

2023 Academic Challenge Chemistry Exam Topic Distributions

	Topics	Regional	Sectional	State
1	Measurement	3	2	2
2	Atoms, Molecules, and Ions	3	2	2
3	Chemical and Physical Properties	2	1	1
4	Percent Composition and Empirical Formula	2	2	2
5	Periodic Table and Periodic Properties	2	2	2
6	Electronic configuration, Orbital Diagram	2	2	2
7	Nomenclature Inorganic and organic	2	3	2
8	Chemical stoichiometry	3	2	1
9	Bonding, Molecular Geometry, and Polarity	2	2	1
10	Electromagnetic Radiation, frequency, wavelength	2	2	2
11	Energy, Thermochemistry, and Thermodynamics	2	2	2
12	Intermolecular Forces, Liquids and Solids	1	2	2
13	Solubility and Concentration	2	2	2
14	Acids-Bases and pH	2	2	3
15	Buffer and Ksp	1	1	2
16	Colligative Properties	1	1	2
17	Gases and Gas Laws	2	1	2
18	Radioactivity and Nuclear Chemistry	1	1	1
19	Chemical Equilibrium	1	2	2
20	Chemical Kinetics	1	2	2
21	Quantum Mechanics	1	2	2
22	Electrochemistry and Redox Reactions	2	2	1
	Total = 40	40	40	40