



KIDS ENVIRONMENTAL LESSON PLANS

This lesson developed by:



Oyster Tag

Overview:

Oyster Tag is a straightforward game of tag that demonstrates the effects of pollution on oyster reefs, and the effect of oyster reefs on pollution.

Ocean Literacy Principles:

1. The Earth has one big ocean with many features
5. The ocean supports a great diversity of life and ecosystems
6. The ocean and humans are inextricably interconnected
7. The ocean is largely unexplored

Key Concepts:

- Oysters are filter feeders that have large effects on the water columns in which they are found, consuming nutrients (plankton and organic particles) from the water
- Oysters also indiscriminately remove toxins and pollutants from the water
- Humans polluting waterways has a large impact on these filter-feeders and therefore also the marine ecosystem

Materials:

- Enough space to run around with a group of kids

Duration:

20-50 minutes, depending on how long the kids can play tag

Physical Activity:

High



Oyster Tag (cont.)

Background:

Today, oysters have vanished from many of their former strongholds, in part due to overharvesting, but also in part due to increased pollution. Oysters are filter feeders, meaning they stay in one spot and get whatever nutrients they can out of the water that passes through their systems. Unfortunately, in addition to nutrients, they also indiscriminately consume any toxins and pollutants in the water. An onslaught of this kind of harmful material can eventually kill an entire reef, which can be home to a host of creatures from tiny invertebrates to large fish that use the reef for food and shelter. Learn more about filter feeders in the Clam Jigsaw activity.

Activity:

1. Choose two students in the group (or just one if it is a smaller group) to be Toxic Waste (toxic waste is “it”). The remaining students are all Happy Oysters. Happy Oysters run around in an attempt to stay away from Toxic Waste and becoming a Sad Oyster. They should display their Happy Oyster status by calling out “happy oyster, happy oyster!” and flapping their hands in imitations of bivalves. Toxic Waste should display their status by calling out “toxic waste” in a foreboding voice.
2. Toxic Waste attempts to tag as many Happy Oysters as possible.
3. If a Happy Oyster is tagged by Toxic Waste, he/she becomes a Sad Oyster. A Sad Oyster must freeze and display their status by calling out “sad oyster!”
4. A Sad Oyster can be unfrozen and become a Happy Oyster once again if two Happy Oysters join hands around the Sad Oyster, chant “happy oyster” three times while doing a Happy Oyster dance. (You can make up your own Happy Oyster dance).
5. If a single Happy Oyster is tagged three separate times, he/she becomes Toxic Waste and tries to tag all the other Happy Oysters.
6. The game ends when all players become either toxic waste or sad oysters, and there is no one left to tag.

Discussion:

- What does Oyster Tag demonstrate about the effect of pollution on oysters? (oysters can process a certain amount of pollution, but will eventually be overcome if something is not done to lessen the effect)
- Why do two oysters need to help a sad oyster become a happy oyster again? (Teamwork! The more oysters there are to filter the water, the easier it is to process toxins and survive)
- Is there anything positive about oysters consuming pollution? (They can help clean polluted water)
- Would you eat an oyster that had filtered pollution or toxic waste?
- What can people do to help oysters?
- What would happen to oysters and other marine species if people continued to pollute our waterways?
- Combine this discussion and activity with “Who Dirtied the Water?” for more discussion topics, and to deepen the students’ understanding of these concepts.