

## Whale Watcher: Student Booklet

In this activity, you will be playing the part of an *Ocean Adventures* volunteer team member, looking at the various whale behaviors on film as well as gathering additional information about the threats the whales face during their migration using a virtual whale-watching trip.



1. Watch this introductory video on gray whales:  
**Jean-Michel Cousteau Ocean Adventures Gray Whale**  
(<http://www.youtube.com/watch?v=mMFznXz-Uh4>)
2. Take a look at the Gray Whale Obstacle Course Website:  
(<http://www.pbs.org/kqed/oceanadventures/episodes/whales/>)
3. Click on “Trace the Migration” and read the opening paragraph
4. Click “Launch Interactive Map” and work through the Gray Whale Migration Map.
5. Turn to the **Migration Data Sheet** in this booklet. Fill in the questions to make your hypotheses about what you think you will discover during the virtual whale-watching trip.
6. Click on “Fun and Games”, then “Interactive Web Games”. Click on the green arrow until you get to “Whale Watcher” and click anywhere on the picture to launch the game.
7. Before beginning, **read the game instructions** in “How to Play”. Now you are ready to begin your virtual trip!
8. Throughout the game, make sure you are observant of the whale behaviors and whale threats you come across. Fill out the **Gray Whale Behavior Data Sheet** and the **Migration Threats Data Sheet** in this booklet to keep track.
9. Once you have completed the virtual trip, note down the score you received. Review your collected data
10. Using the **Reporting Data Sheet**, answer the questions using the data you collected.

## Whale Watcher: Migration Data Sheet

Before you begin your virtual whale watching, please fill out the following information.

1. What type of behaviors do you expect to see during the expedition?

.....  
.....  
.....  
.....



2. What dangers do you think gray whales run into along their migration?

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.....  
.....  
.....

Use the information found in the interactive Gray Whale Migration Map, as well as the “More About Gray Whales” and “What’s This?” features of the Whale Watcher Game to answer the following questions.

Migration start point:.....

Migration end point: .....

Length of migration route: .....

Name of surrounding ocean basin: .....

Reasons for migration: .....

.....

Reasons for low numbers of gray whales in the 1800s and early 1900s: .....

.....

.....

## Whale Watcher: Gray Whale Behavior Data Sheet

BEHAVIOR	Describe the behavior	Why is this behavior helpful to the whales?	Sketch the behavior if possible	Give one additional interesting fact
Mating				
Social behavior/nature				
Rubbing				
Blowing				
Nursing				
Fighting Orca				
Swimming in kelp				
Spy hopping				
Feeding				
Breaching				

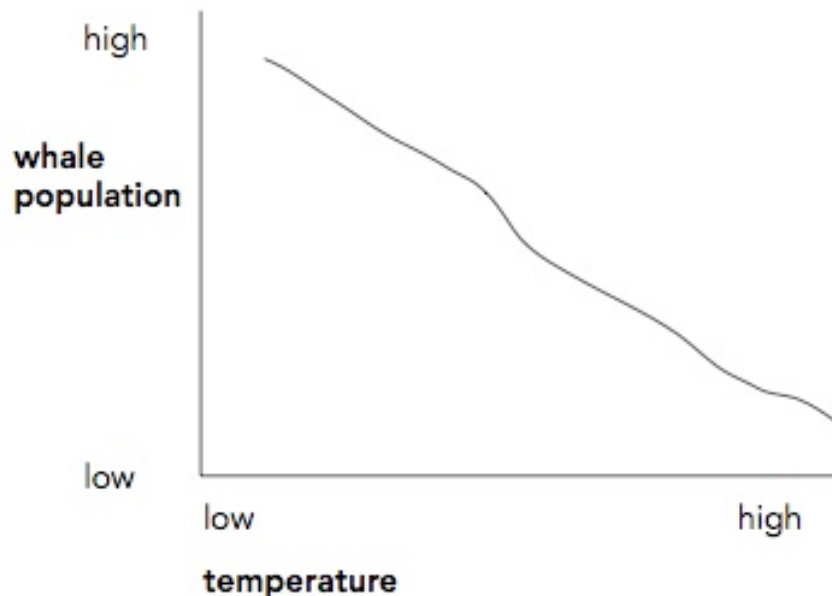
## Whale Watcher: Migration Threats Data Sheet

THREAT	Why is this a danger to the whales?	Can whales avoid it? If so, how?	What can people do to help?
Whale-watching boats			
Ship traffic			
Fishing nets			
Chemicals and pollution			
Orcas			
Sonar			
Global warming			
Ice			

## Whale Watcher: Reporting Data

Once you have collected your data, please answer the following questions on a separate sheet of paper.

1. Describe the gray whale migration: Where do the whales migrate to and from? Why?
2. What do you think would happen to a whale that did not exhibit the behaviors you filmed? List a possibility for each behavior, for example “If a whale did not rub its skin on the bottom of the ocean floor, it would.....”
3. Which threat do you think is the most dangerous to the migrating whales? Why?
4. Draw a possible food chain from the animals you encountered in the game
5. According to the following (fictitious) graph, how does rising ocean temperature affect gray whales? Use your data to explain this connection.



6. Draw a comic strip from the point of view of a migrating gray whale calf. Describe the lagoons in Mexico, some of the behaviors you watch the adults exhibit, and the threats you and your mother run into along the trip. What do you wish humans would do differently to make your trip easier?