Then and Now: Historical Eras in North Central Massachusetts

Overview: Students compare various historical eras in North Central Massachusetts.

Goals: This lesson will
Support concepts & skills: Comprehension skills, chronological order, analysis of main idea, use of diverse sources, timelines, cause and effect relationships.
Fulfill Learning Standards: Science Strand 2 and 3 (gr.6-8) 17; History & Social Sciences 5:2, 8:17-20; ELA 9, 13.
Practice: reading and writing for understanding, researching facts and using them to construct a narrative; using their imagination.
Familiarize students with: Massachusetts history, landscape painting.

Objectives for Students: Students will
Be able to: decode written passage for clues about time period; to construct a narrative that reveals a time period by embedding clues about that period.
Understand: how people’s lives in various periods of history compare to each other; ways in which the evolution of technology had an impact on North Central Massachusetts.

Key Questions (to be answered by students):
1. What do the historical facts tell us about a person’s experience at that time?
2. How can a narrative reveal its time period without telling it directly?
3. What impact have changes in population and technological innovations had on Mt. Monadnock over time?

Materials Needed: Any other material about Mt. Monadnock that you can supply will enhance their writing - any artifacts, objects, photos, postcards, etc. The Museum has a catalogue from the 1999 exhibit which contains information and images. For the “Chronology and Timelines activity: timeline, glue sticks.


Pre-Museum Visit – Review the geography of North Central Massachusetts; rivers, mountains, distances; Mt. Monadnock location. Consider the possibility of a field trip.

At the Museum – Look at the painting Monadnock Afternoon. Discussion: “Is this what the mountain looks like today?” “How far away do you think we would be standing if this is what we saw?” “How long do you think it would take to climb to the top?” “How do you think the painter felt about this place, and why?” Ask the students to come up with other questions, and keep track of them. “In what ways might the mountain have looked different in the past?”

Post-Museum Visit – Read the narrative, “Climbing Grand Monadnock in 1999.” “What are the clues in the story that tell you that this person is climbing the mountain in the present time? Work in small groups. Suppose that instead of climbing in the present your group was climbing...
in another era. Write a brief account of your climb. What clues could you put in your story to tell the readers which time period you were climbing in? After your story is finished read it to the whole class and see if they can guess the time period. Choose from: 1400, 1770, 1871, 1930, 1950. Use the History and Fact Sheets, and use any other resources provided to help with your story. Suggestions to think about in your group: What would be different about what you were wearing, what you take along, what you hear and see, how you got there?”

Reflection: “How would a young person’s day to day experience have been different in each era? What do you have that they didn’t? What did they have that you don’t? What do you want to know more about now?”


Documentation and Assessment Options: Pre- and post-test: “How has Mt. Monadnock changed over time?” Count the number of accurate clues students inserted into their stories.

Other Works of Art in the Museum that can connect to this lesson: Some of the same questions can be applied to other landscape paintings in the collection.

Links to Other Curriculum:
See the three lessons about Mapping on this CD-ROM.

Literature: Read fiction about or journals from the time periods chosen.

History: Read Massachusetts history accounts; extend their stories, or write others.

Science: History of science – “What new things were discovered or invented in each era that would have changed people’s experience? What did people in each era believe about how the world works? How did transportation change in north central Massachusetts? What were the changes in economics?

Music: Listen to music from each of the time periods. Discuss how each compares with contemporary music and popular music. Compare how people heard music of their era (participatory, live, recorded).

Author of the lesson: Anne Rhodes
CLIMBING GRAND MONADNOCK IN 1999

We were all riding in my brother’s car and it was crowded. Everybody was in a good mood. We followed the road signs from Jaffrey Center for about two miles. My brother turned off the road from Jaffrey to Dublin, and we passed the former inn known as The Ark, which looked as if it had been there forever. We passed the house where the park superintendent lives, paid the parking fee, and pulled into the parking lot near the camping area. Right next to the parking lot we saw big signs pointing us to several trails. We chose the White Dot trail, which they say is one of the oldest trails up the mountain. Everybody loaded up with cameras, canteens, CD players and lots of snacks - enough gear to stay on the mountain for a week, and we got ready to have a good time. I was wearing brand new hiking boots that I bought over the internet, which turned out to be a mistake. Not that buying them over the internet was a mistake, but wearing them for a long hike without breaking them in was.

Several trails start out together and then split off from each other, so at the beginning we were walking with a whole lot of people. Almost the first mile was a wide dirt road, not steep at all, and easy to walk. My brother amused us by doing imitations of rap artists. We were cracking up. He’s no good at it, but he doesn’t care. He was walking backwards and sort of dancing until he fell flat on his behind. After that we had to keep warning him about rocks in the trail. We found the Falson Spring that runs all year long, and had a drink. Somebody a long time ago built a little cover over it and people have carved their names on it over the years.

We followed the white spots on rocks as the trail went up a steep ridge, crossing over huge rock slabs and ledges of different kinds of rock. Parts of it were really steep and we were glad that it wasn’t wet or dark, because it would have been dangerous. By the time we got to the very top we were all sweating and bushed. We didn’t know it would be so hard. Maybe we should have taken a less steep trail, even if it took longer to get to the top. But at the summit the view was awesome in every direction. My brother did another little dance on the bare rock at the top and everybody up there clapped for him. There were about fifty people already at the top when we got there. We ate our snacks, listened to Bobby McFerrin, who I love, and lay back in the hot sun.

My feet were a mess. I had huge blisters on both heels and on one toe. Nobody had remembered to bring band-aids. I took my boots and socks off and moaned, until some nice mother with three little kids came over and offered me band-aids. Good thing. I never would have made it down the mountain. They would have had to airlift me off in a helicopter. As the sun crossed overhead and started down the other side of the sky we headed back down. It was my first climb to the top, but my brother’s friends had been up every year of their life. Wow. One guy knew all the flower names, and told us that some of the flowers we saw don’t grow anywhere else around here. Cool. We got back to the car as the sun was setting, hopped in, and went for a pizza. Awesome trip. Even with my sore feet I want to go again next year.
**CHRONOLOGY and TIMELINES**

**Which things came first? How do you know?**

**Preliminary discussion:** What are some things that have changed between 1000 CE and 2000 CE (Common Era)?

**Instructions:** Put a long timeline up where you can see the whole thing at one time. The years cannot be evenly spaced. Arrange the years so that 1000 CE to 1500 CE takes up little space, showing only 100 year increments. From 1900 to the present show single year increments, since most of the information will be placed in that time period. Do not mark all the actual dates. Prepare small icons, and spread them out so you can see all of them. Students will use glue stick or other means to stick the icons where they decide they belong. The icons will be placed along the line in the order that they think they happened in history. If there are other events that they think are significant they can draw an icon of their own. They can use the Monadnock History and Fact Sheet and any other resources that you provide. If you prefer, they can work in small groups and then compare their results. Ask them to discuss with one another why they think an icon should be placed before or after another (their reasoning, evidence, or prior knowledge). “If you don’t know, make your best guess, and see if you can defend it.”

**Discussion afterwards:** “How did you make decisions about where to place the icons? Looking at the timeline, when did change happen rapidly, or slowly? How would your life be different today if one of the icons never happened (for example, if there were no roads or cars)? How do we get our information about what it was like in the past in different eras? What do you want to know more about now?”
Monadnock History and Fact Sheet

NAME
Monadnock, from the Algonquin words:
MANIT – that which is exceeding, surpassing, extraordinary, supernatural.
ADN – mountain
OC or OCK – place or land
Meaning "revered mountain" or "mountain that stands alone," also called "the place where running waters meet."
Generic Geologic term: "Monadnock: Isolated remnants of hard rock which remain distinctly above their surroundings in the late stages of an erosion cycle." "Isolated peak above an eroded level area called a peneplain."

HISTORY
Devonian Period: 400 million years ago. Ocean covered the region. Water receded leaving a flat tableland composed of sand and clay sediment. (Marine fossils can still be found in nearby areas of New Hampshire.) These layers of sediment are part of the Littleton Formation.

Few Hundred Million Years Later: Deep under this flat ocean bed the surface crust of the earth was thrust upward, and the layers of sand and clay were folded and refolded under this upheaval. Extreme heat and pressure transformed this sediment into quartzite and schist. The rock in this area was much harder than the surrounding rock left from the flat ocean bed. The top of what became the mountain was still about a mile underground. (The folding and swirling can still be seen on exposed ledges.)

At the End of the Folding Era: Boiling magma forced itself through cracks of the older rock formations, and formed dikes composed of tar-colored hornblende granites, and white quartz veins.

Carboniferous Stage: 250 million years ago. Colorful deposits of crystals and minerals were added.

In the last Million Years: The softer rock of the flat ocean bed around the upthrust schist eroded over time, leaving more and more of the schist rock isolated above the lowered level of the peneplain.

Last Ice Age: The receding ice deposited huge granite boulders on the slopes of the exposed schist, and left large gouge and scrape marks where ice and stone were dragged along with the retreating glacier.

After the Last Ice Age: Barren rock began to host vegetation and then scrub, and eventually the entire region was covered with original red spruce forest.
Sometime 15,000 to 35,000 Years Ago: The original human inhabitants of the region made their homes at and near the base of the mountain, hunting and fishing and gathering wild foods on its slopes and in the forest and lakes at its base. The Abenakis considered themselves descended from animals and viewed their animal relations as "persons of other than human form."

Sometime During the Last 10,000 Years: The people who lived near the mountain perfected farming and cultivation techniques that allowed their communities to flourish. The western bands of the Abenaki (Algonquin Nation) were the people who lived near the mountain when the first white people arrived. Abenaki means "people of the dawnland," the eastern people. The groups living near Monadnock were the Pennacook and the Winnipesaukee. The Abenaki bands all speak related dialects of the Algonquin language.

1617: Smallpox, bubonic plague, measles, yellow fever, and influenza brought by European settlers began to rage among the Abenakis, completely destroying many villages. Survivors abandoned their homes.

1632: The Governor of the Massachusetts Bay Colony, John Winthrop, was the earliest white person that we can find to have left mention of Monadnock.

1633, 1639: Smallpox epidemics killed nearly all Abenakis remaining in New Hampshire and Vermont. From a population of about 10,000 in 1600, only 500 remained.

1706: Rangers from Groton, Massachusetts were ordered to scout the summit of the mountain, but turned back when they encountered Abenakis.

1725: Saturday, July 1st. Captain Samuel Willard and "a healthy party of 14" rangers were the first white people recorded to complete an ascent. They camped at the summit, and observed 26 bodies of water including Lake Winnipesaukee.

1749: Jaffrey and Dublin were settled, and land began to be cleared for pasture on the lower slopes. As colonists pushed into their lands, many eastern and western Abenakis migrated north to Canada, settling in villages along the St. Lawrence River.

1759: Greater and greater numbers of European settlers moved onto the land, divided it up into lots for sale, and began converting more of the upper slopes for sheep pasture. Land at the base was cleared of trees to make it suitable for farming. The trees were simply felled and burned.

1769: Settlers deliberately set fire to the slopes, hoping to clear brush quickly and easily for farming. The fire raged out of control, burning for two to three weeks, destroying much of the forests. It is said that one could see a line of fire over two miles long sweeping up the slopes.
1800: Settlers began to build up farm communities, and a great portion of the mountain was developed and allotted. Trees that had been weakened by the fires blew down or collapsed, creating a dense thicket at the burn edge, where wolves took harbor from the settlers. Another fire was started to drive out the animal predators. For many years a thousand head of cattle were pastured on the mountain.

1820: Other fires were set over the next several years, until the entire forest at the top of the mountain was destroyed, the topsoil was burned and consumed, and most of the vegetation disappeared. All the remaining topsoil near the summit was eventually lost to "creep," which is downward movement on the surface of high places due to wind, frost and rain. The resulting open rocky summit became almost alpine, offering rare flowers and views. Rich people from Boston began to visit the mountain. Photographers, naturalists, scientists, hikers, and authors, including the group that came to be known as the Transcendentalists traveled to the mountain, particularly in the summer. Some visitors set up summer residence, and returned year after year. Tourism began to be an economic viability as the mountain became more and more popular.

1847: The Cheshire Railroad was extended from Boston as far as Troy (about 10 miles from the mountain), making the region even more accessible to more people.

1850: Pasturage became depleted due to overgrazing and was abandoned, the land reverting to woodlots. Hotels, stores and resorts began to flourish. Thoreau and other writers visited the mountain regularly and wrote of their experiences.

1871: The Railroad was extended to Jaffrey, near the base of the mountain. Hotels and resorts began to decline, since people could come and go from the mountain without having to stay overnight.

1883: Preservation attempts began to protect the mountain "for the greater good of the public."

1885: Only a few working farms were left on or near the mountain. Logging of second growth timber reduced the woodlots, and in some areas what was left of forests was destroyed by hurricanes.

1900: The major trails of the mountain began to be marked, or blazed. There were 12 major trails and 28 connecting trails. Poets, artists and hikers named every major rock, crevice, vantage point and spring.

1905: Monadnock Mountain Association was formed as an educational and preservation organization for the mountain.
1911: A Fire Warden was hired for the first time, and was provided with a summit cabin, which system continued for 37 years, until 1948 when more modern means of fire protection were instituted.

1925: There were still nine miles of rough dirt road to walk between the train and the mountain. The automobile made day tripping to the mountain accessible to more people from a wider area. Paved roads made the trip from New York, Connecticut, Vermont, Massachusetts and Canada even easier. Stands of young birch now cover most of the lower slopes where clearing, logging, storms and fires destroyed the old growth. The original post-glacial cover of red spruce regained the upper pastures.

1980: President Carter signed an Indian Claims Settlement Act giving money to compensate for land taken illegally from the Abenaki people in Maine. No settlement was ever made for the land in New Hampshire.

FACTS

- Mount Monadnock stands 3,165 feet above sea level, in the southwest corner of New Hampshire.
- Latitude 42° 51' 30" N.
- It rises 1500 to 2000 feet above the surrounding country.
- Monadnock schist is a conglomerate of mica, garnet, tourmaline, and sillimanite.
- The area is dotted and crossed with ponds, rivers, springs, brooks, forests, bogs, miniature pools, lakes, and swampy areas.
- The mountain is home to maple and spruce forests, as well as pines, oaks, birches, beeches, sumac, rhododendron, mushrooms, blueberries, and many species of wildflowers, including alpine wildflowers.
- The scrub zone higher up the slopes hosts low-lying brush, moss, lichen, and grasses.
- Deer, fox, coyote, fisher cats, tomtcats, moose, wild turkeys, grouse, waterfowl, and woodcock also populate the area.
- The climate of the mountain is cool at all seasons.
- From the summit one can see over 100 miles in every direction. On a clear day one can see the Boston skyscrapers.
- 125,000 people hike the mountain every year. It is the most climbed mountain in the world, with the exception of Mt. Fuji, which has road access to the top.
- There are over 40 miles of trails.
- About 5,000 acres on and near the base of the mountain are protected as a reserve. Over 8,000 acres of protected lands surround the mountain.