How ALEKS works:

First off, ALEKS is not like most homework systems. You don't earn points for "getting answers right", you earn points based on how much you complete. Depending on your preparation and how much effort you put into reading, you will get more or less problems assigned. Your homework will be tailored to your needs thus it will be very different from everyone of your fellow students.

ALEKS works in a regular cycle of assessment and learning. Here's how it will go:

You'll begin with an initial "placement" assessment, about 20-30 problems and questions in chemistry to solve. You'll get no help at all, nor should you try to find any. The idea is to find out where you should start learning, and you want ALEKS to get that just right. If your friend helps you, or you Google answers, you will end up with learning path that is too advanced and frustrating for your level of preparation. You will miss important pre-requisites and end up lost or having to do a lot of remedial work down the line. Conversely, if you don't take the assessment seriously, you'll just end up wasting time on material you already know. The assessment is over the entire first semester material, so you can expect to get problems you have no idea how to solve. Don't worry about that. This is a placement test, not a final exam. You're not going to be graded on it, and there's no reward for doing better or penalty for doing worse.

Next you'll enter "Learning Mode." Here you will to learn how to master topics ALEKS determined that you need to work on. Do you see topics here you're really sure you already know? See the discussion above! Almost certainly, you really DO need to work on those topics, to cement your mastery. You DO NOT want to find that out on the first exam! Trust ALEKS. Do the work it assigns.

In Learning Mode you'll study topics by working through problems. Each topic will consist of several problems in the same topic that you must answer correctly for ALEKS to conclude you've mastered the topic. How many can vary, depending on what kind of mistakes you make, if any. The fastest way to be awarded credit is to be methodical and careful. Get three or four in a row correct and you'll be done. Get one right, then one wrong, then another two right, then one wrong, and you could be there a long time. ALEKS puts a real premium on solving a problem perfectly. All units must be correct and complete. Answers must be rounded to the correct number of significant figures. Nomenclature spelled correctly and formulas must all be written without a single small careless error. This is not to say you can't make mistakes in ALEKS. ALEKS can detect a wide range of mistakes and give you useful feedback to correct your errors. You will certainly move through the system faster if you are careful, so take the time to write out your work on paper thoroughly without skipping steps while showing all of your units. You'll be rewarded by not having to repeat problems. When it comes to ALEKS, don't think in terms of how many you get right or wrong, think in terms of how much must I do to really learn the material.

In Learning Mode you'll also have access to learning resources. You can ask ALEKS to show you how to solve any problem you're given, in every detail. (ALEKS will then ask you to solve another, similar but not identical, problem on your own.) There are hyperlinks in these Explanations that will take you to the ALEKSPaedia, a built-in "encyclopedia" of general chemistry that has more general and background knowledge you may need. The Explanation will also tell you where in your textbook you can find more help. Use these resources! They're designed to give you just the right help you need at just the right moment, without wasting your time.

Finally, after each round of learning, you'll be re-assessed, to make sure you retained what you learned. You're not going to like this, of course. Nobody does. But being re-assessed is very important for your long-term success. First, because you really do want to be sure you haven't forgotten anything. But also because practicing solving problems on your own, without any help or hints, cements knowledge and mastery in your memory. Research in cognitive science clearly supports this. You may understand it already from your own
experience: You may "feel" that you know something, but if you perform poorly on an exam, you find out that you clearly don't.

An unfortunate but absolutely necessary aspect of this re-assessment is that you can lose credit for topics which you have forgotten. If this happens -- or rather WHEN it happens, since it will almost certainly happen to all of you, and more than once -- then you will have to restudy the topics in Learning Mode to re-gain credit. That's more work, of course, so the lesson here is: Learn topics thoroughly the first time through so you can demonstrate your mastery of them any time, on any re-assessment, for the rest of the course. If you ever feel that you are weak on a particular topic, ALEKS also has a Review feature where you can practice on topics where you feel a little shaky. In fact, ALEKS will even suggest which topics you should review, based on its data and your own record. A judicious use of the Review feature will make it much less likely you have to re-study many topics and help you to be better prepared for exams.

**Grading Your Work In ALEKS.**

Your ALEKS Hw is worth 100 points (10% of your grade). This means that HW will not take an average of 60% on your exams and quizzes from a D to a C, but it will mean that if you earn 70% and above on those exams and quizzes, you will likely earn at least a C or maybe better.

Prep for Chem. 1A: you’ll be expected to come into Chem. 1A with genuine mastery of a wide range of topics from High School (makes sense, right?). Your first objective is to find out which topics you really never mastered, or have forgotten through lack of recent practice, and to recover them prior to the deadline for the first objective, called "Prep for Chem. 1A". Look in your Gradebook in the ALEKS learning mode to see your score, and make sure that is 100 percent prior to January 30th.

Intermediate Objectives: you'll be expected to reach certain "mileposts" in your mastery of the entire curriculum at certain dates. ALEKS will keep track of this, and report it to your instructor, who will assign a portion of your grade based on whether or not you reached the milestone. The purpose of this is, frankly, to keep you working regularly. We know it's human nature to procrastinate if given the chance. Check the Gradebook for your score on this metric. You % of the points = you % completion.

Final mastery: the remainder of your grade will be determined just by your overall level of mastery at the end of the class -- how many topics ALEKS says you've mastered. The purpose of this is, first, to give you credit for mastery whenever it is achieved, even if its achieved well after the initial deadline. It is also to give you a strong motive for restoring topics to your mastery list that you may lose on re-assessment. We don't want you forgetting what you learned in Week 1 by the time you get to Week 15. That would result in a sad experience on the final exam. Look at the numerator on the fraction above the ALEKS pie for your score here.

During the semester you will have points from ALEKS allocated to your total based how well you are keeping up with your weekly objectives. i.e. if you are completing all of your objectives on time, you earn 100% of your points. If you fail to do so, you will earn points based on your %.

At the end of the semester, your HW points will be based on two factors. 1. How well you kept up with the weekly objectives and 2. You completion of the "pie" (% of 224 topics mastered). This means if you fall behind, you can make up some points by completing your pie. If you look at the ALEKS syllabus, you will see that you have the week of spring break to fill in parts of your pie that are missing!

**Tips And Tricks.**

Don't cram your ALEKS work into one giant all-night session right before the deadline. Not just because it isn't good for you in the long term. It won't work well even in the short term! What happens is that after about an
hour and a half you're going to get tired, and you're going to start making mistakes. What happens then? ALEKS gives you more work to do! Because it looks like your mastery is fading. If you work in marathon sessions, you can easily end up putting in twice as many total hours as someone who breaks his work up into shorter, more frequent sessions, so that he has a well-rested mind throughout. Log in every day and do at least a little work, 30 to 90 minutes is best.

Try to solve each new problem yourself before reading the Explanation. You may get it completely wrong, but by trying to solve it yourself, you will be much more aware of what exactly is confusing to you -- which steps or concepts. Then when you do read the Explanation, it will have much more impact.

When you work on a new topic in Learning Mode, ALEKS will tell you how many more problems you need to get right to earn credit. The best way to long-term mastery is to NOT to work on one topic only until you get credit. Instead, stop just short, when ALEKS says you only need one more correct to gain credit. Go do something else then. Work on another topic, or work on some other course, or do something productive (read a book, get some sleep, wash clothes, work out etc... Then come back later and finish off the topic. Why? Cognitive science tells us memory actually needs a little time when it's not being actively used to become "consolidated" and permanent. Putting a little delay between the bulk of your learning and the final dash to the finish line will significantly improve your retention.

Always remember: ALEKS is ALL about retention. You are GOING to see that type of problem again, on an re-assessment later on, and you want to get it right every time so you don't have to re-study the topic.

Lastly, always keep in mind that your ALEKS homework will be different from that of every one of your classmates so don't bother comparing answers. Also, don't waste your time searching for answers, you won't find any on the Google internets!

So ALEKS Screwed Up.

**DO NOT SPAZ OUT AND EMAIL DR. MACK OR YOUR TA!!!**

You're working in ALEKS, and you are absolutely certain that ALEKS is wrong about your answer. You put the right answer in, and the system marked you wrong. This is deeply frustrating, particularly right before a deadline. Don't smash your computer. That would be expensive. Also don't e-mail your instructor in a rage. If ALEKS has really made a mistake, there's nothing he can do about it, because he doesn't have access to the computers running ALEKS.

What you need to do is write to ALEKS Customer Support. Open your Message Center, compose a message to ALEKS Customer Support. You can use as many bad words as you like, but please be as precise as possible about your difficulty, including the date and time, your ALEKS login, and what exactly happened, so that they can zero in on the problem quickly. Check the little box at the bottom of the form that attaches the page on which you were working, for even faster results.

Your complaint will be reviewed promptly by ALEKS. People with PhDs in chemistry will look into it. If you have discovered a genuine bug in ALEKS it will be fixed pronto, usually within 12 to 24 hours, depending on when you find it, and ALEKS will apologize to you sincerely and thank you for helping them find a mistake. Incidentally, please be sure you have a genuine complaint. ALEKS will examine your exact record in the system -- exactly what you put in, and when -- and communicate the results to your instructor as well as to you. Your instructor has access to the same complete record of what you do in ALEKS, including when you work, for how long, what you enter, how ALEKS responds, everything. It will not serve you well to complain about ALEKS when
the real problem turns out to be you managed your time poorly, or were extremely careless, or did not understand some key concept in chemistry.

What do you do after you've fired off your angry e-mail to ALEKS? You have two options: first, just ask ALEKS for a new problem on the topic. Each problem is a little different, and if you haven't found a major problem, there's a strong chance the next problem won't have it, and you can complete the topic. Even if you get another "broken" problem, you can almost certainly still complete the topic, because you don't have to get every problem right to get credit in ALEKS.

Second, if the whole topic seems broken, or you're sick of it, just work on another topic. It's very rare you'll only have one topic on which you can work, and rarer still that this isn't the very last topic in a goal anyway.

**How Do I Get This Thing Working?**

ALEKS runs through your Web browser, on any computer, yours or a friends or mom's, so you have access to ALEKS almost anywhere and anytime. It's designed to run as painlessly as possible, but with the huge variety of computers and browsers and set-ups out there, sometimes you may need some technical assistance to get things running, or iron some strange behavior out.

Call ALEKS Customer Support. Your instructors can't help at all with this, but ALEKS has people who know all about computers on staff, and they will work with you to fix any technical problems as fast as possible. Your fastest response is to go to the Support website, http://support.aleks.com/, and describe the problem in detail. You can also try calling 714 619 7090 during the hours listed below:

**Useful links:**

http://www.aleks.com/support/contact_support_highered

Someone will e-mail you or call you promptly.

How ALEKS Works:

http://www.aleks.com/video/how_aleks_works