[Stoichiometry: Chemistry for Massive ... Crash Course Chemistry #6](http://nerdfighteria.info/video/144/UL1jmJaUkaQ" \o "Stoichiometry: Chemistry for Massive Creatures - Crash Course Chemistry #6)

1. Chemistry explains everything you can see, how it looks, the way it feels, why it behaves the way it does--by describing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that you can't see. It helps us understand the biggest stuff in the universe by helping us understand the tiniest.
2. Define stoichiometry:

http://nerdfighteria.info/images/arrow_d.png Atomic Mass Units ([2:05](javascript:;))

1. The average atomic mass of all of the naturally occurring \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a given element.
2. What can we measure atomic mass in? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ units.   
     
   http://nerdfighteria.info/images/arrow_d.png Moles ([4:43](javascript:;))
3. And in order to make these calculations and predict reactions, I first need to be able to convert the atomic mass of this sugar, into a standard amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Not weight, not volume, just purely, objective amount of stuff.
4. What is arguably the most important unit in all of chemistry, because it allows us to express a chemical's atomic mass in terms of grams? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

http://nerdfighteria.info/images/arrow_d.png Molar Mass ([5:59](javascript:;))

1. So you get the picture, it's a big number, but in chemistry the thing to remember is this: a mole of any element contains 6.022 x \_\_\_\_\_\_\_\_atoms of that element no matter what. This is what lets us translate number of atoms into grams. It lets us \_\_\_\_\_\_\_\_\_\_\_\_\_\_elements.
2. The number of atoms per mole remains the same, but the mass of a mole depends on the average mass of the element. This simply means that one mole of any element equals its relative atomic mass in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

http://nerdfighteria.info/images/arrow_d.png Equation Balancing ([8:45](javascript:;))

1. So when writing a reaction out as an equation the number of \_\_\_\_\_\_\_\_\_\_\_\_ of each element has to be exactly the same on both sides. Reconciling the reactants with the products is called equation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and it's a good bit of what stoichiometry is all about.
2. Today, we learned about two of the most important units of measure in chemistry, atomic mass units and\_\_\_\_\_\_\_\_\_\_\_. We also learned how to calculate molar mass and how to balance a chemical equation and finally, we talked about how to use molar ratios to calculate the amount of stuff that goes in and out of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Explain 2 things you learned from this video: