Fifth Grade Science Pacing Overview

Quarter	Grade 5 SOL
First Nine Weeks	**5.7 Earth Patterns, Cycles, and Change** a) The rock cycle including identification of rock types. b) Earth history and fossil evidence. c) Basic structure of the Earth's interior. d) Plate tectonics (earthquakes and volcanoes). e) Weathering and erosion. f) Human impact. **5.1 Scientific Investigations** a) Rocks, minerals, and organisms are identified using a classification key.
Second Nine Weeks	**5.5 Living Systems** a) Basic cell structures and functions. b) Kingdoms of living things. c) Vascular and nonvascular plants. d) Vertebrates and invertebrates. **5.6 Interrelationships in Earth/Space Systems** a) Geological characteristics of the ocean (continental shelf, slope, rise). b) Physical characteristics of the ocean (depth, salinity, major currents). c) Biological characteristics of the ocean (ecosystems). **5.1 Scientific Investigations** b) Estimations of length, mass, and volume are made. d) Accurate measurements are made using basic tools (thermometer, meter stick, balance, graduated cylinder). f) Predictions are made using patterns, and simple graphical data are extrapolated. g) Manipulated and responding variables are identified.

Third Nine Weeks	**5.4 Matter** a) Atoms, elements, molecules, and compounds. b) Mixtures including solutions. c) The effect of heat on the states of matter. **5.1 Scientific Investigations** c) Appropriate instruments are selected and used for making quantitative observations of length, mass, volume, and elapsed time. e) Data are collected, recorded, and reported using the appropriate graphical representation (graphs, charts, diagrams). h) An understanding of the nature of science is developed and reinforced. **5.2 Force, Motion, and Energy** a) Frequency, waves, wavelength, vibration. b) The ability of different media (solids, liquids, and gases) to transmit sound. c) Uses and applications (voice, sonar, animal sounds, and musical instruments).
Fourth Nine Weeks	**5.3 Force, Motion, and Energy** a) The visible spectrum and light waves. b) Refraction of light through water and prisms. c) Reflection of light from reflective surfaces (mirrors). d) Opaque, transparent, and translucent. e) Historical contributions in understanding light. **Review**