Rockwall ISD Science 8 on-level Year-at-a-Glance

	Term 1	Term 2	Term 3	Term 4
Focus TEKS ESSENTIAL	Unit 1 1A, 4A, 4B Unit 2 1B, 2A, 2E, 4A, 11A, **11B**, 11C Unit 3 Part A 2A-E, **3B**, 3C, 4A, **7A** Unit 3 Part B 2A-E, **3B**, 3C, 4A, **7B**, 7C Unit 4 2A-E, 3D, 4A, 10A, 10B, 10C	Unit 5 2E, 3A, **3B**, 3C, 3D, 4A, **6C**, 9A, **9B**, 9C Unit 6 2C, 2E, 3A, **3B**, 3C, 3D, 4A, **8A**, 8B, 8C, 8D Unit 7 2C, 2E, 3B, 3C, 4A, 5E	Unit 8 2C, **3B**, 3C, 3D, 4A, **5A**, 5B Unit 9 2E, 4A, 5B, **5C** Unit 10 2C, 2E, **3B**, 3C, 4A, **5D**, **5E**	Unit 11 1A, 2B, 2C, 2D, 2E, 3A, 4A, **6A**, 6B Unit 12 2C, 2E, **3B**, 3C, 3D, 4A, **6C**
Topic Focus	Unit 1 Science Safety & Procedures Unit 2 Ecosystems Unit 3 Part A Earth Cycles: Seasons / Day & Night Unit 3 Part B Earth Cycles: Tides / Moon Phases Unit 4 Climatic Interactions	Unit 5 Forces that Change the Earth Unit 6 Space Unit 7 Chemical Change	Unit 8 Atoms Unit 9 Periodic Table Unit 10 Chemical Formulas & Equations	Unit 11 Speed, Velocity & Acceleration Unit 12 Forces and Newton's Laws
Resources	Unit 1 Chapter 1 Unit 2 Chapters 15 & 16 Unit 3 Chapter 12 Unit 4 Chapter 11	Unit 5 Chapters 8, 9, & 10 Unit 6 Chapters 13 & 14 Unit 7 Chapter 7	Units 8 & 9 Chapter 5 Unit 10 Chapter 6	Unit 11 Chapters 2 & 3 Unit 12 Chapter 4
Key Concepts	Unit 2 • Competition and dependence on abiotic and biotic factors • Short term/long term environmental changes on organisms and subsequent populations • Dependence on the ocean and how humans use and modify ocean systems	Unit 5 • Describe the historical development of evidence of plate tectonic theory • Relate plate tectonics to the formation of crustal features • Interpret topographic maps and satellite views to identify land and erosional features • Predict how land and erosional features may be reshaped by weathering.	Unit 8 • Students will describe properties and the structure of an atom including: mass/size comparisons, electrical charges, and locations of structures. Unit 9 • Students examine patterns in physical and chemical properties to understand the organization and placement of elements into periods and groups / families on the Periodic Table.	Unit 11 • Calculate Speed, Velocity and Acceleration • Read and interpret Motion and Speed graphs • Understand what the concept of Speed, Velocity, and Acceleration • Unbalanced forces cause a change in speed or direction

Rockwall ISD Science Template Year-at-a-Glance

	Unit 3 Part A
	• Model and illustrate Earth's rotation on its axis causing day and night
	• Model and illustrate changes in seasons
	Unit 3 Part B
	• Model and illustrate lunar cycle
	• Illustrate and describe the tides based on location of the Sun, earth and moon.
	Unit 4
	• The Sun provides energy that drives convection within the atmosphere and oceans producing winds.
	• Address the role of oceans in the formation of weather systems.
	• Design, plan, and implement comparative investigations to enrich their understanding of convection and weather phenomenon.
	• Identify how global patterns of atmospheric movement influence local weather using weather maps.
	• Use anemometers and are introduced to psychrometers
		Unit 6
		• Describe the components related to the universe
		• Identify characteristics of the Sun and its relation to Earth
		• Determine how light/radio waves are used to gather information about components of the universe.
		Unit 7
		• Law of Conservation of Mass
		• Evidence of chemical change
			• Students analyze and interpret information on the Periodic Table to ascertain why elements are arranged into groups / families.
			• Students identify that valence electrons determine an element's chemical properties including reactivity.
			• Students relate an element's structure to its placement on the Periodic Table.
			• Students view the Periodic Table as a model and learn how the arrangement of the Periodic Table allows for the prediction of undiscovered elements and their properties.
			• Students use their science notebooks to communicate conclusions based on the arrangement of the Periodic Table.
			Unit 10
			• Coefficient, subscript, chemical formula, compounds, molecules
			• Identify:
			  ○ Products
			  ○ Reactants
			  ○ yields --->
			• Counting atoms
			• Law of Conservation of Mass
				Unit 12
				• 1st- Vehicle restraints
				• 2nd- amusement park rides
				• 3rd- Rocket Launches