

GRADE 6 MATHEMATICS/SCIENCE

All Year, 450 minutes per week

QUARTER 1

Quarter One of Grade 6 Integrated Math/Science focused on our local Wetlands. The study of ecology emphasized biodiversity, populations/species, food chains and webs, energy transfer, photosynthesis and other biological processes, wetlands species (especially mangroves), and the importance and conservation of wetlands. The quarter concluded with a major “outdoor education” study-trip to the eastern coast of Trinidad (Nariva Swamp / Bush Bush Forest / the Ortoire River / Manzanilla Beach) for observation and data collection, followed by lab preparation and analysis of the samples taken in the field and an introduction to microscopes.

Math studies concentrated on whole number operations, estimating and rounding, the Order of Operations, bar graphs, equations and variables, and statistical methods (mode, mean, median). Math integrated within science continued through the application of the above within the science content.

QUARTER 2

The quarter in Integrated Math /Science begins with an Oceanography unit, which continues the study of ecosystems - the interdependency of organisms and the movement of energy through food webs and food chains. After learning about the taxonomy of living things, a major project is the creation of a classroom "ocean" full of lifelike, life-sized marine organisms, accompanied by informational flyers. Labs include investigations of oceanographic-related concepts, including salinity, density, depth, and pressure. Math topics taught include exponents, scientific notation, fractions and percents.

QUARTER 3

Students review scientific processes and procedures as well as measurement using appropriate tools and units. In order to understand how the earth is constantly changing, they study Earth’s forces and interactions as well as the evidence used to justify the Tectonic Plate Theory. They also learn about the forces behind sea-floor spreading, volcanoes, and earthquakes.

Math skills are used in conjunction with the science content, in order to provide an understanding of how math and science are interrelated. For example, the use of metric measurement, decimals and scale are all used to compute the rate of sea-floor spreading from given data.

QUARTER 4

The Forces and Motion unit follows, which uses the construction of mousetrap-powered cars as an exploration into Newton's 3 Laws of Motion. Algebraic equations are put to use in determining the relationships among speed, distance, and time.