Science Notebook Layout **DON'T COPY UNDERLINED TEXT**

Mrs. Aguirre's Webpage: http://www.quia.com/profiles/caguirre

Atoms: CPO pages 118-124 2/5/13

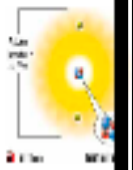
Definitions:

1. electron
2. Proton
3. Neutron
4. Nucleus
5. Atomic number
6. Isotope
7. Mass number

Stamped up to 4 times

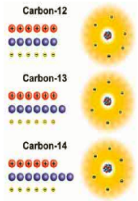
2. **Charge** on subatomic particles (pictures and text from pg 118)

3. **Atomic structure** (how parts are put together) Pictures and text from pg. 121



4. **Mass** of subatomic particles p 121

5. **Isotopes** of Carbon P 124



HW: Section Review on **page 126, questions 1-8 (SKIP # 2 and #4) Use "FCS", binder paper**

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Atoms Study Guide 2/6/13

Atoms Study Guide

1. Draw and label a Helium atom: (Label the nucleus with protons & neutrons and the correct number of orbiting electrons using the symbols below)

2
He
Helium
4.003

how many?

Neutrons _____ Protons _____ electrons _____

2. Atomic mass comes from adding _____ + _____ (in nucleus).

3. The atomic number comes from the _____ of _____ in the nucleus.
4. What is the atomic number for Tin? _____
5. What is the Atomic mass for Tin? _____
6. How many protons _____
   electrons _____
   neutrons _____

50
Sn
Tin
118.69

show math:

7. Electrons have a _____ charge
8. Neutrons have a _____ charge
9. Protons have a _____ charge
10. What is the definition of an **isotope**? _____

11. The isotopes will have **different numbers of** _____ but the **same number** of _____ and _____. Draw and label 3 different hydrogen **isotopes.**

The isotopes will have a mass of 1, 2, and 3 amu.

1 H 1 **H** isotope with mass=1	2 H 1 **H** isotope with mass=2	3 H 1 **H** isotope with mass=3

12. On back, Make a labelled diagram of the Rutherford experiment. (CPO book pg. 120 or internet). Show and describe (in words) how Rutherford found evidence for: a. the atom being mostly empty space and b. the existence of a small nucleus containing most of the mass of the atom.

HW: Test Friday!! Study and finish all work from unit

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