

## What your child will learn:

## Environmental Science

*Environmental Science is the study of the interaction of living and non-living components of the environment with special emphasis on the impact of human on these components. In Environmental Science class,*

**The student will explain how matter and energy move through the biosphere (lithosphere, hydrosphere, atmosphere and organisms).**

- The student will demonstrate that matter cycles through and between living systems and the physical environment constantly being recombined in different ways.
- The student will analyze how the transfer of energy between atmosphere, land masses and oceans results in areas of different temperatures and densities that produce weather patterns and establish climate zones around the earth.

**The student will investigate the interdependence of organisms within their biotic environment.**

- The student will explain how organisms are linked by the transfer and transformation of matter and energy at the ecosystem level.
- The student will explain why interrelationships & interdependencies of organisms contribute to the dynamics of ecosystems.
- The student will conclude that populations grow or decline due to a variety of factors.
- The student will provide examples and evidence showing that natural selection leads to organisms that are well suited for survival in particular environments.

**The student will analyze the relationships between humans and the earth's resources.**

- The student will evaluate the interrelationship between humans and air quality.
- The student will evaluate the interrelationship between humans and water quality and quantity.
- The student will evaluate the interrelationship between humans and land resources.
- The student will evaluate the interrelationship between humans and biological resources.
- The student will evaluate the interrelationship between humans and energy resources.

**The student will develop and apply knowledge and skills gained from an environmental issue investigation to an action project which protects and sustains the environment.**

- Identify an environmental issue and formulate related research questions.
- Design and conduct research, and interpret the findings and make recommendations to help resolve an issue.
- Apply the conclusions to develop and implement an action project.
- Analyze the effectiveness of the action project in terms of achieving the desired outcomes.