



Theme

Maps do not need to be complex in order to be useful.

Grade Level

3-5 Grade

Time/Location

1 Class Period

Goals

- Explore different forms of communication
- Create a wikhikon telling a class mate where to meet
- Use critical thinking skills to draw conclusions about a pictographic representation of a story.

Objectives

- Explain how Wabanaki people communicated without a written language.
- Create their own wikhikon based on what they have learned.
- Look at one of the historic wikhikon and explain what it represents to someone else.

Wikhikon (Birchbark Maps)

Background:

When traveling to remote places, Wabanaki guides and other members of the tribes made maps on birchbark (*wikhikon*) to communicate with one another. If separated from your party, you could use a map with a few simple symbols to learn where your party has been, where your party went, and where their final destination would be. These maps were also created to help Europeans travel from one place to another when a guide was unavailable. Early French missionaries were impressed with the details of these maps and the ease with which native people used them to successfully navigate.

This type of map aided Benedict Arnold in his march to Quebec City during the American Revolutionary War. Arnold's army was said to have found a birchbark map left in a notch of a stick stuck into the riverbank which greatly aided their march into Quebec. The map left for them gave details of the rivers and streams above their location.

While wikhikon symbols were not standardized, there were some symbols which were used fairly consistently. For instance:

A crescent shaped moon indicated the time span of a month and the hash marks underneath the moon shape denoted the number of months spent at that location.

A circular sun shape indicated the time span of a day and hash marks underneath the sun shape denoted the number of days spent at the marked location.

Arrows drawn above a solid line indicated the direction of travel when the person was leaving their starting point.

The use of an arrow underneath a solid line indicated the direction of travel when returning to your starting point.

Engage:

If you needed to leave a message for someone about where you were going and when you would be back how would you do it? (Leave a message, text, Facebook post, post a note on the person's door?) But how do you leave a message for someone if you come from a culture which passes all information from one person or generation to the next orally? While the Wabanaki people have always had distinct spoken languages, it was not until the late 1960s or 1970s that the different Wabanaki tribes developed a written language for themselves. All information was passed down through oral traditions much the same way they are today. However, sometimes it was necessary for a Wabanaki person to leave a message about which way they were traveling, how long they would be at a particular location, and dangers or hazards they wanted others to know about.



Essential Questions

- How do you send a message to someone without a written language?
- Do maps have to be complex to be informative?

Academic Vocabulary

Wikhikon

Hieroglyphics

Ethnographer

Materials

Etchable birchbark or Faux Birchbark.

Printed copies or digital copies of historic and modern wikhikons.

Modern day map

How do you think Wabanaki people left these messages? Before a written language Wabanaki people used wikhikon, or picture writing, to create message maps for one another. Now is a good time to show students the photo of the Passamaquoddy wikhikon on birchbark.

Explore:

Break the students into groups of four and hand out the Passamaquoddy wikhikon to the students, telling them they are going to get five minutes to look at the map and figure out what message the sender was trying to convey. Have them write down some notes so they don't forget what they came up with.

After the five minutes is up call on the groups and as they give their report, write down keywords on the board. As the groups give their reports put a hash mark next to recurring themes the students have picked out. After a few groups have gone and a trend starts to form, ask the students if any group came up with something different from what has already been said and add this information to the list.

Explain:

The wikhikon the students just looked at was drawn by a Passamaquoddy man named Sapiel Selmo for an ethnographer named Garrick Mallery back in 1894. It recounts what Sapiel told Garrick about the map. Read the Passamaquoddy Wikhikon Explanation (see below). Look at the themes the students came up with and point out how well their interpretations matched up with what Sapiel was wishing to convey.

Now try looking at the Penobscot Wikhikon. Repeat the process as before, giving the students about five minutes to look at the wikhikon and then making a list of recurring themes on the board before reading them the Penobscot Wikhikon Explanation (see below).

Elaborate:

This part of the lesson is best done outside on a playground where there is a large open space with a lot of different "obstacles" for students to use as landmarks.

Now we are going to see how well you can convey a message to someone using the idea of a wikhikon. Pick a partner. Next, look around and come up with a place where you want your partner to meet you. Now draw a map for your partner, including at least three different landmarks so they will know they are traveling in the right direction. (Give the students 10-15 minutes to draw a map and then have the groups, one at a time, use each other's maps to find the meeting point.) Remember you cannot talk to your partner—they can only use your map.

How did you do? Could you find the place where your partner wanted you to meet them?



State Standards

D1: Create visual representations of the world.

E2-b: Describe various cultural traditions and contributions of Maine Native Americans and various historical and recent immigrant groups in the community, Maine, and the United States.

B1: Students use a variety of media, tools, techniques, and processes to create original art works.

B2: Students use Elements of Art and Principles of Design to create original art works including paintings, three dimensional objects, drawings from imagination and real life, and a variety of other media and visual art forms.

Elaborate:

Unlike the Egyptians whose system of hieroglyphics, where letters or words were represented by a set group of pictures, Wabanaki symbols were drawn by the mapmaker in the way they felt would best represent the message they were trying to convey. While wikhikon symbols were not standardized, there were some symbols which were used fairly consistently. For instance:

A crescent-shaped moon indicated the time span of a month and the hash marks underneath the moon shape denoted the number of months spent at that location.

A circular sun shape indicated the time span of a day and hash marks underneath the sun shape denoted the number of days spent at the marked location.

Arrows drawn above a solid line indicated the direction of travel when the person was leaving their starting point.

The use of an arrow underneath a solid line indicated the direction of travel when returning to your starting point.

Wabanaki people also created these maps to help Europeans travel from one place to another when a guide was unavailable. For example, a birchbark map was left for Benedict Arnold in his march to Quebec City during the American Revolutionary War. Arnold's army was said to have found a birchbark map in a notch of a stick stuck into the riverbank which greatly aided their march into Quebec. Birchbark maps always depicted the area in which you were traveling and the map left for Benedict Arnold gave him details of the rivers and streams above the location above where they found the map.

Evaluate:

Evaluation will be based on the following criteria:

How well they worked with the other three people in their group.

How well they used critical thinking skills to interpret the message maps.

How well their map conveyed information to the person who was supposed to meet them.

Recommended References:

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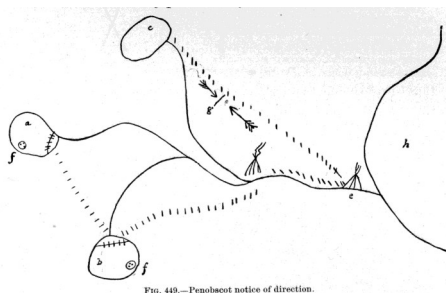
Wikhikon descriptions copied from:

Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution 10th 1888-1889. 1888. Accessed October 16, 2015.

<http://library.si.edu/digital-library/book/annualreportofbu1018881889smit>.

Note: This 1888 publication uses an older spelling– wikhegan, rather than wikhikon.

Figure 449: Penobscot Notice of Direction



“Fig. 449 shows a still-existing use of the wikhegan between a Penobscot Indian and his nephew. It is copied from the original, incised on birch bark, by Nicholas Francis, a Penobscot, of Oldtown, Maine, which was obtained and kindly presented by Miss A. L. Alger of Boston.

Pitalo (Roaring Lion), English Name, Noel Lyon, and his old uncle, aged over 70 years,

went trapping for beaver in 1885 and camped near Moosehead Lake “h”, having their supply tent at “e”. They visited the ponds “a” and “b” and knew there were beaver there, and set traps for them, “f f”. The beaver dams are also shown extending across the outlets of the streams. Noel came back from pond “b” one day to the camping tent and found this birch-bark wikhegan made by the old uncle, who still used the pictographic method, as he does not know how to write, and by this Noel knew his uncle has gone to pond “c” to see if they were any beaver there and would be gone one night, the latter expresses by one line “g” drawn between the two arrows pointing in opposite directions, showing the going and returning on the same trail.

The notable part of the above description is that the wikhegan consisted of the chart of the geographic features before traversed by the two trappers, with the addition of new features of the country undoubtedly know to both of the Indians, but not before visited in the present expedition. This addition exhibited the departure, its intent, direction, and duration”.

Explanation of Figure 449 Interpretation

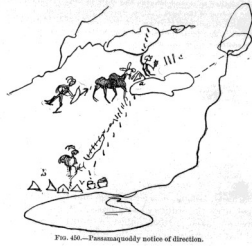
This wikhikon is a telling about one time when Pitalo and his uncle went beaver trapping.

1. Their camp is set up near Moosehead Lake (h).
2. From their camp they walk to two different lakes (a & b) because they know there are beavers there and set traps (f) in both lakes.
3. Pitalo stays at one of the lakes while his uncle returns to their camp by Moosehead Lake.
4. Pitalo returns to their camp by Moosehead Lake the next day and finds that his uncle has left him a wikhikon telling Pitalo that he has gone to another lake (c) to see if there were beavers there.
5. By drawing a line between two arrows (g) the uncle let Pitalo know he would be at that lake one night before returning to their camp on the same trail.



Figure 450: Passamaquoddy Notice of Direction

“Sapiel Selmo, a chief of the Passamaquoddy tribe, who gave to the writer the wikhigan copied as Fig. 450, in 1887, was then a very aged man and had since died. He lived at Pleasant point, 7 miles north of Eastport, Maine. He was the son of a noted chief, Selmo Soctomah (a corruption of St. Thomas), who, as shown by a certificate exhibited, commanded 600 Passamaquoddy Indians in the Revolutionary war. When a young man Sapiel, with his father, had a temporary camp “a” at Machias Lake. He left his father and went to their permanent home at Pleasant Point, “b”, to get meat, and then returned to the first camp (route shown by double track) and found that his father had gone, but that he had left in the temporary wigwam the wikhigan on birch bark, showing that he had killed one moose, the meat of which Sapiel found in the snow, and that the father was going to hunt moose on the other lake (East Machias Lake) and would camp there three days, shown by the same number of strokes at “e”, so he waited for him to come back”.



Explanation of Figure 450 Interpretation

This wikhigan tells about a moose hunting expedition of Sapiel and his father.

- 1) Sapiel and his father have a seasonal hunting camp near Machias Lake (a).
- 2) Sapiel leaves his father at the hunting camp and returns to their village (b) to get meat before returning to their hunting camp (route is shown by dashed lines going up and back the same trail).
- 3) While Sapiel is at their village his father kills a moose which he buries in the snow.
- 4) When Sapiel returns to the hunting camp he finds a wikhigan his father left telling Sapiel that he had gone to East Machias Lake to look for moose and would be there three days (the hash marks at (e) denote the number of days.)
- 5) Sapiel waits at the hunting camp for his father to come back.

Figure 457

“Fig. 457 was also incised on birch bark by Sapiel Selmo and described by him.



Two Indian hunters follow the river “7” to hunt. They go together as far as the river’s forks and then separate. One “3” went to the river “9”. The other follows river “8” and kills a moose “6”. They both build their winter wigwams “4 & 5”.

Indian “2” went to hunt and found a bear’s den under the foot of a big tree “12”. He attempted to stab the bear “11”, but missed the vital part. The bear got hold of him, bit him severely, and mortally wounded him. He went to his wigwam “4” and thinks he is going to die, so he makes his mark or wikhigan on a birch-



bark. He makes notches “11” on the bark to mean his tracks and also marks a tree as in “12” and also a bear as in “1”. His friend “3” came to visit him and found him lying dead in his wigwam, and also found the marks on the piece of birch-bark, which he read and knew at once his partner was killed by the bear, and he followed his bear tracks, and he also found the bear dead”.

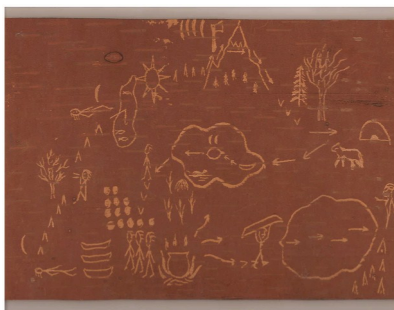
Explanation of Figure 457 Interpretation

This wikhikon tells of two friends who went out hunting in two different areas. One hunter tries to kill a bear which attacks him and he dies.

- 1) Both hunters are following the river together until they reach a fork.
- 2) One hunter (3) follows one branch of the river (9) and kills a moose (6) before building his wigwam.
- 3) The other hunter follows the other branch of the river (8) until he finds a bear's den in the hollowed out bottom of a tree.
- 4) This hunter (2) tries to stab the bear but misses any vital organs and the bear (1) attacks the hunter wounding him very badly.
- 5) The hunter makes his way back to his wigwam (as noted by the hash marks near number 11) where, realizing he is going to die, he draws a wikhikon letting anyone who finds him know what happened.
- 6) Sometime later the hunter who killed the moose finds the other hunter's wigwam with him dead inside.
- 7) The hunter (3) spies the wikhikon which was left by the dying man and realizes the man was fatally wounded by the bear he was trying to kill.
- 8) This hunter after reading the wikhikon goes out and finds the bear tracks and follows them, where he finds the bear, also dead.

Modern Day Wikhikon

This wikhikon was etched by David Moses Bridges, Passamaquoddy, during a children's workshop at the Abbe Museum. David graphically represented a story being told by the children who attended.



The story starts in the lower left hand corner with the horizontal stick figure laying on the ground. In this story the crescent shaped moons denote the passage of one night, the round full moons denote the passage of a month, arrows denote the direction of travel, and the triangular shapes denote traveling up or down hill.

- 1) The man, after spending one night camping out, climbs up a hill. About half way up the hill he sees an owl in a tree and sits down to call to the owl for a while.
- 2) He continues to climb the hill and a short time later comes to a lake with a lot of fish. He uses his fishing pole to do some fishing before making camp for the night next to the lake.
- 3) The next morning at sunrise he climbs a more gradual part of a hill towards a mountain.



- 4) After reaching the mountain he climbs up the side until, just before the summit, he uses his ax to cut a tunnel into the mountain, which takes him four days to complete.
- 5) Once on the other side of the mountain he climbs down the side and continues down a hill until he reaches a forest.
- 6) He spies a cave and enters it to investigate. Finding a bear inside he quickly gets as far away from the cave and bear as possible, fleeing to a nearby lake which has a small island, marsh, and a beaver lodge.
- 7) At the edge of the lake he discovers a canoe which he uses to cross to the small island where he seeks refuge for two days.
- 8) After two nights on the island he hops back into the canoe and canoes to the side of the lake and continues his journey on foot.
- 9) He travels down a steep grade away from the lake where he encounters two friends.
- 10) The two friends have a large cauldron over a fire and are making a feast.
- 11) The three friends stay together long enough for them to build one canoe for each of them, which takes 13 moons or 13 months to complete.
- 12) After 13 months of canoe building and feasting our three friends head off in different directions, with our character portaging his canoe to a nearby lake.
- 13) He crosses the lake to a village on the opposite side. (The triangles on the opposite side of the lake represent wigwams.)
- 14) There is a person with outstretched arms on the other side of the lake waiting for their loved one, our character, to return. From the shape of the figure we can figure this is a woman with child.
- 15) Our story ends with our character safely making it back to his village and loved ones.