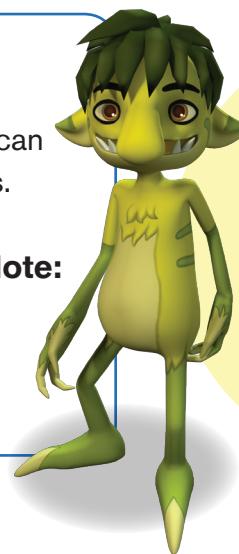


Preparing for Tsunamis

Grades 4-6
Reproducible Master

Hi! I'm Tolly! A tsunami is a series of powerful, fast-moving waves usually caused by an earthquake under the ocean. Want to learn more? Download **Monster Guard**. It's a free app from the American Red Cross that teaches kids how to be prepared for emergencies. Choose "Tsunami" on the main menu. Then join me on a training mission to learn how to stay safe when a tsunami is on the way. **Note:** You must have completed the **Monster Guard** Initiation section before you can access the Tsunami training mission.

My Tsunami Safety Score: _____



Part 1

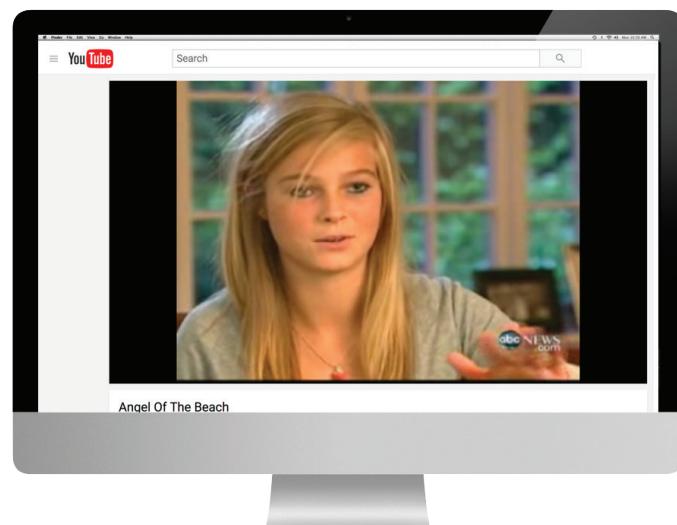
As you have seen, tsunamis are different from normal waves. They usually start when an undersea earthquake pushes on the ocean water, causing a series of powerful waves that move through the ocean very quickly – as fast as a jet airplane. When they reach shallow water near the shore, the waves slow down and start growing taller. These tall, powerful waves can cause a lot of damage. In fact, large tsunamis can flood the land up to a mile from the shore!

How can we tell if a tsunami is coming? For tsunamis that start far away, there will usually be a warning on the radio or television, and sirens will sound along the coastline. But for tsunamis that start nearby, there may not be time for a warning. That's why you need to watch for these signs that a tsunami may be on the way.

- The ocean pulls way back from the shore, or suddenly come up farther onto the beach than normal.
- The ocean looks like it is covered with bubbles.
- The ocean makes a loud roaring sound.
- You might see a large wave on the horizon or waves rushing toward the shore and flooding over the coastline.
- You feel a long or strong earthquake near the ocean.

In 2004, a 10-year-old girl named Tilly Smith saved hundreds of people because she had learned the warnings signs of an approaching tsunami.

Watch a video about Tilly at www.youtube.com/watch?v=6C3CJX1-d_8. Then imagine you are the one who needs to warn the grown-ups about a tsunami. Use the back of this sheet to describe the things you would need look out for that tell us a tsunami may be happening.



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Part 2

Do you remember your tsunami safety training? Show what you learned by filling in the blanks to complete these safety tips.

1. If you feel an earthquake near the ocean, Drop, _____, and _____ until the shaking stops. Then move away from the _____. Seek higher _____.
2. If you see the ocean pull back away from the shore, a tsunami may be _____. Move away from the shoreline and seek _____ ground.
3. For updated emergency information about tsunamis, listen to a NOAA Weather Radio, tune into the Coast Guard emergency frequency station, or tune into a local _____ or _____ station.
4. To be prepared for tsunamis, you should be able to reach a safe area outside the Tsunami Hazard Zone in ___ minutes.
5. Stay away from the shore until local officials tell you it is safe. A tsunami is a series of waves that may continue for _____.



Part 3

Scientists use special “DART” buoys (Deep Ocean Assessment and Reporting of Tsunamis) and other sensors to gather information about tsunamis, so they can warn people who live where a tsunami might hit the shore. You can watch a video about this warning system at <https://youtu.be/XIvhRs7bst4> and learn more about how it works at <http://tsunami.noaa.gov>. Share what you learn in a class discussion.

The screenshot shows a video player interface. At the top, it says "Elapsed Time: 0 MIN - 8 MIN". Below the video frame, there's a progress bar showing "0:20 / 6:45". Underneath the video frame, it says "Tsunami Warning!" and "PacificTWC". On the right side of the video frame, there are statistics: "18,792 views", "111 likes", and "111 dislikes". At the bottom left, there are buttons for "Add to", "Share", and "More".

Replay the
Monster Guard
Tsunami training
mission. See if you
can score higher!

