

Grade Level Curriculum Themes/ Essential Questions *OVERVIEW*

<i>Grade Level</i>	<i>Social Studies</i>	<i>Science</i>	<i>Delta Science Kits</i>
Kindergarten	<p>How are people/ families alike/ different?</p> <ul style="list-style-type: none"> - folktales, legends - people change over time - likes/ dislikes - unique people (gender, ethnicity, language) - needs/ wants - FL: biographical info, likes, dislikes, family life <p>How do you/ others demonstrate citizenship?</p> <ul style="list-style-type: none"> - US holidays - Rules <p>Where do you live?</p> <ul style="list-style-type: none"> - school - my neighborhood - land/ water masses - US location <p>How do people rely on each other?</p> <ul style="list-style-type: none"> - goods/ services 	<p>How are the seasons different? ²</p> <p>- FL: climate, weather</p> <p>Why is water important? ^{1,2}</p> <p>Why is air important? ^A</p> <p>How do our senses help us to learn about ourselves, others, and our environment? ³</p> <p>How does an object change? ² (properties)</p> <p>How do things move?</p> <p>What do living things need to survive? ¹</p> <p>How do people rely on nature?</p> <p>What is energy?</p> <p>How do animals grow and change? ¹</p> <p>How do you stay healthy?</p> <p>How are the day sky and night sky different?</p>	<p>Aquarium ¹</p> <p>Investigating Water ²</p> <p>Senses ³</p> <p>Sink or Float ^A</p>

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Grade 1	<p>How are patterns evident in communities?</p> <ul style="list-style-type: none"> - community history - community culture - regional culture - folklore, myths, legends of local region - exchange cultural elements - maps, globes - locations in neighborhood - cardinal directions <p>How do families interact and change?</p> <ul style="list-style-type: none"> - beliefs, customs, traditions - family history, oral history - diversity - family timeline - family roles and responsibilities - FL: family bio information, family life <p>How do people meet their wants/needs?</p> <ul style="list-style-type: none"> - income - scarcity <p>How do people in a class/ family/ community interact?</p> <ul style="list-style-type: none"> - democracy, power, citizenship, nation-state, justice 	<p>What patterns occur in weather?⁵</p> <ul style="list-style-type: none"> - FL: temperature, precipitation <p>How are patterns evident in communities?</p> <p>How do families interact and change?</p> <p>How is the Sun a star?^{4,5}</p> <p>How are objects classified/ measured?⁶</p> <p>What are the physical properties of an object?⁶</p> <p>How is sound produced?⁷</p> <p>How do magnets work?⁸</p> <p>How do amphibians grow?</p> <p>How do plants grow?⁴</p> <p>How do plants and animals interact in the environment?</p> <p>How do you choose to be healthy?</p> <ul style="list-style-type: none"> - FL: everyday meals 	<p>From Seed to Plant^{4**}</p> <p>Sunshine and Shadows⁵</p> <p>Properties⁶</p> <p>Sound⁷</p> <p>Magnets⁸</p> <p> </p> <p>** Live seeds/ plants must be ordered. Card must be sent in 5 weeks before beginning unit.</p>
Grade 2	<p>How are communities alike/ different?</p> <ul style="list-style-type: none"> - urban/ suburban/ rural - holidays - change over time - urban/ suburban/ rural on map - future communities - FL: community bio, house/ home, local physical features <p>How do communities make rules and resolve conflicts?</p> <ul style="list-style-type: none"> - elected leaders make/ enforce rules <p>What is the relationship between a community's physical setting and its ability to satisfy its wants/ needs?</p> <ul style="list-style-type: none"> - producers/ consumers <p>How does our economic system display interdependence?</p> <ul style="list-style-type: none"> - scarcity, choices, taxes 	<p>How is weather a system?¹¹</p> <p>How is the Earth part of a larger system?</p> <p>How are rocks used and what are their properties?²⁵</p> <p>What is light?</p> <p>How are forms of energy created?</p> <p>What is a force?¹²</p> <p>How do insects grow and change?⁹</p> <p>How are living things systems?</p> <ul style="list-style-type: none"> - FL: parts of the body <p>What are the physical characteristics of plants and animals?^{9,10}</p> <p>How do humans impact the environment?</p>	<p>Butterflies and Moths^{9*}</p> <p>Classroom Plants¹⁰</p> <p>Weather Watching¹¹</p> <p>Force and Motion¹²</p> <p> </p> <p>Rocks and Minerals²⁵ (See Grade 2 for overlap)</p> <p> </p> <p>* Live pupas must be ordered. Card must be sent in 5 weeks before beginning unit.</p>

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Grade 3	<p>How are world cultures similar/ different?</p> <ul style="list-style-type: none"> - world legends, folktales, bios, autobiogs, historical narratives - celebrate world achievements <p>How are world communities similar/ different?</p> <ul style="list-style-type: none"> - difference events/ people/ problems/ ideas - timelines, calendar time (BC, AD) - different interpretations of events - customs/ traditions differ - sim/ dif groups live together in communities - learning <p>What are common characteristics of world communities?</p> <ul style="list-style-type: none"> - human settlements - environment and geography - FL: house, homes, world physical features, transp <p>How do world communities use resources?</p> <ul style="list-style-type: none"> - interdependence - human, capital, natural resources <p>How are community locations different?</p> <ul style="list-style-type: none"> - maps/ globes - direction, location, distance, scale - parallels, meridians - continents, oceans <p>How is citizenship demonstrated in world communities?</p> <ul style="list-style-type: none"> - governments - conflict over rules <p>How do world governments operate?</p> <ul style="list-style-type: none"> - laws, disputes 	<p>What are the characteristics of stars?</p> <p>What are fossils and how do they link to history? ¹⁵</p> <p>How do living things in and around an ecosystem interact with one another and the environment? ¹³</p> <p>How is matter described? ¹⁴</p> <p>How is energy measured and described? ^B</p> <ul style="list-style-type: none"> - FL: regional food, mealtime interaction, informal conversation <p>How do mammals grow and change?</p> <p>What are common features shared by all living things? ¹³</p>	<p>Populations ¹³</p> <p>States of matter ¹⁴</p> <p>Dinosaurs and Fossils ¹⁵</p> <p>Force and Motion ^B</p>
Grade 4	<p>Why is Native American history an important element of New York State history?</p> <ul style="list-style-type: none"> - How did people arrive in the Americas? <p>How was NYS influenced in the Colonial period?</p> <p>How did the Revolution impact NYS/ US?</p> <p>What effects did the Declaration of Independence have on NYS?</p> <p>How did NY expand during the Industrial Revolution?</p> <p>How are the NYS government and US government similar and different?</p>	<p>How is the solar system a system? ¹⁷</p> <ul style="list-style-type: none"> - sun illuminates moon, moon phases - planet comparison <p>How do changes in the Earth's layers affect ecosystems? ¹⁸</p> <ul style="list-style-type: none"> - layers of Earth, plate tectonics, rock types, attribute classification, minerals - volcanic and earthquake activity <p>How do living things depend on other organisms? ¹⁶</p> <ul style="list-style-type: none"> - producers to consumers to decomposers - plant photosynthesis - life cycles within food webs/ chains - migration, hibernation - conservation <p>How does an object acquire an electrical charge? ¹⁹</p> <ul style="list-style-type: none"> - circuits, simple motor <p>How does magnetism relate to energy?</p> <ul style="list-style-type: none"> - strengths, properties <p>What is the relationship between food, energy, and our bodies?</p> <ul style="list-style-type: none"> - cells, tissue, organs - natural defenses and vaccines - muscular endurance, flexibility, fitness - diseases and heart (risk factors) 	<p>Food Chains & Web ¹⁶</p> <p>Solar System ¹⁷ (See Grade 7 overlap)</p> <p>Earth Movements ¹⁸</p> <p>Electrical Circuits ¹⁹ (See Grade 7 for overlap)</p>

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Grade 5	<p>How is US/ Canada/ LA culture influenced by different groups? How is US/ Canada/ LA history the same/ different? How are countries connected and interdependent? - social/ cultural, migration/ immigration, and scientific/ tech - industrial growth, urbanization How is culture/ history influenced by many different groups? - historical figures,/ groups How are US/ Canada/ LA locations represented? How is US/ Canada/ LA geography similar/ different? How are the economies of US/ Canada/ LA the same/ different? How is the government of US/ Canada/ LA the same/ different? How can primary sources relay important historical information? How is citizenship in US/ Canada/ LA the same/ different?</p>	<p>How does climate affect plants and animals? ²³ How and why do changes occur within biomes? - weather systems, pressure systems, ²³ humidity, wind speed, meteorologists ²⁰ - living organisms in biomes - ocean water composition, ocean ecosystem ²² How is matter measured? - density, solubility, conductivity, hardness How is matter classified? - atoms, elements, compounds, molecules (intro only) How is energy conserved? (fossil fuels) - push/ pull on object - simple and compound machines - explore mass, inertia, friction, speed, acceleration How is sound energy created, conserved, and transmitted? ^C - waves, frequency, amplitude How are vertebrates/ invertebrates similar/ different? How do body systems function? ²¹ - all body systems, pathogens</p>	<p>Weather Instruments ²⁰ You and Your Body ²¹ Oceans ²² Weather Forecasting ²³ Sound ^C</p>
Grade 6	<p>How can primary sources/ artifacts relay important historical information? How does Eastern Hemisphere history change over time? How are Eastern Hemisphere civilizations/ country locations rep? How do people/ civilizations impact culture/ regions? - Neolithic Rev, inventions (writing, wheel), slavery, trade routes - River civilizations (geography, population, agriculture) - Renaissance period How do economic systems in the Eastern Hemisphere vary? How are Eastern governments of the past and present similar/ different? How are Eastern values evident within their systems of government/ civics?</p>	<p>What are galaxies and stars? How do landforms change? ²⁵ - weathering, erosion, shorelines, glaciers - classify rocks How can matter change? - elements, compounds, mixture - chemical reaction How is heat energy created, conserved, and transmitted? ^{26,27} - conduction, convection How is light energy created, conserved, and transmitted? - reflection, refraction, and absorption, color spectrum How is a machine a system? ²⁸ - everyday machines, toys How are living things made up of cells? How do body systems interact? - human reproduction How are physical traits inherited? What are simple organisms and how do they change? - fungi, protists, moneran, competition How do organisms/ plants change? ²⁴ - photosynthesis vs. respiration - renewable vs. nonrenewable natural resources - pollution</p>	<p>Pollution ²⁴ Rocks and Minerals ²⁵ (See Grade 2 for overlap) Solar Energy ²⁶ Color and Light ²⁷ Simple Machines ²⁸</p>

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Grade 7	<p><i>Essential Questions to be focused on throughout US History timeline:</i></p> <p>How did historians research the past? How did geography influence the development of each culture? What were the effects of European exploration? How was European worldview demonstrated in maps, artwork, and writing from the time? What role did geography play in settlement pattern? How did colonial life evolve? How did colonial protests against Britain escalate? What role did leadership, commitment, and luck play in the American victory over British? What were the political, economic, and social causes of the American Revolution? How did the Revolution change peoples lives? How were political systems established in the colonies? What is government? Why was a new constitution necessary? How did perspectives differ on the new nation's viability under the Constitution? What was Jackson democracy? How did social and economic life change as the US began to move from an agrarian society to an industrial society?</p>	<p>How is Earth impacted by our solar system?^H</p> <ul style="list-style-type: none"> - compare/ contrast orbits of planets - role of moon in tides, phases, eclipses <p>How does geography affect how and where people live? How is land impacted?^{D, I}</p> <ul style="list-style-type: none"> - weathering - erosion - earthquakes, volcanoes, plate tectonics, ages of rock layers, geological time scale <p>How is matter changed to effect solubility and density?^E</p> <ul style="list-style-type: none"> - pH comparison of acids/ bases - physical/ chemical changes <p>What are basic elements?^E</p> <ul style="list-style-type: none"> - atomic theory, periodic table - compares elements, compounds - Archimedes' principle <p>How is electricity conserved and transmitted?^G</p> <ul style="list-style-type: none"> - Ohm's Law, voltage, current - Law of conservation to potential/ kinetic energy - Open-loop/ closed-loop systems - Heat transfer (convection, conduction, radiation) - Circuits- series and parallel <p>How is energy a change?^F</p> <ul style="list-style-type: none"> - velocity and acceleration - Newton's Laws of Motion - Work - Simple machines → compound - Free fall, projectile motion, pendulum 	<p>Erosion^D Chemical Interactions (Now called Matter)^E Newton's Toy Box^F</p> <p style="color: red;">Electrical Connections^G (See grade 4 for overlap, similar kit)</p> <p style="color: red;">Earth, Sun, Moon^H (See grade 4 for overlap, similar kit)</p> <p style="color: red;">Earth Processes^I</p>

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Grade 8	<p><i>Essential Questions to be focused on throughout US History timeline:</i></p> <p>What were the conflicting perspectives on slavery?</p> <p>What were the political, social, and economic causes and effects of the Civil War?</p> <p>How and why did the leadership of US differ after WWI and WWII?</p> <p>What were the causes/ effects of US involvement in foreign affairs at turn of 20th century?</p> <p>How did the role of gov't change from the 1920s to the 1930s?</p> <p>What changes took place with the crash of the stock market?</p> <p>Why is WWII considered a “total war”?</p> <p>What will be the role of US in 21st century?</p> <p>How is cultural diversity both a benefit and a problem?</p> <p>How can an individual bring about change in society?</p>	<p>How are organisms organized from basic elements?^J</p> <ul style="list-style-type: none"> - classify levels - genes, chromosomes, Punnet square - DNA pattern - Organism structure → function - Mitosis, meiosis - Metabolism, nutrient content, vitamins <p>How do living organisms interact with/ impact the environment?^{K, M}</p> <ul style="list-style-type: none"> - adaptations for survival - asexual/ sexual reproduction in plants/ animals - interaction in ecosystem - transfer of energy in food chain <p>How do living organisms interact?^{K, M}</p> <ul style="list-style-type: none"> - human reproduction** - plant/ animal cell structures/ funtions <p>How is land impacted? (see PHYSICAL)^{D, I}</p> <ul style="list-style-type: none"> - ecosystem interconnectedness - population - impact of technology - fossil fuels - environmental changes ↔ humans <p>** see curriculum outline draft from School Nurse</p>	<p>DNA – From Genes to Proteins^J</p> <p>Diversity of Life^K</p> <p>Populations and Ecosystems^M</p>