

## Advanced Placement Chemistry Student Reflection

This course is designed around the AP Chemistry Curriculum Framework and is centered on the six big ideas outlined by the College Board:

**Big Idea 1: Atomic Structure** - The chemical elements are fundamental building materials of matter, and all matter can be understood in terms of arrangements of atoms. These atoms retain their identity in chemical reactions.

**Big Idea 2: Bonding** - Chemical and physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.

**Big Idea 3: Rearrangement of Atoms/Electrons** - Changes in matter involve the rearrangement and/or reorganization of atoms and/or the transfer of electrons.

**Big Idea 4: Kinetics** - Rates of chemical reactions are determined by details of the molecular collisions.

**Big Idea 5: Thermodynamics** - The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter.

**Big Idea 6: Equilibrium** - Any bond or intermolecular attraction that can be formed can be broken. These two processes are in a dynamic competition, sensitive to initial conditions and external perturbations.

Each big idea is supported by enduring understandings, essential knowledge and scientific practices - which are taught in relationship to each other and to the associated big idea(s). The AP Chemistry exam in May is not a test of memorization. Students will have to use their knowledge to find interconnections between different topics. Students will have to reason things out based on lab/inquiry experiences.

This is a rigorous college level course that requires advanced reading and study skills. Students should be very interested in science and enjoy using scientific reasoning and problem solving strategies. Students should exhibit **strong, college-level reading comprehension**. Students should be mature, self-reliant, and self-directed learners. It is strongly recommended that students have completed Honors Chemistry with a B/B+ or higher. **Summer reading and study is required in this course.**

Please circle the appropriate responses in the table below:

Courses already taken	Year taken	Letter Grade Earned
Honors Chemistry	9 10 11	B B+ A- A

Please circle the appropriate responses:

I regularly perform strongly (85% or better) on all kinds of exams.	Yes	No
I am a mature, independent, & self-directed learner.	Yes	No
I quickly and easily comprehend college level reading.	Yes	No
I display an extremely strong interest in science.	Yes	No

### EASTVIEW HONORS CHARACTER STATEMENT

An Honors/AP/CIS student exemplifies the following characteristics necessary to achieve success:

academic initiative and enthusiasm	high standard of honesty and reliability
self-motivation and an independent work ethic	strong study skills