

American Indian Contributions to Pennsylvania Sports History
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DESCRIPTION

This lesson plan can be adapted for use with students in grades 7 through 12. This lesson was designed to be used as a companion to Chapter 1 in the text *Sports in Pennsylvania* (Guenther, 2007). This lesson relates primarily to the NCSS thematic strands “Culture” and “Time, Continuity, and Change.” In this lesson, students will learn about the cultures of American Indians and how those cultures influenced the sports played in Pennsylvania.

STANDARDS

NCSS.1.1.a	...enable learners to analyze and explain the ways groups, societies, and cultures address human needs and concerns;
NCSS.1.2.b	...have learners apply key concepts from the study of history such as time, chronology, causality, change, conflict, and complexity to explain, analyze, and show connections among the patterns of historical change and continuity;
NCSS.1.2.f	...enable learners to apply ideas, theories, and modes of historical inquiry to analyze historical and contemporary developments, and to inform and evaluate actions concerning public policy issues;
PA.SS.G.7.3.9.B	Explain the human characteristics of places and regions by their cultural characteristics: Ethnicity of people at national levels (e. g., customs, celebrations, languages, religions); Culture distribution (e. g., ethnic enclaves and neighborhoods)
PA.SS.H.8.2.9.A	Analyze the political and cultural contributions of individuals and groups to Pennsylvania history from 1787 to 1914; Political Leaders (e. g., James Buchanan, Thaddeus Stevens, Andrew Curtin); Military Leaders (e. g., George Meade, George McClellan, John Hartranft); Cultural and Commercial Leaders (e. g., John J. Audubon, Rebecca Webb Lukens, Stephen Foster); Innovators and Reformers (e. g., George Westinghouse, Edwin Drake, Lucretia Mott)
PA.SS.H.8.2.12.A	Evaluate the political and cultural contributions of individuals and groups to Pennsylvania history from 1890 to Present; Political Leaders (e. g., Gifford Pinchot, Genevieve Blatt, K. Leroy Irvis); Military Leaders (e. g., Tasker H. Bliss, Henry 'Hap' Arnold, George C. Marshall); Cultural and Commercial Leaders (e. g., Milton Hershey, Marian Anderson, Fred Rogers); Innovators and Reformers (e. g., Frank Conrad, Rachel Carson, Joseph Rothrock)

- PA.SS.H.8.3.9.A Identify and analyze the political and cultural contributions of individuals and groups to United States history from 1787 to 1914; Political Leaders (e. g., Daniel Webster, Abraham Lincoln, Andrew Johnson); Military Leaders (e. g., Andrew Jackson, Robert E. Lee, Ulysses S. Grant); Cultural and Commercial Leaders (e. g., Jane Addams, Jacob Riis, Booker T. Washington); Innovators and Reformers (e. g., Alexander G. Bell, Frances E. Willard, Frederick Douglass)
- PA.SS.H.8.3.12.A Identify and evaluate the political and cultural contributions of individuals and groups to United States history from 1890 to Present; Political Leaders (e. g., Theodore Roosevelt, Woodrow Wilson, Franklin D. Roosevelt); Military Leaders (e. g., John Pershing, Douglas MacArthur, Dwight D. Eisenhower); Cultural and Commercial Leaders (e. g., Abby Aldrich Rockefeller, Langston Hughes, Alan Greenspan); Innovators and Reformers (e. g., Wilbur and Orville Wright, John L. Lewis, Reverend Dr. Martin Luther King)
- PA.SS.H.8.4.9.A Analyze the significance of individuals and groups who made major political and cultural contributions to world history before 1500; Political and Military Leaders (e. g., King Ashoka, Montezuma I, Ghenghis Khan, William the Conqueror); Cultural and Commercial Leaders (e. g., Mansa Musa, Yak Pac, Cheng Ho, Marco Polo); Innovators and Reformers (e. g., Erastostenes, Tupac Inka Yupenqui, Johannes Gutenberg)
- PA.SS.H.8.4.12.A Evaluate the significance of individuals and groups who made major political and cultural contributions to world history since 1450: Political and Military Leaders (e. g., Askia Daud, Simon Bolivar, Napoleon Bonaparte, Mao Zedong); Cultural and Commercial Leaders (e. g., Achebe Chinua, Gabriel Garcia Marquez, Akira Kurosa, Christopher Columbus); Innovators and Reformers (e. g., Nelson Mandela, Louis- Joseph Papineau, Mohandas Gandhi, Alexander Fleming)
- PA.AH.PPE.9.1.12.F Analyze works of arts influenced by experiences or historical and cultural events through production, performance or exhibition.

RESOURCES

Guenther, K. (2007). *Sports in Pennsylvania*. Mansfield, PA: Pennsylvania Historical Association.

Keoke, E. D. & Porterfield, K. M. (2003). *American Indian contributions to the world: 15,000*

years of inventions and innovations. New York, NY: Checkmark Books.

OBJECTIVES

1. Given information presented in the textbook and during the in-class lecture, the students will evaluate the ways in which American Indians have contributed to the development of Pennsylvania sports history.
2. Given access to the internet and sporting publications, the students will identify at least 15 examples of contributions to Pennsylvania sport history made by American Indians.
3. Using the images found on the internet and in sporting publications, the students will create a collage depicting at least 15 contributions to Pennsylvania sports history made by American Indians.

RATIONALES

According to the Pennsylvania Literacy Framework, in order for students to make connections to prior knowledge, they need the opportunity to work collaboratively, take risks, and test their ideas. Collaborative work and discussion motivate and extend current thinking processes related to content. This type of collaborative dialogue also helps teachers establish knowledge-building communities in their classrooms. (PDE, 2000, p. 6.3)

In addition, graphic organizers, like collages, help students analyze ideas in texts and the relationships between ideas. They also show students how ideas can be represented and related in different ways. (PDE, 2000, p. 6.9)

Furthermore, as students interact with others, they discuss contradictions or confusions created by text and enhance their understanding of the material. (PDE, 2000, p. 3.2)

Pennsylvania Department of Education. (2000). *Pennsylvania literacy framework*. Harrisburg, PA: Pennsylvania Department of Education.

PROCEDURES

Anticipation/Motivation

1. The teacher will begin the lesson by telling the students that today they will be discussing American Indian contributions to sports, particularly to Pennsylvania sports.
2. In order to assess prior knowledge, the teacher will ask the students if they are aware of any contributions that American Indians have made to sports. The teacher will allow the students to respond. The teacher will then ask the students who has ever played basketball, raced horses, gone hunting or fishing, played hackey sack. The teacher will then inform the students that without American Indians, these sports may not have come into existence.

Investigation

1. The teacher will begin the instructional period by opening the PowerPoint Presentation titled American Indian Contributions to Pennsylvania Sports History or using the transparencies titled American Indian Contributions to Pennsylvania Sports History. The teacher will proceed through the presentation, which identifies areas of sports history that were introduced to America by various American Indian groups. The teacher will present each slide or transparency to the class and describe the contributions made by American Indians. The teacher will field all student questions and comments throughout the presentation. To assist the teacher with instruction, the teacher should use the notes found within the PowerPoint Presentation or the document titled American Indian Contributions to Pennsylvania Sports History Notes.
2. After the teacher has presented the PowerPoint or the transparencies to the class, the teacher will begin to explain to the students the activity that they will complete.
3. To begin the activity, the teacher will use the Partner Matching Game squares to pair the students into groups of two. The teacher will go around the room and ask the students to pick a piece of paper out of a bowl, hat, etc. The papers are small squares which contain an image. There are two copies of each image in the pile. The two students who pull the same image will be partners.
4. After the teacher has gone around the room and allowed each student to pull a piece of paper, the teacher will start back at the first row and ask the first student to show their image. The teacher will ask which student has the same image. The teacher will make sure that both of the students are aware of the identity of the other. The teacher will continue until each student is aware of the identity of their partner.
5. Once the students know who their partner is, the teacher will ask the two students to rearrange themselves so that they are sitting next to their partner.
6. Once the students have rearranged themselves, the teacher will distribute one copy of the Contributions of American Indians Collage Activity Handout to each group. The teacher will tell the students to follow along as the directions are read out loud to the entire class. The teacher will read the following directions to the students:

Directions: You and your partner will be expected to create a collage using both the internet and pictures found in magazines and catalogues. This assignment is to be completed in class and it is worth 90 points.

Step One: Use the information presented to you in class regarding American Indian contributions to Pennsylvania sports history to complete this assignment. Please browse the internet and the magazines and catalogues and identify at least 15 examples of how the American Indian contributions we discussed in class are used today. Your 15 images cannot all be depicting the same contribution (example: 15 different pictures of contemporary compasses). You must find examples from at least 10 different categories of contributions. Remember that the contributions we discussed included:

- Appaloosa Horse Breed (Equestrian Sports)
- Rubber Balls
- Basketball
- Footbag or Hacky Sack
- Sports Helmets

- Field Hockey
- Ice Hockey
- Lacrosse
- Running
- Laminated Bows
- Bird and Animal Calls
- Duck Decoys
- Compasses
- Fish Hooks
- Ice Fishing
- Animal Traps

Step Two: When you locate an image in a catalogue or magazine, cut it out using the scissors provided. If you locate an image on the computer, print it and then cut the image out.

Step Three: Once you have located and obtained all 15 images, use the double-sided tape provided to attach the images to your poster board. You may want to create a title on your poster board after all of your images have been attached.

Step Four: Once your collage has been completed, you will present it to the class. During the presentation, you are required to identify each image and describe it. Tell your fellow classmates how the image is similar to the American Indian contribution discussed in class. Tell the class how it has changed or evolved over time. In addition, tell the class how your image pertains particularly to Pennsylvania Sports History. Remember to use the information provided in your textbook, *Sports in Pennsylvania* (Guenther, 2007), to assist you in making this important connection.

Step Five: Once you have presented your collage to the class, make sure that both names are on the back and turn it in to the teacher.

7. Once the teacher has read through the directions with the class, the teacher will ask if there are any questions. The teacher will answer all questions before proceeding.
8. Once all of the students' questions have been answered, the teacher will distribute one pair of scissors and one dispenser of double-sided to tape to each group. After all of the students have received their supplies, the teacher will allow the students to begin working. The teacher will place a pile of magazines and catalogues on a desk at the front of the room.
9. Once the entire class has completed their collages, the presentation portion of the assignment will commence. The students will present their collages one group at a time. The presenting group will go to the front of the classroom to present their collages. The teacher will assess the students' presentation and collage using the American Indian Contributions Collage Checklist. The teacher will allow students to ask the presenting group questions after each presentation.
10. After a group has completed their presentation, they will turn in their collage to the teacher. The teacher can mount the collages on the wall if desired.

Reflection

1. After all of the collages have been completed and presented, the teacher will ask the students to take out a blank piece of paper. The teacher will inform the students that they are to write a two paragraph synopsis of what they have learned about the contributions of American Indians to Pennsylvania Sports History. They will also be asked to write how those contributions have personally affected them. The writing assignment will be turned into the teacher at the end of the class period. The teacher will ask the students if there are any questions prior to allowing the class to start.

MATERIALS

1. Computer for each student
2. Color printer
3. One poster board for each group of students
4. Partner Matching Game
5. Scissors for each pair of students
6. Double-sided tape
7. Copy of the American Indian Contribution Checklist for each group
8. American Indian Contributions to Pennsylvania Sports History PowerPoint or American Indian Contributions to Pennsylvania Sports History Transparencies
9. American Indian Contributions to Pennsylvania Sports History Notes
10. Copy of Contributions of American Indians Collage Activity Handout for each group

EVALUATION/ASSESSMENTS

The students will be assessed using the American Indian Contribution Checklist. The checklist assesses the student's pictures and presentation based on the following criteria: the applicability of the image; the description provided during the presentation; and the contribution addressed. The students will receive a check in the right column of the checklist if they met the requirement and if their information was correct. Each check mark is worth 2 points. The points will be added together and placed over 90. The grade will simply be the number of points received divided by 90.

American Indian Contributions to Pennsylvania Sports History Notes

Transparency #4

“Appaloosa horses are a breed characterized by a light gray coat that is dappled with darker gray spots. The breed shares other characteristics, including mottled skin pigmentation and striped hooves. These horses were portrayed in European cave drawings 20,000 years ago. The Spaniards introduced the horse to the North American continent, but by 1710 the Indians of the Northwest had adopted the animals as their own. The Nez Perce favored spotted horses over the others. They are credited with developing the strong, sure-footed breed recognized today. Although they were not the first people in the world to care for the spotted horse, they were the first to begin selectively breeding their mounts for speed and intelligence by mating only the best stallions with mares. They traded the horses that they considered inferior to other tribes who prized them for their outstanding qualities compared to other horses.” (Koeke & Porterfield, 2003, p. 18)

Transparency #5

“The Olmec were the first people to produce and play with rubber balls, spherical objects that are widely used in many sports and games today. A rubber ball dated to 1000 B.C. has been found in the Olmec site of La Venta. Rubber is made from the sap, or latex, of a tree indigenous to the area. The Olmec, whose culture flourished from 1700 B.C. to 400 B.C., were the first to manufacture objects made of rubber. They, and later the Maya and Aztec, made hollow and solid rubber balls that were used for playing a team sport on huge ball courts. The Maya culture arose in about 1500 B.C.; the Aztec Empire was established in about 1100 A.D. Rubber balls were so highly valued that the Codex Mendoza, an Aztec book of accounts, listed 16,000 rubber balls being paid by the coastal provinces to the Aztec emperor.” (Keoke & Porterfield, 2003, p. 26)

Transparency #6

“Basketball, a team sport, in which points are scored by throwing a rubber ball through a hoop, is an all-American game that most people believe was invented about 100 years ago. In truth, it was played by American Indians about 3,000 years ago. The Olmec, who lived in what is now southern Mexico and Central America from about 1700 B.C. to 400 B.C., originated the game because Latex-producing trees grew in their area and they had developed the technology to create balls made from rubber. Because this game is the first one known to have used a rubber ball, many anthropologists consider it to be the forerunner of all modern games that use bouncing balls, including basketball, soccer, and football.

Both nobles and commoners played the game, and nearly every adolescent male participated. The nobility sponsored professional basketball teams that played on feast days. So important was the ball game to Olmec culture that huge stone ball courts were built in the central, ceremonial areas of Olmec and, later, the Maya and Aztec. Evidence of these impressive courts has been found from Honduras to Arizona; the archaeological remains of 600 ball courts have been found in Mexico alone. They typically contain large circular stones with a hole in the

center that were mounted high on the side walls of the playing field. Instead of being horizontal, these pre-Columbian hoops were mounted vertically. Many anthropologists think the game, which involved making goals by getting the ball through a stone or (sometimes) wooden hoop, spread throughout the Americas when the Indians of different areas visited one another. Archaeologists have found about 200 Hohokam ball courts in what is now Arizona. The Hohokam culture arose in about 300 B.C. Both solid and hollow rubber balls have been found near the old courts. As basketball spread, it eventually became more of a ritual than a recreational pastime. Some anthropologists who have studied hieroglyphs believe that the Maya impersonated the Gods as they played, making the match a form of theater. The precise details of how pre-Columbian basketball was played remain a mystery, but glyphs and small statues offer some clues. For years archaeologists thought that the players were not allowed to touch the ball with their hands or feet, instead moving it from one end of the court to the other with their shoulders, elbows, hips, and knees in play that must have resembled a very intense soccer game. Recently some scholars have begun to disagree, among them archaeologist Nicholas Hellmuth. Based on the evidence of two eighth century Maya sculptures and several Maya vases that show players with their hands on the ball, he believes players could in fact touch the ball and that the Maya played two types of games- a form of handball using a small, solid rubber ball, and what he calls “big ball,” a ritualized form of the game using a larger rubber ball.

Early Spanish explorers who watched the basketball game that the Aztec called *tlachtli* admired the way the sport was played and commented on how dexterous and skilled the players were. Because the ball was so hard and the play so rough, the team members wore padding much like a goalie on an ice hockey team does today. Hernán Cortés liked the Indian sport so much that he took two teams back to Spain to play exhibition matches before European audiences. However, basketball never caught on in Europe. As the conquistadores spread through the Aztec and Maya Empires, under the direction of the Catholic Church, they suppressed all “heathenish practices” of the indigenous people, including the game.” (Keoke & Porterfield, 2000, p. 28-29)

Transparency #7

“Footbag games involve using the feet- or the feet, head, and arms- to keep a softball in the air. Hackey sack is a modern version of a footbag game. Women and girls in a number of North American Indian tribes routinely played these games. The balls that they used were about six to seven inches in diameter and were stuffed with deer, antelope, or buffalo hair. They were covered with buckskin by the Inuit of the Arctic. The Cheyenne and Mandan of the plains sometimes decorated the buckskin covers with elaborate quillwork and, after European contact, beadwork. The Gros Ventre (Atsina) and Crow covered the animal fur with a bladder netted with sinew.

Maximilian, prince of Wied in Germany, who in 1832-34 observed Mandan women playing the sport, gave this description in *Travels in the Interior of North America*: “The women are expert in playing with a large leathern ball which they let fall alternately on their foot and knee, again throwing it up and catching it, and thus keeping it in motion for a length of time without letting it fall to the ground.” Prizes were given for the winner.

Arapaho and Cheyenne women played the game somewhat differently. In this version of the game the balls had a thong attached to them. Among the Arapaho, a young woman would hold the thong in their hand while throwing and catching the ball. Cheyenne women held the 24-inch thong in their hands and kicked the ball. The game's goal was to kick the ball as many times as possible without missing. In the Cheyenne game, the ball had to be kicked without letting the ball or the foot touch the ground. A Ho-Chunk game was similar. Its goal was for the player to make 100 successful kicks. When young women missed, they had to pass their turn and the footbag to another person who would attempt to reach the set number of kicks." (Keoke & Porterfield, 2003, p. 116-117)

Transparency #8

"Helmets are head coverings designed to protect the wearer against injury. The people of Mesoamerica wore helmets when they played an ancient version of basketball. The Olmec, whose civilization arose in Mesoamerica in about 1700 B.C., invented the game. Players wore helmets in addition to protective padding that included gloves, a broad waist belt, knee and hip pads, and special footwear. The sports helmet and protective garb were made from wickerwork or leather. From statues of Mesoamerican ballplayers and depictions of them on pottery, it appears that these sports helmets resembled the leather football helmets worn by players during the early 20th century. They are an example of one of the first sports helmets used in history." (Keoke & Porterfield, 2003, p. 127-128)

Transparency #9

"Hockey is a popular sport currently played throughout the world by teams of players who attempt to knock a ball into the opponents' goal by using curved sticks. While modern field hockey, whose players are usually women, is played on a grassy field, ice hockey is played on an ice-covered court. Both games are based on an American Indian stickball game called shinny, which was played by tribes throughout North America well before Europeans arrived on the continent. Frequently, Indians played shinny on ice. The players used a wooden ball or one made of buckskin that could only be touched with the stick or kicked with the feet.

It was primary American Indian women who played shinny. Occasionally men and sometimes coed teams played shinny games. These original versions of field hockey were known by many names, depending on the tribe that played it, but they were given the universal name of shinny by early anthropologists. The modern name *hockey* came from the Jesuit missionaries who observed Indians living in what is now Canada playing the game. *Hoquet* is the French word for a shepherd's crook and referred to the curved sticks the players used to propel the ball down the field. Although evidence exists that the Greeks and the Egyptians also played stickball games, historians have been unable to find a link between those games and the sport as it is played today." (Keoke & Porterfield, 2003, p. 129)

Transparency #10

"Sometimes called the fastest game on two feet, lacrosse is played by two teams on an open field with goals at each end. In the modern version of the game, 10 players on each team carry long-

handled sticks with a triangular mesh pocket at the end. They attempt to put a five-ounce, hard rubber ball into the opponents' net while preventing them from scoring. They may not touch the ball with their hands.

The game of lacrosse was originally invented by American Indians and played in many parts of the North American continent. (Although some anthropologists have made attempts to relate the origins of lacrosse to the ancient basketball game played in Mesoamerica by the Aztec, Maya, and Olmec on elaborate stone courts, little evidence supports this.) However, the exact origins of lacrosse, the fastest growing sport in the United States today, remain uncertain. The first recorded instance of a non-Indian watching a lacrosse game was that of Jean de Brébeuf, a French missionary who described a Huron (Wyandot) game to his superiors in the 1600s. In his report he compared the curved playing sticks he had seen to a crosier, a staff with a cross or a crook at the end carried before Catholic officials to denote their office. Although legend has it that lacrosse derived its name from Brébeuf, more than likely the name lacrosse came from a type of French stickball called *jeu de la crosse*.

Other accounts from early missionaries indicated that lacrosse was played in the Great Lakes region, Lower Canada, Upstate New York, and among the Cherokee of the Southeast. There were also a few scattered reports of a game similar to lacrosse played by some Pacific Coast tribes, but anthropologists do not believe the game was widespread in the West.

The game was a dangerous one, requiring players to have great skill to catch, carry, and pass the ball. According to some witnesses, the southeastern teams were so large that many players would never get near the ball. Instead, they used their sticks to injure other players in order to take them out of the game. The contests were typically played from day break to sunset and lasted two or three days. The Cherokee, avid players, termed the sport "War's Little Brother." Not surprisingly, lacrosse was mainly played by young men who raced across the countryside to score points and block the other team from making goals. Although the game was mainly a man's sport, some tribes are said to have allowed women to play on teams with men. In a few instances women competed with other women." (Koeke & Porterfield, 2003, p. 152-153)

Transparency #11

"Indigenous people throughout the Americas relied on sophisticated systems of specially trained runners to send messages to other tribes and receive news. These runners also moved goods along trade routes and road systems that crisscrossed the Americas. These couriers, who sometimes ran in relays, were able to cover great distances in incredibly short times. Hernán Cortés reported that not more than 24 hours passed after he landed in Chianiztlán in the spring of 1519 before couriers had taken that news to the Aztec ruler, Montezuma, who was 260 miles away.

In the northeastern part of North America, the Iroquois had a system of runners in place along the 240-mile Iroquois falo. These Iroquois runners, who carried messages and wampum belts between the tribes, were among the reason the Iroquois were able to assume a leadership role in forming the Iroquois Confederacy. An early Quaker colonial observer of the time, James Emlen,

reported that one of the Iroquois chief Cornplanter's runners, named Sharp Shins, was able to run 90 miles in a day.

The best well-developed running system was that of the Inca, whose empire was established in the Andean region of South America in about A.D. 1000. Although running had existed at least 500 years before this, the Inca created a formalized running system that was made up of young runners called *chasqui*. The system was developed in the mid-1400s by the ninth Inca ruler, Pachacuti Ina Yupanqui. By the reign of the 11th Inca ruler, Huayna Capac (A.D. 1493-A.D. 1528), the Inca had perfected a system of roads on which runners traveled. Inca *chasquis* came from the ruling class and were trained to run swiftly over short distances. Once they had finished training, they lived for 15-day shifts in stone huts that were spaced about two miles apart along the road system. The clothing, food, and other needs of the *chasqui* were provided by the mit'a or work tax." (Keoke & Porterfield, 2003, p. 229-230)

Transparency #13

"Lamination is the process of covering an object with thin sheets of material that are bound together. Bows are curved weapons that are used to launch arrows. American Indian tribes of the Great Basin region, located in what are now western Oregon, southern Idaho, Utah, and Wyoming discovered that by laminating their bows with sinew (the tendons of animals) they could dramatically increase the efficiency of their bows. These first compound, laminated bows in Precontact America were an important discovery, since the indigenous people of this area hunted on foot for the large game they depended on for food.

To shape the bow, they first heated mountain mahogany (not true mahogany) or another hard wood over an open fire. Next, they bent the wood into a double curve. Afterward, they polished and smoothed the bow with a piece of obsidian flint. Once the shaping and polishing were completed, the next step was to laminate the bow. The bow maker placed wet strips of deer sinew along the concave and convex sides of the bow's length. One layer was thus positioned and allowed to dry, and then another layer was placed on the opposite side of the bow. When it was dry, the sinew became like plastic or fiberglass. It was also just as pliable. Next, wet sinew strips would be wound around the bow, across the grain of the two layers that had already been fixed to the bow. After this had dried, the bow maker attached bowstrings to the ends of the outward curves of the bow. When the bow had been strung, the archer held it halfway between the ends at the inward central curve in order to use it to propel arrows at game.

The laminating process made the bow incredibly powerful. A laminated bow could send an arrow completely through a deer at close range. In some instances, European observers reported that American Indians shot bison with such force that their arrows passed through and projected out the other side. The power of this bow was comparable to the English crossbow. Lamination also increased the distance from which the hunter could place a projectile into a target.

Inuit people living in the Arctic and subarctic regions of North America used a similar process to make their bows. In the far North there are few trees, so they used pieces of short wood and mountain sheep and goat horns. They then employed wet rawhide to hold the pieces of the bow together. The horns were heated until they straightened and then were pierced together using a

lamination process similar to that used by the indigenous people of the Great Basin.” (Keoke & Porterfield, 2003, p. 39)

Transparency #14

“Calls, or auditory decoys, make sounds that attract wild game or fowl. For the pre-Columbian American Indians, hunting involved more than just stalking prey and attempting to kill it. They studied the lay of the land and the habits of the animals they hunted. They also took into consideration the weather, the time of the year, and the type of weapon they would use. Throughout the Americas, indigenous hunters used animal calls to attract prey to within a range close enough to ensure that the weapon of choice could do its job. Auditory decoys saved hunters time and energy that would have been lost during the pursuit of prey.

The materials used in auditory decoys- sticks, antlers, and blades of grass, were simple, but the technique was a sophisticated one. Attracting wild game by emulating their sounds is not accidentally stumbled upon; the task took a great deal of observation and experimentation. Once the concept was developed, the next step was to find the appropriate material to produce the needed sound. Finally, a test period was required to determine which sounds would attract the target animal. One of the most widespread and simplest calls was the whistle, which was used throughout North America. Other calls were more sophisticated and specialized. Although today’s auditory decoys would not be recognizable to American Indians of the past, the technology of animal calls used by modern hunters is essentially the same as that used by American-Indian hunters for thousands of years.” (Keoke & Porterfield, 2003, p. 46)

Transparency #15

“Decoys, figures that resemble ducks, are a standard part of the duck hunter’s equipment today. The duck decoy was invented about 3,000 years ago by American Indians living in what is now northwest Utah. Decoys that archaeologists found in the Lovelock caves of Nevada have been dated to about 1000 B.C. Many anthropologists believe indigenous hunters made similar decoys much earlier. Visual decoy technology attracted the prey, conserving time and energy that would be spent pursuing ducks, which were a food source. The development of decoys required advanced intelligence and knowledge of hunting technology and the behavior of birds.

American Indians made duck decoys from materials such as reeds and cattails. Some of the decoys were painted. Others were made to appear more lifelike by skinning a real duck and placing the feather skin over a reed or cattail frame. These decoys were almost indistinguishable from the real thing.

Some archaeologists suggest that indigenous hunters wore the decoys on their heads while submerged in water and breathed through a hollow reed. They would grab ducks that were attracted to the decoys and pull them under water. Another possible hunting method was to lure the ducks close enough to be disabled by various projectiles such as rocks or arrows. Yet another method of capturing ducks might have been to throw a net over them. The Indians, who utilized more sophisticated hunting technology than did their European counterparts at the time,

also used auditory decoys when hunting waterfowl and animals.” (Keoke & Porterfield, 2003, p. 80)

Transparency #16

“A compass is a device that uses a lodestone, or a piece of iron that has been magnetized by contact with a lodestone, to determine magnetic north. The Olmec are believed to have discovered that a lodestone will align itself in a magnetic north-south position, and they are credited with developing a compass before 1000 B.C. Olmec civilization arose in the Yucatán Peninsula of what is now Mexico in about 1700 B.C.

The American Indian discovery of the compass occurred about 1,000 years before the Chinese developed a compass, according to Mesoamerica expert Michael Coe and other archaeologists. The earliest date for a compass in China is A.D. 1100. Western Europeans did not use them until A.D. 1178.” (Koeke & Porterfield, 2003, 67)

Transparency #17

“Indians throughout the Americas constructed fishhooks, curved instruments affixed to a line and put into the water to catch fish. They made them out of several materials. Some were carved from bone, ivory, antler, and wood. A major technological breakthrough occurred around 5,000-4,000 B.C. when the Paleo-Indian of the southern Great Lakes area produced a metal fishhook. This was certainly the oldest metal fishhook in the New World and probably the first metal fishhook in the entire world. The earliest fishhooks in South America date between 4,000 and 3,000 B.C. These were made of shells and thorns and were used for freshwater fishing. These Paleo-Indian also made a unique fishhook called a stone sinker hook. The fishhooks were imbedded in the stone sinker. Archaeologists believe that most of the fishing that took place at this time was accomplished with cotton nets.

Indians were the first in North American to invent fishing with multiple hooks on a single line, and they were masters at this technology. Hundreds of years before Columbus arrived, they invented two methods of fishing in this highly efficient way. The first method is referred to today as “setlines,” a technique that did not use a pole. Three or more fishhooks were attached to a line as well as on the end of the line. After the fisher men baited the hooks, they cast them into the water. They accomplished this by loosely piling the string between the fisher and the water, then taking the end with the weight and hooks on it and twirling it overhead while letting it out a little at a time. When the appropriate length was reached, the fishermen released the line in the direction of the water. This method of casting was necessary because the extra hooks and bait required more line than a fishing rod could provide. They tied the end of the line to a branch, a rock, or a log. These lines could be checked at any time, even several days after they were set. Because this was not labor intensive, fishing with setlines freed the fisher to do other things.” (Keoke & Porterfield, 2003, p. 106)

Transparency #18

“Ice fishing is practiced in winter by dropping a line into the water through a hole in the ice and sitting in a small shelter while waiting for the fish to bite. What has become a popular sport today was practiced for centuries by the Great Lakes tribes who depended on it for survival. Unlike modern fishermen, however, they speared the fish. They began by cutting a hole about 12 inches in diameter into the ice. Next they built a small shelter over the hole; this was just large enough to cover the fisher’s head and chest when the fisher was lying down on the ice to peer into the hole. The purpose of the shelter was not for protection against the elements, but rather to prevent the fish from seeing the human above and to allow the fisher to see into the water below. After the fisher dropped a lure into the water, he waited, and when a fish swam beneath the hole, he speared it. This fishing method allowed American Indians to obtain a valuable food source during the winter. The Inuit, who lived in the Arctic, used a somewhat similar technique in the wintertime to hunt for seals.” (Keoke & Porterfield, 2003, p. 107)

Transparency #19

“The Paleo-Indian of North American devised several means of obtaining food. One was through the use of traps. The most common traps that they developed were the snare, the deadfall, and the pitfall trap. The Inuit of the Arctic region of North America used a unique spring trap to kill game. These traps were invented independently of those invented by early people in other parts of the world. In order to develop them, American Indians had to understand animal behavior. The technology of trapping was labor-saving, freeing people from having to constantly hunt. This left time to pursue other endeavors, including agriculture. With the advent of the fur trade, American Indians began to use metal traps and guns.” (Keoke & Porterfield, 2003, p. 276)

Contributions of American Indians Collage Activity

Directions: You and your partner will be expected to create a collage using both the internet and pictures found in magazines and catalogues. This assignment is to be completed in class and it is worth 90 points.

Step One: Use the information presented to you in class regarding American Indian contributions to Pennsylvania sports history to complete this assignment. Please browse the internet and the magazines and catalogues and identify at least 15 examples of how the American Indian contributions we discussed in class are used today. Your 15 images cannot all be depicting the same contribution (example: 15 different pictures of contemporary compasses). You must find examples from at least 10 different categories of contributions. Remember that the contributions we discussed included:

- Appaloosa Horse Breed (Equestrian Sports)
- Rubber Balls
- Basketball
- Footbag or Hackey Sack
- Sports Helmets
- Field Hockey
- Ice Hockey
- Lacrosse
- Running
- Laminated Bows
- Bird and Animal Calls
- Duck Decoys
- Compasses
- Fish Hooks
- Ice Fishing
- Animal Traps

Step Two: When you locate an image in a catalogue or magazine, cut it out using the scissors provided. If you locate an image on the computer, print it and then cut the image out.

Step Three: Once you have located and obtained all 15 images, use the double-sided tape provided to attach the images to your poster board. You may want to create a title on your poster board after all of your images have been attached.

Step Four: Once your collage has been completed, you will present it to the class. During the presentation, you are required to identify each image and describe it. Tell your fellow classmates how the image is similar to the American Indian contribution discussed in class. Tell the class how it has changed or evolved over time. In addition, tell the class how your image pertains particularly to Pennsylvania Sports History. Remember to use the information provided in your textbook, *Sports in Pennsylvania* (Guenther, 2007), to assist you in making this important connection.

Step Five: Once you have presented your collage to the class, make sure that both names are on the back and turn it in to the teacher.

Contributions of American Indians Collage Checklist

Student Names: _____ & _____

IMAGE #1

Applicability of Image: Notes:	____ 2 points
PRESENTATION	<div style="background-color: black; width: 20px; height: 10px; margin: 0 auto;"></div>
Description: Notes:	____ 2 points
Contribution Addressed: _____	____ 2 points

IMAGE #2

Applicability of Image: Notes:	____ 2 points
PRESENTATION	<div style="background-color: black; width: 20px; height: 10px; margin: 0 auto;"></div>
Description: Notes:	____ 2 points
Contribution Addressed: _____	____ 2 points

IMAGE #3

Applicability of Image: Notes:	____ 2 points
PRESENTATION	<div style="background-color: black; width: 20px; height: 10px; margin: 0 auto;"></div>
Description: Notes:	____ 2 points
Contribution Addressed: _____	____ 2 points

IMAGE #4

Applicability of Image: Notes:	____ 2 points
PRESENTATION	<div style="background-color: black; width: 20px; height: 10px; margin: 0 auto;"></div>
Description: Notes:	____ 2 points
Contribution Addressed: _____	____ 2 points

IMAGE #5


Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #6


Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #7


Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #8


Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #9

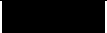
Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #10


Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #11

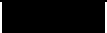
Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #12


Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #13

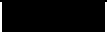
Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #14

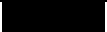

Applicability of Image: Notes:	___2 points
PRESENTATION	
Description: Notes:	___2 points
Contribution Addressed:_____	___2 points

IMAGE #15

Applicability of Image: Notes:	___2 points
PRESENTATION	
	___2 points
	___2 points


TOTAL: /90

Teacher's Signature: _____

American Indian Contributions to Pennsylvania Sports History

Chapter 1: “Riotous Sports, Plays &
Games”

Sports in Pennsylvania Prior to 1860



Gotschal, 2007

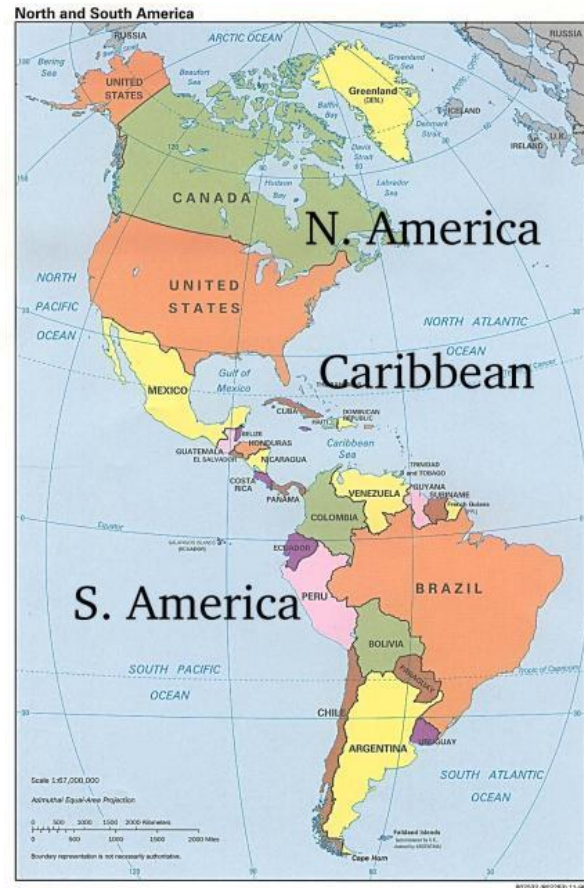
Agenda

- The Americas
- Contributions of American Indians

Gotschal, 2007

The Americas

Gotschal, 2007



<http://www.maclester.edu/research/economics/image/americas.jpg>

Appaloosa Horse Breed

- ca. A.D. 1710
- North American Plateau Culture
- Nez Perce
- Credited with developing the strong, sure-footed breed recognized today (Koeke et al, 2003, p. 18)



http://content.answers.com/main/content/wp/en/9/9b/THIEL_619.jpg

Gotschal, 2007

Rubber Balls



- ca. 1700 B.C.
- Mesoamerican Cultures
- The Olmec
- The Maya
- The Aztec

<http://mcclungmuseum.utk.edu/specex/maya/ma-ballp.jpg>

Gotschal, 2007

Basketball

- ca 1000 B.C.
- Mesoamerican cultures
- North American Southwest cultures
- Olmec
- Hohokam
- Maya
- Aztec



<http://z.about.com/d/archaeology/1/7/H/G/ballcourt2.jpg>

Gotschal, 2007

Footbag (Hackey Sack)



- Precontact
- North American Great Plains Cultures
- Women and girls

http://www.tenthousandvillages.com/catalog/get_file.php/cart_product_image_image_filename_518.jpg

Gotschal, 2007

Sports Helmets

- ca 300 B.C.
- Mesoamerican cultures
- Basketball
- Olmec
- Wickerwork or Leather



http://maint.gophersport.com/files/image/general/LARGE/FB_Helmet.jpg

Gotschal, 2007

Field Hockey and Ice Hockey (Shinny)

- Precontact
- North American Great Plains Cultures
- Plateau Cultures
- Southwest Cultures
- Northeast Cultures
- Women



<http://www.hickoksports.com/images/shinty.jpg>

Gotschal, 2007

Lacrosse

- Precontact
- North American Northeast Cultures
- North American Southeast Cultures
- Jean de Brébeuf
- “War’s Little Brother”



<http://www.mce.k12tn.net/indians/reports1/lacrosse.jpg>

Gotschal, 2007

Running

- Precontact
- North American Cultures
- Mesoamerican Cultures
- South American Cultures
- Trade
- Couriers of News
- Used road systems



<http://members.aol.com/Nowacumig/run.gif>

Gotschal, 2007

Hunting, Fishing, and Trapping

- Laminated Bows
- Bird and Animal Calls
- Duck Decoys
- Compasses
- Fish Hooks
- Ice Fishing
- Animal Traps

Gotschal, 2007

Laminated Bows

- Precontact
- North American Great Basin Cultures
- Arctic Cultures
- Subarctic Cultures



<http://www.old-picture.com/indians/thumbnails/Indians-Shooting-Bows-Arrows-th.jpg>

Gotschal, 2007

Bird and Animal Calls



<http://www.chrisharris.com/gallery/g-bull-moose.jpg>

- Precontact
- North American Northeast Cultures
- Deer and Elk Calls
- Moose Calls
- Caribou Calls
- Wild Sheep Calls
- Seal and Walrus Calls

Gotschal, 2007

Duck Decoys



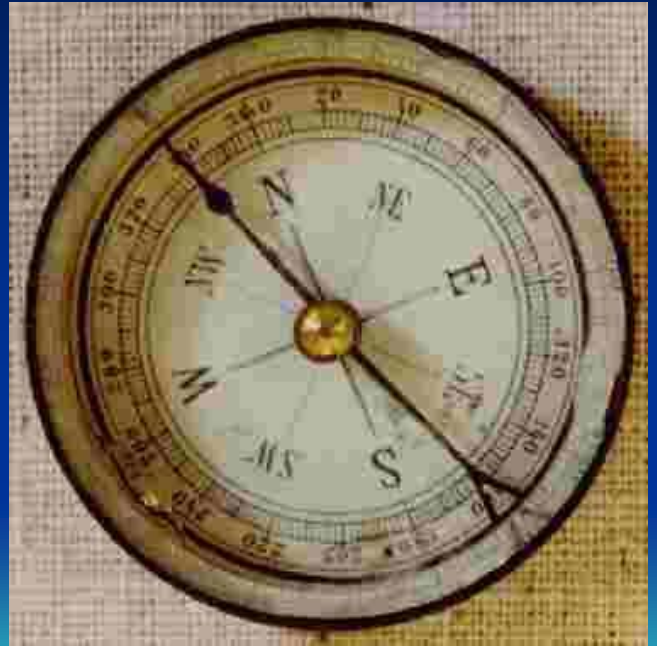
- ca. 1000 B.C.
- North American Great Basin Cultures
- Lovelock Cave

<http://dmla.clan.lib.nv.us/DOCS/kids/images/tuleduck.jpg>

Gotschal, 2007

Compass

- Pre-1000 B.C.
- Mesoamerican Cultures
- Lodestone
- Olmec vs. Chinese



http://www.solarnavigator.net/images/compass_pocket.jpg

Gotschal, 2007

Fishhooks



<http://www.ou.edu/cas/archsur/Images/OA/fishhook.jpg>

- 5000 B.C.- 3000 B.C.
- North American Cultures
- Mesoamerican Cultures
- Circum-Caribbean Cultures
- South American Cultures
- Bone, Ivory, Antler, and Wood

Gotschal, 2007

Ice Fishing

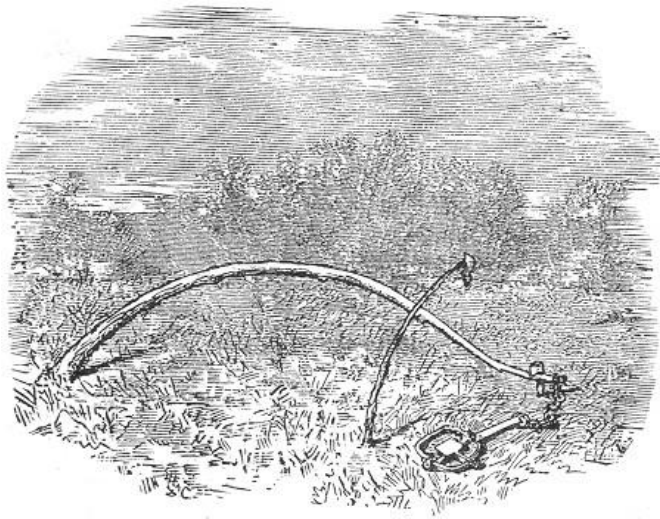
- Precontact
- North American Northeast Cultures
- Great Lakes
- Speared fish
- Inuit and seals



<http://www.studyzone.org/testprep/ss5/b/comnew5.jpg>

Gotschal, 2007

Animal Traps



<http://www.gutenberg.org/files/17093/17093-h/images/fig104.jpg>

- ca. 12,000 B.C. – 10,000 B.C.
- North American Cultures
- Circum-Caribbean Cultures
- Snare
- Deadfall
- Pitfall

Gotschal, 2007

References

Keoke, E. D. & Porterfield, K. M. (2003).
*American Indian contributions to the world:
15,000 years of inventions and
innovations*. New York, NY: Checkmark
Books.

Gotschal, 2007