Analysis Activity

ATOM FORMATION

Directions:

Name: _____

1. Log into Collisions and navigate to the Atoms Game.
2. Play the Tutorial levels, if you haven't done so already.
3. Exit the levels and enter the Atoms Sandbox.
4. Build each atom listed in the table below based on the proton # provided and record the requested information.

Atomic Number	2	7	12	15	9	16
Proton #	2					
Electron #	2					
# of energy levels	1					
# of valence electrons	2					
Electron Configuration	$1s^2$					
Atomic symbol	He					
Element name	Helium					

Order the atoms above from smallest to largest atomic radii by placing atomic symbols on the lines below.

_____ < _____ < _____ < _____ < _____ < _____

Smallest Radii — Largest Radii

Analysis Activity

ATOM FORMATION

Atomic Number	20	10	30	5	26	35
Proton #						
Electron #						
# of energy levels						
# of valence electrons						
Electron configuration						
Atomic symbol						
Element name						

Order the atoms above from smallest to largest atomic radii by placing atomic symbols on the lines below.

_____ < _____ < _____ < _____ < _____ < _____

Smallest Radii — Largest Radii

Summary Questions:

1. Using a periodic table and the information collected above , describe the trend in atomic size across a row.

2. Using a periodic table and the information collected above, describe the trend in atomic size down a period.