

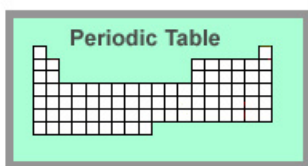
## 8.6 and 8.7 Periodic table of Elements and Periodic Trends

**Instructions:** Read the Unit 8 notes from the website and do the following exercise.

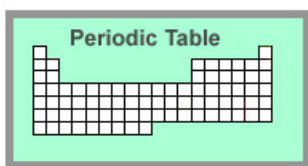


### I. Atomic size

1. Draw in the direction of an arrow for atomic size trend as you move ACROSS a row on the Periodic Table.



2. Draw in the direction of an arrow for atomic size trend as you move DOWN a column on the Periodic Table.



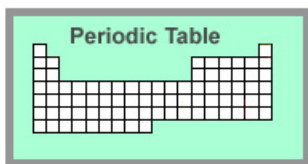
### II. Ionic size

Circle which is bigger.

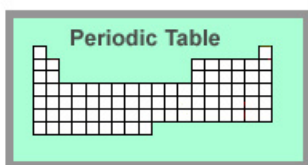
1. Na atom or  $\text{Na}^+$  ion
2. F atom or  $\text{F}^-$  ion
3.  $\text{Na}^+$  ion or  $\text{F}^-$  ion or  $\text{O}^{2-}$  ion

### III. Metallic characteristic

1. Draw in the direction of an arrow for metallic characteristics trend as you move ACROSS a row on the Periodic Table.



2. Draw in the direction of an arrow for metallic characteristics trend as you move DOWN a column on the Periodic Table.



### IV. Melting point and boiling point

1. Draw in the direction of an arrow for melting point and boiling point trend as you move DOWN the column for the halogens (Group VIIA).

9 <b>F</b> Fluorine 18.9984032	Melting Point	Boiling Point
17 <b>Cl</b> Chlorine 35.4527		
35 <b>Br</b> Bromine 79.904		
53 <b>I</b> Iodine 126.90447		
85 <b>At</b> Astatine (210)		

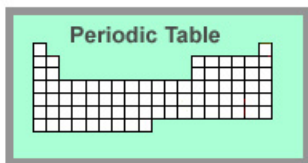
2. Draw in the direction of an arrow for melting point and boiling point trend as you move DOWN the column for the alkali metals (Group IA).

3 <b>Li</b> Lithium 6.941	Melting Point	Boiling Point
11 <b>Na</b> Sodium 22.989770		
19 <b>K</b> Potassium 39.0983		
37 <b>Rb</b> Rubidium 85.4678		
55 <b>Cs</b> Cesium 132.90545		

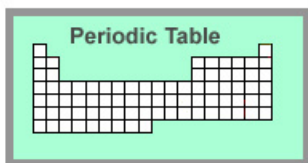
## V. Electronegativity

1. In your own words, what is it and what is it used for?

2. Draw in the direction of an arrow for electronegativity trend as you move ACROSS a row on the Periodic Table.



3. Draw in the direction of an arrow for electronegativity trend as you move DOWN a column on the Periodic Table.



## VI. Spelling with the Elements

How many words (4 letters or longer) can you spell using the elements on the Periodic Table.

