

Problem-Based Learning Unit Template

Topic
Ecosystems (4.5) and Watersheds (4.9)
Goals/Objectives
4.5 The student will investigate and understand how plants and animals, including humans, in an ecosystem interact with one another and with the nonliving components in the ecosystem.
4.9 The student will investigate and understand important Virginia natural resources. Key concepts include: a) watersheds and water resources; b) animals and plants
Theme
Human and Natural Impact on Water and Living Systems
Scenario
<p>“Saving A National Treasure”</p> <p>Blue crabs are a well-known symbol of the Chesapeake Bay and they are an important part in the web of life in the bay. It is a matter of grave concern that the blue crab population has fallen to near record lows. Scientists say there are two causes of the problem: pollution and overharvesting. The Chesapeake Bay Foundation has asked elementary schools to research how pollution in their area might be affecting the health of the Chesapeake Bay and the plant and animal life in the bay and make recommendations for improvement and inform the public</p>
Culminating Activity
Develop a presentation to educate the public on the dangers facing the blue crabs and what people can do to help increase the blue crab population in the Chesapeake Bay. Your presentation could include reports, videos, interviews, plays, posters, and other forms of communication to present your findings and solutions to this problem
Problem Question
How do human activities impact the blue crab population in the Chesapeake Bay?
Student Role
Researchers: The Chesapeake Bay Foundation wants you to determine how pollution in your area affects the health of the Chesapeake Bay and the blue crab population. Students will choose their role and audience for saving the blue crab population in a RAFT format (see attached sheet)