, homogenous

11) The _____ is a table that contains elements. The elements are organized according to their _____. The rows in the periodic table run _____, and are numbered from ____ to ___ . The rows are usually called _____. The columns in the periodic table run _____, and are numbered from ___ to ___. The columns are usually called _____.

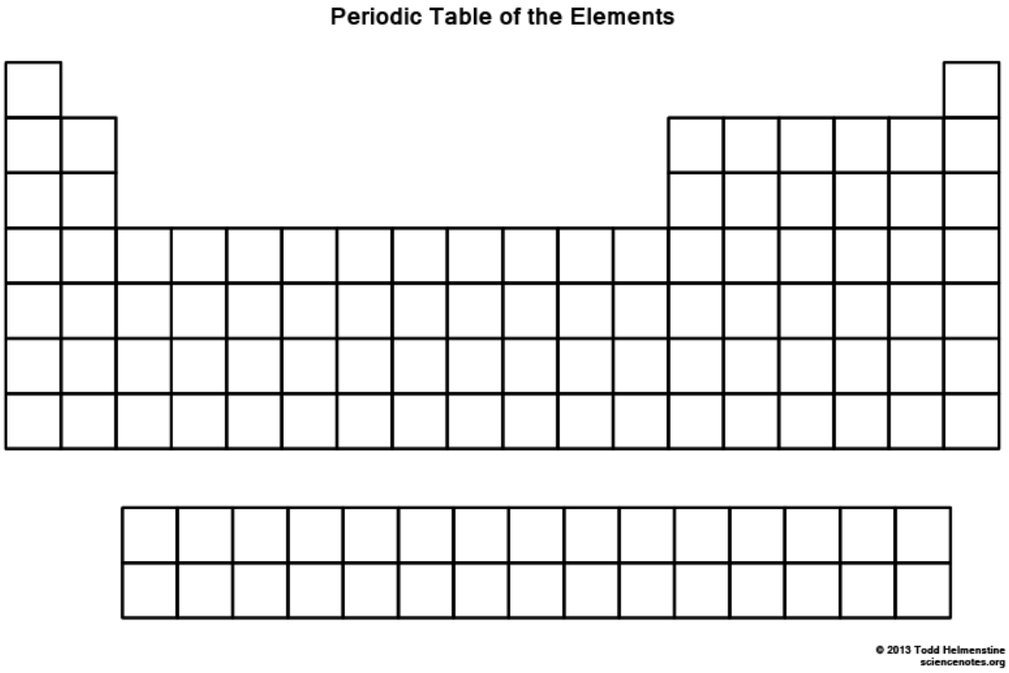
12) The majority of the elements in the periodic table are _____. There found on the _____ hand side of the table.

13) What element falls in :

a. Period 5, Group 3 _____ b. Period 4, Group 2 _____ c) Period 2, Group 18 _____

14) Label the periodic table with the families:

a. Transition Metals
b. Noble Gases
c. Chalogens Family
d. Alkali Earth metals
e. Lanthanides Series
f. Boron Family
g. Actinides Series
h . Halogens
i) Alkali Metals
j) Carbon Family
k) Oxygen Family



15) The element Nitrogen has an atomic number of _____, and an atomic mass of _____. It's chemical symbol is ____.

a. Write the standard atomic notation for this element

16) The element Magnesium has an atomic number of ____, and an atomic mass of____. It's chemical symbol is_____.

a. Write the standard atomic notation for this element

17) _____, _____ and _____ are known as subatomic particle.

18) _____ are positive charged, _____ are negative charged and _____has no charge . _____ and _____ are found in the nucleus of the atom and make up the atoms_____. _____ is found on the orbits of the atom.

19) In a neutral atom the number of

a. Protons = _____
b. Electrons = _____
c. Neutron = _____ - _____
d. Atomic Mass = _____ + _____

20) Use your periodic table to fill in the missing information for the neutral atoms:

Element Name	Standard Atomic Notation	Atomic Number	Number of Protons	Number of electrons	Number of Neutrons	Mass Number
Phosphorus		15				
	$^{7}_{3}Li$					
		10				
Silicon						
			29			
	$^{40}_{20}Ca$					
			11			

21) An _____ is an atom that has become charged by gaining or losing electrons.
When an atom losses an electron it becomes _____ charged
When an atom gains an electron it becomes _____ charged

22) Complete the following table for the following ions:

Ion Symbol	Charge	Protons	Electrons
K^{+1}			
Ni^{+3}			
Te^{-2}			
As^{-3}			

23) In the Bohr-Rutherford diagrams the:

a. First orbit can hold a maximum of ___ electrons
b. The second orbit can hold a maximum of ____ electrons
c. The third orbit can hold a maximum of ____ electrons
d. The fourth orbit can hold a maximum of ____ electrons
e. The fifth orbit can hold a maximum of ____ electrons

24) Create a Bohr-Rutherford diagram for

a. Chromium (Cr) b. Rubidium (Rb)

25) There are three rules for counting atoms:

a. _____ only refers to the atom they are behind
b. _____ applies to the entire compound. You must _____ the coefficient by the _____.
c. If there are elements and compounds inside a bracket the _____ following the bracket applies to all atoms inside the bracket.

26) Count the atoms in the following compounds

a. Li_2SO_4

Type of atoms	Number of atoms
Total atoms:	

___

b. $2\ Na_3PO_4$

Type of atoms	Number of atoms
Total atoms:	

b. $Mg_3(PO_4)_2$

Type of atoms	Number of atoms
Total atoms:	