

FROM BASE TO PEAK:
THE PINNACLE ABOVE THE REST
MISSOURI SCHOOL FOR THE BLIND
CAPSTONE 2017

How do mountains get here and why do they look the way they do? Mountains can be explained as landforms that rise above the surrounding area in the form of a peak. Mountains are steeper, larger and taller than hills and are more than 600 meters in height. Many mountains are so high that they reach the colder layers of the atmosphere. Mountain life is less preferable due to harsh climates, less suitable for agriculture and also less oxygen as you go higher up. (owlcation.com)

How are mountains formed? Mountains can be formed in any of 5 different ways. For example; fold mountains, the most common type, are formed when continental tectonic plates collide to form mountains in a process called plate tectonics: fault-block mountains are created when cracks in the Earth's crust force blocks of rocks up or down: dome mountains are formed when large amounts of magma, or liquid rock, push the Earth's crust from underneath but doesn't break through causing the Earth's surface to bulge upward: volcanic mountains are formed when magma erupts up through the Earth's surface; and plateau mountains are formed by wind and water eroding or wearing away the surrounding soil and dirt. (Cain)

Millions of years ago a body of water called the Ouachita Ocean covered most of the area that is now the state of Arkansas. Over time earthquakes caused the ocean floor to move. This movement caused one plate of the Earth's crust to slide under another plate. This collision forced the top plate up through the surface and created peaks which later formed the Ouachita Mountain range as fold mountains. (Cole and Marston) Today, the Ouachita range extends for some 220 miles from Arkansas into Oklahoma. The highest point along this range is the top of Magazine Mountain reaching a height of 2,823 feet. (Cole and Marston)

Long ago, local Native Americans referred to the Ouachita Mountains as "good hunting grounds." The natives hunted in the forests and fished in the streams. Today, the base of one of

the peaks in the Ouachita Mountain range, Pinnacle Mountain, rises 756 feet from its base and 1,011 feet above sea level. Like all the rest of the range Pinnacle Mountain was formed from the collision of two continental plates. (Cole and Marston) The cone shape form of Pinnacle Mountain we see today is the result of 275 million years of erosion. In 1819, English botanist Thomas Nuttall referred to the peak as “Maumelle.” (Friant) This name was also given to a local settlement and lake. However, the locals simply referred to the peak as “the pinnacle.” Eventually, that name stuck and today the peak is called Pinnacle Mountain.

This mountain, like others in this range, holds the remains of ocean sediment and has been a local source of sandstone and shale. Sandstone from Pinnacle Mountain was used to build the Lake Maumelle Dam in 1958. (Root) Today Pinnacle Mountain and its state park continue to provide environmental protection and conservation for the Ouachita Range. (Southern History)

Bibliography

- Cain, Fraser. "Mountains: How They are Formed."
<http://www.aspenridgesports.com> Accessed September 20, 2016
- Cole, Shayne R. and Richard A. Marston. "Ouachita Mountains."
Encyclopedia of Oklahoma History and Culture. www.okhistory.org
Accessed September 20, 2016
- Friant, Matthew. "The Building of a Community Icon, the History of
Pinnacle Mountain." www.epubs.democratprinting.com
Accessed September 20, 2016
- Root, Kristina. "Pinnacle Mountain State Park Rocks!"
www.arkansasstateparks.wordpress.com Accessed September 27,
2016
- "The Ouachitas of Arkansas and Oklahoma."
www.exploresouthernhistory.com Accessed September 22, 2016
- "Types and Formation of Mountains – For Kids." www.owlcation.com
Accessed September 29, 2016