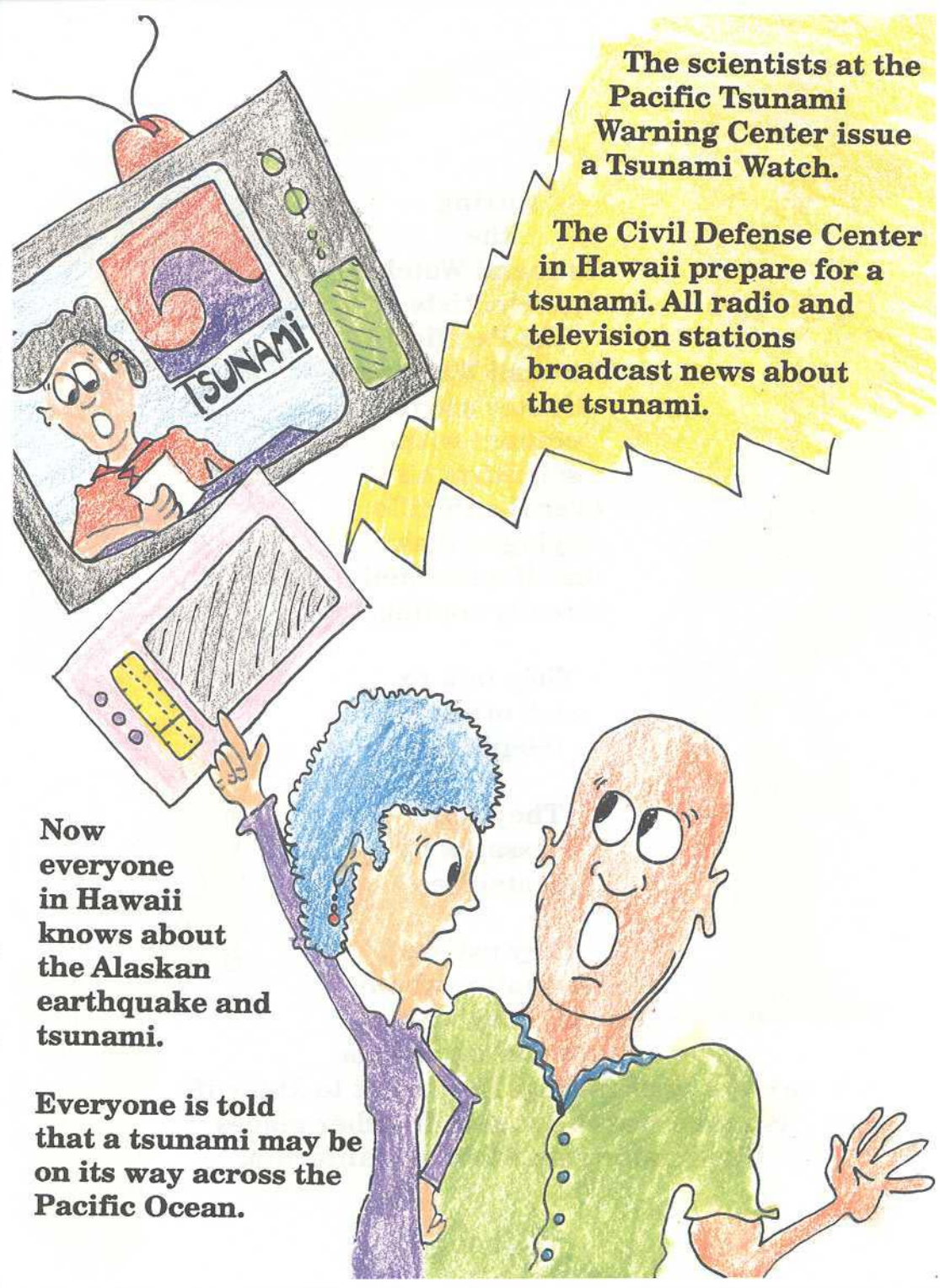
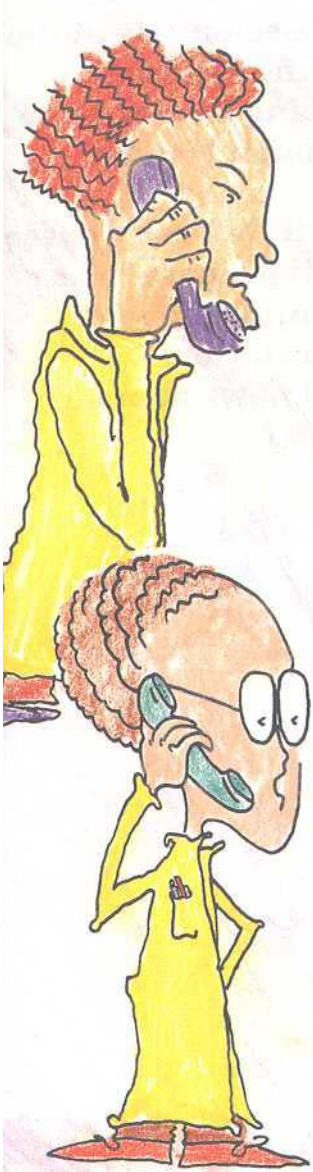
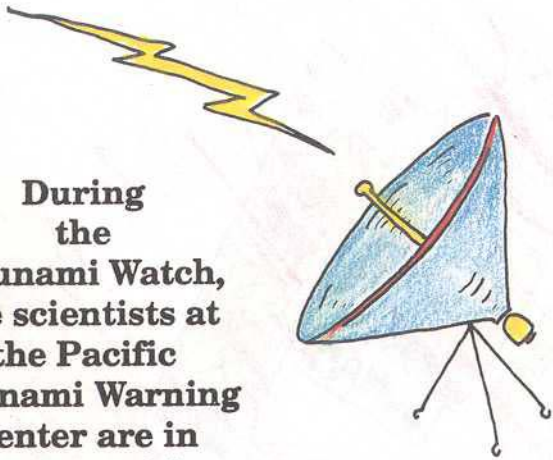

TSUNAMI
The scientists at the Pacific Tsunami Warning Center issue a Tsunami Watch.
The Civil Defense Center in Hawaii prepare for a tsunami. All radio and television stations broadcast news about the tsunami.
Now everyone in Hawaii knows about the Alaskan earthquake and tsunami.
Everyone is told that a tsunami may be on its way across the Pacific Ocean.



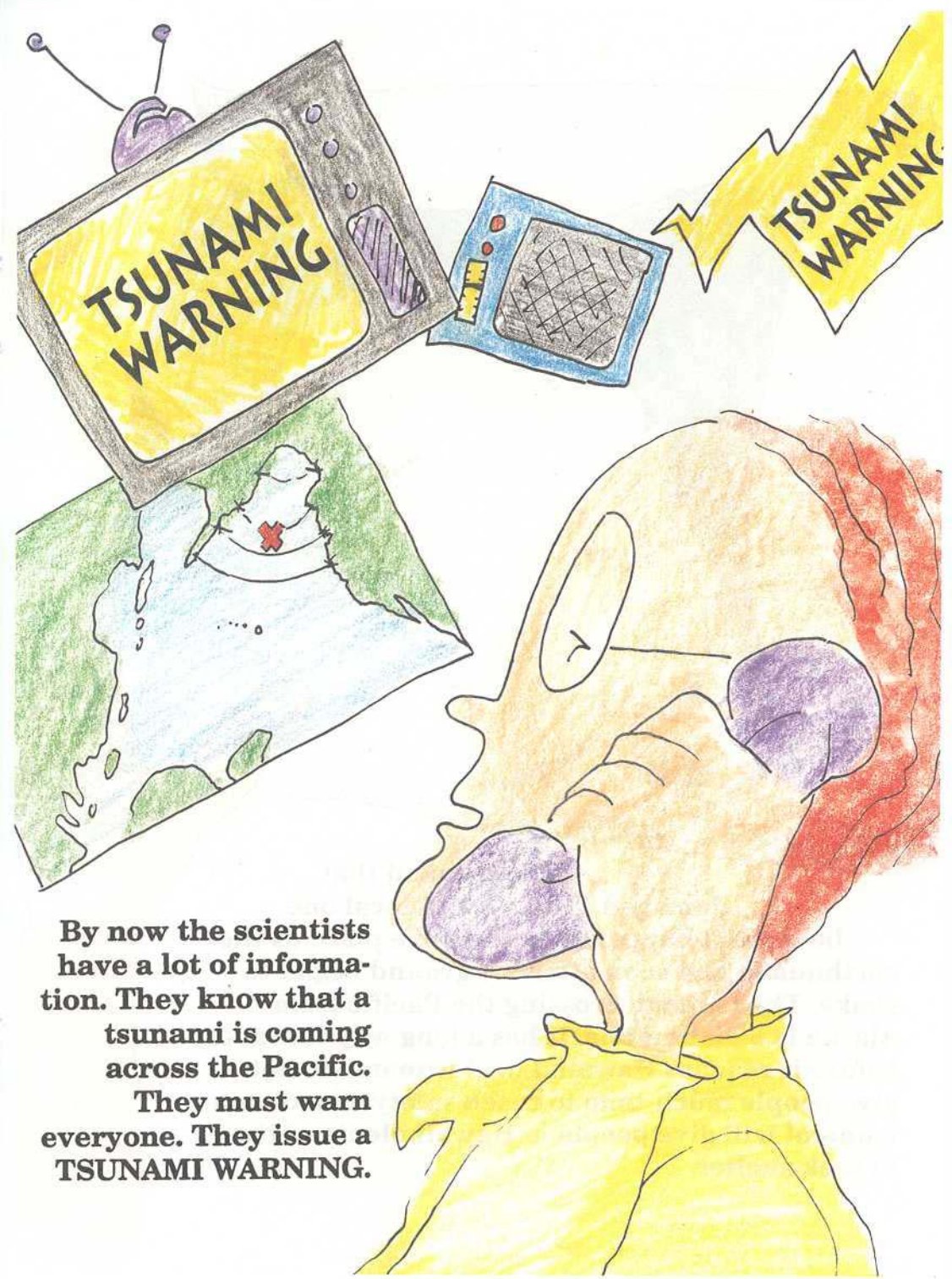


During the Tsunami Watch, the scientists at the Pacific Tsunami Warning Center are in contact with scientists all over the Pacific trying to make sure if a tsunami is really coming.

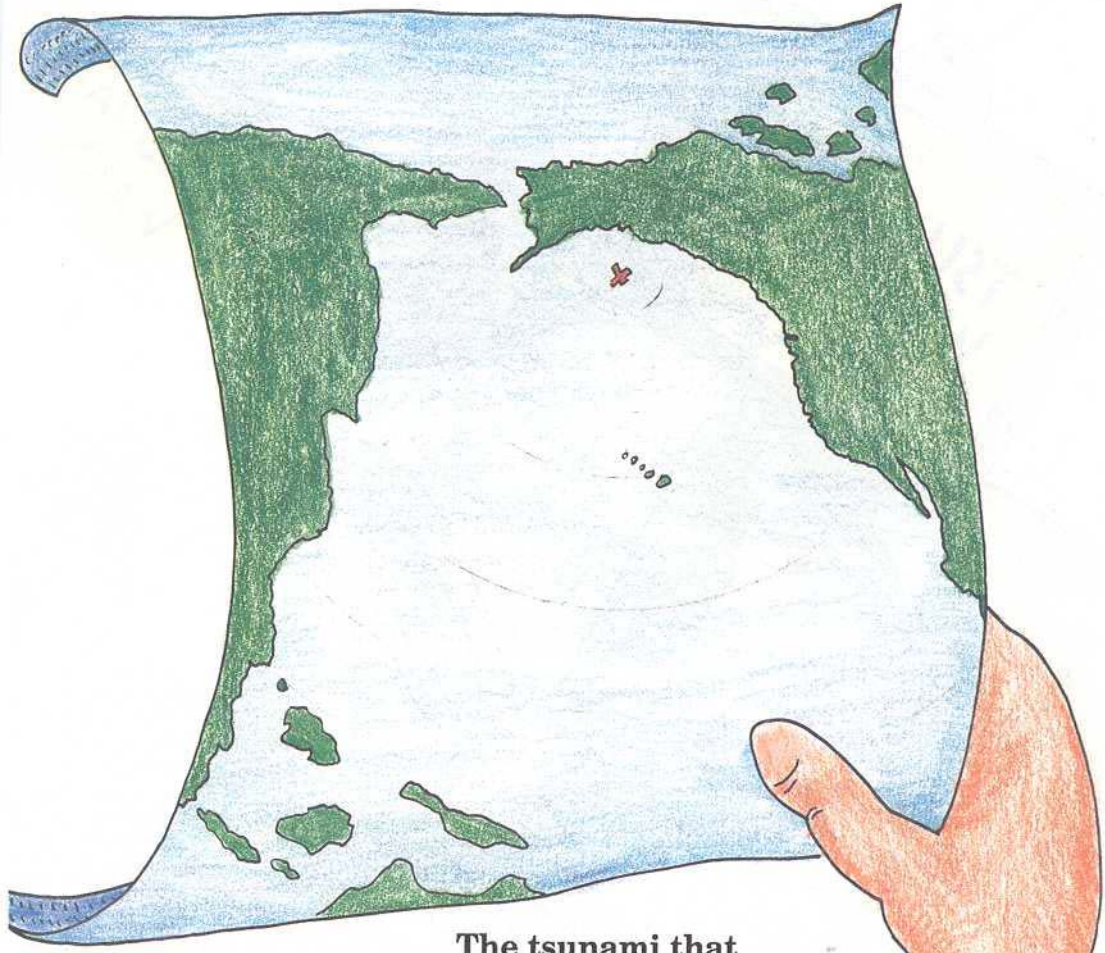
They talk to each other by telephone.

They send messages by satellite.

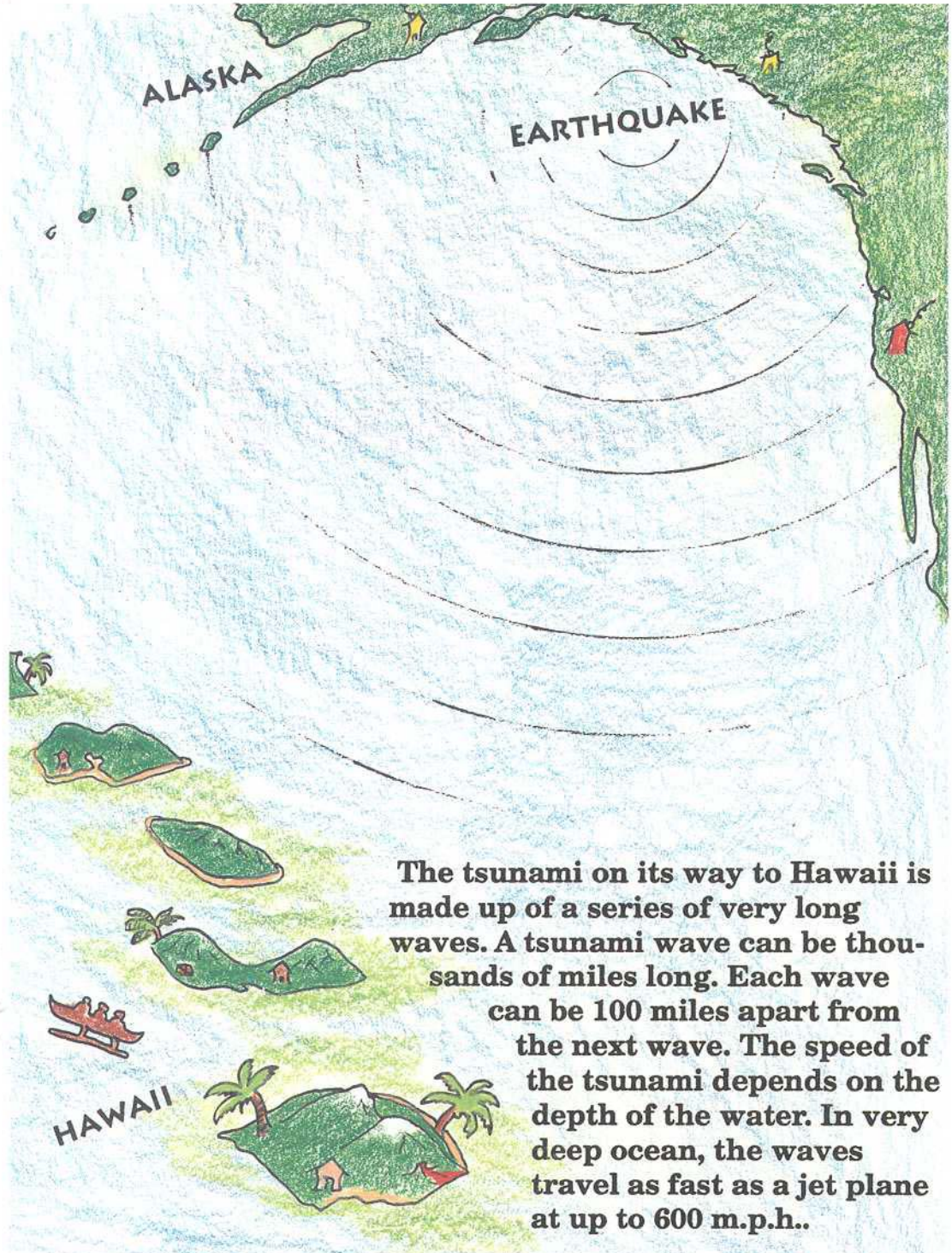
They ask for information about tides. They want to know if water levels are rising or falling. They want to know if tsunami waves are seen in other places like Washington State or California.



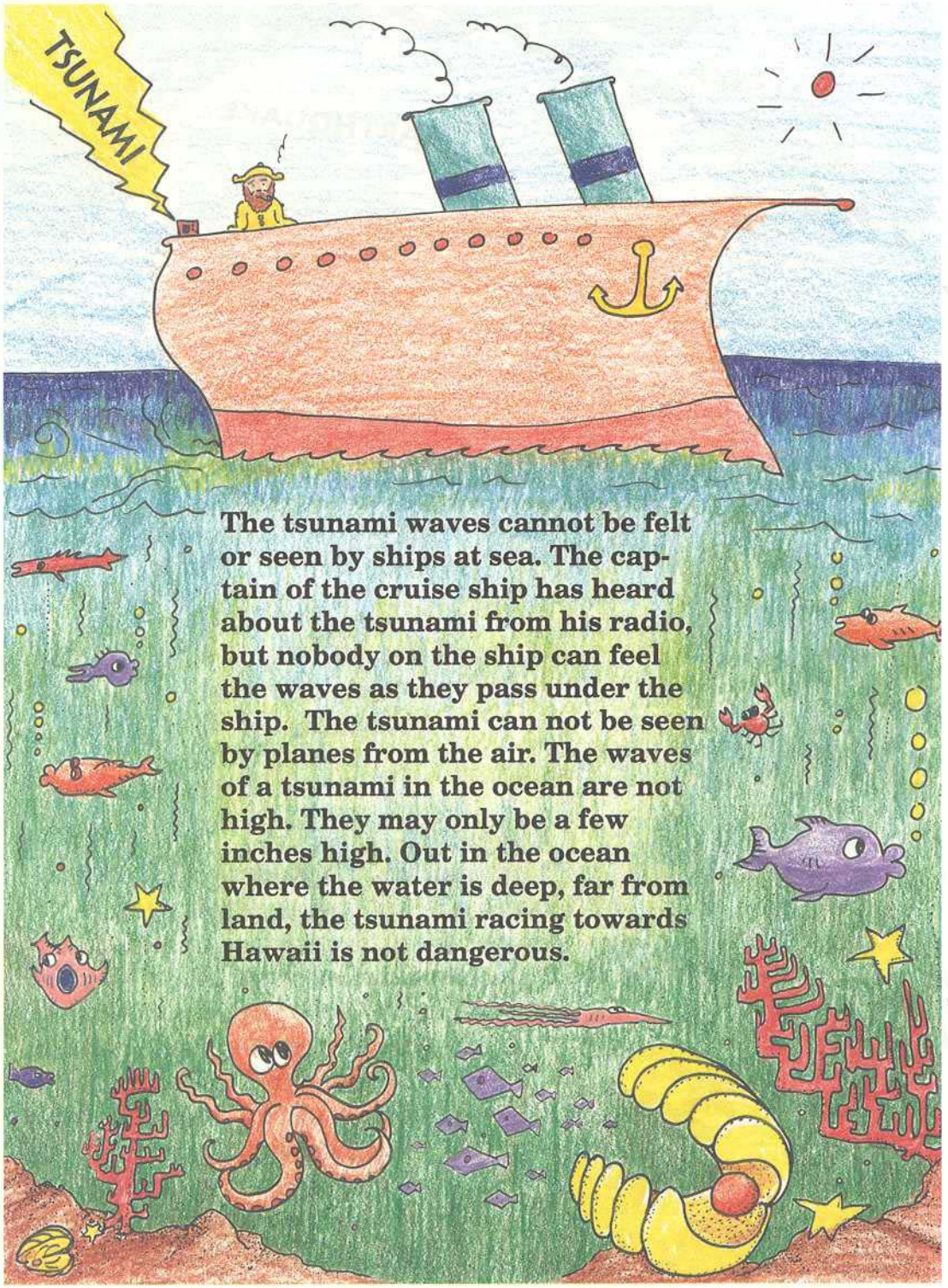
By now the scientists have a lot of information. They know that a tsunami is coming across the Pacific. They must warn everyone. They issue a TSUNAMI WARNING.



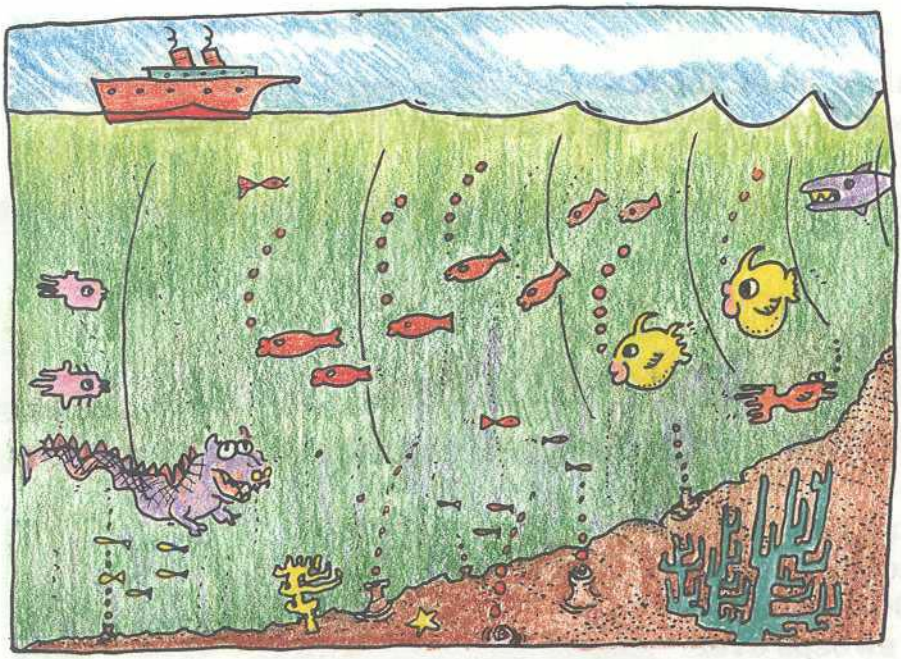
The tsunami that damaged Alaska was a local one because it happened in the same place as the earthquake and soon after the ground began to shake. The tsunami crossing the Pacific from Alaska is a distant one. It has a long way to travel before it reaches Hawaii. Local tsunami do not give people much time to reach safety. The distant tsunami will give people in Hawaii plenty of time to seek shelter.



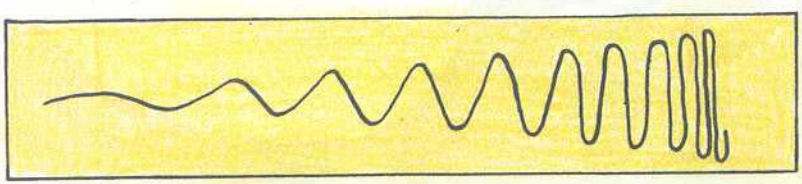
The tsunami on its way to Hawaii is made up of a series of very long waves. A tsunami wave can be thousands of miles long. Each wave can be 100 miles apart from the next wave. The speed of the tsunami depends on the depth of the water. In very deep ocean, the waves travel as fast as a jet plane at up to 600 m.p.h..



The tsunami waves cannot be felt or seen by ships at sea. The captain of the cruise ship has heard about the tsunami from his radio, but nobody on the ship can feel the waves as they pass under the ship. The tsunami can not be seen by planes from the air. The waves of a tsunami in the ocean are not high. They may only be a few inches high. Out in the ocean where the water is deep, far from land, the tsunami racing towards Hawaii is not dangerous.

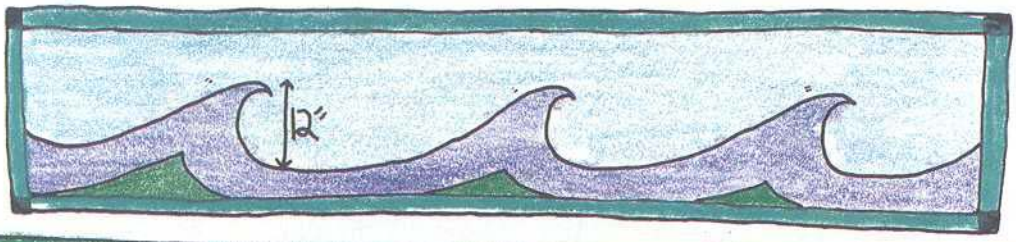


But as the tsunami approaches land it becomes dangerous. The speed of the waves slows down in shallow waters. In 60 feet of water a tsunami travels at 30 m.p.h., the speed of a slow car. The problem is that although the first wave slows down in shallow water, the second wave is 100 miles apart and it is traveling faster. The result is that the distance between the waves does not remain at 100 miles. It grows smaller.



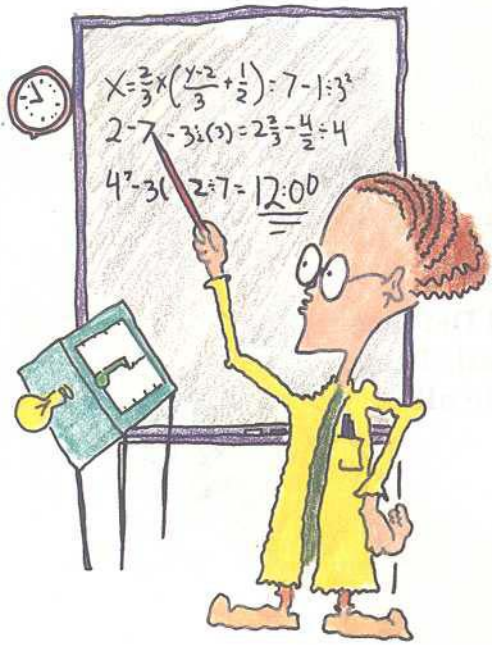
The waves are bunched up more together. This squashing together makes the waves taller.

This is when the tsunami waves can become dangerous. A small wave only 12 inches high in deep ocean-



may grow into a monster wave 100 feet high as it sweeps over the shore.

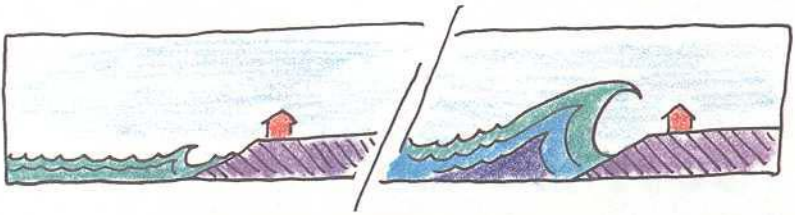
100'



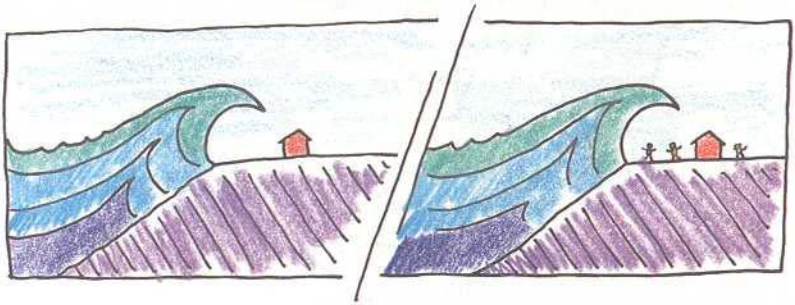
The scientists at the Pacific Tsunami Warning Center can calculate when the first wave of the tsunami will reach Hawaii. It will reach Hawaii at 12 o'clock lunchtime, just five hours after the earthquake took place in Alaska.

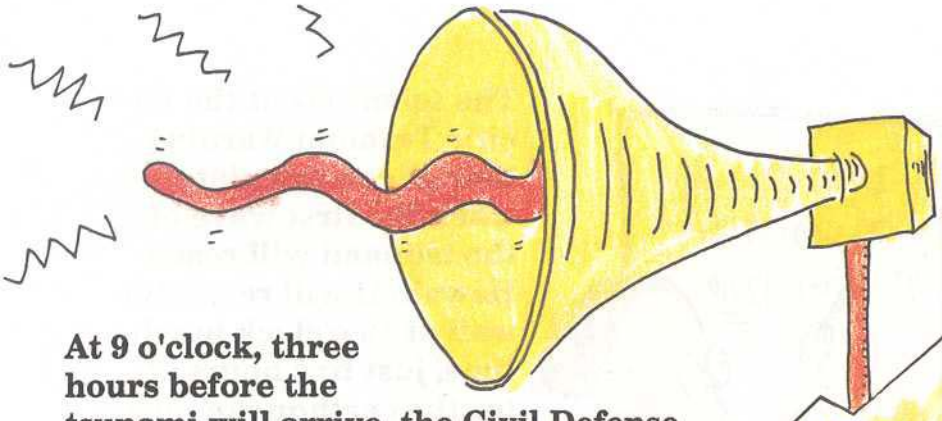
Although the scientists can tell when the tsunami will arrive if it is a distant one, they can not tell how big the waves will be.

They could be small. They could be gigantic.



They could be harmless. They could be killers. People must be prepared for the worst and hope for the best.





At 9 o'clock, three hours before the tsunami will arrive, the Civil Defense sounds all the sirens in Hawaii. They wail for three minutes. People all over the islands switch on their radios and televisions to listen to the latest news and learn what to do.