Rockwall ISD Science 7 Honors Year-at-a-Glance

	Term 1	Term 2	Term 3	Term 4
Focus TEKS	Unit 1 7.1-7.4, 8.4 Unit 2 7.12DF Unit 3 6.12D, 7.6A, 7.12BCE, 7.7B, 7.13AB Unit 4 7.5A, 7.7AB, 7.13AB	Unit 5 7.14ABC Unit 6 7.11ABC, 7.12A, 8.11B, 6.12D	Unit 7 8.9AB Unit 8 7.8B, 8.9C Unit 9 8.10ABC, 7.8A Unit 10 7.10AC	Unit 11 7.5B, 7.10B, 8.11A Unit 12 7.8C, 8.11C, IPC7.F Unit 13 IPC5.H, IPC5.1
Topic Focus	Unit 1 Investigative Processes Unit 2 Cell Structure, Function, and Theory Unit 3 Human Body Systems Unit 4 Plant Processes and Responses	Unit 5 Heredity Unit 6 Adaptations and Classification	Unit 7 Plate Tectonics Unit 8 Topography Unit 9 Weathering Unit 10 Ecological Succession	Unit 11 Ecology Unit 12 Human Footprint Unit 13 Human Consumption Research Project
Resources	Unit 1 **(7) Chapter 1** Unit 2 **(7) Chapter 2** Section 1 **(7) Chapter 4** Sections 1, 2 Unit 3 **(7) Chapter 4** Section 2 **(7) Chapters 13, 14, 15 & 16** all Unit 4 **(7) Chapter 5** Section 2 **(7) Chapter 6** Section 1 **(7) Chapter 11** Section 2	Unit 5 **(7) Chapter 9 all** Unit 6 **(7) Chapter 2** Section 3 **(7) Chapter 10** all **(7) Chapter 11** Section 1 **(7) Chapter 12** Section 1 **(8) Chapter 16** Section 2	Unit 7 **(8) Chapter 9** all Unit 8 **(7) Chapter 8** Section 2 **(8) Chapter 8** Section 2 Unit 9 **(7) Chapter 8** Section 3 **(8) Chapter 11** all Unit 10 **(7) Chapter 6** Section 3 **(7) Chapter 7** Section 1	Unit 11 **(7) Chapter 6** Section 1 **(7) Chapter 7** Section 1 **(8) Chapters 15** Section 1 **(8) Chapter 16** all Unit 12 **(7) Chapter 8** Section 1 **(8) Chapter 15** Section 2 **(IPC) Chapter 8** Section 4 Unit 13 **(IPC) Chapter 8** Sections 1-3
Key Concepts	Unit 1 • This unit bundles the student expectations that address how scientific investigations should be conducted in a safe, environmentally appropriate, and ethical manner, as well as the organization of student work in science notebooks. • Lab equipment will be introduced and utilized.	Unit 5 • Genetic instructions include physical traits and instinctual behaviors. • Heredity is the passing of genetic instructions from one generation to the next. • Compare organisms that reproduce sexually or asexually, and recognize the advantages and disadvantages of each method.	Unit 7 • Describe the historical development of evidence of plate tectonic theory. • Relate plate tectonics to the formation of crustal features. Unit 8 • Analyze the effects of weathering, erosion, and deposition on different ecoregions of Texas. • Identify examples of physical and chemical weathering.	Unit 11 • Producers create their own energy through photosynthesis which is then transferred through a food chain. • Consumers are found at different feeding levels in an ecosystem. • 10% rule in an energy pyramid. • Abiotic and biotic factors impact populations.

Rockwall ISD Science Template Year-at-a-Glance

	• Scientific Method and Science Process Skills will be investigated and practiced. Unit 2 • All organisms are composed of one or more cells • Differentiate between prokaryotic and eukaryotic Unit 3 • Recognize the levels of organization in animal cells up to the organism level • Compare the functions of cell organelles to the functions of an organ system • Understand the forces that affect motion in organisms also affect the circulation of blood • Identify main organs, their systems, and the system functions, and the other systems within the body, they function with • Describe how an organism responds to internal and external stimuli to maintain balance Unit 4 • Plants transform radiant energy into chemical energy in photosynthesis. • Geotropism is a plant's response to gravity. • Phototropism is a plant's response to light. • Emergence of seedlings is a direct result of these responses. • Turgor pressure plays a role in plant processes and works on a cellular level.	• Genes are contained within chromosomes in the nucleus. Unit 6 • explain variation within a population or species by comparing external features, behaviors, or physiology of organisms that enhance their survival • identify changes in genetic traits that have occurred over several generations through natural selection and selective breeding • short- and long-term environmental changes affect organisms and traits in subsequent populations • Use dichotomous keys to identify organisms. • Apply prior knowledge of Kingdom traits to classify organisms.	• These are processes that affect Earth's surface. • Topographic maps and satellite image interpretation Unit 9 • 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 10 • Predict and describe how different types of catastrophic events impact ecosystems. • Describe how ecosystems rebuild through the process of succession.	Unit 12 • Water flows from high elevation to low elevation. • Water carries pollution. • Water quality is directly affected by human activities, and students should model these effects. Unit 13 • students research the advantages and disadvantages of using coal, oil, natural gas, nuclear power, biomass, wind, hydropower, geothermal, and solar resources. • Students will discuss the advantages and disadvantages and ethical perspectives based on their research • Students will explore energy transformations