

# In the Future we will all be Mixed Bloods and Mestizoes

Grade Level: Middle School

Integrated Unit: Science- Social Studies- Language Arts



L.) Jaune Quick to See Smith *In the Future we will all be Mixed Bloods and Mestizoes*, lithograph. chine colle, pastel 1997, 33"x26" R.) *Celebrate 40,000 Years of American Art* , collagraph, 1995, 71X47 ½ "

## Goals and Learning Objectives:

1. Students will examine *In the Future we will all be Mixed Bloods and Mestizoes* and *Celebrate 40,000 Years of American Art*
2. Students will understand the concept that prior to the arrival of the Europeans that the Americas were inhabited by people who had rich and vibrant histories that stretched back thousands of years.
3. Students will recognize the range and diversity of Native American tribes and populations.
4. Students will question the role of genetics in establishing our identity both individually and culturally.

5. Students will recognize that petroglyphs and pictographs are ancient art and historical records that need to be respected and protected.

**Background:**

*Jaune Quick to See Smith uses an ancient petroglyph of a rabbit. The rabbit is a symbol of the passage of time through the centuries from the beginning in the shadow of man's memory to the recent everyday realities. (Peterborough, Ontario)*

Native Americans believe that their ancestors have always been here. It is important to honor the tradition and belief that Native Americans have been here forever, just as we honor the idea that Europeans believe that their ancestors have been in Europe forever.

The theories of the scientific community of humans arrival in the Americas fall into three categories: how, where, and when. The Land Bridge theory contends that people followed the herds from Siberia to North America during the last Ice Ages. Once across the land bridge, they took the unglaciated routes along the Pacific Coast or followed the Inland Alberta Corridor.

The Water Theory contends that the early people had boats that were capable of following a water passage along the continents. One theory postulates that the people were following the migration routes of sea mammals such as whales and seals from Japan.

The timeline for Native American sites ranges from the 10,500 years ago (Clovis Period) to 40,000 years ago. In Montana, there are sites that have been dated to 11,000 years ago. Monte Verde in Chili has just been redated to 14,500 years+. There are sites with possible dates of 35- 40,000 years ago depending on how archeologists examine the evidence and how the technology is utilized. In contrast, the British Isles have only been inhabited for the last 10,000 years with the ending on the last Ice Age.

It is important to remember, that as technology develops the interpretation of the evidence also changes. Therefore, the stories and traditions of the tribes take on a new importance. One example would be the flood stories of the tribes of the Northwest that reflects the draining of Glacial Lake Missoula. In the 1960's with the acknowledgement of the existence of Glacial Lake Missoula and its corresponding floods, the Northwest Native American flood stories took on new interpretations for anthropologists. The tribes have always held that the stories were true and part of their history.

**Vocabulary:**

Native American - The original inhabitants of North and South America.

Tribe - A group of people who share a common history, language, culture, and customs.

Clan - In some tribal societies, a division of a tribe tracing descent from a common ancestor

Family – A group of people related by blood and by marriage

Nation – 1. A group of people who share the same government. 2. A group of inhabitants that share a specific territory and who share a common history, language, culture, and customs.

Mestizo – Originally the Spanish word for a person of Native American and Spanish descent. Now, a person who has both Native American and European ancestors

Mixed Bloods – a person having Native American and European ancestors

Dominant – Exercising the most influence; to control, govern, or rule by superior authority or power;  
*Genetics.*

Recessive – An allele that does not produce an effect when paired with a dominant allele.

Segregation – The process of separating or isolating an individual or group from the larger community.

Integration – The process that brings all the parts together into a unified whole.

Purebred – A strain established through breeding many generations of unmixed stock.

Genetics- The biology of heredity; especially, the study of mechanisms of hereditary transmission and variation of organismal characteristics. 2. The genetic constitution of an individual, group, or class.

Petroglyph – a carving or line drawing on rock

Orphan language – A language that has no other members in its language family.

Stereotype – A conventional, formulaic, and usually oversimplified conception, opinion, or belief.

Mendel's Rule of Dominance - The trait that is observed in the offspring is the dominant trait. The trait that disappears in the offspring is the recessive trait.

Note: Other words may be added to the list but these are specific to the prints or this unit. Have students define and chart the words. Charting may be done on a Venn diagram or other form of charting that shows commonalities or differences. Remind the students that there are multiple meanings to many of these words that have multiple applications to the unit.

## **ACTIVITIES**

### ***Jaune Quick to See Smith's In the Future We Will All Be Mixed Bloods and Mestizoes and Celebrate 40,000 Years of American Art***

This unit could easily be done as a team effort. Be sure to include your resource teacher and your "gifted and talented" teacher on the team. When working as an interdisciplinary team, it is important to sit down together and develop a timeline and a syllabus for the students. The syllabus would include each activity with the expected product and points or grading expectations. Discussion sections would also have participation points in addition to notes or worksheets depending on the teacher's preference. Grades for the unit are generally subject specific rather than having the entire unit grade going to each subject area. A sample syllabus is given at the end of the unit.

## **LANGUAGE ARTS ACTIVITIES**

### **Introductory Reading**

*The more than 400 American Indian Nations share a deep respect for the power, a power that often can only be described as sacred, of stories. Language in the living shape of a song or a story makes things happen. (Bruchac, Roots and Branches)*

Please note: although the unit is based on Jaune Quick-to-See Smith's prints *In the Future we will all be Mixed Bloods and Mestizoes* and *40,000 Years of American Art*, it is important to note that the Salish are represented because Quick-to-See Smith is Salish. One may substitute any tribe in place of the Salish. If you need reading and resource materials contact the appropriate tribal council at [www.mtwytlc.com](http://www.mtwytlc.com).

### **The Bitterroot – Salish**

Johnny Arlee / Salish Cultural Council

This is the Salish origin story of the bitterroot is Montana's state flower. The bitterroot was a food source for the Salish and grew in abundance on the hillsides and in the valleys of Western Montana. Following the oral tradition of stories, *the Bitterroot* should be read aloud. (Contact the Salish Cultural Committee for Johnny Arlee's story)

### Activity 1- Discussion

This activity should be done as a large group so all students can benefit from the discussion.

Responses should be recorded by the teacher or by the students for future use

### Discussion Questions:

1. View the image *In the Future....* . What symbols does Jaune Quick-to-See Smith incorporate in the print
2. Why does she use the garden pea instead of the bitterroot?
3. What does the title *In the Future we will all be Mixed Bloods and Mestizoes* mean?
4. Why are "Mixed Bloods" and "Mestizoes" capitalized? What does the rabbit symbolize? *The rabbit is a symbol of the passage of time through the centuries from the beginning in the shadow of man's memory to the recent everyday realities.*

### Activity 2: Write a story that tells how we may all be similar, sharing certain traits, in the future.

(The stories will often be science fiction or fantasy. Encourage the students to attempt a historical or realistic story rather than science fiction or fantasy.)

### Activity 3: Large Group Discussion (This activity could also be done with or by the foreign language teacher).

1. How does language reflect who we are as a people?
2. What is an orphan language?
3. Why is it important to preserve the language of a tribe?

### Activity 4: Mapping

Materials: Blank maps of Montana and of North America, colored pencils ( blank maps may be obtained from the Montana Historical Society website).

Have students create maps that answer the following questions:

1. Map the languages of the Montana tribes

2. What language family does the tribe's language belong to? What other tribal languages are they related to. Show those languages and their interrelationship on a North American map.
3. How many tribal members still speak the language fluently?
4. What is the tribe's actual name for themselves and where did they receive the name that we know them by come from?

### **Native Languages of the Americas: List of Native American Indian Tribes and Languages**

[www.native-languages.org/languages.htm](http://www.native-languages.org/languages.htm) This site is an excellent source of information for stories, languages and customs and provides the answers to question 4

### **Differentiated Activity Ideas**

Depending on the level of your students some activities such as mapping could be partnered with another student. Non-writers or students with limited writing skills could dictate their stories to another individual or to a *speak and say* program. In some cases, the students could also draw pictures to illustrate the story of the bitterroot.

## **SOCIAL STUDIES ACTIVITIES**

### **Activity 1: Archeologist Visit**– Large Group – Discussion or Speaker

Tribal archeologists could be contacted and ask to talk about the petroglyphs and pictographs in their area or in Montana. Speakers can talk with individual classes or one large group. The other option is to go to the petroglyphs sites listed in the appendix and access the images on the computer.

1. Jaune Quick-to-See Smith uses an ancient petroglyph of a rabbit. The rabbit is a symbol of the passage of time through the centuries from the beginning in the shadow of man's memory to the present everyday realities. *For more information about this petroglyph go to Jenn Ogden's **Grade 8 : Reading Into Rabbit** lesson on this website.*

Class Questions and Discussion:

What are other symbols used in Montana petroglyphs?

How do they represent the cultures of the tribe that produced them?

What are the laws that protect those petroglyphs?

### **Activity 2: Mapping**

Materials: individual world maps, colored pencils, large world map (National Geographic world maps are great for this project because they are disposable.) push pins, large sheets of poster board or butcher paper, colored markers

1. **Class Questions and Discussion:** Have the students brainstorm all of the groups to which they belong include family, school, and community, as well as multiple national backgrounds. Discuss what the words *purebred, Mestizo, and Mixed Bloods* mean in relation to their own heritage. Are there stereotypes for different nationalities and races? Do students fit those stereotypes of their ancestry? Yes or No? Why or Why Not?

2. Students will map their ancestry. It is best to limit this to four different nationalities or tribes per student or a map can become pin heavy. Some students will only be able to do the United States or Canada, which is fine. If a student does not have a family history or background have them create one based on reasonable guesses.

3. Create Venn diagrams or maps of to show how they as individuals relate to each other in the community and in school; i.e., map out their community and show where each student lives, include the paths of how they move through their community. Look at the site: <http://cfcc.edu/faculty/dutch/VennDiagram.html> for venn diagram ideas.

### Activity 3: **Segregation Poster**

Materials: poster board or large sheets of construction paper, markers or crayons

1. What does *segregation* from a social point of view?
2. Is segregation a reality for different groups of people based on their race or color?
3. Have the students create posters of examples of social segregation. The posters can be school related: cliques and gangs to examples of segregation on the national and historic level

### Activity 4 – **Montana Tribes Discussion and Mapping**

Explain that there are seven Native American reservations Montana. There are twelve tribal and cultural councils for those reservations. [www.mtwytlc.com](http://www.mtwytlc.com) Divide the class into small groups and have them map the following questions:

1. Where is the original homeland of the tribe?
2. Where is the reservation?
3. When was the treaty that governs the tribe's reservation established?

## **SCIENCE ACTIVITIES**

An excellent source of information is the *Genographic Project* at [ibm.com/dna](http://ibm.com/dna). The project covers everything from genetics to human migration. The data for the project is, for the most part, derived from the National Geographic human genome project. The information is at a middle school level. It is user friendly and could easily be projected for class use.

**Activity 1 Lecture and Discussion:** The following questions should be answered. I have provided the *wikipedia* biographical information plus the *wikipedia* synopsis of Mendel's work. Question 3 can be answered by checking the *Genographic Project* site listed above.

1. Who is Gregor Mendel and why is he important to the study of genetics?
2. How has the study of genetics changed since Mendel put forth his experiments in 1859?
3. How has technology changed the way we study genetics and human migrations?

### Activity 2 - **Discussion**

1. Examine the image *In the Future we will all be Mixed Bloods and Mestizoes*. What do the diagrams that Jaune Quick- to-See Smith used mean in terms of genetics?
2. Why does Jaune Quick- to-See Smith use the phrase *purebred red*? Is she talking about peas or about Native Americans?
3. What does the title mean in terms of the human genome? Is the future already here?
4. Define *segregation* in terms of genetics.

### Activity 3 – **Charting**

Materials: butcher paper or newsprint, poster board, markers

1. Have students decide as a large group what physical characteristics they have in common.
2. Divide students into groups according to their nationalities or tribal affiliations, create lists of their physical characteristics that they have in common. This activity should result in a fair amount of group

changing since the students will belong to several different groups. The students who have Native American heritage do not have to be enrolled tribal members.

3. Have the students create charts or diagrams of their characteristics according to their nationalities or tribal affiliations. In many cases, they will have multiple nationalities or tribes to from which to choose. Examples, Salish-Scottish or English-Norwegian. Venn diagrams work well for this activity; however, students should be free to develop their individual charts in any style they wish.

Resource on charts: <http://www.teachervision.fen.com/graphic-organizers/printable/6287.html>

## **MATH ACTIVITY**

Materials graph paper, construction paper poster board

### **Individual Graphing Activity**

1. Have the students graph their personal ancestry. They may choose what style of graph they would like to use.

### **Small Group Graphing Activity**

2. Using the data from their science activity have them create graphs which represent the ancestry of the class.

### **Resources on Graphing:**

([http://www.teach-nology.com/teachers/lesson\\_plans/math/graphing/](http://www.teach-nology.com/teachers/lesson_plans/math/graphing/))

### **Resources for Venn Diagram samples and use**

<http://www.teachervision.fen.com/graphic-organizers/printable/6287.html>

<http://cfcc.edu/faculty/dutch/VennDiagram.html>

## **RESOURCES:**

### **Petroglyph Web Sites:**

A word of caution when searching for petroglyph sites, make sure your source is valid or authentic.

<http://www.pictographcave.org/educate/educator.html> :Pictograph Cave site. It has been developed with students in mind and has a tour that students can view on their computers or utilize the Smart Board technology if your school has it and show it to the entire class.

[kemperartmuseum.wustl.edu/islandpress](http://kemperartmuseum.wustl.edu/islandpress) : Kemper Art Museum's one page discussion of *In the Future we will all be Mixed Bloods and Mestizoes*

[www.sacred-destinations.com/canada/peterborough-petroglyphs.htm](http://www.sacred-destinations.com/canada/peterborough-petroglyphs.htm) : The Peterborough Rabbit Petroglyph is the inspiration for the rabbit in Jaune Quick-to-See-Smith's print *In the Future we will all be Mixed Bloods and Mestizoes*. This site shows the original rabbit.

[ecore restoration.montana.edu/mineland/histories/coal/ellison\\_rock/default.htm](http://ecore restoration.montana.edu/mineland/histories/coal/ellison_rock/default.htm): discusses how rock art is preserved when threatened by mining.

[www.flickr.com/photos](http://www.flickr.com/photos) : Montana's Deer Medicine site

[geology.com/articles/petroglyphs.html](http://geology.com/articles/petroglyphs.html) : Excellent background information source. This site shows ancient rock art from around the world.



[www.petroglyphs.us/photographs\\_renegade\\_canyon\\_petroglyphs\\_RC.htm](http://www.petroglyphs.us/photographs_renegade_canyon_petroglyphs_RC.htm) : A California site with excellent example of petroglyphs including a rabbit.

### Readings:

It is important to honor the traditions of the tribe when using traditional literature. For example, Salish coyote stories are told after the first snowfall and end when the snow disappears. If you have a question, feel free to contact any of the cultural committees of the different tribes.

Michael J. Caaduto and Joseph Bruchac **Keepers Series**, Fulcrum Publishing: Golden, Colorado 1988-1994.

#### **Keepers of the Animals, Keepers of the Earth, Keepers of Life, and Keepers of the Night**

These four books contain enough activities and stories to create an entire year of science units for any K-8 grade level. A Native American Story accompanies each activity.

Susag, Dorothea M. **Roots and Branches: A Resource of Native American Literature**

Another excellent resource, **Roots and Branches** contains themes, lessons, and an extensive bibliography of Native American Literature. It also has an extensive list of resources including the names and addresses of the different tribal councils.

For more readings consult the [www.oyate](http://www.oyate). Oyate is an excellent resource for materials related to Indian Education for All.

Contact Information to reach Montana and Wyoming tribal leaders: [www.mtwytlc.com](http://www.mtwytlc.com)

[montanahistoricalociety.org](http://montanahistoricalociety.org) The Montana Historical Society is an excellent source of information for this unit. Check the education section for worksheets that could be utilized with this unit. The on-line materials are for the new Montana History textbook **Montana: Stories of the Land**.

The following **Indian Education for All; Essential Understandings** are incorporated or reflected in the above activities.

**Essential Understanding 1** There is great diversity among the 12 tribal Nations of Montana in their languages, cultures, histories and governments. Each Nation has a distinct and unique cultural heritage that contributes to modern Montana.

**Essential Understanding 2** There is great diversity among individual American Indians as identity is developed, defined and redefined by entities, organizations and people. A continuum of Indian identity, unique to each individual, ranges from assimilated to traditional. There is no generic American Indian.

**Essential Understanding 3** The ideologies of Native traditional beliefs and spirituality persist into modern day life. Tribal cultures, traditions, and languages are still practiced by many American Indian people and are incorporated into how tribes govern and manage their affairs. Additionally, each tribe has its own oral histories, which are as valid as written histories. These histories pre-date the “discovery” of North America.

**Essential Understanding 4** Reservations are lands that have been reserved by the tribes for their own use through treaties, statutes, and executive orders and were not “given” to them. The principle that land should be acquired from Indians only through their consent with treaties involved three assumptions: *I. Both parties to treaties were sovereign powers. II. Indian tribes had some form of transferable title to the land. III. Acquisition of Indian lands was solely a government matter not to be left to individual colonists*

**Essential Understanding 6**



History is a story most often related through the subjective experience of the teller. With the inclusion of more and varied voices, histories are being rediscovered and revised. History told from an Indian perspective frequently conflicts with the stories mainstream historians tell.

## **Montana Standards for Social Studies**

### **Content Standard 1**

Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.

### **Content Standard 3**

Students apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions).

### **Content Standard 4**

Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.

### **Content Standard 6**

Students demonstrate an understanding of the impact of human interaction and cultural diversity on societies

## **Montana Standards for Science**

### **Content Standard 3**

Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment.

### **Content Standard 5**

Students, through the inquiry process, understand how scientific knowledge and technological developments impact communities, cultures and societies

**Content Standard 6** Students understand historical developments in science and technology

## **Benchmarks Science Content**

### **Standard 1**

Compare how observations of nature form an essential base of knowledge among the Montana American Indians

### **Standard 3**

Communicate the differences in the reproductive processes of a variety of plants and animals using the principles of genetic modeling (e.g., Punnet squares)

### **Standard 5**

Describe how the knowledge of science and technology influences the development of the Montana American Indian cultures