Place our initials on A-F for all videos you watched at the URL listed below:

http://homework.sdmesa.edu/dgergens/chem100/concept_map_interactive/bohr_schroedinger_videos.html (click here)

<table>
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<tr>
<th></th>
<th>A) Basic Concepts for Bohr's Model</th>
<th>B) Atom, Shell, Subshell, Orbital</th>
<th>C) City, Street, Home, Room</th>
<th>D)</th>
<th>E) Electron Configuration for Atoms</th>
<th>F) Electron Configuration for Ions</th>
<th>G) I read each topic sentence in Chapter 4</th>
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Which generic symbol (the first or second symbolism) provides the most information for the unknown element below? **Circle the symbol that provides more information about the isotope and briefly explain your choice using complete sentences. Be brief and concise in your explanation.**

![20 X versus 20 X]

Complete the following:

**Atomic Number:** 13
The mass number for this element is 27
How many neutrons ______, protons ______
Give the correct isotopic symbol: [ ]
Correctly name this isotope:

**Atomic Number:** ______
The mass number for this element is ______
How many neutrons ______, protons ______
Give the correct isotopic symbol: [ ]
Correctly name this isotope:

Complete the following nuclear reactions:

\[ ^{237}_{93}\text{Np} + ^{4}_{2}\text{He} \rightarrow \text{fill in missing isotope} \]
\[ + ^{1}_{0}\text{n} \rightarrow ^{14}_{6}\text{C} + ^{1}_{1}\text{H} \]

**CIRCLE the cosmic ray** and place a triangle around \( \Delta \) the alpha particle.
According to Bohr's model, answer the questions on the left.

Atomic Number: _____

How many protons _____

How many total electrons _____

Row number of atom _____

Group number of atom _____

How many valence electrons _____

Draw its Lewis Dot structure

(metal, semimetal, nonmetal) (Circle One)

Give the Lewis Dot Structure

How many neutrons _____

What is the atom's mass number? _____

Give its ISOTOPIC symbol

Name of ISOTOPIC symbol

Complete the following:

Atomic Number: 17

Draw a sketch of this atom according to Bohr's model, and answer the questions on the left.

How many protons _____

How many total electrons _____

How many valence electrons _____

Group number of atom _____

Row number of atom _____

Atomic symbol

Name of symbol

Give the Lewis Dot Structure

(metal, semimetal, nonmetal) (Circle One)

To draw an isotopic symbol you must know the atom's ______ number and/or number of ________ in its nucleus