

# Oysters and Climate Change

## Flowchart Activity

Oysters are an iconic species in the Chesapeake Bay and oyster populations have faced many challenges from over-harvesting to diseases such as *Dermo* and *MSX*. The increase in burning fossil fuels has raised ocean temperatures due to the greenhouse effect. Our oceans are a natural carbon sink and absorb atmospheric CO<sub>2</sub>, but with the increase in CO<sub>2</sub> emissions, they have absorbed more than they do naturally, causing issues for our oyster populations. Oyster reefs have become a target of restoration efforts through advocacy and research!

**Directions:** Fill out the 4 flowcharts about oyster impacts from climate change using the phrase bank listed below. (Answer key provided on last page!)

**Red** phrases go in first box(es)

**Green** phrases go in the middle box(es)

**Purple** phrases go in the third box(es)

## Flow Charts

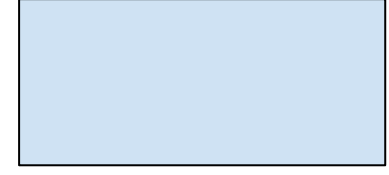
1.



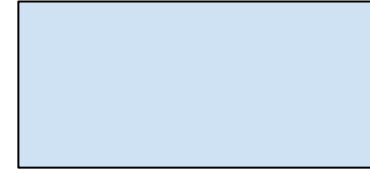
2.



3.



4.



## Phrase Bank

Red phrases go in first box(es)

Green phrases go in the middle box(es)

Purple phrases go in the third box(es)

WARMER WATER  
TEMPERATURES

MORE GREENHOUSE  
GASES

MORE CO<sub>2</sub>

OYSTERS  
CANNOT  
SURVIVE

MORE FOOD FOR  
OYSTERS (FILTER  
FEEDERS)

OCEAN  
ACIDIFICATION

CREATES A MORE  
STRESSFUL  
ENVIRONMENT

WEAKER SHELLS  
FOR OYSTERS

EARLIER  
SPAWNING

FEWER YOUNG  
OYSTERS SURVIVE

MORE NUTRIENTS IN  
THE WATER DUE TO  
RUNOFF

MORE  
PRECIPITATION

INCREASED  
SALINITY

## ANSWER KEY

