MR. ALBERNAZ – PRE-AP (A DAY) AND REGULAR (B DAY) CHEMISTRY

AGENDAS FOR THE WEEK: *9/18 – 9/22*

	MONDAY (A DAY) 10:34AM-12:03PM	TUESDAY (B DAY) 10:34AM-12:03PM	WEDNESDAY (A DAY) 10:34AM-12:03PM	THURSDAY (B DAY) 10:34AM-12:03PM	FRIDAY (A DAY) 10:40AM-12:15PM
	Objective(s): SWBAT ***demonstrate the difference between subatomic particles** ***identify atoms as isotopes or ions depending on their neutrons and electrons** ***use mass number and atomic number to identify elements on the periodic table**	**Objective(s): SWBAT** ***identify subatomic particles through looking at atomic models** ***differentiate historic atomic models and explain differences based on experimentation**	**Objective(s): SWBAT** ***define and differentiate between atomic mass and atomic number** ***use isotopic notation to find the number of protons and neutrons within an atom**	**Objective(s): SWBAT** ***demonstrate the difference between subatomic particles** ***identify atoms as isotopes or ions depending on their neutrons and electrons** ***use mass number and atomic number to identify elements on the periodic table**	**Objective(s): SWBAT** ***read and write isotopic notation with actual elements as examples to determines pairs of elements as isotopes or different elements.** ***identify parts of atoms and isotopes using atomic diagrams, as well as drawing atomic models to represent different isotopes** *** calculate average atomic mass given relative abundance of isotopes of different elements**
P	**Students will complete a warm-up on the history of the atom. Additionally, students will be prompted to consider the components of an atom and guided into questioning the role of each.**	**Students will consider how small objects can get. They will think about how many times you can cut a piece of paper in half until it cannot be done any further.**	**Students will complete a warm up on atomic particles. Students will then consider what causes an element to be an element, answering questions such as: Why are elements defined by their proton number? How do Neutrons affect chemical reactivity?**	**Students will complete a warm-up on the history of the atom. Additionally, students will be prompted to consider the components of an atom and guided into questioning the role of each.**	**Students will briefly review the "beanium" lab and isotopes. Students should answer the question on why the periodic table lists decimal numbers for the atomic mass of elements.**
L **A**	**Students will first complete one page of guided notes on atomic structure. The students will be introduced to some vocabulary to be used in the activity. The students will then complete an activity on parts of the atom, listing the atomic mass, the atomic number, and the charge of different**	**Students will first take notes on the history of the atom and the many experiments that lead to the development of the current atomic model. Students will then work to create a foldable containing a summary of all of the information provided in the lecture section of the class. This foldable will allow students to review the history of the atom while also**	**Students will complete guided notes on isotopes, atomic mass, and relative abundance of isotopes. Students will then explore these concepts through the idea that beans can represent the elements on the periodic table. Students will obtain bags of different types of beans, which are representative of isotopes through an element known as "beanium". Students**	**Students will first complete one page of guided notes on atomic structure. The students will be introduced to some vocabulary to be used in the activity. The students will then complete an activity on parts of the atom, listing the atomic mass, the atomic number, and the charge of different**	**Students will complete a process oriented guided inquiry learning (POGIL) activity on isotopes. This will allow the students to review in-depth the ideas of isotopes, atomic mass, atomic models, and other concepts important to understanding the structure of atoms and isotopes. Students will then calculate the atomic mass of different elements when given the**

	elements presented to them.	**synthesizing all of the information in the different atomic models into the atomic model we use today.**	**will look at the average mass of the beans to determine the atomic mass. Students can then answer post lab questions that bring this activity into the chemical world through identifying the parallels between the activity and the periodic table.** **Students can then complete an extension activity using real elements and calculating average mass with concrete physical numbers.**	**elements presented to them.**	**relative abundance of the different masses of isotopes.**
N	**Students will turn in their activity worksheets to be used as an evaluation. In addition, student questions throughout the lesson will gauge understanding as the activity progresses.**	**Students will glue their foldables into their notebooks to later be evaluated.**	**Students' lab activity will be collected to evaluate student understanding on the link between the physical "beanium" representation to the more abstract analogy to chemical elements.**	**Students will turn in their activity worksheets to be used as an evaluation. In addition, student questions throughout the lesson will gauge understanding as the activity progresses.**	**Students will turn in both their POGIL and the worksheet on calculations of atomic mass using isotopes and relative abundance.**