Environmental Education Standard Knowledge of Environmental Processes and Systems

Grade: 9th Physical Science, 10th Biology

Standard:

B.12.1- Students will assess the relationship of matter and energy in natural, managed, and built systems.

Sample Activity:

Physical Science: Absolute Lab

Biology: Biogeochemical Cycle notes, think, pair, share positive and negative human impact on those cycles.

Knowledge of Environmental Processes and Systems

Grade: 10th Biology

Standard:

B.12.2, B.12.7- Students will evaluate the importance of ecosystems and biodiversity from a natural and human perspective.

Sample Activity:

Students will participate in the Biodiversity Car Lab as well be provided information on Biodiversity.

Knowledge of Environmental Processes and Systems

Grade: 10th Biology

Standard:

B.12.3-12.4- Students will evaluate the stability and sustainability of an ecosystem (including carrying capacity) in response to changes in environmental conditions.

Sample Activity:

Students will participate in Population Ecology notes and the Carrying Capacity and Exponential Growth of Bacteria Lab.

Knowledge of Environmental Processes and Systems

Grade: 10th Biology

Standard:

B.12.5,12.6 and 12.8- Students will analyze the impact of past and current human activities to ecosystems.

Sample Activity:

Students will research a specific ecosystem and present information about human impact on that ecosystem.

Knowledge of Environmental Processes and Systems

Grade: 10th Biology

Standard:

D.12.1 and D.12.4- Students will identify a variety of approaches to environmental issues, evaluate the consequences of each, and select and defend a position.

D.12.2, D12.4-D.12.5- Students will develop and evaluate a plan to maintain or improve their environment and enlist support for implementation.

D.12.3, D.12.6-D.12.8- Students will research a variety of ways to improve an environmental issue analyzing the political, economical, and social costs and benefits.

D.12.9- Students will explain the advantages and disadvantages of economic approaches to improving the environment.

E.12.1- Students will reflect on their personal beliefs regarding their relationship to the natural environment.

E.12.2-E.12.3- Students will write a plan and take action on an environmental issue.

Sample Activity:

Students will choose a environmental issue, research it, present the information to their class and write a professional letter to a government official.