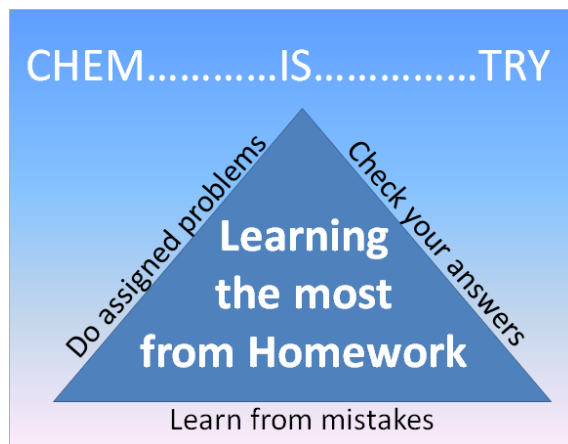


AP Chemistry Summer Assignment

John Wooden- *“Success is peace of mind which is a direct result of self-satisfaction in knowing you did your best to become the best you are capable of becoming.”*

Welcome to the start of AP Chemistry!

It is great that you are challenging yourself by taking demanding and rigorous classes! You should start the year out right, by completing this assignment to the best of your ability. If you continue to work towards being the best student you can be, you have been a success. Having a great experience in this class starts now and will continue throughout the year.



What is it the summer assignment? The summer assignment has three parts. Part I is to memorize important facts and review naming and formula writing. This can be done anywhere without needed the internet. Part II is math review done without a calculator using Khan Academy. The AP chemistry does not allow a calculator for half the test. It is important to start preparing for this now. **WHEN SOLVING THE ONLINE MATH PROBLEMS, DO NOT USE A CALCULATOR!** Part III is basic chemistry review using Khan Academy.

How Long Should it take? For some people the assignment can be done in as little as 5 hours. Plan to make flashcards of the information you need to memorize and use them several times throughout the summer. Plan to spend a couple hours each on Part II and Part III using Khan Academy. You may redo the assignments until you are happy with the grade

Will it be graded? I will be able to check your progress with the online portion of the assignment from home. Your scores on Khan Academy along with a quiz will make up your first grade of the 1st quarter. The quiz will be done in class during one of the first few days of school. There will be at least one day before the quiz when you can stay after to get any questions answered.

What if I need help? If you have an issue that you are unable to resolve you may contact me by email (fneumann2116@bcsdny.org). Do not wait until the last minute to contact me because in the summer I do not check my email daily.

THE FIRST THING IS TO LOGIN TO KHAN ACADEMY WITH YOUR SCHOOL GOOGLE ACCOUNT USERNAME AND PASSWORD. ENTER THE CLASS CODE FOR PART II AND PART III. I will then update the classroom on my account and you will have access to two online assignments. It may take up to a week for me to make the assignments viewable to you, so get logged into each classroom ASAP!

Classroom Code for Part II- **5A9SNFKJ**

Classroom Code for Part III- **KGXXRPH9**

Don't put off getting started. Good luck and I will see you soon!

3. Know the names (spelling counts), formulas, and charges for the following polyatomic ions.

TABLE 2.4 Formulas and Names of Some Common Polyatomic Ions

Formula	Name	Formula	Name
CATION: Positive Ion			
NH_4^+	ammonium ion		
ANIONS: Negative Ions			
Based on a Group 4A element		Based on a Group 7A element	
CN^-	cyanide ion	ClO^-	hypochlorite ion
CH_3CO_2^-	acetate ion	ClO_2^-	chlorite ion
CO_3^{2-}	carbonate ion	ClO_3^-	chlorate ion
HCO_3^-	hydrogen carbonate ion (or bicarbonate ion)	ClO_4^-	perchlorate ion
Based on a Group 5A element		Based on a transition metal	
NO_2^-	nitrite ion	CrO_4^{2-}	chromate ion
NO_3^-	nitrate ion	$\text{Cr}_2\text{O}_7^{2-}$	dichromate ion
PO_4^{3-}	phosphate ion	MnO_4^-	permanganate ion
HPO_4^{2-}	hydrogen phosphate ion		
H_2PO_4^-	dihydrogen phosphate ion		
Based on a Group 6A element			
OH^-	hydroxide ion		
SO_3^{2-}	sulfite ion		
SO_4^{2-}	sulfate ion		
HSO_4^-	hydrogen sulfate ion (or bisulfate ion)		

Parts II and III Khan Academy.

To complete the majority of this assignment you will be using your computer to access Khan Academy. If you do not have a computer or access to the internet, then use a friend or relative's computer or go to the library. You have the entire summer to come up with a solution and get access to a computer and not having one will not exempt you from this assignment.

Part II: Increase your math skillset without using a calculator. 14 Problems Assigned.

Part II is to work on strengthening your math skills. Half of the AP test is taken without a calculator. You will work on math problems using the Khan Academy. **DO THESE PROBLEMS WITHOUT A CALCULATOR.** Tips and videos are available to help you get started when needed. To get the grade you want, you may redo these assigned problems.

This assignment is mandatory; it will count for your grade and will be monitored and you will get the grade that comes from the computer.

Classroom Code for Part II- **5A9SNFKJ**

Part III: Review of First Year Chemistry with a calculator. 7 Problems Assigned.

This part of the summer assignment is designed to review the most important concepts from regents and honors chemistry.

This assignment is mandatory; it will count for your grade and will be monitored and you will get the grade that comes from the computer. Try to do this part after memorizing important facts from Part I of the summer assignment.

Classroom Code for Part III- **KGXXRPH9**

Getting a grade for the summer assignment. The summer assignment has three parts. The first part involves memorizing metric prefixes, common ions, and polyatomic ions. Your graded work done online along with a quiz during the first few days of school will count as the first test of the year. I will NOT be teaching this material in class, but after school help will be available before the quiz.

I look forward to teaching you AP Chemistry!

fneumann2116@bcsdny.org

How to get started with Khan Academy

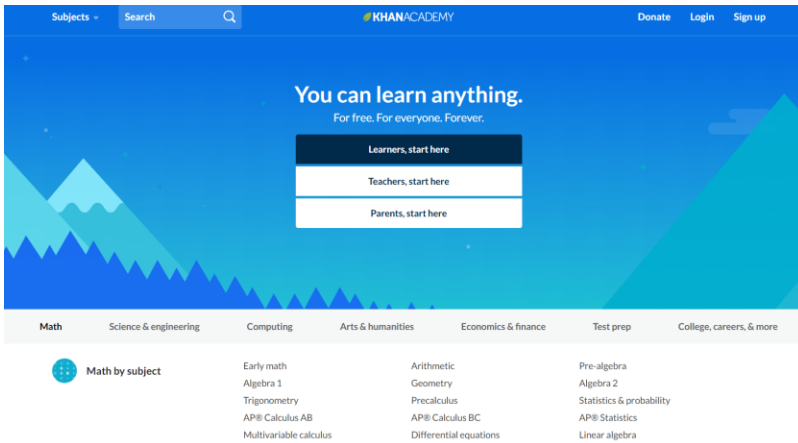


Open your web browser and type the following address:

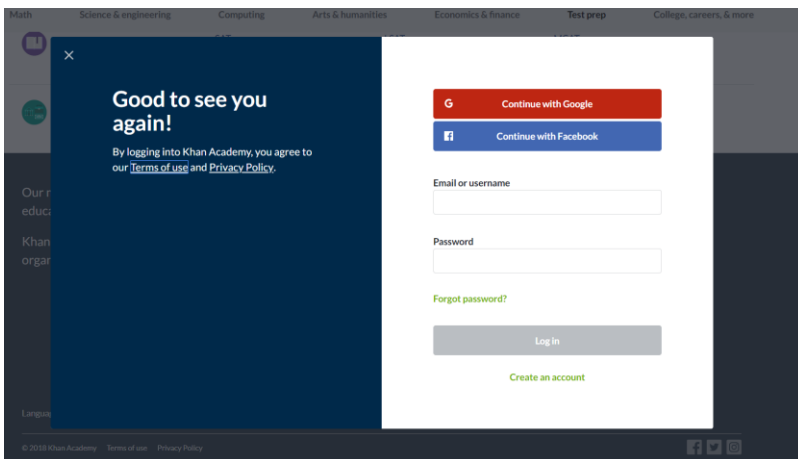
<https://www.khanacademy.org/>

The screen similar to the one on the left will appear:

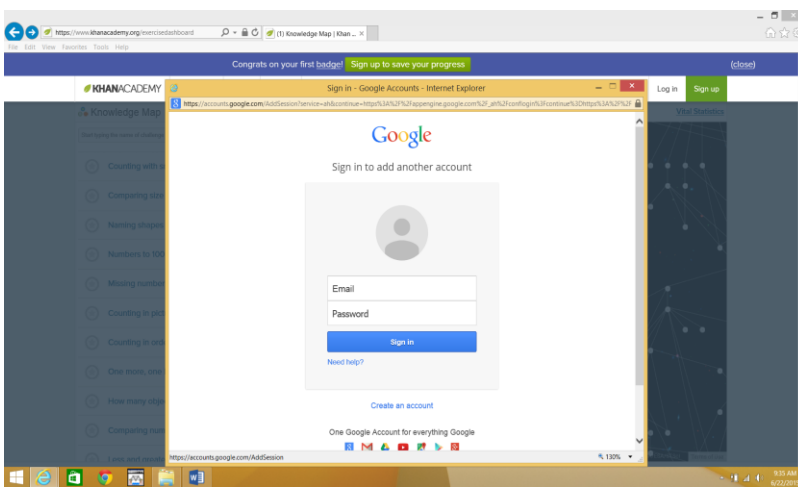
Go to the top right hand corner of the screen and click on login:

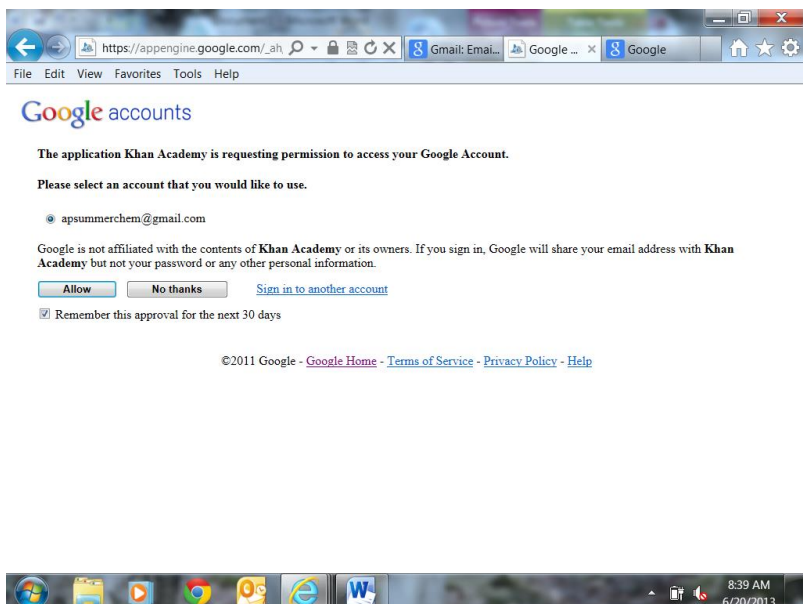


You need to sign into Khan Academy using your school email and password. Click “Continue with Google”



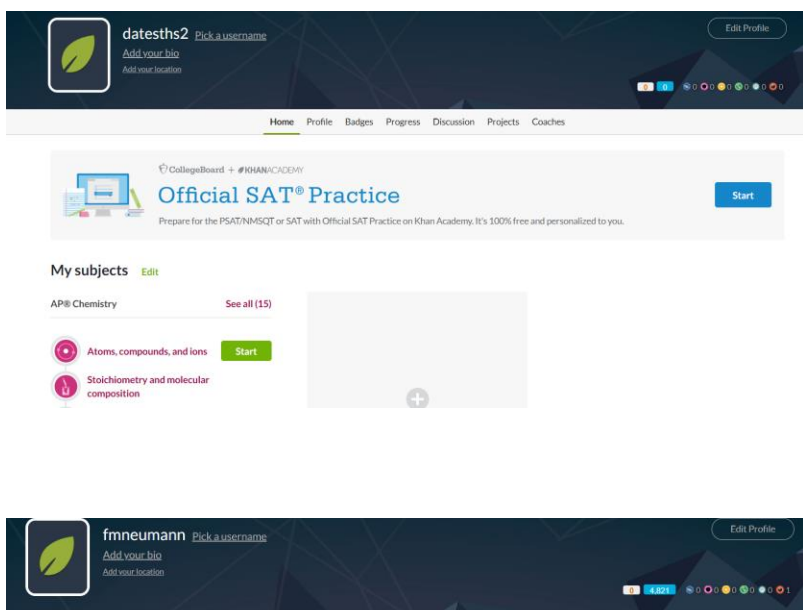
Enter your school email account username and password.





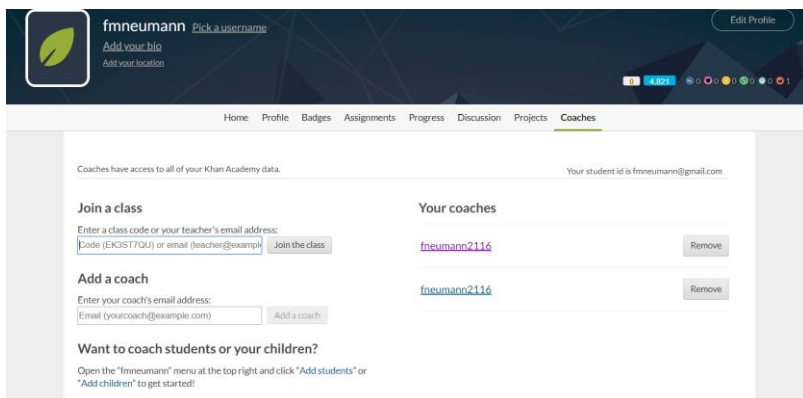
Click “Allow”

You will also need to enter your age and grade. Select AP Chemistry when it asks for a class.



You will now need to request access to the two classrooms.

Go to the tabs and pick Coaches.



Enter two class codes.

Classroom Code for Part II- **5A9SNFKJ**

Classroom Code for Part III- **KGXXRPH9**

You will now need to wait for me to update the assignment in my account so that you can see the work you need to do. I plan to do this at least once a week. If you have waited a week and it is still not done, please email me.

You will now see a bunch of assignments (21). They are on three pages, so don't do 10 and

ALL UPCOMING	CLASS	DUE DATE & TIME	STATUS
• One-step multiplication & division equations	Part II AP Chemistry Summer Assignment 2018	Sep 4th, 10:30 AM	Start
• Two-step equations	Part II AP Chemistry Summer Assignment 2018	Sep 4th, 10:30 AM	
• Equations with variables on both sides	Part II AP Chemistry Summer Assignment 2018	Sep 4th, 10:30 AM	
• Multiplying negative numbers	Part II AP Chemistry Summer Assignment 2018	Sep 4th, 10:30 AM	
• Dividing decimals 1	Part II AP Chemistry Summer Assignment 2018	Sep 4th, 10:30 AM	
• Understanding moving the decimal	Part II AP Chemistry Summer Assignment 2018	Sep 4th, 10:30 AM	
• Convert units (metrics)	Part II AP Chemistry Summer Assignment 2018	Sep 4th, 10:30 AM	

stop. Their title will tell you if it is math (part II) practice or chemistry review (part III). Some topics will also have a video you can watch if you need help. Redo them over as many times as necessary until you are happy with the grade.

As you finish each assignment, you will see your grade in the right status column.