

Chemistry Review

1. Match the following definitions with the terms from the word list to the right.

- | | |
|--|---------------------------|
| _____ Anything that occupies space. | (a) atom |
| _____ A pure substance that can be broken down by chemical changes. | (b) compound |
| _____ Two or more substances that are together and can be separated by physical changes. | (c) heterogeneous mixture |
| _____ A mixture that is the same throughout. | (d) homogeneous mixture |
| _____ A mixture with visible components. | (e) matter |
| _____ The smallest particle of an element that has the properties of that element. | (f) mixture |
| _____ Two or more atoms joined together by chemical bonds. | (g) molecule |

2. Indicate if each of the following is a homogeneous mixture, heterogeneous mixture, compound, or element.

- (a) Popsicle _____
- (b) Chili _____
- (c) Oxygen _____
- (d) Water _____
- (e) Milk _____
- (f) Sugar _____
- (g) Nitrogen _____
- (h) Gasoline _____
- (i) Vinegar _____

7. Indicate if each of the following is a physical or chemical change.

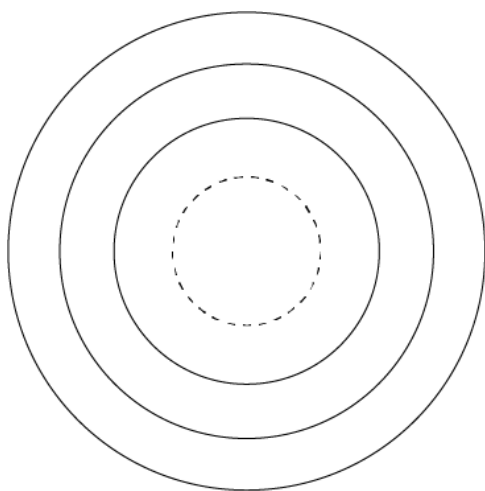
- (a) A hot dog is cooked _____
- (b) Water is boiled to make pasta _____
- (c) Old ham goes bad in the refrigerator _____
- (d) A rock star gets a tattoo on his forehead _____
- (e) Paper is burned _____
- (f) Sanding a piece of wood _____
- (g) melting butter _____
- (h) blowing up a balloon _____
- (i) salt dissolving _____
- (j) colors fading in the sunshine _____

8. Complete the following chart about the particles inside an atom.

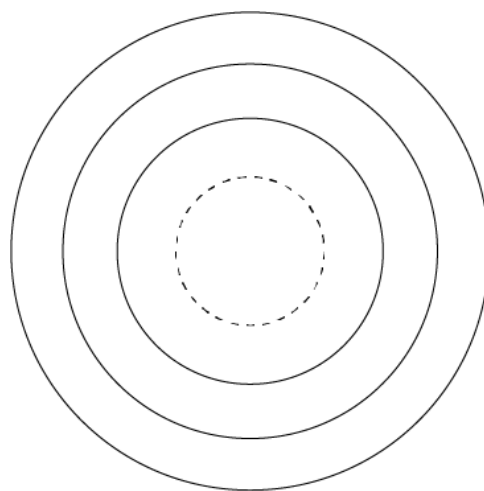
Particle	Symbol	Charge	Location
		positive	
	n^0		
			clouds surrounding nucleus

9. Draw Bohr diagrams for each of the following elements.

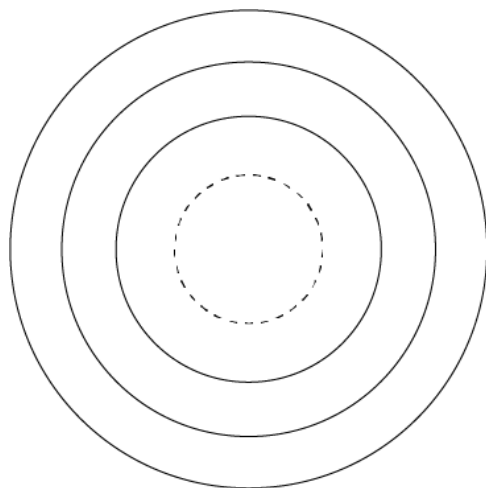
(a) Oxygen



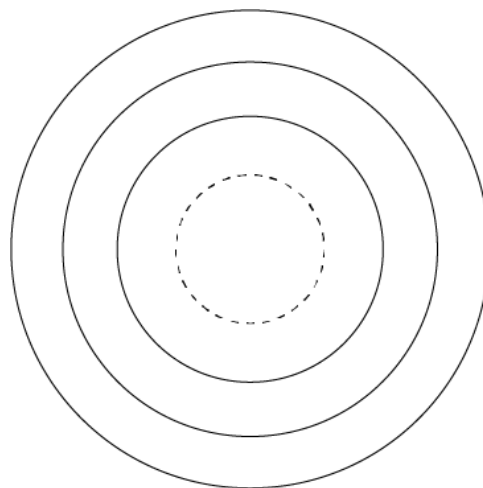
(b) Lithium



(c) Sulfur



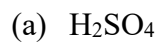
(d) Aluminum



10. Complete the following chart of element names and symbols.

Element Name	Element Symbol
Carbon	
	N
Calcium	
	Au
Chlorine	
	Cu
Silver	
	Be
Tin	
	Mg

11. List the elements and the number of each element in each of the following compounds.



(c) CuSO_4

(d) $\text{Mg}(\text{OH})_2$

12. Differentiate between the groups or families on the periodic table and the periods.

13. Where are the nonmetals located on the periodic table?

14. List the properties of metals.

15. List the properties of nonmetals.

16. What is a metalloid?

17. Indicate if each of the following elements is a metal or a nonmetal.

(a) Sodium _____

(b) Oxygen _____

(c) Calcium _____

(d) Helium _____

(e) Cl _____

(f) Ar _____

(g) Li _____

(h) Cu _____

18. Indicate the group or family that each of the following elements is in.

(a) Magnesium _____

(b) Bromine _____

(c) Krypton _____

(d) Sulfur _____

(e) Potassium _____

(f) Manganese _____