### **TSUNAMIS**

"December 26 started out a beautiful day. The water was turquoise, as calm as glass. Suddenly, there was a great hissing sound and the sea seemed to be caving in. Within seconds, a great wave came rushing in to the shore, destroying everything and sweeping away everybody that was in the way."

The man who wrote this survived a huge tsunami in Thailand in 2004. He was lucky. Hundreds of thousands of people did not.

Tsunamis are one of nature's deadliest forces. These killer waves can race across the ocean as fast as jet planes. They can swallow up islands and wipe out entire villages.

A tsunami is no ordinary ocean wave. Most waves are caused by wind. They skim along the surface of the ocean. Tsunamis are caused by a large movement on the ocean floor, such as an earthquake. Tsunamis are a wall of water right from the seabed to the surface. Tsunamis can travel over 800 km (500 miles) per hour. That's more than ten times the speed of ocean waves. And unlike ocean waves, which "break" near the shore, tsunamis just keep surging right onto the beach and beyond.

Out in the ocean, tsunami waves aren't very high. But as the waves move into shallower water, they slow and grow. By the time they reach land, they can be as high as a ten-storey building. When this wall of water comes roaring onto the shore, buildings, vehicles and people are swept away in its path.

Just before a tsunami hits, there is a sometimes a strange vacuum effect. It sucks all the water from the harbor. You might see the ocean floor littered with flopping fish and other sea creatures. Minutes later, a killer wave crashes onto the shore. Then another, and another, and another. This "wave train" can be the most dangerous part of a tsunami.

The Asian Tsunami of 2004 was the deadliest in history. The waves traveled for 10 km (6 miles) inland. They killed 280,000 people in 14 countries. The devastation continued long after the tsunami. Homes, hospitals and streets were destroyed. Food and water supplies were lost. Many people died from diseases brought on by the flood.

What can you do if you get caught in a tsunami? Listen to warning systems and instructions from officials. Get to high ground as quickly as possible. But whatever you do, don't stop to watch. If you are close enough to see a tsunami, you're too close to escape it.



### **BEFORE YOU READ**

Do you know what a tsunami (soo-nah-mee) is? Tsunamis are the most dangerous ocean waves. Some people call them "tidal waves" but they have nothing to do with tides. The word "tsunami" means "harbor wave" in Japanese. It is named for the great damage the wave causes when it surges onto the shore. <u>Click here to watch a video from National Geographic.</u>

### WHILE YOU ARE READING

As you read, put a check mark in the margin beside any facts you already knew. Put a star beside any facts that you learned.

Think about how tsunamis are different from other ocean waves.

## AFTER YOU READ

#### Things to think about:

- 1. Why shouldn't you stop to watch a tsunami?
- 2. Why do many people die after the tsunami is over?
- 3. What is a "wave train"?

#### Words to figure out:

Go back and look at the highlighted words. Read "around" each word to find another word nearby that helps you figure out the word.

deadliest surging vacuum devastation



# HOW ARE TSUNAMIS DIFFERENT FROM OTHER OCEAN WAVES?

Use the organizer below to note at least three more ways that they are different.

TSUNAMIS	OCEAN WAVES
Travel at great speeds up to 800 km (500 miles) per hour	Don't travel nearly as fast

