



With STEM-focused curriculum and activities, we create unique and individualized experiences for every student and teacher.

Alternative Energy: Photovoltaic and fuel cell technology, exploring alternative energy sources: solar, wind, hydro.

Anatomy: Animal dissections, human respiration, muscles, joints, digestive system and the skeletal system, energy production.

Archeology and Paleontology: Archeological dig, geologic time, study, creation, and collection of fossils.

Art: Earth sculptures, photography, art in nature, art history, study of movement and music, creative writing, acting skills and techniques, improvisation.

Astronomy: Lunar environment, telescopes, solar system, study of the sun, constellations, stars and galaxies.

Botanical Identification & Studies: Trees, plants and fungi, collecting specimens, understanding weeds, understanding the structure of plants, seeds and seed dispersal methods, create medicine, beauty products and art from native plants.

Business and Economics: Cost effectiveness, research, market, and advertising, project management.

Character Education and Cultural Studies: Cultural differences and cultural biases, challenging biases and preconceptions, world geography and cultures from around the globe, understanding disabilities.

Chemistry: Acids & bases, chemical testing of water sources, reagents and cations.

Conservation and Stewardship: Composting and recycling, invasive plant species eradication, landfills and local waste management, ecological footprints.

Cooperation, and Problem-solving: Communication skills, cooperative competition, teambuilding, the importance of expression.

Energy and Motion: Conductors; convection, absorption, and radiation, electromagnets and electric currents, convection and current, kinetic and potential energy, momentum, acceleration, velocity and vectors.

Engineering: Construction and stress tests, pulleys and mechanical advantage.

Environmental Studies: Food chains and biomagnification, watersheds and water conservation, deforestation.

Genetics and Health: Nutrition, human genetics and immune system, sensory information.

Geology: Soil layers and composition, tectonic plate movements, formation of islands; sweepstake dispersal, seismographs and epicenters, weather.

History: American Civil War and Revolutionary War, pioneers and westward expansion, the Underground Railroad, medieval hierarchy.

Law and Government: How to pass a bill, government branches, judicial system.

Mapping and Orienteering: How to use a compass and geometric shapes, shelter and fire building, backpacking, outdoor survival skills.

Mathematics: Nature and symmetry, measurement from algebra equations.

Zoology: Animal identification, behavior and adaptations, nocturnal animals, predation, overpopulation.