

Artifact for Green School Rec
Meal
Kodiak

ENGAGEMENT

Activity 8A

Let's get back to the Bay! Watch a short video clip about some of the organisms that live in Bay waters. Identify one organism and tell why it is important to the Bay.

EXPLORATION

Activity 8B

It's Bad to Be Dirty! Conduct the following investigation to determine one problem of dirty water and to solve the problem.

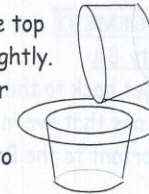
Materials:

- A newspaper page with "black on white" writing
- A cup of dirty water
- 2 clear plastic cups
- A coffee filter or paper towel

Directions:

1. Lay the newspaper page flat on a desk.
2. Place one clear plastic cup over a portion of newspaper. Look down through the cup at the words.
3. Draw what you observe in the circle at the end of these directions, titled "Before."
4. Slowly, pour a small amount of the dirty water into the cup, stopping now and then to see if you can still read the words.
5. Keep adding more water until you can no longer read the writing. (You may still be able to see the writing, but you shouldn't be able to read it.)

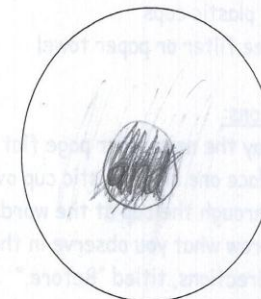
6. Lay the coffee filter or paper towel over the top of the empty plastic cup and push it down slightly.
7. Pour the dirty water into the coffee filter or paper towel on top of the second cup.
8. Allow the water to run through the paper into the cup.
9. When all the water has run through the paper, carefully remove the paper and place it to the side to examine later.
10. Place the cup over a printed section of newspaper again, and look down through the cup at the words.
11. Draw what you observe in the circle at the end of these directions, titled "After."



Before



After



12. Examine the paper that the water ran through. Describe what you see on the paper.

The filter paper had alot of dirt on it left from the water.

EXPLANATION

Activity 8C

Read the following to find out how oysters are like the paper in the investigation you just completed and why they are needed.

Trouble for Oysters and Crabs!

Oysters act like living filters in the Chesapeake Bay. They take in dirty water and release clean water back into the environment. Protecting our oyster population will help clean up the Bay.

However, right now the oysters in the Chesapeake Bay are almost gone. The Bay has only 1% of the oyster population that it once had.

Disease and over harvesting have almost completely killed the oyster population. Over harvesting is when fisherman take too many fish and a population can not recover before they are harvested again.

Crabs are in trouble too. The biggest problem for the crabs is water pollution from runoff. They need the clean water that the oysters provide. Soil runoff from erosion fills the water with mud. Scientists call some areas of the Chesapeake Bay "dead zones" because there is so much pollution that Bay plants and animals can not live there.

Preventing water pollution will help the health of the oysters. Healthy oysters can help to keep the water clean. Preventing nutrient and soil pollution from runoff will help the crabs and their habitat. Setting a limit on how many oysters and crabs the fishermen can take will also help. Preventing the over harvesting will help the Chesapeake Bay to recover.



Activity 8D

Based on your reading, describe the problems for the oysters and crabs.

The problem for the oysters is there is too much pollution and overharvesting. The same for the crabs.

Activity 8E

Predict what the impact on the Chesapeake Bay will be if people continue to over harvest the oysters and crabs.

There will be no more crabs for us and other animals which could kill many animals.



Activity 8F

State your opinion! In the sentence below, fill in the blank with the words "should" or "should not" to state your opinion about fishing for oysters and crabs in the Chesapeake Bay.

I think that fishermen should not be allowed to continue fishing oysters and crabs from the Bay.

Justify your answer! On the lines below, tell why you have that opinion.

I have that opinion because
if to many are gone there will
not be any left for other animals
and they might die.

Activity 8G

Be a Problem Solver! On the lines below, list steps people could take to prevent pollution and over harvesting while still using its natural resources.

- Take crabs that are 10 in. and over.
- Take oysters 4 in. and over
- Take crabs that weigh 1lb. or more.
- Take oysters that weigh 95 ounces and up.