NUEVO COLEGIO DEL PRADO

Science 8th Grade

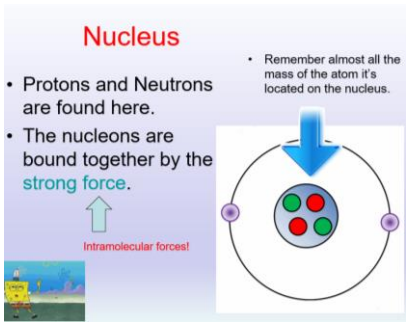
Guía de Trabajo Semana 2, 13 – 17 abril 2020

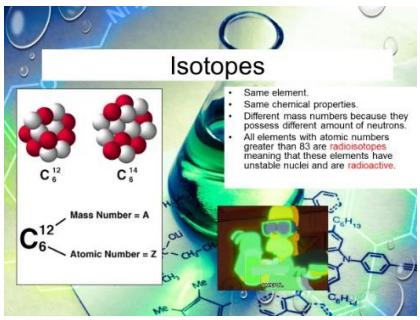
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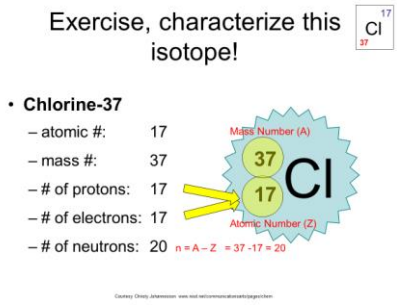
Topic: Isotopes and Average Atomic Mass

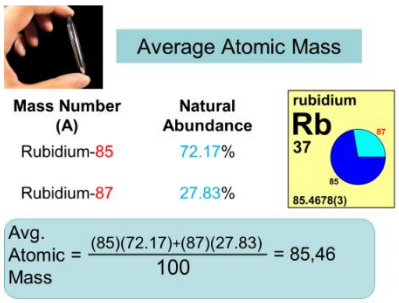
Part 1

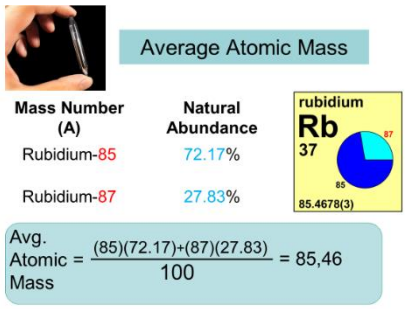
1. **Watch** the videos that are posted on the blog.
2. **Download** the PowerPoint Presentation as well.
3. **Write** on your notebook the following, remember the title is:











Remember to write the formula for calculating the Average Atomic Mass!

$$\text{Avg. Atomic Mass} = \frac{(\text{mass})(\%) + (\text{mass})(\%)}{100}$$

Part 2

4. **Visit** the link to play building isotopes.
5. **Do** the corresponding exercises on your notebook.
6. **In case you want to study more check the blog!**

At the end of the week send a picture of the lesson and exercises on your notebook. Study the two previous lessons and get ready to be evaluated.

Exercises for the week!

1. **What is an isotope?**

2. **What does the number next to isotopes signify? Example: Carbon-12**

3. **What's the main difference among isotopes of the same element?**

4. **Complete the following characterization of isotopes. Find the Z in the periodic table.**

Isotope	^{11}B	^{19}Cl	^{34}Si	^{98}Sr	^{43}Ca
A					
Z					
# Protons					
# Neutrons					
# Electrons					
Isotope name:	Boron-11				

5. **Calculate the average atomic mass of the following elements. Use the calculator.**

REMEMBER: Each atom or isotope has MASS NUMBER. Each element has an AVERAGE ATOMIC MASS calculated from each isotope abundance.

a. **Three isotopes of Silicon occur in nature, Calculate the average atomic mass for the three isotopes of Silicon.**

Isotope	Abundance in nature	Mass
Silicon-28	92.23%	27.97693
Silicon-29	4.68%	28.97649
Silicon-30	3.09%	29.97377

b. **Only two isotopes of Copper naturally occur in nature. Calculate copper atomic mass.**

Isotope	Abundance in nature	Mass
Copper-63	69.17 %	62.9396
Copper-65	30.83%	64.9278

Write only two decimals in your response.