

Unit 4

NAME

Class Work

12/4/13

## 4.9 Electronegativity

SPARK: submit bathroom passes

Complete participation rubric!

Write down this definition:

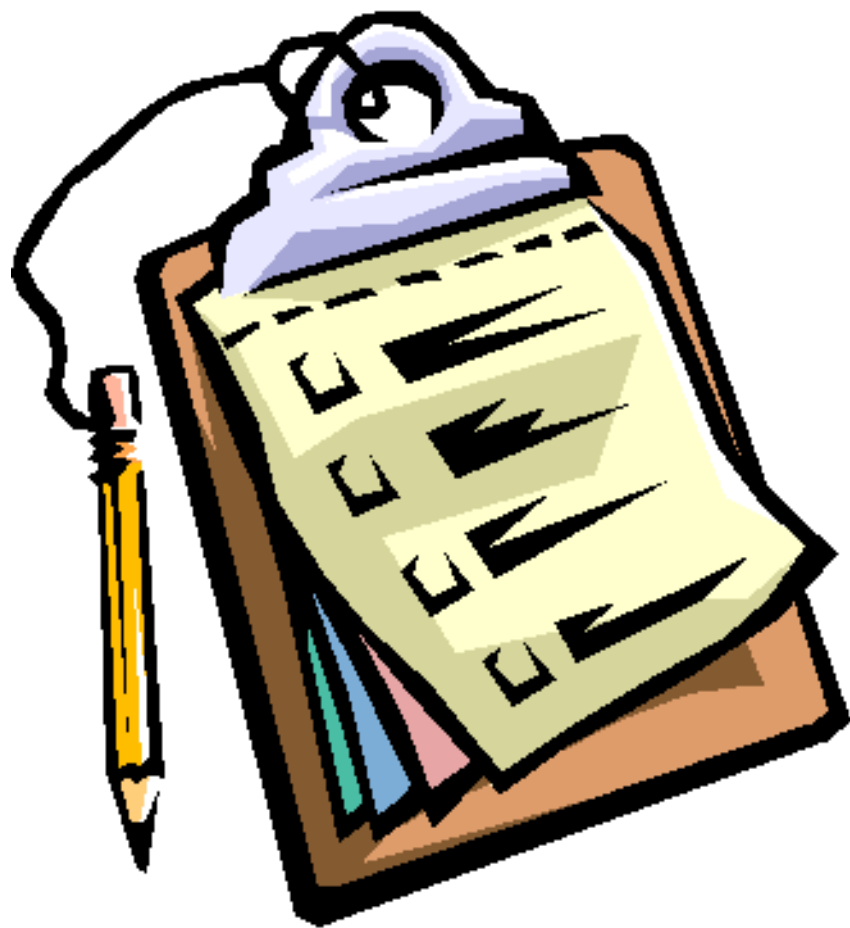
**Electronegativity:** The tendency of an atom to attract electrons toward itself.

## Objective

SWBAT explain trends in electronegativity

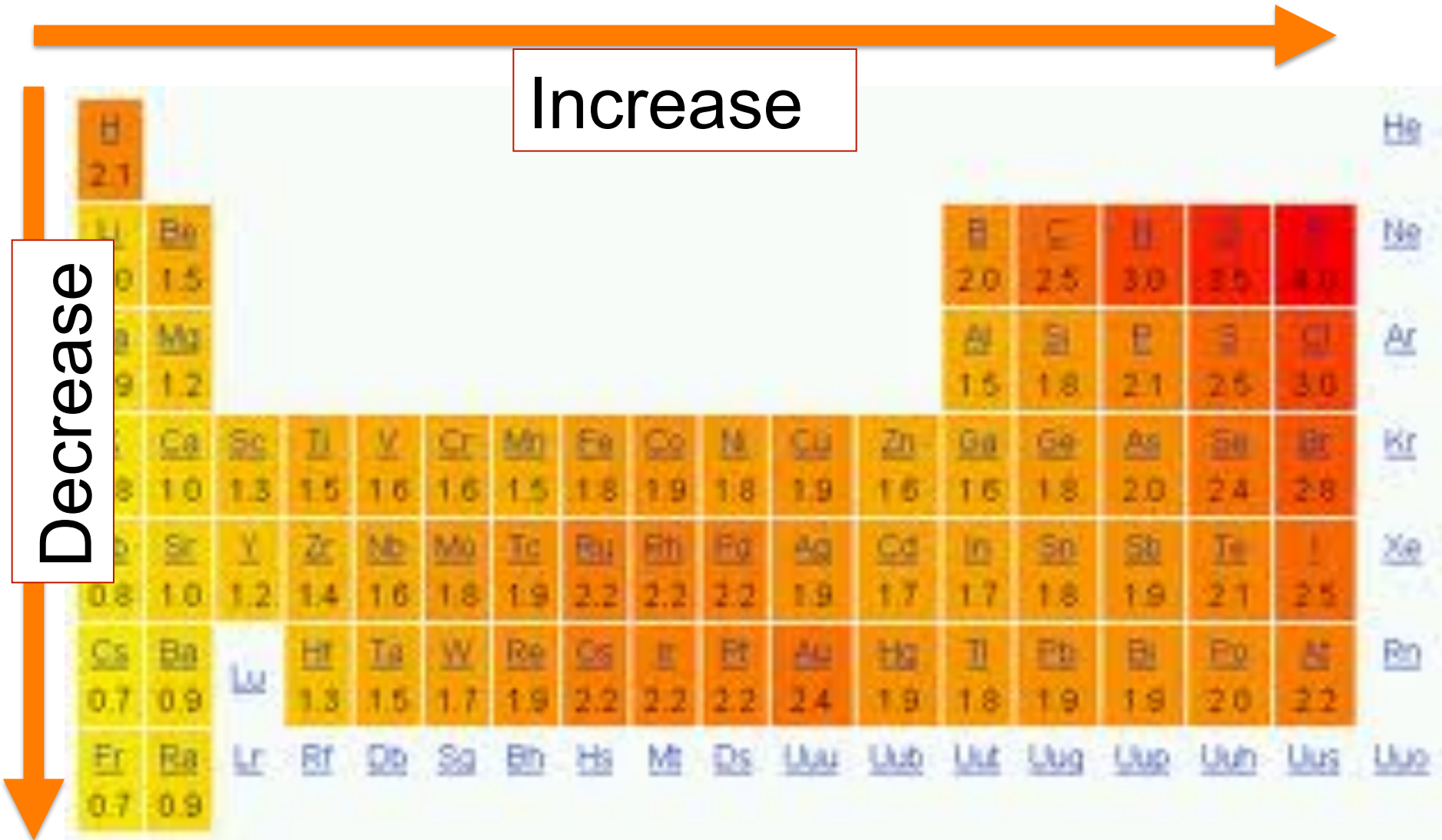
# Agenda:

- Do Now/Objective
- Trends in Electronegativity
- Practice
- Homework



Objective: SWBAT explain trends in electronegativity

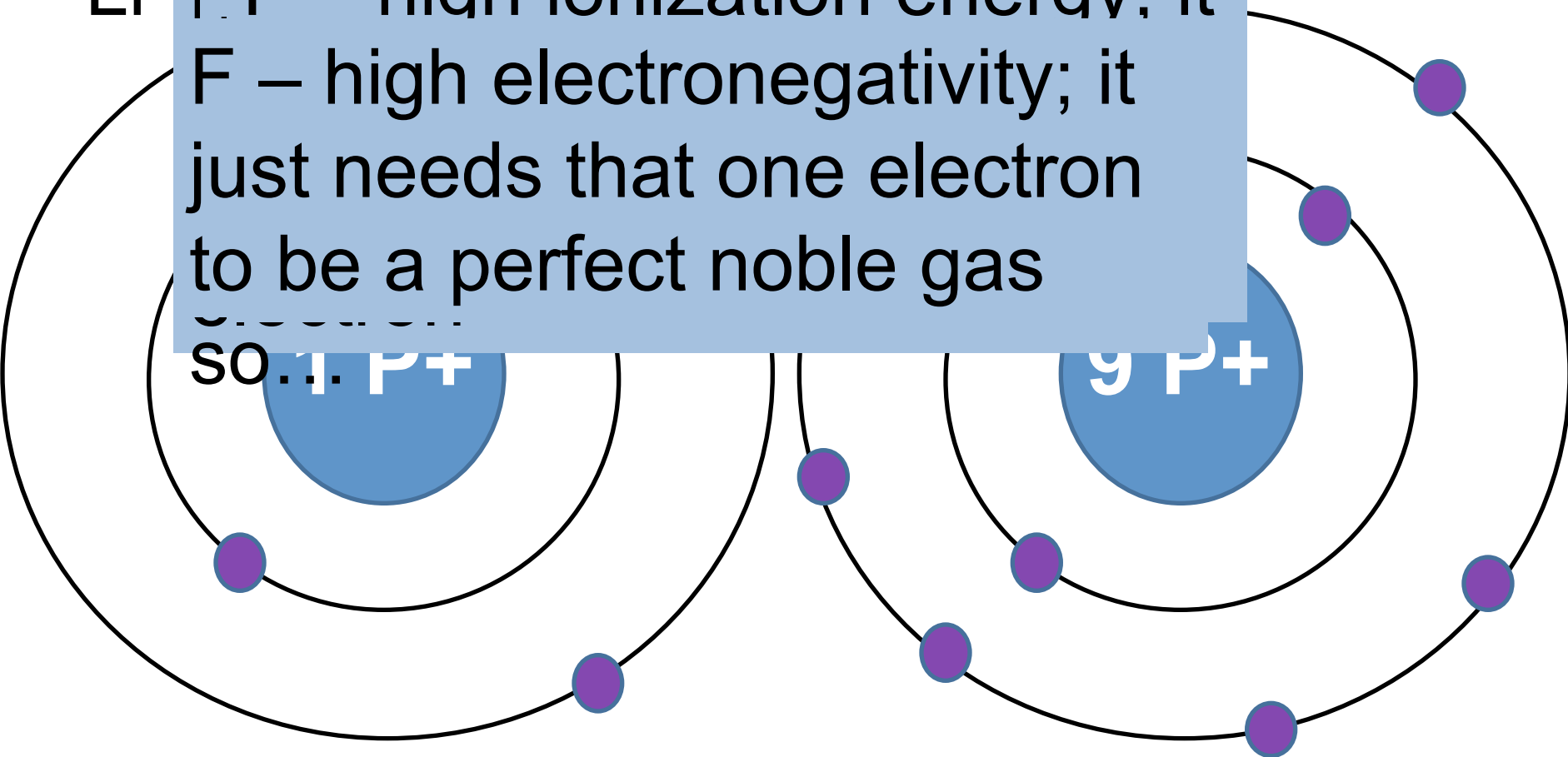
# Trend: Electronegativity



Objective: SWBAT explain trends in electronegativity

# Across a Period


Li → F – high ionization energy; it  
F – high electronegativity; it  
just needs that one electron  
to be a perfect noble gas



Objective: SWBAT explain trends in electronegativity

# Electronegativity

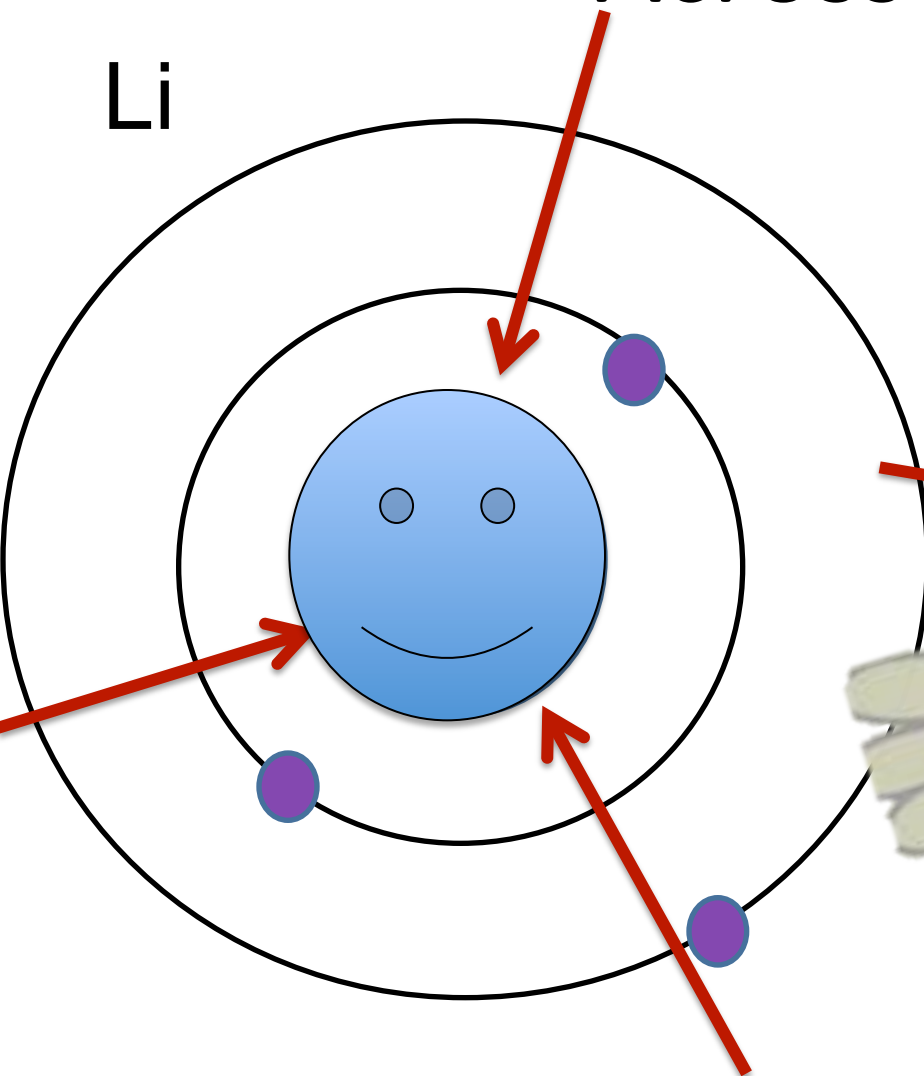


- Across a period: Electronegativity Increases
    - As the number of protons increases, electrons are more strongly attracted and hence...
    - They will have more pull on other atoms electrons
- 

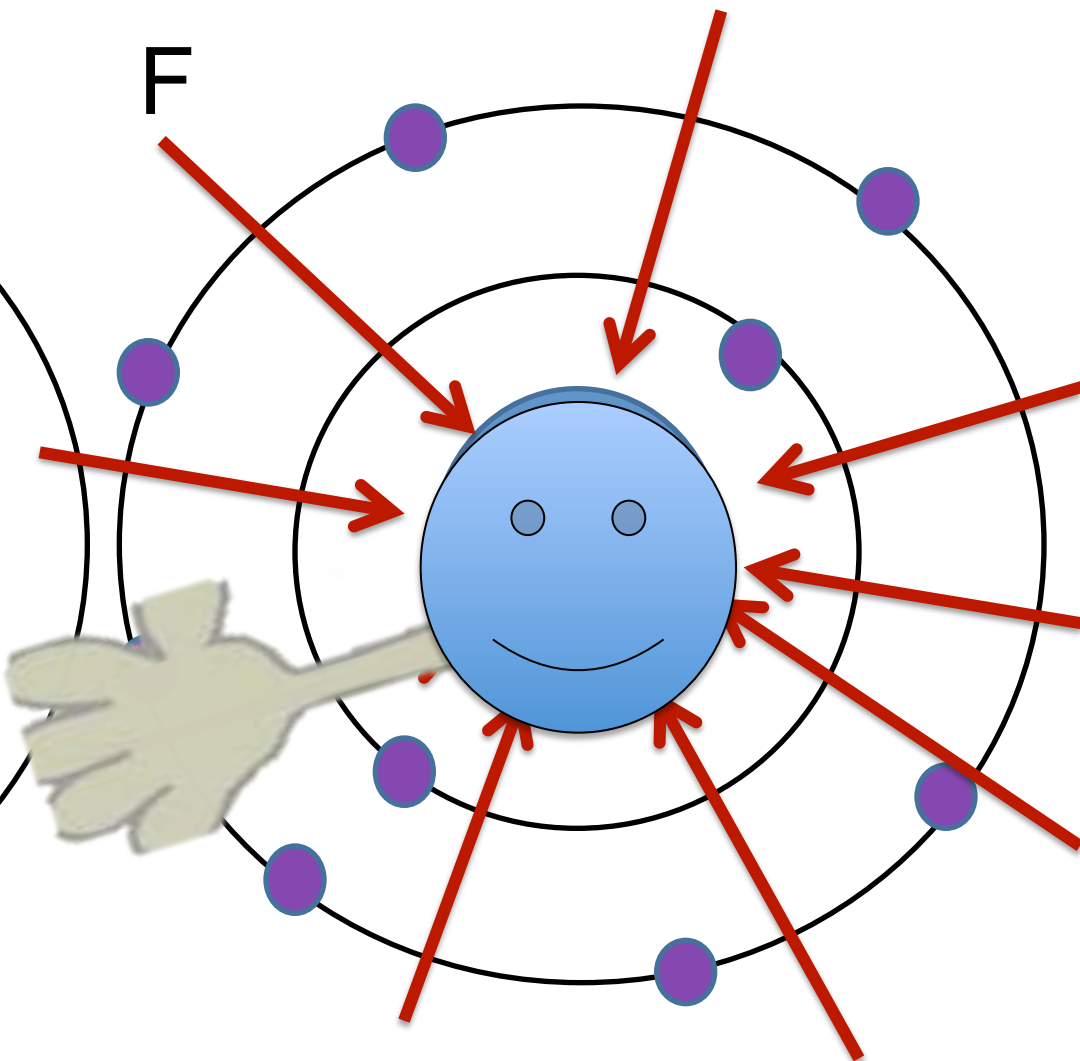
Objective: SWBAT explain trends in electronegativity

# Across a Period

Li



F



Objective: SWBAT explain trends in electronegativity

# Electronegativity



Down a group: Electronegativity Decreases

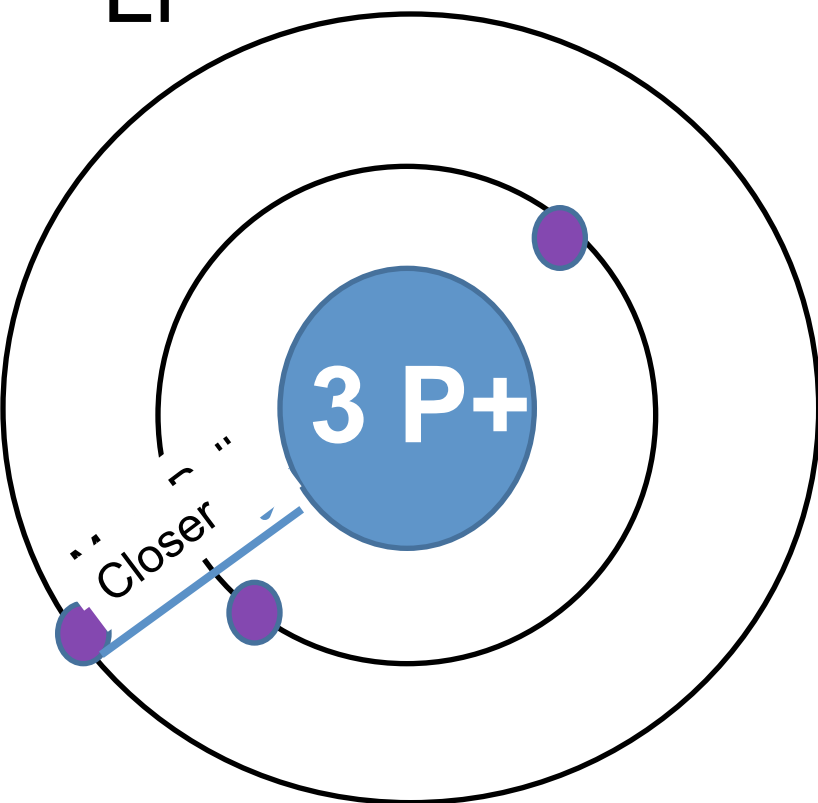
- There are more energy levels.
- Prospective electrons from other atoms will be shielded from the attraction forces of the additional protons by other energy levels of electrons



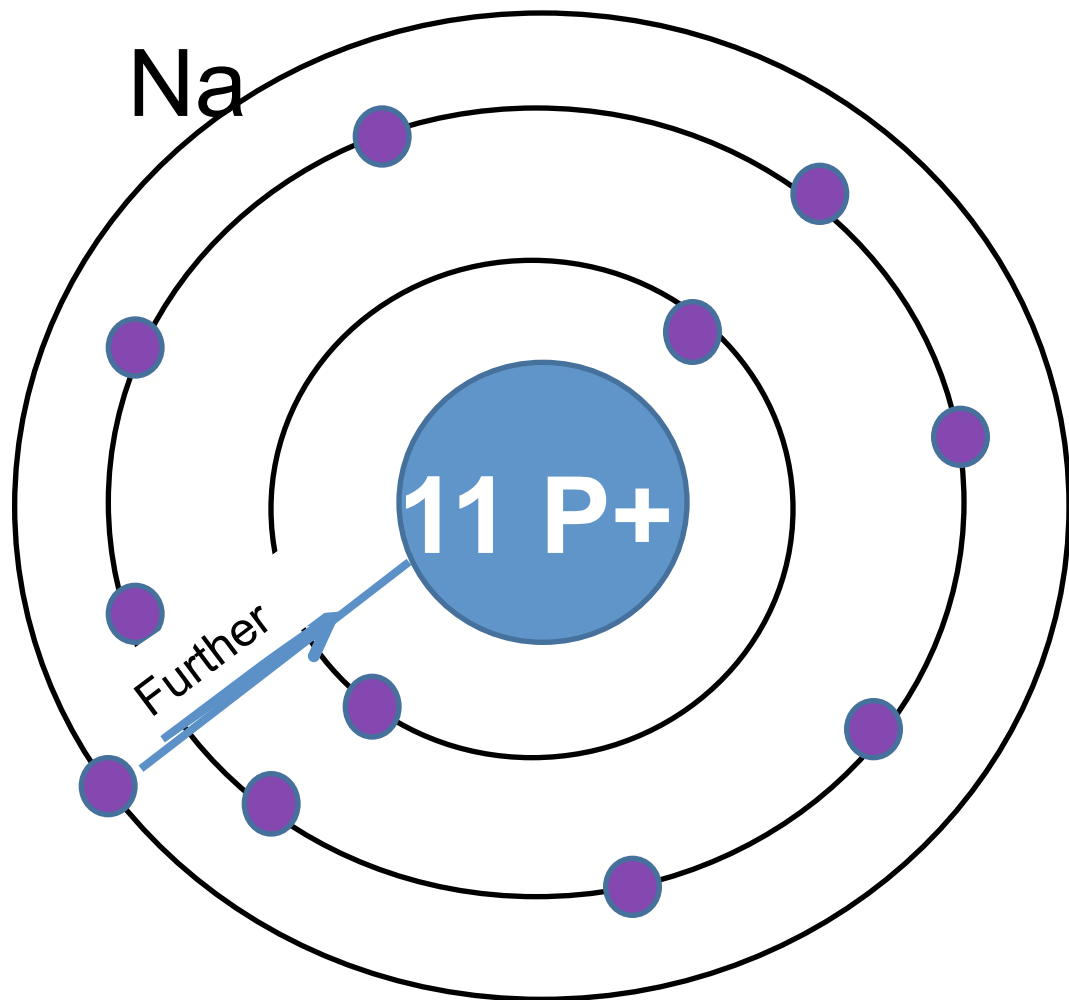
Objective: SWBAT explain trends in electronegativity

# Down a Period

Li



Na



Objective: SWBAT explain trends in electronegativity



# Mid Lesson “Exit” Ticket

Describe the trends

## 1. Ionization Energy

A. Left to Right: Increase or Decrease

- EXPLAIN!

B. Top to Bottom: Increase or Decrease

- EXPLAIN!

## 2. Electronegativity

A. Left to Right: Increase or Decrease

- EXPLAIN!

B. Top to Bottom: Increase or Decrease

- EXPLAIN!

Objective: SWBAT explain trends in electronegativity

# Independent Work

- Complete the 4.9 worksheet!
- If there is time remaining, we will review 4.8 HW on the document camera

Objective: SWBAT explain trends in electronegativity

# HOMEWORK

Work on Unit 4 Flash Cards!

Objective: SWBAT explain trends in electronegativity