

7th Grade Science Pacing

| Scope and Sequence Unit | Unit | Content Topics | Time Frame |
|--------------------------------|---|--|-------------------|
| Geology | Nature of Science | Design and conduct investigations: systematic observations, accurate measurements, identification and control of variables, mathematical and technological tools | 9/9-9-25 |
| | Rocks and Minerals | Composition of rocks, Rock formation and classification, Rock cycle | 9/28-10/9 |
| | Weathering and Erosion | Atmosphere/Lithosphere/Hydrosphere, Weathering and Erosion | 10/13-10/23 |
| | Clues to Earth's Past | Fossil evidence, Extinction of species based on fossil evidence, Earth history | 10/26-10/30 |
| | Plate tectonics | Shape of Earth, Latitude/Longitude, Continental drift, Theory of Plate Tectonics, Convection inside Earth, Comparative densities, Mountains | 11/6-11/20 |
| | Earthquakes, Volcanoes, and Plate Tectonics | Volcanoes, Earthquakes, and wave data | 11/23-12/4 |
| Energy and Matter | Waves, Sound, and Light | Law of Conservation of Energy, Forms of Energy, Energy transformations, Electromagnetic energy, Waves, Light, Sound/vibrational | 12/7-12/11 |
| | Atoms, Elements, and the Periodic Table | Atoms, Elements, Periodic Table, Classification of Elements, Law of Conservation of Matter | 12/14-12/23 |
| | Matter and Its Changes | Characteristic properties of matter, Phases of Matter (gas, solid, liquid), Physical Changes (phase changes) Density, Magnetic attraction, Attraction of Electrically charged materials, Chemical Changes, Law of Conservation of Mass | 1/4-1/15 |
| | Substances, Mixtures, and Solubility | Compounds and Mixtures, Solutions, Environmental pollutants harmful to organisms | 1/19-1/22 |

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| | Chemical Reactions | Temperatures affect on solubility, Chemical change, Chemical reactions and energy transfer, | 1/25-1/29 |
| Midterm/Science Investigation/ Presentations | | | 2/1-2/26 |
| Dynamic Equilibrium: The Human Animal | Cells – The Units of Life | Cell theory, Cell parts, Function of cells, Cell organization, | 2/29-3/11 |
| | Support, Movement, and Responses | Nervous system, Endocrine System, Response to Stimuli, Locomotion, Carrying out Life Process, Internal Structures, Homeostasis | 3/14-3/25 |
| | Circulation | Circulatory system, Carrying out Life Process, Internal Structures, Homeostasis | 3/28-4/1 |
| | Digestion, Respiration, and Excretion | Respiratory system, Digestive System, Excretory system, Obtaining Energy, Food, Food contents, Metabolism, Calories, Nutrient intake, Carrying out Life Process, Internal Structures, Homeostasis | 4/4-4/22 |
| Dynamic Equilibrium: Other Organisms | Invertebrates and Vertebrates | Cell parts, Organization of cells, Specialized organs/organ systems & specific functions/regulations, Carrying out Life Processes, Obtaining Energy, Responding to Environment, Life Cycle/Patterns of Development | 5/2-5/13 |
| | Plants & Plant Processes | Cell parts, Organization of cells, Specialized organs/organ systems & specific functions/regulations, Carrying out Life Processes, Obtaining Energy, Responding to Environment, Life Cycle/Patterns of Development | 5/16-5/27 |
| | Bacteria, Protists, and Fungi | Cell parts, Organization of cells, Specialized organs/organ systems & specific functions/regulations, Carrying out Life Processes, Obtaining Energy, Responding to Environment, Life Cycle/Patterns of Development | 5/31-6/10 |
| Review, Inquiry, and Research | | Students work in groups to explore topics from throughout the year. | 6/13-6/28 |