

Title: Gold Nanoparticles

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Name of Tribe whose culture is presented: Turtle Mountain Band of Chippewa Indians

Introduction or Overview of what will be covered: The cultural unit will focus on the plant kingdom. The students will learn that the plants have many purposes around them in the world. I will share a story of an Elder who gave me the directions we need to take around the plant kingdom.

Glossary: (new words and definitions that are unique to the cultural information in the supplement)

Cultural Supplement Narrative:

I look this up and had to do research on this assignment and found I really didn't understand the concept until I looked at the plant which they extract the product out of the leaves or the tree.



So, I pick this: Biological synthesis of gold nanoparticles using Magnolia kobus and Diopyros kaki leaf extracts. This plant was one of the beautiful sights when I went to Japan and it grows all over out there. Magnolia Kobus, is a species of Magnolia native to Japan and Korea and occasionally cultivated in temperate areas, slow rate of growth. I didn't know that it



takes a long time to grow but there is a lot of them all over the country and is long-lived and incredibly beautiful.



Then I checked for the plant in the United States and found the Persimmons Fuyu. It is a deciduous tree with a spreading crown clothed in glossy, dark green, oval leaves it also has a wonderful fruit we can eat and healthy for you.



Foliage color variety enhances any garden or open space, and this long-oval leafed tree transforms through the seasons from light bright green, through dark pine to fall colors in the same warm range as its fruit: yellow, orange and salmon, tinged with red and crimson.

So, I decided we need to hear a story about how color came about in our forest.

The Legend of the Indian Paintbrush



Many years ago, when the People traveled the Plains and lived in a circle of wigwams, there was a boy who was smaller than the rest of the children in the tribe. No matter how hard he tried; he couldn't keep up with the other boys who were always riding, running, shooting their bows and wrestling to gain their strength. Sometimes his mother and father worried for him.

But the boy, who was called Little Gopher, was not without a gift of his own. From the early age, he made toy warriors from scraps of leather and pieces of wood and he loved to decorate smooth stones with the red juices from berries he found in the hills.

The wise shaman of the tribe understood that Little Gopher had gift that was special. "Do not struggle, Little Gopher. Your path will not be the same as the others. They will grow up to be warriors. Your place among the People will be remembered for a different reason."



And in a few years when Little Gopher was older, he went out to the hills alone to think about becoming a man. The sky filled with clouds and out of them came a young Indian maiden and an old grandfather. She carried a rolled-up animal skin and he carried a brush made of fine animals' hairs and pots of paints. The grandfather spoke. "My son, these are the tools by which you shall become great among your People. You will paint pictures of the deeds of the warriors and the visions of the shaman, and the People shall see them and remember them forever.: The maiden unrolled a pure white buckskin and placed it on the ground. "Find a buckskin as white as this," she told him. "Keep it and one day you will paint a picture that is as pure as the colors in the evening sky."

And as she finished speaking, the clouds cleared and a sunset of great beauty filled the sky. Little Gopher looked at the white buckskin. Then the sun slowly sank behind the hills, the sky grew dark.

The next day he began to make soft brushes from the hairs of the different animals and stiff brushes from the hair of the horses' tails. He gathered berries and flowers and rocks of different colors and crushed them to make his paint. He collected the skins of animals, which the warriors brought home from their hunts. He stretched the skins on the wooden frames and pulled them until they were tight. great deeds.

But even as he painted Little Gopher sometimes longed to put aside his brushes and ride out with the warriors. But always he remembered his Dream-Vision and he did not go with them.

Many months ago, he had found his pure white buckskin, but it remained empty because he could not find the colors of the sunset. He used the brightest flowers, the reddest berries, and deepest purples from the rocks, and still his paintings never satisfied him. They looked dull and dark.



He began to go to the top of the hill each evening and look at the colors that filled the sky to try and understand how to make them. He longed to share the beauty of his Dream-Vision with the people. But he never gave up trying and every morning when he awoke, he took out his brushes and his pots of paints and created the stories of the People with the tools he had.

One night as he lay awake, he heard a voice calling to him. “Because you have been faithful to the People and true to your gift, you shall find the colors you are seeking.

Tomorrow take the white buckskin and go to the place where you watch the sun in the evening. There on the ground you will find what you need.”

The next evening as the sun began to go down, Little Gopher put aside his brushes and went to the top of the hill as the colors of the sunset spread across the sky. And there, on the ground all around him, were brushes filled with paint, each one a color of the sunset. Little Gopher began to paint quickly and surely, using one brush, then another. And as the colors in the sky began to fade, Little Gopher gazed at the white buckskin and he was happy.

He found the colors of the sunset. He carried his painting down. And the next day, when the People awoke the hill was ablaze with color, for the brushes had taken root in the earth and multiplied into plants of brilliant reds, oranges, and yellows and every spring from that time, the hills and meadows burst into bloom.

And every spring, the People dances and sang the praises of Little Gopher who had painted for the People. And the People no longer called him Little Gopher, but He-Who-Brought-the-Sunset-to-the-Earth.



Author Biography:

Frances Allard

Boozhoo, my name is Miigizi Ikwe, Wapski Makwa indoodem, Mikanock Wajii. My other name is Frances Allard, I'm from the Turtle Mountain Chippewa Reservation in Belcourt, ND. I am Anishinabe Ikwe (Ojibwa)/Cree/Mitchif and the eldest of 8 siblings. I have two sons, an adopted daughter, a foster daughter and an adopted grandson. I have seven grandchildren and one great-granddaughter. I raised two other young men as well; one lives here in Belcourt and the other lives in Colorado. My father was a marine, my mother was a beautician, and when I was a child, we traveled throughout the US/Guam/Japan before returning to the Turtle Mountain home of my parents in 1959 when I was 14 years old.

I have had a lot of educational experiences, both formal and informal. I graduated from Turtle Mountain Community High School in 1963; got an LPN degree in 1974 through the Lake Region Jr. college in Devils Lake, ND and was trained in Belcourt; completed a BA in Communication/Dance in 1985 (Missoula, Mt) during the summers I worked as a woodland fire fighter, added an AA in Chemical Dependency in 1993 and an AA in Child Abuse/Neglect in 1994 from Lummi Community College (which later became Northwest Indian College) in Bellingham, WA; and then went back to TMCC for an AA in Commercial Art/Graphic Design in 2005; and picked up many certificates along the way. During those years, I was educated also by many Elders from different tribal nations and finally came home in 1995 and began my studies with all the Elders in the

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Turtle Mountains. I learned a lot and was honored to sit with them and learn from them. I also went to Canada to learn from the other half of my blood line, the Cree Nation. My travels took me across the US/Canada and across the ocean to Guam and Japan, learning many cultures along the way. The very first teachings I learned were the Seven Teachings of the Ojibwa, which came from my Aunt Edna Cloud who began this journey for me.

While I was in college, I learned to do research and found that very interesting. That training has become even more useful now that I am a board member of the Turtle Mountain Chippewa Tribal Nations Research Group, a board that reviews and approves all research done on the Turtle Mountain Chippewa Reservation. There are individuals from various universities who want to do research with our Turtle Mountain people, and the board makes sure they are following the guidelines of the Tribal Nations Research Group. We are the protectors of our people in the research/data arena.

I learned to sew in high school and loved it. This is one of my gifts that I have. I design all of my regalia (the traditional clothing/accessories) that I wear for Ceremonies/Pow Wows/special occasions. Since I have moved home, I have designed and made regalia for my grandchildren and other young people as well as others who request it of me.

I am a Cultural Advisor for TMCC and ND EPSCoR. I work with 6-12 graders in ND EPSCoR NATURE camps during the summer months and ND EPSCoR NATURE Sunday Academies during the school year. I write cultural supplements for each of the STEM topics covered in the various STEM activities. If I am not familiar with the STEM topic, I do the research on the topic so that I can figure out which cultural information fits best with it. This I have been doing for 22 years. I work for TMCC as an instructor, and was asked by the TMCC president and vice president to develop an archives for our artifacts by our people (clothing, tools, baskets, sculptures, etc.) for the college, which I did for 6 years. I am also currently working for the Turtle Mountain Chippewa Heritage Center for the last 3 years as an archivist/assistant for our artifacts and the tour guide to explain the historical way of life of our people here on the Turtle Mountain Chippewa Reservation. I also do research on various artifacts in our collection to find the importance/year/geographic origin of the items. I realize that my passion is all about what I have learned and how to give back to our families, relatives, friends, and those who want to know who we are as Anishinabe people. I am grateful for the teachings of our elders, our young people of today and my children. I am also a sponsor for those who are struggling with alcohol/drugs on a one-on-one basis, as well in the sweat lodge. I work with the youth, adults, and the elders, outside this community in all four directions.

As I look at my journey throughout my life, my vision is to work with my people in any way I can to teach what I know, and pass it on to all that are interested in our Native way of life. I live simply so that I can live in peace and harmony in nature, which means I will follow the Seven Teachings in a good way. Those teachings came from my elders and I take the lessons they taught me seriously and to heart. So, my mission is to guide those who want the Seven Teachings in their life. The Seven Teachings are Love, Honesty, Humility, Bravery, Respect, Wisdom and Truth.