

## SNC 1P - Chemistry Review

### Physical and Chemical Properties & Changes

Fill in the blanks below using the following words

state                      original                      description                      hardness                      combustibility  
behaviour                      colour                      chemical                      texture                      senses  
flammability                      properties                      evaporating                      physical                      dissolving                      new

1. A physical property is a \_\_\_\_\_ of an object. It can usually be made by using your five \_\_\_\_\_.
2. Examples of physical properties include \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
3. A chemical property describes the \_\_\_\_\_ of a substance as it becomes a \_\_\_\_\_ substance.
4. \_\_\_\_\_ and \_\_\_\_\_ are examples of chemical properties..
5. In a \_\_\_\_\_ change, the substance involved stays the same.
6. All changes of \_\_\_\_\_ are physical changes.
7. Examples of physical changes include: \_\_\_\_\_ and \_\_\_\_\_
8. When the \_\_\_\_\_ substance is changed into one or more different substances, known as a \_\_\_\_\_ change.
9. In a chemical change, the new substance formed has new \_\_\_\_\_
10. List 5 clues that a chemical reaction has occurred.
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  5. \_\_\_\_\_

### **12. Decide and explain chemical or physical change** Chemical or Physical Change

	Chemical or Physical	Reason
Water evaporating		
Ripping paper		
Water freezing		
Dissolving Kool Aid		
A candle burning		
Wax melting		
Baking a cake		

13. Is rusting, a specific example of corrosion, a physical or chemical change?

14. List 3 ways corrosion can be prevented?

i) \_\_\_\_\_ ii) \_\_\_\_\_ iii) \_\_\_\_\_

15. What material is responsible for the colour in fireworks? \_\_\_\_\_

16. **Matter.** Match the description on the right with the term on the left.

matter  
element

A. dense metal causing nervous system damage  
B. consisting of one kind of atom or molecule

compound  
atom

C. a mixture of metals  
D. salad dressing (oil and water)

heterogeneous

E. a naturally occurring compound containing metal

homogenous

F. has mass and occupies space

mixture

G. minerals mixed in with rock

pure substance  
molecules

H. 2 or more elements in chemical combination  
I. Kool Aid

ore

J. smallest particle of matter

heavy metal

K. Ne

mineral

L. consisting of 2 or more pure substances

alloy

M. a combination of 2 or more atoms

17. Fill in the Subatomic Particles chart below

Particle	Charge	Mass	Location in the atom
		112000	
Neutron			inside nucleus
	positive		

**18. For Chlorine, atomic number 17;**

Draw a Bohr Rutherford Diagram

Write in Standard Atomic Notation

**19. Counting Atoms.** Name the atoms present and state number of atoms in each of the following.

	Type	Number
i) NaCl	_____	_____
	_____	_____
	TOTAL	_____
ii) NaHCO <sub>3</sub>	_____	_____
	_____	_____
	_____	_____
	TOTAL	_____

**20. Compound Formulas.** Make a formula with the given elements and provide a name.

Elements	Formula	Name
Ca (2), F(1)		
C(4), O(2)		
N(3), H(1)		

**21. Periodic Table True or False.**

- a) Mendeleev arranged the elements according to their atomic number \_\_\_\_\_
- b) Currently, the periodic table is arranged according to the atomic masses \_\_\_\_\_
- c) There are more metals than non- metals \_\_\_\_\_
- d) The metalloids share properties of both metals and non-metals \_\_\_\_\_
- e) Elements with a full electron shell are stable gases \_\_\_\_\_
- f) Mercury and Bromine are liquids at room temperature \_\_\_\_\_
- g) the horizontal rows going across the table are called groups \_\_\_\_\_
- h) the vertical chemical families have similar properties \_\_\_\_\_