# Pre-AP Chemistry Instructional Planning Guide

This planning guide is designed to help you create a roadmap of the key instructional activities and assessments you will use   
to design your course in alignment with the Pre-AP course framework and instructional principles. Please view this document as   
a template you can adapt and refine as you implement the Pre-AP model lessons and assessments in concert with your own resources.   
You are encouraged to customize it by incorporating your own resources that further support student learning based on your   
individual students’ needs, and your school, district, and state requirements.

**Using and Customizing the Instructional Planning Guide:**

* This template is organized by the four core units of the Pre-AP course. You can customize the *Date(s)* column with single dates,   
  date ranges, weeks, or other time measurements that make sense for your setting.
* Some useful planning documents include your Pre-AP teacher resources and standards crosswalk (where available).   
  Detailed planning information is captured in the course map and unit overviews found in your teacher resources.
* This template has room to include the Pre-AP performance assessments and learning checkpoints, as well as any   
  Pre-AP model lessons and additional materials you plan to use.
* Consider using this tool to plan collaboratively with your peers.
* When planning additional lessons, consider how they support the Pre-AP course framework, areas of focus, and shared principles.   
  These three elements represent the key ingredients of aligning to Pre-AP.
* Take time to capture your reflections as you move through the course.

## Unit 1 Structure and Properties of Matter

| **Planned Date(s)** | **Actual Date(s)** | **Key Concepts** | **Materials/Resources/Tasks**  *Pre-AP Model Lessons, Additional Lessons, Labs, Textbooks,  Performance Tasks, Assessments* | **Learning Objectives** | **Essential Knowledge** | **State Standards** | **Reflections on  Areas of Focus & Shared Principles** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 1.1: Particle View of States of Matter |  |  |  |  |  |
|  |  | 1.1 | **Learning Checkpoint 1**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 1.2: Phase Changes and Particle Interactions |  |  |  |  |  |
|  |  | 1.3: Kinetic Molecular Theory |  |  |  |  |  |
|  |  | 1.2, 1.3 | **Learning Checkpoint 2**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 1.1, 1.2, 1.3 | **Performance Task** Cooling an Alcohol  *This performance task assesses learning objectives and essential knowledge statements addressed in the unit.* |  |  |  |  |

[add or remove rows as needed]

### Reflections

What went well in this unit?

When were students most engaged during this unit?

How have students grown? What opportunities for growth stand out at this time?

What needs modification or differentiation next time?

## Unit 2 Chemical Bonding and Interactions

| **Planned Date(s)** | **Actual Date(s)** | **Key Concepts** | **Materials/Resources/Tasks**  *Pre-AP Model Lessons, Additional Lessons, Labs, Textbooks,  Performance Tasks, Assessments* | **Learning Objectives** | **Essential Knowledge** | **State Standards** | **Reflections on  Areas of Focus & Shared Principles** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 2.1: Classification and Interactions of Matter |  |  |  |  |  |
|  |  | 2.2: Molecular Structure and Properties |  |  |  |  |  |
|  |  | 2.1, 2.2 | **Learning Checkpoint 1**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 2.3: Covalent and Ionic Bonding |  |  |  |  |  |
|  |  | 2.2, 2.3 | **Learning Checkpoint 2**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 2.1, 2.2, 2.3 | **Performance Task**  Ionic and Covalent Compounds  *This performance task assesses learning objectives and essential knowledge statements addressed in the unit.* |  |  |  |  |

[add or remove rows as needed]

### Reflections

What went well in this unit?

When were students most engaged during this unit?

How have students grown? What opportunities for growth stand out at this time?

What needs modification or differentiation next time?

## Unit 3 Chemical Quantities

| **Planned Date(s)** | **Actual Date(s)** | **Key Concepts** | **Materials/Resources/Tasks**  *Pre-AP Model Lessons, Additional Lessons, Labs, Textbooks, Performance Tasks, Assessments* | **Learning Objectives** | **Essential Knowledge** | **State Standards** | **Reflections on  Areas of Focus & Shared Principles** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 3.1: Counting Particles in Substances |  |  |  |  |  |
|  |  | 3.1 | **Learning Checkpoint 1**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 3.2: Counting Particles in Chemical Reactions |  |  |  |  |  |
|  |  | 3.2 | **Learning Checkpoint 2**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 3.1, 3.2 | **Performance Task**  The Chemistry of Respiration  *This performance task assesses learning objectives and essential knowledge statements addressed in the unit.* |  |  |  |  |

[add or remove rows as needed]

### Reflections

What went well in this unit?

When were students most engaged during this unit?

How have students grown? What opportunities for growth stand out at this time?

What needs modification or differentiation next time?

## Unit 4 Chemical Transformations

| **Planned Date(s)** | **Actual Date(s)** | **Key Concepts** | **Materials/Resources/Tasks**  *Pre-AP Model Lessons, Additional Lessons, Labs, Textbooks, Performance Tasks, Assessments* | **Learning Objectives** | **Essential Knowledge** | **State Standards** | **Reflections on  Areas of Focus & Shared Principles** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 4.1: Precipitation Chemistry |  |  |  |  |  |
|  |  | 4.2: Oxidation−Reduction Chemistry |  |  |  |  |  |
|  |  | 4.1, 4.2 | **Learning Checkpoint 1**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 4.3: Acid−Base Chemistry |  |  |  |  |  |
|  |  | 4.4: Thermochemistry |  |  |  |  |  |
|  |  | 4.5: Reaction Rates |  |  |  |  |  |
|  |  | 4.3, 4.4, 4.5 | **Learning Checkpoint 2**  *This learning checkpoint can assess any of the learning objectives from its associated Key Concepts.* |  |  |  |  |
|  |  | 4.1, 4.2, 4.3, 4.4, 4.5 | **Performance Task**  Applications of Chemical Transformations  *This performance task assesses learning objectives and essential knowledge statements addressed in the unit.* |  |  |  |  |

[add or remove rows as needed]

### Reflections

What went well in this unit?

When were students most engaged during this unit?

How have students grown? What opportunities for growth stand out at this time?

What needs modification or differentiation next time?