

# Lesson 44: Trends on the Periodic Table

Chemistry with Lab

## **Atomic Number**

- \_\_\_\_\_ across a period
- \_\_\_\_\_ down a family

## **Atomic Mass**

- \_\_\_\_\_ across a period
- \_\_\_\_\_ down a family

## **Atomic Radius**

- \_\_\_\_\_ the distance between \_\_\_\_\_ of two like \_\_\_\_\_.
- \_\_\_\_\_ across a period (due to increased attraction of more positive nuclei to electron clouds)
- \_\_\_\_\_ down a family (due to addition of an energy level)

## **Electron Affinity**

- amount of \_\_\_\_\_ when an \_\_\_\_\_ gains an \_\_\_\_\_
- \_\_\_\_\_ across a period
- \_\_\_\_\_ down a family

## **Ionization Energy**

- amount of \_\_\_\_\_ required to \_\_\_\_\_ an \_\_\_\_\_ from a neutral \_\_\_\_\_
- \_\_\_\_\_ across a period
- \_\_\_\_\_ down a family

## Lesson 44: Trends on the Periodic Table (cont.) Chemistry with Lab

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### **Electron Distribution – Forming Ions**

- Atoms become ions by \_\_\_\_\_ or \_\_\_\_\_ electrons to become \_\_\_\_\_
- An atom is stable when it has a \_\_\_\_\_ outer energy level (\_\_\_\_\_ valence electrons)
- Atoms that lose (give away) electrons become \_\_\_\_\_ charged ions.  
Atoms that gain (steal) electrons become \_\_\_\_\_ charged ions.

### **The Chemistry Quiz**

CR1. \_\_\_\_\_ CR2. \_\_\_\_\_ 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
4. \_\_\_\_\_ 5. \_\_\_\_\_