

## Event Details



Connecticut is not well known for earthquakes. Overall, there is very minor seismic activity. Earthquakes are experienced in Connecticut around every twenty years. However, as far back as the 1500's there have been people noticing the rumblings of the Earth. The Indians had a spot that they called Morehemoodus, which has become a town known as Moodus. The translation of the name comes out to "place of noises" because of the rumblings that could be heard in this region. The noises can be big though, on May 16th, 1791 the most severe earthquake in Connecticut's history occurred. There were over one hundred quakes in one night, the first and largest felt as far away as New York and Boston. Fortunately there was no serious damage done.

Windsor – Latitude = 41.5N  
Longitude = 72.5 W

Moodus – Latitude = 41  
Longitude = 72.4

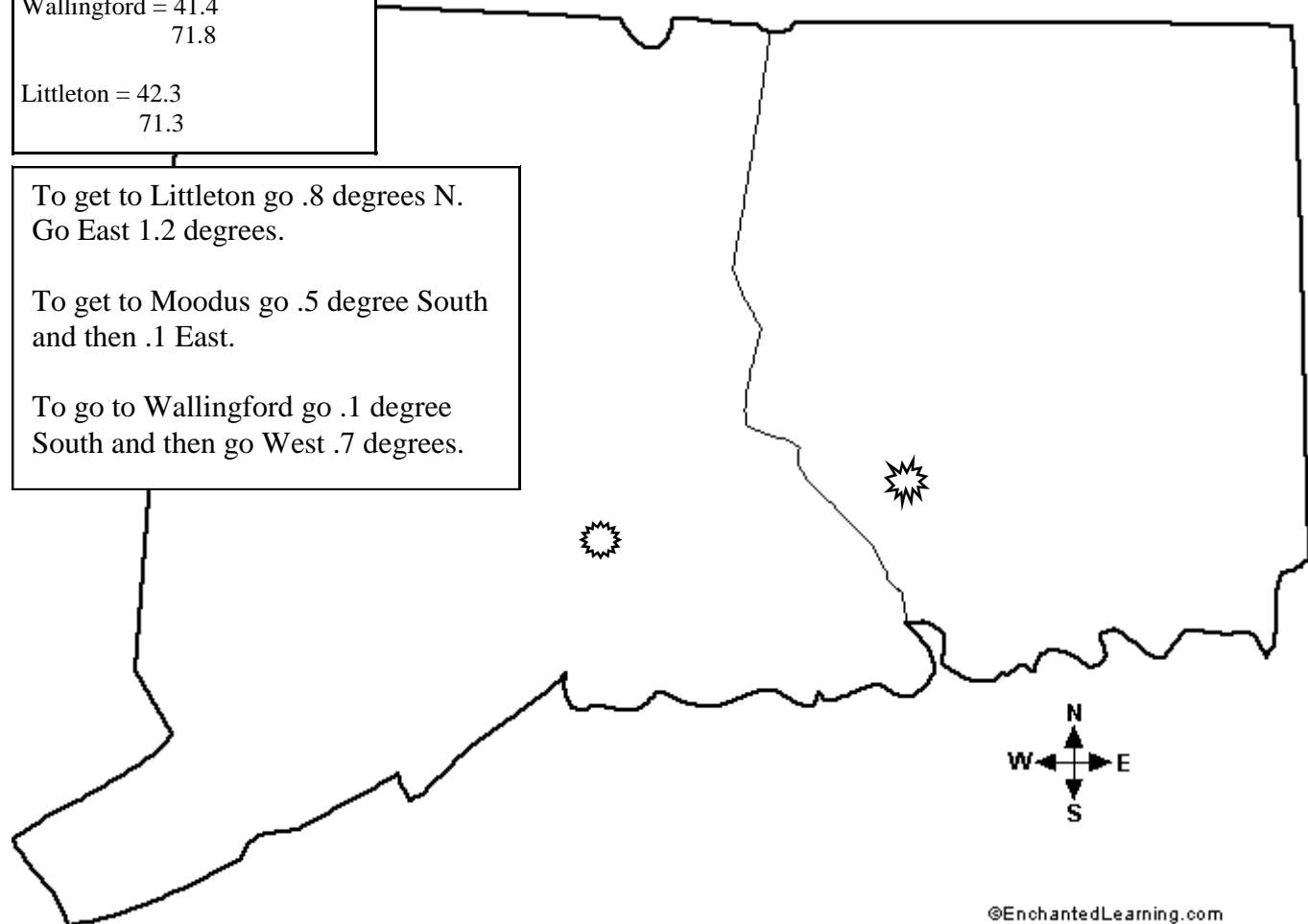
Wallingford = 41.4  
71.8

Littleton = 42.3  
71.3

To get to Littleton go .8 degrees N.  
Go East 1.2 degrees.

To get to Moodus go .5 degree South  
and then .1 East.

To go to Wallingford go .1 degree  
South and then go West .7 degrees.



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Recently there has not been much activity, however, on October 8, 2004 there were three small successive earthquakes in Littleton, MA. They reported in on the Richter scale at 2.0, which means that some dishes may have rattled around a bit. In Connecticut there was an earthquake that occurred within the past five years. On February 3rd, of 2001 in Wallingford we experienced a 1.8 magnitude earthquake. Again, some dishes were shaken and some peoples dinner's were interrupted. All of these quakes were unexpected events that occurred on the North American plate. Scientists can not really predict the earthquakes in CT because they are intraplate quakes, in other words, they are in the middle of the modern plate. Scientists have been using these events to understand what happened when the continents split apart several hundred million years ago. Also, the scientists can determine what the landforms looked like back then.

# Connecticut Geological Information

## New Knowledge

The earthquakes that occur in New England are a special kind called intraplate earthquakes. Basically, 400 million years ago, Connecticut was connected to Africa. There was a boundary where the two landmasses collided. This boundary is the reason we have earthquakes today. The collision left “scars”. These scars are in the layers of rock and cause the quakes to occur in the rocks buried under more recently laid rock. There was also the splitting event that occurred. Pangea ripped apart separating Africa and Connecticut. This split left more “scars”. So there are two layers under Connecticut that occasionally rumble and shake the ground. All of the earthquakes though are small, 3.0 or less on the Richter scale.

## Reinforced knowledge

The Richter Scale is used to measure earthquakes. It is a scale that grows exponentially, a 2 is 10x larger than a 1, a 3 is 10x larger than a 2, and so on. Earthquakes are events that occur when the Earth’s interior is shaken causing the ground to move. How violent an earthquake is depends on several factors — mostly, the force with which the earth is disturbed and how deep within the Earth the event occurs. The earthquakes are very low on the scale because they are occurring deep beneath the surface because they are leftover faults from Pangea. Pangea was the supercontinent that existed around 300 million years ago. Connecticut was connected to Africa at that time. This connection of landmasses also caused the formation of some of our present day mountains.

## Connections of knowledge

I can take what I know about CT and use it to better understand geologic events. The idea of intraplate earthquakes has helped me understand why one of the largest earthquakes in U.S. history was in New Madrid, Missouri. I never understood how there could be an earthquake in the middle of a continent. Now, I understand. I also can see the impact that the tectonic motion of the continents has on geologic events. For instance, the Appalachian mountains formed because of the tectonic movement of the North American plate into Africa. In response, there was damage done to the rock layers on the Eastern coast. The damaged rocks are now causing earthquakes in that same region. I know that the region extends down to Philadelphia because growing up there, I experienced small earthquakes just like Connecticut has here.