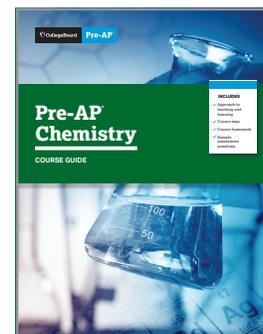




Pre-AP Chemistry and Texas Essential Knowledge and Skills for Science: Alignment Summary

Pre-AP courses focus deeply on a limited number of concepts and skills with the broadest relevance for high school coursework and college and career success. The course framework serves as the foundation of the course and defines these prioritized concepts and skills.

When teaching a Pre-AP course, teachers have purposeful time and space to bring their own voice and lessons into each unit to best meet the needs of their students and address the full range of state standards. This alignment summary demonstrates the deep connections between the Pre-AP Chemistry Course Framework and the Texas Essential Knowledge and Skills for Science to support teachers and schools in their planning. Along with the corresponding standards crosswalk, teachers and schools can use this alignment summary when planning and preparing to implement Pre-AP Chemistry.



Alignment at a Glance: Very Strong

TEKS for Science:



- Chemical Reactions (Concept 8)
- Behaviors of Gases (Concept 9)
- Energy Changes in Chemical Reactions (Concept 11)

Discipline Highlights

- ✓ Overall, the alignment between the Pre-AP Chemistry Course Framework and the TEKS for Science is very strong.
- ✓ Eight of the nine science concepts from the TEKS for Science are covered in full or in part by the Pre-AP course framework.
- ✓ The TEKS for Science and the Pre-AP course framework share the deepest alignment within the Chemical Reactions, Behaviors of Gases, and Energy Changes in Chemical Reactions concepts.



= **Very strong alignment**



= **Partial alignment**

Alignment between the Pre-AP Chemistry Course Framework and the TEKS for Science is described as *very strong* or *partial*. A *very strong* alignment is one in which a strand is fully addressed by the mapped Pre-AP Learning Objectives (LOs). A *partial* alignment is one in which a strand is partially addressed by the corresponding Pre-AP Learning Objectives. Partial alignment can occur when one framework includes greater specificity or extends beyond the scope of the other framework. Given the focused nature of the Pre-AP course framework, some partial alignments are to be expected.

Alignment at a Glance: Partial

TEKS for Science:



- Properties of Chemical and Physical Change (Concept 4)
- The Periodic Table (Concept 5)
- Atomic Theory (Concept 6)
- Ionic, Covalent, and Metallic Bonds (Concept 7)
- Behaviors of Solutions (Concept 10)

Discipline Highlights



While the overall alignment between the TEKS for Science and the Pre-AP Chemistry framework is strong, there are some expected areas of partial alignment or gaps in alignment given the intentional focus and approach of the Pre-AP framework.



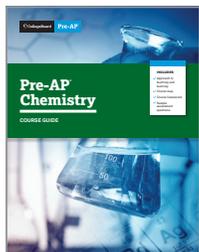
In some instances the TEKS for Science include more granular statements than the Pre-AP learning objectives. For example, standard C.5.C details three periodic trends, while the Pre-AP framework specifically addresses only two of those trends, so the standard was given a partial match. However, the framework and model lessons provide the conceptual foundation and skills needed for teachers to address the third trend within the context of the curriculum.



The TEKS for Science are divided into two categories: scientific processes and scientific concepts. The Pre-AP Chemistry Learning Objectives do not directly align to the TEKS for Science scientific process standards. However, these processes are deeply embedded in the Pre-AP course framework and the Pre-AP model lessons.

Summary

Beyond alignments to the course framework, it is also important for educators to turn to the Pre-AP Shared Principles and Pre-AP Chemistry Areas of Focus to understand the full picture of alignment between Pre-AP Chemistry and TEKS for Science. The shared principles and areas of focus represent the Pre-AP approach to teaching and learning, and these principles deeply address skill development and disciplinary practices that cannot be easily captured within a standards crosswalk. **In summary, there are ample opportunities to address the TEKS for Science with confidence throughout this course.**



Learn more about Pre-AP Chemistry at preap.org