

2022-2023 Grade 8 Science Year-At-A-Glance

Unit Title	Student Expectations
1st Nine Weeks: August 18 – October 14	
Unit 1:7th Ecology Review/8th Ecology Intro	7.10 C, 7.11 A, 7.5 B, 7.5 C, Old 8.11 A
Unit 2:Ecology Part 2: 8th Ecology	8.11 A, 8.11 B, 8.11 C
Unit 3:Chemistry Part 1: Atomic Structure, Periodic Table	8.5 A, 8.5 B, 8.5 C
2nd Nine Weeks: October 18 – December 16 Assessment - CBA Testing Window: Dec. 5- Dec. 9	
Unit 4:Chemistry Part 2: Formulas, Reactions, Equations	8.5 D, 8.5 E
Unit 5:Physics: Forces, Speed, Velocity, Acceleration	8.6 A, 8.6 B, 8.6 C
Unit 6:Newton's Laws	8.6 C
3rd Nine Weeks: January 4 – March 10	
Unit 7:Space:EMS, Stars	8.8 C, 8.8 A , 8.8 B
Unit 8:Cycles: ROD/REY, Lunar Phases, Tides	8.7 A, 8.7 B , 8.7 C
Unit 9: Geology: Plate Tectonics, Topo maps	, 6.10 B 6.10 D, 8.9 A, 8.9 B, 8.9 C
Unit 10: Sun and Weather	8.10 A, 8.10 C
4th Nine Weeks: March 20 – May 25 Assessment - Interim Window: March 27-March 31 Grade 8 Science Star Window: May 2-May 5	
Unit 10 Con't: Weather Maps	8.10 B
Unit 11: Flashback reviews; Campus determined	Campus selection
Unit 12:STAAR Review: Campus determined	Campus selection
Unit 13:Bridge to Biology Course	B9.A, B9.C

Readiness (TEA) Standards **Essential Standards**
 Process standards should be embedded into instruction on a daily basis
[Click here to access state standards for Grade 8 Science.](#)

Any additional notes:

2022-2023 Grade 8 IPC STEAM Year-At-A-Glance

Unit Title	Student Expectations	Suggested Instructional Days
1st Nine Weeks: August 18 – October 14		
Unit 1: Safety, IAN Setup, Energy- Laws of Conservations, forms/types of energy, p/k formulas, energy transformation	6.8A,6.9C, 1.5ABDH +3 day safety	13 days
Unit 2: Energy in Action- Energy transfer, heat dissipates, convections, currents, plate tectonics, density	8.10A, 8.10B, 8.10C, 8.9A, 8.9B, 6.6(B)	9 days
Unit 3: Forces- $F=ma$, balanced and unbalanced forces, Newton's Laws, speed acceleration displacement, gravity, graphs, momentum	6.8C, 6.8D, 8.6A, 8.6C, 8.6B, 1.4C, 1.4D, 1.4E, 1.4F, 1.4G, 1.4A, 1.4B	19 days
2nd Nine Weeks: October 18 – December 16 Assessment - CBA Testing Window: Dec. 5- Dec. 9		
Unit 4: Forces in Action- watersheds, topo maps, day/night, seasons, moon, tides, gravity	7.8C, 6.11B, 8.7A, 8.7B, 8.7C, 8.9A, 8.9C	10 days
Unit 5: Waves and Space- Energy Travels in Waves-spectrometers, properties of waves, spectroscopy, space, structure of a wave, light and sound	8.8A,8.7C, 8.8B, 8.8C, 8.8D, 6.11B	13 days
Unit 6: Life & Ecology	8.11A, 8.11B, 8.11C, 7.5B, 7.11A, 7.10B, 7.10C, 7.11C, 7.12B, 7.14B, 7.14C, 7.12F, 7.12D, 6.12D:	10 days
3rd Nine Weeks: January 4 – March 10		
Unit 7: Classifying Matter & Physical Changes- Heterogenous & homogeneous mixtures, solid liquid and gas, phase changes, energy transformations, analyze physical and chemical properties & compounds, density	6A, 6B, 6C, 6D, 7A, 7.6(A), 6.6(B)	10 days
Unit 8: Atoms, PT, Structure, Orbitals PT trends- Atoms, isotopes-nuclear, PT Trends	8.5A,8.5B,8.5C,6.6A,6A, 6B, 6C, 6D7B:	10 days
Unit 9: Bonding & Naming Chemical Formulas: Bonding, naming chemical formulas	8.5D,8.5E,7.6A,6.5C, 7D, 7E	11days
Unit 10: Reactions, Stoichiometry, balancing equations, types of reactions, law of conservation of mass, endothermic/exothermic- Physical and chemical change, types, balancing LoC, endo/exothermic and nuclear, stoichiometry, moles-Gram	8.5D, 8.5E, 7.6A, 6.5C, 7C, 7D, 7E	5 days
4th Nine Weeks: March 20 – May 25 Assessment - Interim Window: March 27-March 31 Grade 8 Science STAAR Window: May 2-May 5		
Unit 10 Continued: Reactions, Stoichiometry, balancing equations, types of reactions, law of conservation of mass,	8.5D, 8.5E, 7.6A, 6.5C, 7C, 7D, 7E	16 days

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endothermic/exothermic -Physical and chemical change, types, balancing LoC, endo/exothermic and nuclear, stoichiometry, moles-Gram		
Unit 11: Water, Acid & Bases	6E, 6F, 7F	7 days
Unit 12: Biomolecules	9A	5 days
Unit 13: STAAR Review: Campus determined	Campus selected	10 days
Unit 14:Circuits	4G,5C, 5F	9 days

Process standards should be embedded into instruction on a daily basis (I.1, I.2, I.3 A, I.3B, I.4 A, 1.4B, I.5, I.6, I.7)

[Click here to access State Standards for Grade 7 Science](#)

[Click here to access State Standards for Grade 8 Science](#)

[Click here to access State Standards for IPC](#)