Science Grade 8 Semester 1 Final Assessment Blueprint

Year: 2024-2025 **Method of Delivery:** Online
Subject: Science **Administration Window:** December 9 -19

Resources

Chemistry Curriculum Map

Standards At-A Glance

Standard	Number of Items	Standard Description
SCI.9-12.HS.P1U1.1	8	Develop and use models to explain the relationship of the structure of atoms to patterns and properties observed within the Periodic Table and describe how these models are revised with new evidence.
SCI.9-12.HS.P1U1.2	9	Develop and use models for the transfer or sharing of electrons to predict the formation of ions, molecules, and compounds in both natural and synthetic processes.
SCI.9-12.HS.P1U1.3	3	Ask questions, plan, and carry out investigations to explore the cause and effect relationship between reaction rate factors.
SCI.9-12.HS.P4U1.10	2	Construct an explanation about the relationships among the frequency, wavelength, and speed of waves traveling in various media, and their applications to modern technology.
SCI.9-12.HS.P4U1.8	6	Engage in argument from evidence that the net change of energy in a system is always equal to the total energy exchanged between the system and the surroundings.
SCI.9-12.HS+C.P1U1.1	1	Develop and use models to demonstrate how changes in the number of subatomic particles (protons, neutrons, electrons) affect the identity, stability, and properties of the element.
SCI.9-12.HS+C.P1U1.2	1	Obtain, evaluate, and communicate the qualitative evidence supporting claims about how atoms absorb and emit energy in the form of electromagnetic radiation.
SCI.9-12.HS+C.P1U1.4	4	Develop and use models to predict and explain forces within and between molecules.
SCI.9-12.HS+C.P1U1.5	8	Plan and carry out investigations to test predictions of the outcomes of various reactions, based on patterns of physical and chemical properties.
SCI.9-12.HS+C.P1U3.8	2	Engage in argument from evidence regarding the ethical, social, economic, and/or political benefits and liabilities of fission, fusion, and radioactive decay.
SCI.9-12.HS+Phy.P4U1.6	2	Analyze and interpret data to quantitatively describe changes in energy within a system and/or energy flows in and out of a system.

** Some items may be tagged to more than one standard.*

Depth of Knowledge

DOK	Number of Items
Level 1: Recall	7
Level 2: Skill/Concept	35
Level 3: Strategic Thinking	4

Item Types Included

Type	Number of Items	Description
IC	1	Inline Choice - Select the correct response from one or more dropdown menus within the question
MC	44	Multiple Choice - Select one answer
MR	1	Multiple Response - Select all the correct answers