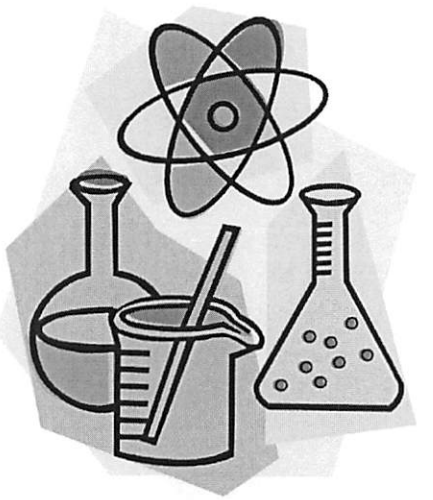
ROAD BRANCH ELEMENTARY & MIDDLE SCHOOL

NTID/SNOW DAY PACKETS



SCIENCE 8

Day 3

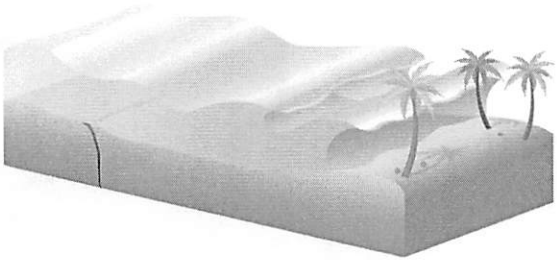
Science

Earthquakes

How Earthquakes Work

Earth's surface is like a puzzle with each piece making up what is called a **tectonic plate** as shown on the right. These plates are always moving and earthquakes happen when two tectonic move against each other. This movement creates a lot of energy, which is released as an **earthquake**.

If these plates move against each other on land, you feel the Earth shake. If it happens in the Ocean, it can make a huge wave known as a **tsunami**.



Interesting Fact

An area where two plates meet is called a fault line. The U.S. is home to the San Andreas Fault, which is the boundary between the Pacific Plate and the North American Plate. This boundary runs through California and is responsible for the Earthquakes felt there.

Tectonic Plates – Parts of the Earth's surface that fits together like puzzle pieces.

Earthquake – The shaking of the Earth's surface.

Tsunami – An extremely large wave usually caused by the movement of tectonic plates.

The Danger of Earthquakes

When earthquakes are involved, lives are in danger. The most effective way to save lives is by warning people of an upcoming Earthquake in their area.

Earthquakes are "felt" using sensitive measuring devices called **seismometers**. How strong an earthquake is, is shown by its position on the Richter scale which goes from 0 – 9 with 9 being highly destructive and 3 being minor.

A strong earthquake can knock over buildings and leave people are without **shelter**, food, water, and medical supplies until help can arrive.

How To Prepare For An Earthquake

In order to prepare yourself and your family for an earthquake, steps should be taken before the earthquake happens. Canned food and bottled water, medical supplies, extra medication, batteries and a radio should be available at all times.

Reading Comprehension Questions:

1. What causes an earthquake?
2. What is used to measure the strength of an earthquake?
3. Earthquakes affect an area even after the Earth stops shaking. Explain.
4. Why do you think some locations more prone to earthquakes then others?

Extension Activity:

5. On a map, find the San Andreas Fault. Draw a sketch of California and include the San Andreas Fault in your drawing.
6. Someone wants to know about earthquakes. Summarize IN YOUR OWN WORDS, what you know about them in 100-150 words.

Seismometers – Instrument used to detect an earthquake.

Shelter – A place to live.