

LOS ANGELES UNIFIED SCHOOL DISTRICT  
Office of the Deputy Superintendent, Instructional Services

MEMORANDUM NO. N-18  
February 11, 2001

ATTACHMENT A

Emergency Preparedness  
**COOL FACTS ABOUT EARTHQUAKES**

Discussion Topic - March 2002

1. The *largest recorded earthquake in the United States* was a magnitude 9.2 that struck Prince William Sound, Alaska on Good Friday, March 28, 1964.
  2. The *largest recorded earthquake in the world* was a magnitude 9.5 in Chile on May 22, 1960.
  3. The *earliest reported earthquake in California* was felt in 1769 by Gaspar de Portola while his group was camping about 30 miles southeast of Los Angeles.
  4. The *average movement of the San Andreas Fault Zone* during the past 3 million years has been about 2 inches per year. This is about the same rate as fingernails grow. If this rate continues, Los Angeles and San Francisco will be next to one another in about 15 million years.
  5. *Moonquakes* ("earthquakes" on the moon) do occur, but they happen less frequently than on earth and at much smaller magnitudes. They also occur at great depths, about halfway between the surface and the center of the moon.
  6. A *tsunami* is a sea wave caused by an underwater earthquake or landslide. A *tidal wave* is a large sea wave produced by high winds.
  7. The *hypocenter* of an earthquake is the location beneath the earth's surface where the rupture of the fault begins. The *epicenter* is the location directly above the hypocenter on the surface of the earth.
  8. It is estimated that there are *500,000 detectable earthquakes in the world each year*. 100,000 can be felt by humans, and about 100 of them cause various degrees of damage.
  9. More damage was done to the city of San Francisco in 1906 *by fire* after the earthquake than by the earthquake itself.
  10. A *seiche* (pronounced SAYSH) is what happens in the swimming pools of Californians during and after an earthquake. It is the sloshing of the water in your swimming pool caused by the ground shaking. This sloshing can also be caused by the wind.
-

11. ***Each year the southern California area has about 10,000 earthquakes.*** Most are so small that they are not felt. Several hundred are above a 3.0 magnitude and only about 15-20 are greater than a magnitude 4.0.
12. The ***magnitude*** of an earthquake is a measured value of the earthquake size. The ***intensity*** is a measure of the shaking created by the earthquake.
13. There is ***no such thing as "earthquake weather."*** Statistically there is an equal distribution of earthquake in cold weather, hot weather, rainy weather, etc.
14. From 1975-1995 there were only ***four states that did not have any earthquakes.*** They were: Florida, Iowa, North Dakota, and Wisconsin.
15. ***Earthquakes occur in the central portion of the United States too.*** The magnitude 8+ earthquakes on New Madrid fault in the Mississippi Valley in 1811-12 caused church bells in Boston, nearly 1000 miles away, to ring.
16. The ***San Andreas Fault is not a single, continuous fault,*** rather it is actually a fault zone made up of many segments. The fault is some 800 miles long and in some spots is over 10 miles deep.
17. ***The world's deadliest recorded earthquake*** occurred in 1557 in central China. Many people in the area lived in dirt cave. An estimated 830,000 people were killed. In 1976 another deadly earthquake struck in Tangshan, China, killing about 250,000 people.
18. Florida and North Dakota have the ***smallest number of earthquakes*** in the United States.
19. ***Alaska is the most seismically active state*** in the U.S. It experiences a magnitude 7 earthquake almost every year and a magnitude 8 or greater on average every 14 years.

Sources: United States Department of the Interior  
United States Geological Survey (<http://earthquake.usgs.gov/4kids/>)

---