

Activity	Social Studies	Science
<p>EYES ON DISSOLVED OXYGEN STUDENTS LEARN ABOUT DISSOLVED OXYGEN AND THE FACTORS THAT INFLUENCE DO IN A RIVER OR ESTUARINE SYSTEM. THEY WILL MEASURE DO USING EITHER A PROBE OR DISSOLVED OXYGEN CHEMISTRY TESTING KIT (MOST KITS USE THE WINKLER TITRATION METHOD). AFTER MEASURING DO, STUDENTS WILL THEN USE REAL-TIME DATA TO LOOK AT CURRENT DO LEVELS IN THE CHESAPEAKE BAY.</p>	<p>2.0 Geography: A.1. a (using geographic tools, describe distribution of natural resources & modifications to the environment, and analyze geographic issues); A.2. a (how physical & human characteristics effect economic growth); b (how physical & human characterizes effect how people make a living) A.4. a. (how humans modify their natural environment (water use; economics of modified environment); and, b. (consequences of modifying the environment).</p>	<p>1.0 Skills & Processes [Potential exists to meet 2.0 Earth Science: E. Interactions of Hydrosphere & Atmosphere – a. (water cycle) by including this concept in Engagement].</p> <p>3.0 Life Science: E. Flow of Matter & Energy. c. (photosynthesis); e. decomposition; f. (water cycle); F. Ecology: b. (limiting factors of environment).</p> <p>4.0 Chemistry: A Structure of Matter; D. Physical & Chemical Changes. 1 & 3. [Potential exists to meet 4.0 Chemistry: C. States of Matter by including HEAT as a variable/factor influencing DO levels].</p> <p>6.0 Environmental Science: 1. B. How humans accelerate changes (fertilizers & wastes).</p>
<p>EYES ON HARMFUL ALGAL BLOOMS BY USING THE EYES ON THE BAY WEBSITE, STUDENTS WILL LEARN ABOUT THE CAUSES AND EFFECTS OF HARMFUL ALGAL BLOOMS (HABS). STUDENTS WILL THEN USE AN INTERACTIVE MOVIE TO EXPLORE HABS THAT OCCURED IN THE CHESAPEAKE BAY IN 2003. THEY WILL THEN APPLY THIS LEARNING TO THE CURRENT YEAR IN THE BAY USING REAL-TIME DATA. THEY WILL LOOK FOR RECENT HARMFUL ALGAL BLOOMS AND EXAMINE THE CONDITIONS OF THE BAY PRIOR TO THE BLOOM EVENT.</p>	<p>2.0 Geography: A.1.a. Using geographic tools, describe distribution of natural resources & modifications to the environment; 4.a. How humans modify their natural environment (water use; economics of modified environment); and, b. (consequences of modifying the environment).</p> <p>3.0 Economics: 6 (b) Public health issues.</p>	<p>1.0 Skills & Processes</p> <p>3.0 Life Science: A. Diversity of Life (b) Plants make food. [With Extension activity involving the use of microscopes, meets B. Cells 1. All living things are cellular (a) compare cells of plants and animals; [potential exists to meet (b – e) form & function of plant & animal cells]. E. Flow of Matter & Energy. c. (photosynthesis); e. decomposition; f. (water cycle; nitrogen cycle); F. Ecology: a. (fluctuations in populations due to environmental conditions; b. (limiting factors of</p>

¹ Activities meet standards as noted. When a standard is listed without notation, the activity meets the standard fully.

		<p>environment – including disease); c. (competition for resources).</p> <p>6.0 Environmental Science: 1. A. Natural Resources & Human Needs 1. Impact of human population on environmental quality B. Environmental Issues - How humans accelerate changes (fertilizers & wastes).</p>
<p>EYES ON SALINITY STUDENTS WILL CONDUCT FOUR DIFFERENT INVESTIGATIONS TO INVESTIGATE SALINITY. ADDITIONALLY, THEY WILL LEARN ABOUT SALINITY BY MAKING A HYDROMETER AND COMPARING ITS USE AND ACCURACY WITH A PURCHASED METER. THEY WILL ALSO COMPARE ARCHIVED DATA AND EXAMINE THE CONNECTION BETWEEN SALINITY AND THE SURVIVAL OF AQUATIC ORGANISMS. FINALLY, STUDENTS WILL LOOK HOW SALINITY LEVELS ARE IMPORTANT PART OF THE CHESAPEAKE BAY</p>	<p>2.0 Geography: A.1.a. Using geographic tools, describe distribution of natural resources & modifications to the environment; 4.a. How humans modify their natural environment (water use; economics of modified environment); and, b. (consequences of modifying the environment).</p>	<p>1.0 Skills & Processes</p> <p>2.0 Earth Science: E. Interactions of Hydrosphere & Atmosphere – a. (water cycle); b. (properties of salt & fresh water).</p> <p>3.0 Life Science: F. Ecology: a-c (conditions of environment; limiting factors; competition amongst organisms).</p> <p>6.0 Environmental Science: B. Environmental Issues (impact on ecosystems; impact of environmental changes on the local & regional level; acceleration or magnification of naturally occurring changes).</p>

