

# Around the Americas K–8 Teacher’s Guide

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## AROUND THE AMERICAS

Many of the fundamental properties of the ocean are changing: seawater pH is decreasing, endangering coral reefs; warming waters are causing sea level to rise, imperiling low-lying areas; and Arctic sea ice is shrinking, threatening local wildlife. Changes in the marine environment affect not only inhabitants of the sea, but also have great ramifications for both coastal communities and inland populations. These changes are heavily influenced by human activity. Consequently, individuals can play an important role in protecting and improving the health of our oceans.

To build awareness about ocean health on an international scale, Seattle’s Pacific Science Center and Boston’s Sailors for the Sea have launched the *Around the Americas* project in collaboration with the University of Washington’s Applied Physics Laboratory, the Joint Institute for the Study of the Atmosphere and Ocean, MIT Sea Grant College Program, and NASA’s Student Cloud Observations On-Line.

*Around the Americas* is a clockwise circumnavigation of the North and South American continents as though they were one gigantic island. In May 2009, a 64 foot sailboat named “*Ocean Watch*” departed Seattle and is scheduled to visit 31 ports in 12 countries over the course of its 13 month voyage. On board are four crew members and one Science Center educator. Ocean and atmospheric scientists are joining the crew for certain legs of the expedition to conduct research. The goal of the *Around the Americas* project is to use this unusual adventure to engage and educate citizens in North and South America about ocean health issues using science-driven education materials and activities.

## ABOUT THE GUIDE

Welcome aboard! The *Around the Americas* K-8 Teacher’s Guide features seven inquiry-based lessons to engage your students in learning about different aspects of ocean health. Each lesson in this guide is aligned to the ocean literacy principles ([www.oceanliteracy.net](http://www.oceanliteracy.net)) and U.S. and Canadian national science standards. Each lesson is designed for students in grades 6-8 and includes suggestions for adapting the lesson to younger students. Lesson topics include ocean acidification, coral reef ecology, changes in sea level, and sustainable fisheries. Exercises on atmospheric aerosols, underwater sound, and sea ice directly relate to research projects on board: updates of these projects will be posted to the *Around the Americas* website ([www.aroundtheamericas.org](http://www.aroundtheamericas.org)) throughout the voyage. Each lesson has “extensions” to explore each topic in greater depth.

Thank you for your interest in these materials and in the *Around the Americas* project: we encourage you to dive in and follow the progress of “*Ocean Watch*” and her crew on-line at [www.aroundtheamericas.org](http://www.aroundtheamericas.org).

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## CREDITS

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