

Hillsdale College Science

An American Classical Education

Grammar School (K-6)

Upper School (7-12)

	EARTH SCIENCE	PHYSICAL SCIENCE	LIFE SCIENCE
KINDERGARTEN	Meteorology: Weather, Weather Forecasting	Forces: Push/Pull, Direction/Strength, Collisions, Ramps, Magnetism	Animals & Plants: Animal/Plant Needs, Connected Environments; Human Systems: 5 Senses, Taking Care of the Body
FIRST	Astronomy: Solar System, Galileo	Sound & Light	Organisms and Their Needs: Structures & Functions, Inheritance of Traits; Human Body Systems, Taking Care of the Body
SECOND	Geology: Earth Features & Formation	Matter, Electricity, Magnetism	Habitats; Human Systems: Cells, Digestive and Excretory Systems, Taking Care of the Body
THIRD	Meteorology: Weather, Climate, Atmospheric Layers, Water Cycle, Clouds, Wind, Natural Hazards	Forces: Push/Pull, Direction/Strength, Balanced/Unbalanced, Gravity, Friction, Predictable Motion, Magnetism	Classification of Animals, Social Instincts in Animals, Ecology, Life Cycles, Traits, Fossils, Human Systems
FOURTH	Geology: Fossils, Weathering & Erosion, Rock Cycle, Plate Tectonics, Natural Hazards, Geographic Maps; Natural Resources: Fossil Fuels, Nuclear/Wind/Hydroelectric/Solar Energy	Energy: Forms, Transfer, Transformation, Conservation, Collisions; Electricity & Magnetism: Circuits, Electromagnetism; Waves: Light, Sound	Structures & Functions in Organisms; Human Systems: Visual, Auditory, Circulatory, Respiratory
FIFTH	Geology: Major Earth Systems; Conservation; Astronomy: Universe, Our Solar System, Exploration of Space	Chemistry: Matter, Atoms, Molecules, Compounds, States/Conservation/Properties of Matter, Mixtures, Solutions, Chemical Reactions	Ecology; Classification of Organisms; Reproduction: Plants, Animals, Humans; Endocrine System
SIXTH	Plate Tectonics: Layers, Crust Movement, Volcanoes; Astronomy: Gravity, Stars, Galaxies, Earth; Oceans: Surface, Bottom, Movement, Composition	Energy & Heat; Physical Change: States of Matter, Expansion, Contraction, Changing Phases, Distillation	Human Body: Circulatory, Lymphatic & Immune Systems; Marine Life: Pelagic & Benthic Zones, Classification, Phytoplankton
SEVENTH	History of the Earth: Paleontology, Geologic Time/Eras	Atomic Structure, Chemical Bonds & Reactions	Chemistry of Food & Respiration, Cell Division & Genetics, Evolution
EIGHTH		Conceptual Physics Motion, Forces, Density & Buoyancy, Work, Energy, Power, Electricity, Magnetism, Electromagnetic Radiation & Light, Sound Waves”	
NINTH			Biology Scientific Method; Cell Structure & Function; Genetics; Evolution & Classification; Microorganisms, Fungi, & Plants; Animals; Human Body, Ecology”
TENTH		Chemistry Atomic Theory, Periodic Table, Chemical Bonds, Stoichiometry, Acid Base Reactions, Kinetics & Chemical Equilibrium, States of Matter, Gases”	
ELEVENTH		Physics Motion, Forces & the Laws of Motion, Work & Energy, Momentum & Collisions, Circular Motion, Gravitation, Vibrations & Waves, Sound, Light & Optics, Electrostatics”	
TWELFTH	Astronomy; Biology II; Chemistry II; Physics II; or Earth Science		