



The Great Barrier Reef • Study Guide

Jonathan visits the largest reef system in the world: the famous Great Barrier Reef of Queensland, Australia. In addition to going diving, he visits the reef as non-divers often do—by submarine, helicopter and even in a bubble helmet! Along the way he meets some amazing animals such as a friendly sea turtle and a giant wrasse!

Objectives

1. Introduces viewers to the world's largest reef and the animals that live there.
2. A physics lesson on air in an upside-down submerged vessel.

Questions for before watching the program

1. What is a coral reef? What builds it?
2. How do reefs benefit the marine life underwater around them?
3. Are there ways that a reef might provide benefits to people on land, not just marine life? (Hint, it's called a *Barrier Reef* for a reason!)

Discussion for after watching the program

1. How many miles does the Great Barrier Reef span? If that's the largest barrier reef, what's the second largest? (Internet research!)
2. The Sea Walker experience utilized helmets with air in them. What keeps the water from coming in the bottom of the helmet?
3. Why doesn't the Sea Walker helmet float off Jonathan's head, since it's full of air? (Some math: assuming it's a sphere 14 inches in diameter inside, how much positive buoyancy does it have in seawater?)
4. What is the sea turtle eating on the reef? What kinds of things do sea turtles generally eat?
5. The giant clam was living in very shallow water. Why?
6. Internet research: The boat we used is called a *Catamaran*. What kind of boat is this and what makes it good for travel on rough water?