

**Chemistry**  
**Final Exam Blueprint**  
**2024-25**

The district common exam for Chemistry will be given during final exam week. The table below contains the standards that are to be assessed and the number of questions. All questions on this assessment are multiple choice.

<b>Standard</b>	<b>Topic and Description</b>	<b>Number of Questions</b>
SC.912.P.8.6	<b>Bonding Forces:</b> Distinguish between bonding forces holding compounds together and other attractive forces, including hydrogen bonding and van der Waals forces.	3
SC.912.P.8.8	<b>Chemical Equations:</b> Characterize types of chemical reactions, for example: redox, acid-base, synthesis, and single and double replacement reactions.	4
SC.912.P.8.9	<b>Mole Concept &amp; Stoichiometry:</b> Apply the mole concept and the law of conservation of mass to calculate quantities of chemicals participating in reactions.	6
SC.912.P.12.10	<b>Behavior of Gases:</b> Interpret the behavior of ideal gases in terms of kinetic molecular theory.	5
SC.912.P.12.11	<b>Phase Transitions:</b> Describe phase transitions in terms of kinetic molecular theory.	4
SC.912.P.8.11	<b>Acid Base Theory:</b> Relate acidity and basicity to hydronium and hydroxyl ion concentration and pH.	3
SC.912.P.10.7	<b>Exothermic &amp; Endothermic Reactions:</b> Distinguish between endothermic and exothermic chemical processes.	4
SC.912.P.12.12	<b>Factors that Affect Rates:</b> Explain how various factors, such as concentration, temperature, and presence of a catalyst affect the rate of a chemical reaction.	4
SC.912.P.10.12	<b>Chemical vs Nuclear Reactions:</b> Differentiate between chemical and nuclear reactions.	4
SC.912.P.12.13	<b>Concepts of Equilibrium:</b> Explain the concept of dynamic equilibrium in terms of reversible processes occurring at the same rates.	4
SC.912.P.10.5	<b>Kinetic Energy:</b> Relate temperature to the average molecular kinetic energy and related properties such as effusion and diffusion.	3
<b>Total Points</b>		<b>44</b>