

GO TO

<http://www.seismo.unr.edu/ftp/pub/louie/class/100/magnitude.html>

1) Who are "seismologists"? _____

2) What is the Richter scale? _____

Read on the web page the effects of different earthquake magnitudes. Let's use our knowledge of graphing inequalities to express the following: (Make sure 0 is on the number line and that your graphs show accurate positions for the decimals)

Graph	Write the effects here:
3) Less than 3.5 on the Richter Scale	_____



4) 3.5 to 5.4 on the Richter Scale	_____
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5) More than 5.4 but less than 6.0 on the Richter Scale	_____
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6) 6.1 - 6.9 on the Richter Scale	_____
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7) 7.0 to 7.9 on the Richter Scale	_____
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8) 8 or greater on the Richter Scale	_____
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9) What are some reasons that earthquakes of the same magnitude may have different effects? _____

CAUTION - READ THIS:

The graphs above can be very misleading. Did you know that an earthquake with a magnitude of 6.0 is 10 times as strong as an earthquake with a magnitude of 5.0? And that an earthquake of 7.0 is 100 times as strong as an earthquake of 5.0? So as you go from one unit to the next, the earthquake gets that much stronger. It's growing by powers of ten:

$$10^1 = \underline{\hspace{1cm}} \quad 10^2 = \underline{\hspace{1cm}} \quad 10^3 = \underline{\hspace{1cm}} \quad 10^4 = \underline{\hspace{1cm}} \quad 10^5 = \underline{\hspace{1cm}} \text{ etc.}$$

10) How many times stronger is a 9.0 earthquake compared to a 6.0 earthquake?
_____.

Now, **GO TO**

http://gldss7.cr.usgs.gov/neis/eqlists/10maps_usa.html

The Largest Earthquakes in the United States Since 1900

11) Graph using a bar the range of ALL the Alaskan earthquakes. They ranged from _____ to _____.



Scroll down and study the earthquakes that have taken place in the contiguous or continental United States.

12) Graph using a bar the range of ALL the Californian earthquakes. They ranged from _____ to _____.



13) Which other state besides Alaska and California has had the most major earthquakes? _____

Scroll down and **click** on Major Earthquakes of the World Since 1900.

14) Graph the 5 major earthquakes of the world on this number line. Label your **points** with the location and date.



Click on Chile* and read about the largest earthquake in the world.

15) What effects did the earthquake have on Chile and on other parts of the world?

16) Describe where Chile is. Click and find it on the map provided on the previous page.

17) Have you ever been in an earthquake? Explain below:

To see how faults move. It's a cool animation! Check it out!

GO TO

<http://www.iris.washington.edu/seismic/events/faults.html>

To Learn More about How Earthquakes are Measured:

GO TO

<http://pubs.usgs.gov/gip/earthq1/measure.html>