

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

AGENDAS FOR THE WEEK: 9/25 – 9/29

	<b>MONDAY (B DAY)</b> 10:34AM-12:03PM	<b>TUESDAY (A DAY)</b> 10:34AM-12:03PM	<b>WEDNESDAY (B DAY)</b> 10:34AM-12:03PM	<b>THURSDAY (A DAY)</b> 10:34AM-12:03PM	<b>FRIDAY (B DAY)</b> 10:40AM-12:15PM
	Objective(s): SWBAT *identify isotopes using concrete representations of atoms through beans *calculate mass number and atomic number by identifying subatomic particles.	<b>TEST TODAY</b> BAD DAY FOR OBSERVATIONS	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 *use dimensional analysis to convert units of volume, mass, and length *use lab equipment to take measurements and data, and perform calculations with that data	<b>TEST TODAY</b> BAD DAY FOR OBSERVATIONS
<b>P</b>	Students will complete a warm-up on parts of the atom, including a review on mass number and atomic number. Students will then consider the fact that many atoms of the same element may be different due to isotopes.		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 be prompted to think about how they make their food with measuring spoons, cups, etc. Students will consider how measurements are used in their daily life, and how conversions may be useful.	
<b>L</b>  <b>A</b>	Students will first complete one page of guided notes on isotopes. Students will then move to their lab groups in order to begin working with isotopes that are represented by beans in bag. Students will count protons (pinto beans) to identify the atomic number and element name, while they will count neutrons (white beans) to determine the mass number and isotopes.		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 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	Students will take a quick set of guided notes about dimensional analysis, going over a simple example of unit conversion. Students will then move to their lab groups in order to make safe-to-eat cookie dough using abnormal measurement equipment, such as bottle caps. Conversion factors will be given so that students can use them to calculate how to make cookie dough in correct proportions.	

			<p>chemical world through identifying the parallels between the activity and the periodic table.</p> <p>Students can then complete an extension activity using real elements and calculating average mass with concrete physical numbers.</p>		
N	<p>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.</p>		<p>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.</p>	<p>Students will complete a worksheet while calculating their unit conversions. This can be used as an assessment for student work.</p>	