

Sixth Grade	Seventh Grade	Eighth Grade	Physical Science	Biology	Chemistry
Energy Types of Energy and Transformations, Energy/Mass/Speed relationship	Matter Atomic structure, Elements, Compounds, Mixtures, Balancing Chemical Equations, Properties of Matter	Interactions of Matter and Energy Magnetism, Electricity, Electromagnets, Motors, Gravity, Motion, Newton's Laws, Related Technologies	Matter and Its Interactions Structure and properties of matter, Chemical Reactions, Nuclear Processes	Characteristics of Life and Cells/ Cell Processes Macromolecules, Cell Types and Structures, Cell Transport, Photosynthesis and Respiration	The Atom History, Structure, Models, Characteristics of Elements
Interactions in Ecosystems Populations, Interdependent Relationships, Transfer of Energy, Biomes, Invasive Species	Cells, Organization, and Cell Processes Cell Structures and Functions, Processes, Organization of Living Things, Body Systems	Waves and Their Properties Properties of Mechanical and Electromagnetic Waves, Wave Transmission, Waves in Communication Systems	Motion and Stability: Forces and Interactions Forces and Motion, Types of Interactions, Stability and instability in physical systems	The Central Dogma DNA Structure, Function, and Replication, RNA and Protein Synthesis, Enzymes	Periodic Table and Quantum Mechanics Organization, Quantum Mechanics
					Bonding and Nomenclature Electronegative, bonding types and interactions, polarity
Earth's Systems Convection Patterns, Ocean Currents, Weather and Climate, Hydrologic Cycle	Heredity Types of Reproduction, Mitosis and Meiosis, Transmission of Traits	The Universe and Its Origin Origin of Stars and Galaxies, Gravity and our Solar System, Earth's Tides	Energy Types, Conservation, Transfer, Energy and Forces, Energy in Chemical Processes and Everyday Life	Heredity Mitosis, Meiosis, Inheritance of Traits, Mutations, Pedigree Analysis	Equations and Mole Concept Conservation, Reaction Types, Mole and Related Values
					Stoichiometry Stoichiometric Calculations to Evaluate Reactions
Earth and Human Activity Natural Resources and Associated Technologies, Conservation	Reproductive Success Adaptations and Survival, Reproduction Types	Plate Tectonics and Geologic Change Geographic Change and Populations, Structure of the Earth, Seismography, Rock Cycle, Movement of Tectonic Plates	Waves and Application in Technology Wave Properties, Electromagnetic Radiation	Biodiversity and Change Evolution, Natural Selection, Human Impact on Biodiversity	Energy Thermal Energy in Systems, Endothermic and Exothermic Reactions, Electromagnetic Radiation
Biodiversity Biodiversity and Ecosystem Stability, Ecosystem Solutions	Earth and Human Activity Earth's Atmosphere, Change due to Human Activity	Changes Over Time Fossil Record, Anatomical Structures, Adaptations and Survival, Natural Selection, Artificial Selection		Ecology Ecosystem Dynamics, Biogeochemical Cycles, Succession and Environmental Effects	Gas Laws Behavior of Gases (Gas Laws), Ideal Gas Laws
Engineering Design Design constraints Testing solutions	Links Among Engineering, Technology, Science and Society Biomaterials	Engineering Design Design a Model Technology and the Solar System		Technological Applications Biotechnology, Karyotyping, Bioethics	Solutions Quantitative Analysis of Solutions, Solubility
					Acids and Bases Properties of Acids and Bases

KEY
Life Science
Physical Science
Earth Science
Engineering, Technology, Applications of Science