



# Course Syllabus

SY 2011-12

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**COURSE TITLE:** Science – Grade 6

**PREREQUISITE:** N/A

**DESCRIPTION:** In science, a special emphasis is placed on the research process in all grades. This includes making decisions about the generation and testing of ideas; prediction, measurement, data collection and representation; evaluation of sources of information; collaborative investigation; interpretation and communication of findings; evaluation and verification of findings and considerations relating to the social context of research. Sixth graders form precise hypotheses and define dependent and independent variables while planning and conducting detailed investigations utilizing the scientific method. Transformations of energy and matter are explored in physical and biological systems. Students investigate the structure and dynamics of the Earth's atmosphere. They investigate the role of solar energy in driving natural processes. Students also explore water, its properties and watershed structure.

**MAIN TOPICS:** Plan and conduct investigations using a scientific model.

Investigate and understand basic sources of energy, their origins, transformations, and uses.

Investigate the role of solar energy on Earth systems and processes.

Analyze the basic units of matter and interpret the Periodic Table.

Investigate the properties and characteristics of water and its roles in the natural and human-made environment.

Explore the properties of air and the structure and dynamics of the Earth's atmosphere.

Explain the natural processes and human interactions that affect watershed systems.

Investigate the composition and organization of the solar system, and study the history of space exploration.

**CREDIT INFO:** N/A