

SUBJECT	Biology	Chemistry	Environmental Systems	Integrated Physics and Chemistry	Physics
Ideas students are learning	Natural selection, evolution, classification, characteristics of kingdoms	Specific Heat, pH, Ideal Gas Laws, and the kinetic molecular theory of matter	resources, renewable resources, nonrenewable resources, soil, erosion, and desertification	Speed, acceleration, inertia, mass, machines, mechanical advantage, energy	Harmonic motion, wave propagation, wave interactions, sound, and electromagnetic spectrum
Skills	Discuss how natural selection leads to change, interpret fossil evidence, compare amino acid sequences, compare limb structures	Students should be able to determine the acidity of a liquid and determine the relationship between pressure and temperature.	analysis of natural resources within the environment and their effect on daily life, human and otherwise	Calculate speed, acceleration, mechanical advantage, momentum, force	Students should be able to calculate frequency, velocity, and wavelength.
Work and assignments to look for	Journal entries from laboratory investigations	Lab write ups for exploring temperature and pressure, specific heat capacity, and acid rain investigation	Environmental Issue project. Journal entries identifying the role of resources, especially those relevant to the topsoil	Journal entries from laboratory investigations	Lab write ups for pendulum, wave interaction, and reflection/ refraction investigations
Questions Parents Can Ask	How does natural selection lead to change?, How do scientists classify organisms?, What evidences are there for evolution?, How are organisms in the different kingdoms alike	How are pressure and temperature related? What does the kinetic molecular theory state? What is pH?	What are some current and past ways that farmers use to avoid soil erosion? What is the link between erosion and desertification?	What is the relationship between mass, speed, and velocity?, What are some everyday examples of Newton's laws of motion?	How can you determine the period of a pendulum? How are frequency, wavelength, and velocity related?
Special Notes	Ask your child if you can look at their science lab journal as often as possible and ask them to communicate and justify their journal entries. If you do not understand something that they have written, ask them to explain it to you. Look specifically at their scientific explanations that will be at the end of each major activity.				