

Investigating a Plains Tipi

Instructions for the Teacher

Contributors

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Investigating a Plains Tipi

Background Information

Conical (cone-shaped) shelters have been used throughout much of the Northern Hemisphere for hundreds or even thousands of years. The basic building materials are simple: straight poles for structure and skin, bark, or mats as covering. The people of the Great Plains, Rocky Mountains, and the Intermountain West of what is now the United States brought the conical shelter to a fine art in their beautiful and useful tipis. The word “tipi” comes from the Siouan word literally translated as “used for living in.”

Most people of the Great Plains hunted animals and gathered wild plant foods for their sustenance. They followed the bison, which grazed in great herds throughout the Plains, and needed shelter that could be moved. Tipis could be dragged from camp to camp by dog or horse travois (see page ____). Earlier tipis were covered with tanned bison hides; some tribes switched to canvas coverings when European trade goods became available.

Tipis are actually not a true cone. They are usually steeper on one side, a feature that helps them shed the fierce westerly winds of the Plains. Smoke from cooking and warming fires at the center of the tipi escape through overhead, open flaps on the front of the tipi. Short poles and lines connected to the flaps make it easy to close them from the ground during rain or snow storms. Wooden stakes and stones were used to secure the tipi cover to the ground, creating a sturdy, snug shelter.

Social custom governed the use of the interior space of the tipi. In *Native American Architecture*, Nabokov and Easton (1989, 156) describe how the space was organized:

Doorways almost invariably faced the rising sun (east or southeast), and the oldest male occupant customarily slept at the rear, western side of the lodge. Among some tribes it was bad form to step between him and the fire. Men usually sat on the northern side of the tipi, women on the south. If the tipi housed multiple families or more than one wife, household goods defined each person’s sleeping space. Sacred medicine bundles were hung on tripods inside the tipi or were tied high upon the outside cover. Firewood, food, and cooking implements were kept near the door.”

There are two types of tipis: the 3-pole tipi, used by the Cheyenne, Arapaho, Teton, Assiniboine, Kiowa, Gros Ventre, Cree, Mandan, Arikara, Ponca, Oto, and Wichita, and the 4-pole style, used by the Crow, Hidatsa, Blackfoot, Sarsi, Ute, Shoshone, Omaha, and Comanche. Tipis were first recorded by European explorers in the 1540s on the southern Plains, and artists George Catlin and Charles Bodmer both painted pictures of them on their travels in the northern Plains in the 1830s. Today some Native Americans still use the tipi as a way to honor their heritage.

Tipi rings—stone circles where tipis were once pitched—literally litter the northern Plains. Archaeological investigations of tipi rings show that tipis have been used in this region for at least 3,000 years. Some sites have only one or two stone circles, while others have several hundred, indicating that groups of various sizes traveled and lived together. In this investigation students will study the 4-pole tipi, the type of shelter



used by the Crow people of southern Montana and northern Wyoming, and the archaeological evidence of a 240-year-old tipi at the Walker Site, excavated in Wyoming in 1992.

Investigation Materials

The investigation is divided into two documents: “Investigating a Plains Tipi: Instructions for the Teacher (this document) and “Investigating a Plains Tipi: Archaeology Notebook” (separate document). You must have both documents to teach the investigation effectively.

Instructions for the Teacher

This document contains all of the instructions you will need to conduct the investigation in your classroom plus some student materials that will be used in group activities. Within the instructions, two symbols will guide you to specific materials needed for each of the sections.

-  Refers to pages in the Archaeology Notebook.
-  Refers to pages or sections within the Instructions for Teachers.

Archaeology Notebook

The investigation contains all of the data sources and analytical tools the students will need to investigate a tipi from historical, archaeological, and cultural perspectives. Ideally, each student should have a complete notebook of data and data collection sheets (Parts One – Four and the Assessment). Recognizing that providing each student with a complete notebook would require a lot of photocopying, we suggest the following alternatives:

- Make one notebook for each team of students.
- Have students print the notebook at home if possible. The quality of photographs would also be much better.
- Project the file on an LCD projector and work as a whole class.
- Have students work online, either individually or in teams.
- Have students answer questions in a journal or on separate paper instead of using the worksheets.

Teaching the Investigation

The investigation is comprehensive and uses the most authentic data sources available. It is organized into four instructional parts and an assessment which can be separated and taught over several days.

- **PART ONE** introduces Dr. Medicine Crow and gives the students background information on the geographic location of the tipi site they will be studying.
- **PART TWO** focuses on the history and the symbolism of the tipi using historic photographs and three oral histories by Dr. Medicine Crow. The students draw a symbolic map of the tipi using Dr. Medicine Crow’s oral histories as a guide.



- In **PART THREE** the students work with artifacts and quadrant maps of the tipi ring site to make inferences about how the tipi was used by the Crow people.
- **PART FOUR** connects the past with the present. Students learn the importance of preserving archaeological sites and how traditional tipi architecture influences modern buildings that Crow tribal members use today.
- In the **ASSESSMENT** students write an expository composition describing what they learned in the investigation and draw a modern day shelter incorporating at least three ideas from the Crow Tipi beliefs or way of life.

The investigation may be completed as a jigsaw project by dividing Parts One and Two into sections. For example, you might divide the students into four groups and assign each group one of the following sections:

- The Geographic Location of the Crow
- The Journey of the Crow
- The Tipi in History
- An Archaeologist's View of the Settlement of the Great Plains and Rocky Mountains

The groups complete each of the sections and report their findings to the rest of the class. The information gathered from each of these sections must be available to all students when they complete their assessments.

Students will collect information from the data presented and make inferences. While there are no right or wrong answers, answer keys for each student activity provide you with examples of reasonable inferences students might make. They also include information about how archaeologists interpreted the data.



PART ONE – Instructions for the Teacher

Materials

For Each Student

- ☐ “Investigating a Plains Tipi: Part One” (Archaeology Notebook, pages ___)

For the Teacher

- Transparency of the tipi photograph ☐ (page _) or project it with an LCD projector from the Web site.
- Additional illustrations and photographs of plants and animals for the ☐ “Geographic Location of the Crow” can be found on the Web site.
- 7 feet of string or light rope

Preparing to Teach

1. Make a transparency of the historic photograph of the tipi (page _) or prepare to project it from the website with an LCD projector.
2. Make a copy of ☐ “Investigating a Plains Tipi: Part One” for each student.
3. Download additional illustrations and photographs of plants and animals from the Web site for “Geographic Location of the Crow.”
4. Obtain 7 feet of string or light rope.
5. Post the essential question: “How can investigating the Plains tipi help us understand the Crow people and their culture?”
6. Post the Word Bank words.

WORD BANK

archaeology: the scientific study of past human cultures through artifacts and sites

biography: history of a person’s life as told by another person

cultural: of or related to culture

culture: the customs, beliefs, laws, ways of living, and all other results of human work and thought that belong to people of the same society

UNCOVER PRIOR KNOWLEDGE

How can investigating the Plains tipi help us understand the Crow people and their culture? Inform students that this question will guide their learning.

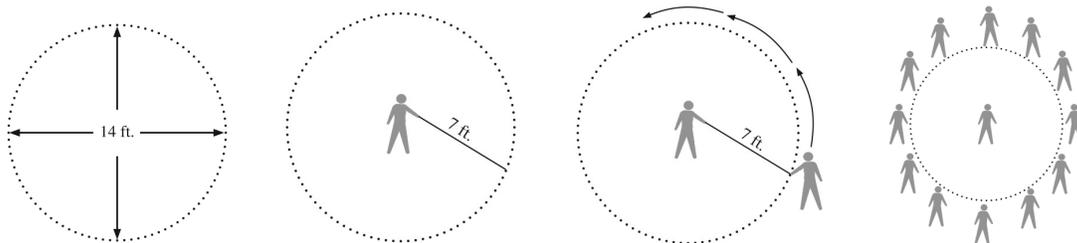
1. Tell students that they are going to play the role of an archaeologist as they investigate the tipi, a type of shelter used by the Crow Indians.
2. Hand out folders to each student for organizing their Archaeology Notebook.
3. Write the word *tipi* on a board or overhead and as the students look at the word, show the students a picture of a tipi (page _). Ask them:
 - What does the design of the tipi suggest about the materials the Crow used to build their shelter?
 - If students suggest the Crow probably used wood and/or skins, ask how might the Crow have built the tipi using these materials?



- How might the Crow have used their tipi?

DISCOVER NEW KNOWLEDGE

1. Go over the cover sheet information for  **PART ONE** and look at the data sources students will use in their investigation.
2. As a class, read Dr. Medicine Crow’s biography. Have students describe the meaning of the word culture from Lesson Three. Assist students in defining the words **biography, archaeology, culture, and cultural** and add them to the Word Bank.
3. Estimate the size of a Crow tipi using the following procedure:
 - a. Go outside as a class.
 - b. As a group estimate how big 14 feet across is, and make a class circle to show your estimate.
 - c. Mark the diameter with small stones, tape, or pieces of string in four places.
 - d. Have one person stand in the middle of the circle with a piece of string 7 feet long.
 - e. Have a second person stretch the string to its full length and walk around the perimeter of the circle.
 - f. Have the rest of the class adjust their circle to match the outside person holding the string.
 - g. How closely did you estimate 14 feet?



4. Teams of two will read together  “Geographic Location of the Crow” and then analyze the data. Alternatively, read the section as a class and analyze the data as a group.

Answer Key for “Geographic Location of the Crow”

1. The Crow people historically lived in south-central Montana and north-central Wyoming.
2. Students should use text, photographs, and illustrations provided to draw a landscape of Poplar Forest. It doesn’t need to be accurate; the goal is to make the place more concrete.
3. Below zero degrees Fahrenheit. Exceeding 100 degrees Fahrenheit.
4. A shelter that stays warm in the winter and cool in the summer.



PART TWO – Instructions for the Teacher

Materials

For Each Student

- “Investigating a Plains Tipi: Part Two” (Archaeology Notebook, pages ___)

Preparing to Teach

1. Make a copy of “Investigating a Plains Tipi: Part Two” for each student.
2. Post the Word Bank words.

WORD BANK

ancestor: a person from whom one is descended; mother, father, grandmother, grandfather.

oral history: history that is passed by word of mouth within and between generations

sacred: revered by a group of people, holy

DISCOVER NEW KNOWLEDGE

1. Go over the cover sheet information for **PART TWO** and look at the data sources students will use in their investigation.
2. Assist students in defining the words **ancestor**, **oral history**, and **sacred** and add them to the Word Bank.
3. Remind students that if they are not Crow, they are now studying a culture different from their own. Using the background information in Lesson Three: Culture Everywhere, remind them that no culture is better than another. Sometimes life in earlier times may seem primitive, but people must use what is available to them and often find creative solutions to challenging problems.
4. Students continue working with their partners to complete “Historic Photos of Crow Tipis.” Alternatively, complete the section as a whole class.
5. Using a reading jigsaw complete “The Journey of the Crow” and “The Tipi in History.” Divide the class in half and have each half complete one of the readings either individually or in teams. Have each student find someone who has completed the other readings and each student shares what he or she learned. All students should complete their data analysis sheets for future reference. Share information from both readings in a class discussion. Alternatively, both readings can be completed as a whole class.
6. Point out that when the Crow traveled to Wyoming and Montana, there were no state boundaries. These boundaries were drawn as the United States expanded westward long after the Crow settled in the Northern Plains.
7. As a class, read the “The Tipi and the Sacred” aloud and discuss the questions. Have students summarize the discussion for each question on page ____.
8. Have students complete “An Archaeologist’s View of the Settlement of the Great Plains and Rocky Mountains” in their teams. Alternatively, complete the reading as a whole class.



Answer Key for “Historic Photos of Crow Tipis: Analyzing the Data”

1. Photo #1 – Along a river, in the trees, no mountains.
Photo #2 – In the trees, no mountains in the view, flat ground.
Photo #3 – Rolling hills, short grass, no mountains, no trees, no water in view.
2. Photo #1 – summer, leaves are on the trees so not winter. During the day.
Photo #2 – Could be spring, summer or fall. During the day, no snow.
Photo #3 – Summer, looks like a hot day. They have the tipi open to let in the breeze? No shadows, so the sun, if shining, must have been directly overhead.
3. Photo #2 - Tipi, tipi's in the background, blanket, Stake holding tipi to the ground, and elk tooth dresses on girls
Photo #3 – Two Tipis, tipi poles, sticks on ground, bundles on ground, cooking tripod, metal pots, possible buffalo hide on ground in front of tipi, rocks scattered on ground,
4. Photo #2 – Three girls are standing, and an infant (either boy or girl) is being held by two of the girls. They are posing for the photograph, looking at the photographer. They are possibly displaying their wealth by wearing their elk tooth dresses and holding a blanket. Notice the dog inside the tipi.
Photo #3 – Five women are inside the tipi structure. This is not a posed photograph like #2. Three of the five women are looking at the camera but two women have their backs to the photographer. The women seem to be preparing a meal or doing daily tasks. Notice the two dogs in front of the smaller tipi.

Answer Key for “Historic Photos of Crow Tipis: Analyzing and Interpreting the Data”

1. Photo #1 – Photo possibly taken to document an event, like Crow Fair or a gathering.
Photo #2 – Document the vanishing lifestyle of the Crow people.
Photo #3 – Document the vanishing lifestyle of the Crow people.
2. Photo #1 – What a Crow village may have looked like in the past (evidence being the layout of the tipis along the river).
Photo #2 – How the Crow women dressed (evidence being the clothing and accessories the children are wearing).
Photo #3 – The daily activities of the Crow people and how they used their tipi (evidence being the cooking pots, the hides on the ground, the open tipi)
3. Questions will vary
4. Books, internet, talking to parents and grandparents, and if possible, talking to Native American elders.
5. Photos #1 and #2 seem posed. Photo #3 seems to be spontaneous.

Answer Key for “The Journey of the Crow: Analyzing and Interpreting the Data”

1. Open.
2. Approximately 100 years.
3. River Crow, Mountain Crow, Whistling Crow. The main group was too large for the resources in the area.

Answer Key for “The Tipi in History: Analyzing the Data”

1. The tipi worked well for the nomadic lifestyle of the Crow people. The tipi could be disassembled and reassembled quickly. The materials used to construct the tipi (animal hides, lodgepole pine poles, pegs or stakes and rocks, and leather straps) could be found fairly easily in the local environment. The tipi was easy to transport.
2. Convenient for the nomadic lifestyle.
3. The wind would blow the tipi away if it was not secured. Pegs and/or rocks were easy to find. The rocks and/or pegs, along with evidence of the hearth, would be all that remained of the village after they moved to another location.



Answer Key for “The Tipi and the Sacred: Analyzing the Data”

1. Map of the inside of a tipi, using Dr. Medicine Crow’s oral history as a guide.
2. Answers will vary.

Answer Key for An Archaeologist’s Views of the Settlement of the Great Plains and Rocky Mountains: Analyzing the Data

1. Archaeologists think that Native American people have been in this region for approximately 3,000 years. Joe Medicine Crow’s oral history places Native American people moving to this area approximately 300 years ago.
2. Answers will vary.
3. Carbon-14 helps archaeologists date archaeological sites to understand when people occupied the site and lived in the area.



PART THREE - Instructions for the Teacher

Materials

For Each Student

- “Investigating a Plains Tipi: Part Three” (Archaeology Notebook, pages ____)

For Each Group at Specific Times in the Investigation

- Copies of the “Quadrant of the Tipi Ring Site” (page ____)
- Each group will receive one of the four quadrant maps and accompanying “Artifact Locations” and “Artifacts” pages with all quadrants being equally distributed among the groups 🍎 (pages _____)

For the Teacher

- Transparencies of the “Footprints of Shelters” (page __), “Footprint of a Tipi Ring” (page __).
- Transparencies of the 🍎 “Quadrant Maps” (pages _____)
- Transparency of the “Map of the Tipi Ring Site (page __)

Preparing to Teach

1. Make a copy of “Investigating a Plains Tipi: Part Three” for each student.
2. Make copies of the quadrant maps. Each group will receive one of the four quadrants with all quadrants equally distributed among the groups.
3. Make transparencies of the “Footprints of Shelters,” the 🍎 “Quadrant Maps,” and the “Map of the Tipi Ring Site.”
4. Post the Word Bank words.

DISCOVER NEW KNOWLEDGE

Archaeological Footprints of Shelters

1. Go over the cover sheet information for **PART THREE** and look at the data sources students will use in their investigation.
2. Project the transparency of the “Footprints of Shelters” graphic on the overhead. Explain to students: Just as human feet leave a footprint, shelters often leave a “footprint” in the ground where they were built. The footprint is sometimes visible after the shelter is gone and archaeologists study this footprint to infer what the shelter looked like.
3. The “Footprints of Shelters” graphic shows four structures (a modern house, an Earthfast house, a plank house and a tipi) and the corresponding footprints that archaeologists find on the ground. Modern houses are usually built on concrete foundations, which are clearly visible. Earthfast houses were commonly built in the eastern United States by European settlers from about 1607 to 1750. These houses used a post-in-ground building method, which was easy and inexpensive to build, but was not very permanent. The post molds are visible in the ground after the structure has disappeared. The two-beam Northwest Coast plank house was built by placing



solid heavy cedar posts in the ground, and then by placing additional cedar beams along the top of those posts in the ground, and then by placing additional cedar beams along the top of those posts to create a frame. Careful effort was put into harvesting thick cedar planks, or boards, from living trees. These planks were affixed horizontally to the posts and beams. The Crow 4-pole tipi was built by leaning numerous poles together in a 'cone' shape, then draping a animal hide or canvas covering over the outside of the poles, and securing the hide covering to the top of the tipi and to the ground with rocks or wooden or bone pegs.

4. After the students have a good understanding that buildings of all kinds leave a distinctive trace or footprint on or in the ground, project the transparency of the  "Footprint of a Tipi Ring." Explain that this is the footprint of a tipi found on the Walker Site, a large archaeological site excavated in northeastern Wyoming. The tipi was occupied approximately 240 years ago, but because so many Native American groups in this area of Wyoming used the tipi as a shelter, we cannot say for sure if the tipi was used by the Crow people.
5. Project the  "Map of a Tipi Ring Site." Explain to students that this is the map that the archaeologists made of the tipi ring site in 1992. The process is described for the students on the  "Footprint of a Tipi Ring" (page __). Describe the features on the map so the students understand the basics. The circle in the middle of the tipi is where the hearth or fire was located. Explain to the students why the map is divided into four quadrants.
6. Tell students that all of the data (artifacts and maps) they are using for their investigation are authentic and comes from the archaeological report for the Walker Site.

Classify the Artifacts and Make Inferences

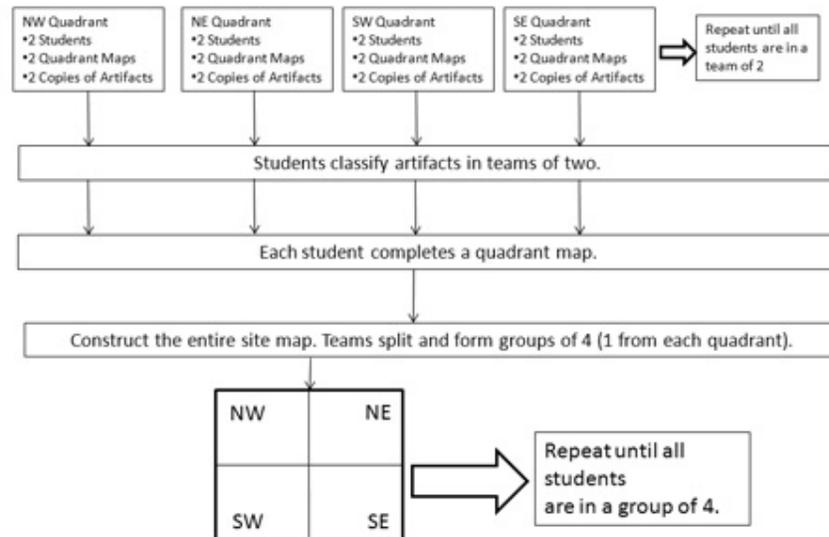
1. Students work in teams of two. Give each group two copies of one of the quadrant maps (Northeast, Northwest, Southeast, and Southwest) along with the corresponding  "Artifact Location" and "Artifacts" sheets. Each student will have one map and one set of artifacts. All quadrants should be equally distributed among the teams.
2. Students cut out their artifacts. Using the  "Quadrant of a Tipi Ring Site" as a guide, students classify their artifacts. Students complete questions 3 and 4.
3. Photographs of representative artifacts can be found on the shelter database (www.projectarchaeology.org/shelterdata_login.asp; Username: shelterPA; Password: !@#2005PA) for your information and to show the students.

Construct the Quadrant Maps

1. Have the students look at the  "Artifact table" and notice the third column. Explain to the students that they will use the coordinates to do archaeology backwards. Instead of unearthing the artifacts and taking them out of the ground, they will place the artifacts back on the map where they were originally found.
2. Tell the students that the artifacts are not drawn to scale with the quadrant maps; the artifacts are approximately life size while the map is much smaller. The purpose of the activity is to establish the context of the artifacts within the tipi ring site, the students do not need to be concerned about the difference in size of the artifacts.



- Instruct students to find the coordinates of each artifact and use those coordinates to place the artifact in the location it was found during the archaeological excavation of the tipi ring. Glue the artifacts in place, so they will not fall off the quadrant map.
- Alternatively, the entire exercise can be accomplished by “drawing” the quadrant maps on the floor of the classroom using masking tape or with markers on a plastic tarp that could be reused.



Construct the Entire Site Map

- Assist students in forming new groups of four. A representative from each quadrant (SE, SW, NE, NW) will comprise each new group. If groups are uneven, you should be prepared to represent the third and/or fourth student.
- Each quadrant representative places her/his completed quadrant out for observation before presenting the data. By the fourth presentation, students are observing the complete map.
- Have students complete question 5 on “Quadrant of a Tipi Ring Site.”
- Using the “Tipi Construction” and the “The Creation of an Archaeological Site” (pages ____). Explain to students: People like the Crow who moved around to follow their food sources had to transport their homes frequently. Often, the only evidence of a tipi is a ‘stone circle.’ These stones were used to hold the hide covering of the tipi down, and were not taken when the Crow people moved.

The Culture of the Crow Indians

- Return to the “Comparing Cultures” activity sheet from Lesson Three (page ____). Have students add a fourth column to the chart and label it “Crow.”



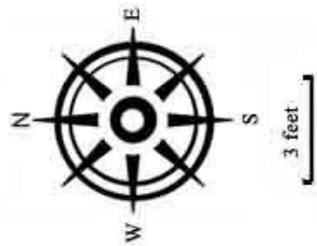
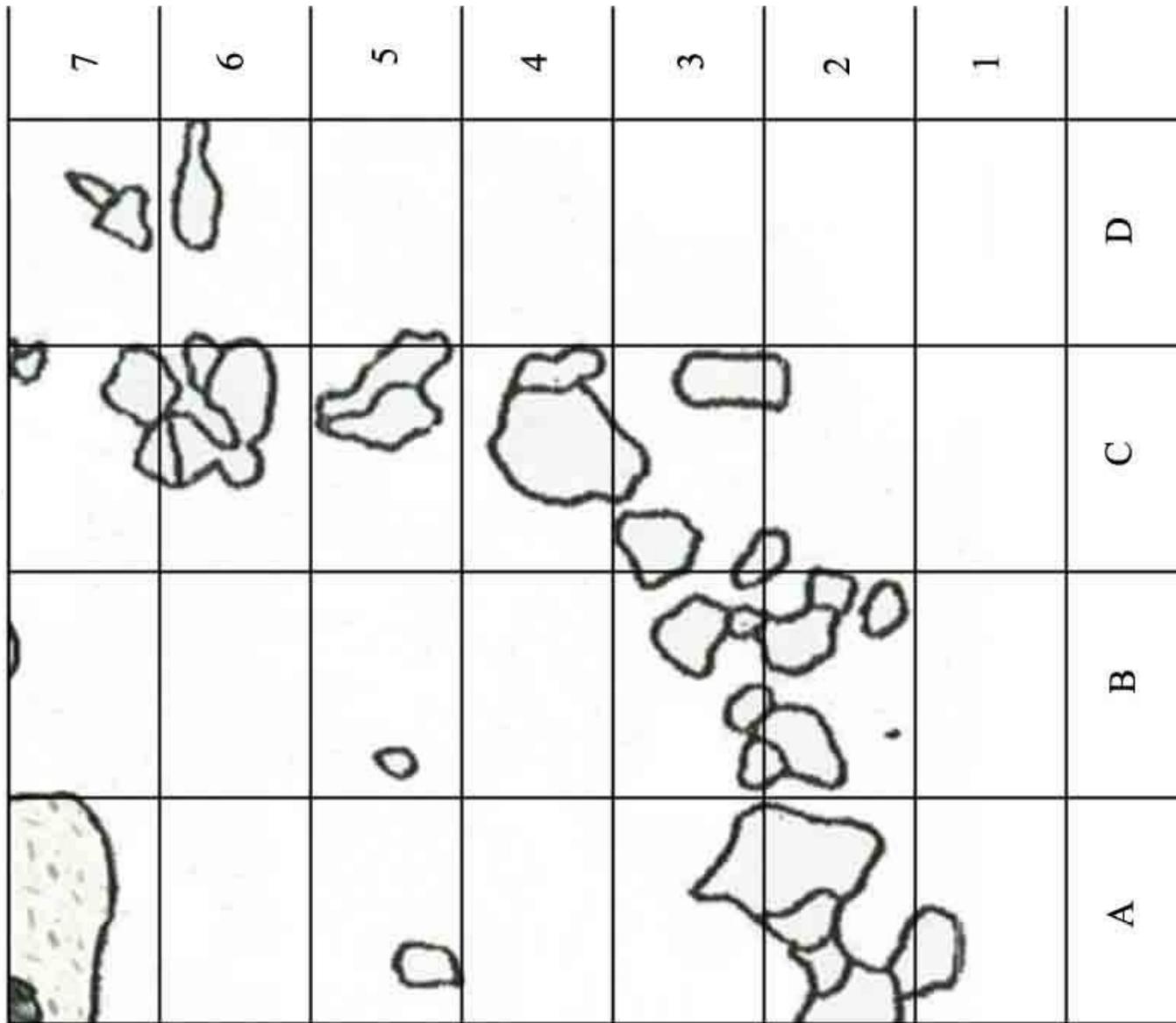
2. Ask students: How did the Crow meet their basic needs? Students fill in the chart using what they learned from the archaeological investigation of a Tipi Site. They should include shelter (the tipi) and how it was built to provide protection from the weather, a place to express spiritual beliefs, and as a home for extended families.
3. Ask students: Did this investigation change your view of the lives of the Crow people? Guide the discussion by emphasizing that the tipi was a practical home and a spiritual place.

Answer Key for “Quadrant of a Plains Tipi Ring Site: Analyzing the Data”

1. Answers will vary depending on the quadrant.
2. Answers will vary. Examples of categories: bone, stone, decoration, weapons, tools, food, size, shape, etc.
3. Bar graph or pie chart
4. Answers may include; food processing and preparation, cooking and eating. Stone tool production. Animal hide processing.
5. Students will have more complete information about the site. Different types of artifacts may indicate different activities from what they found in their quadrant.



Southeast Quadrant



SOUTHEAST QUADRANT Artifact Locations

ARTIFACT:	USE:	AREA
Stone Flake	Waste from making stone tools.	A-6
Stone Flake	Waste from making stone tools.	B-4
Stone Flake	Waste from making stone tools.	C-3
Stone Flake	Waste from making stone tools.	C-7
Stone Flake	Waste from making stone tools.	C-6
Stone Flake	Waste from making stone tools.	B-7
Stone Flake	Waste from making stone tools.	A-4
Stone Flake	Waste from making stone tools.	B-7
Stone Flake	Waste from making stone tools.	B-3
Stone Flake	Waste from making stone tools.	A-6
Stone Flake	Waste from making stone tools.	A-7
Stone Scraper	Stone tool used to scrape materials	B-4
Stone Knife	Stone tool used for cutting	C-6
Animal Tooth	Remains of food	A-7
Animal Tooth	Remains of food	C-6

ARTIFACT:	USE:	AREA
Animal Bone Fragment Cluster	Remains of food	A-7
Animal Bone Fragment Cluster	Remains of food	B-7
Animal Bone Fragment	Remains of food	B-6
Animal Bone Fragment	Remains of food	A-3
Animal Bone Fragment	Remains of food	B-2
Animal Bone Fragment	Remains of food	C-5
Animal Bone Fragment	Remains of food	D-7
Animal Bone Fragment	Remains of food	C-7
Animal Bone Fragment	Remains of food	A-2
Animal Bone Fragment	Remains of food	A-4
Animal Bone Fragment	Remains of food	B-3
Animal Bone Fragment	Remains of food	A-6

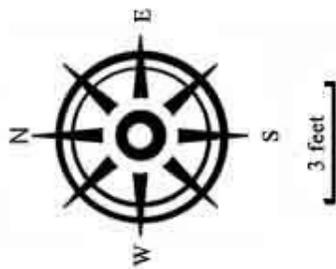
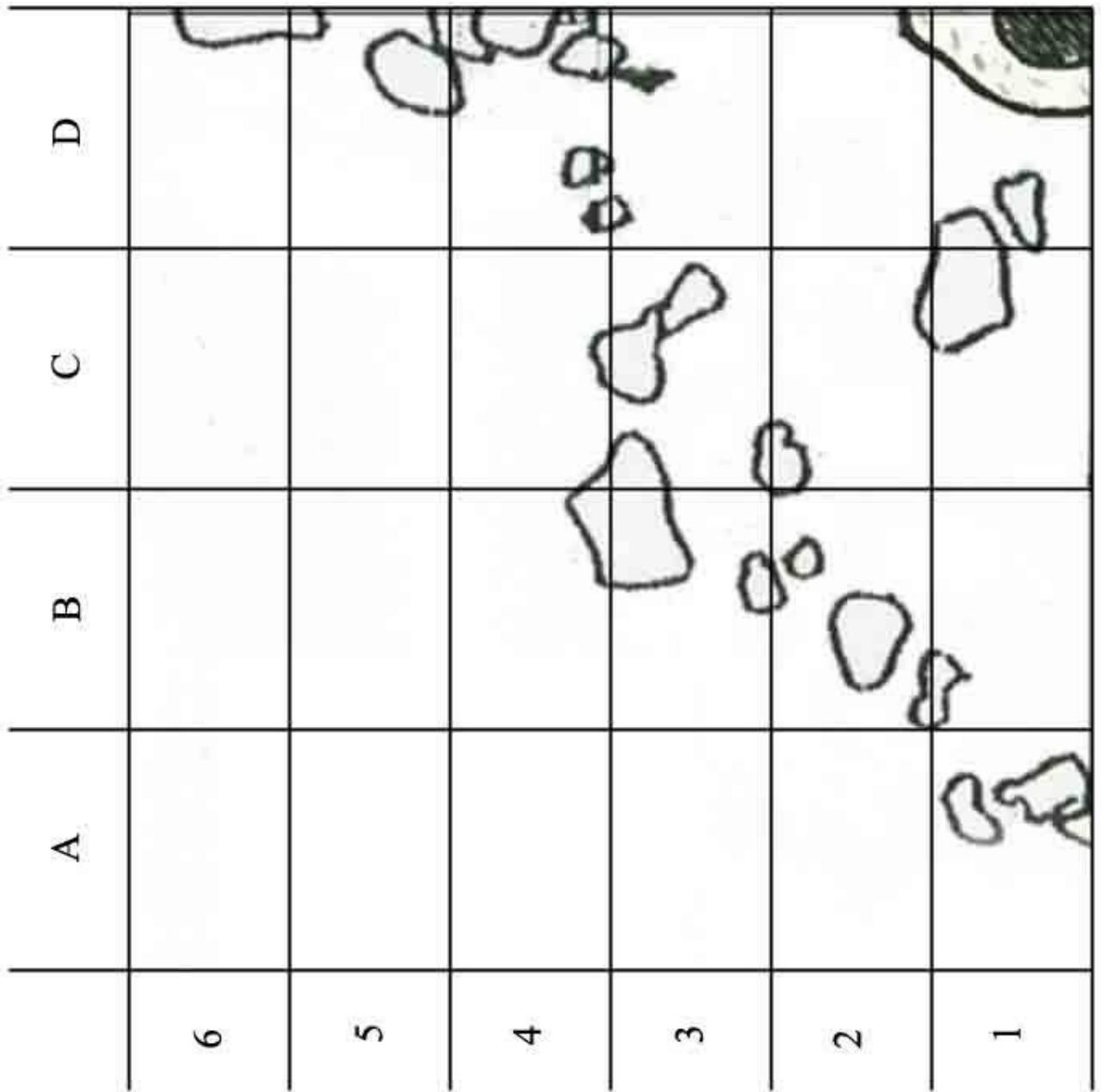


SOUTHEAST QUADRANT ARTIFACTS

 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment
 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment
 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment Cluster
 Animal Bone Fragment Cluster	 Animal Tooth	 Animal Tooth	 Stone Flake
 Stone Flake	 Stone Flake	 Stone Flake	 Stone Flake
 Stone Flake	 Stone Flake	 Stone Flake	 Stone Flake
 Stone Flake	 Stone Knife	 Stone Scraper	



Northwest Quadrant



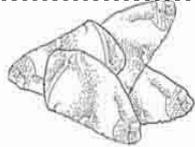
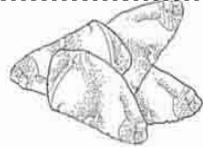
NORTHWEST QUADRANT Artifact Locations

ARTIFACT	USE	AREA
Animal Bone Fragment	Remains of food	D-5
Stone Flake Cluster	Waste from making stone tools.	C-2
Stone Flake Cluster	Waste from making stone tools.	C-1
Stone Flake Cluster	Waste from making stone tools.	D-1
Stone Flake Cluster	Waste from making stone tools.	D-4
Stone Flake Cluster	Waste from making stone tools.	D-3
Stone Flake Cluster	Waste from making stone tools.	D-2
Stone Flake Cluster	Waste from making stone tools.	C-1
Stone Scraper	Stone tool used to scrape materials	D-2
Arrow Point	A stone point that is secured to the end of a weapon	D-3

ARTIFACT	USE	AREA
Animal Bone Fragment	Remains of food	B-1
Animal Bone Fragment	Remains of food	C-2
Animal Bone Fragment	Remains of food	D-5
Animal Bone Fragment Cluster	Remains of food	C-1
Animal Bone Fragment Cluster	Remains of food	D-1
Animal Bone Fragment Cluster	Remains of food	D-2
Animal Bone Fragment	Remains of food	D-4
Animal Bone Fragment	Remains of food	D-3
Animal Bone Fragment	Remains of food	B-1
Animal Bone Fragment	Remains of food	C-2

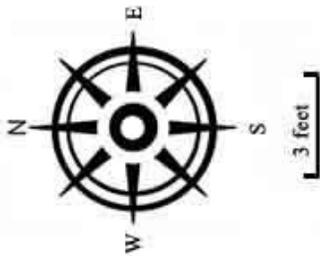
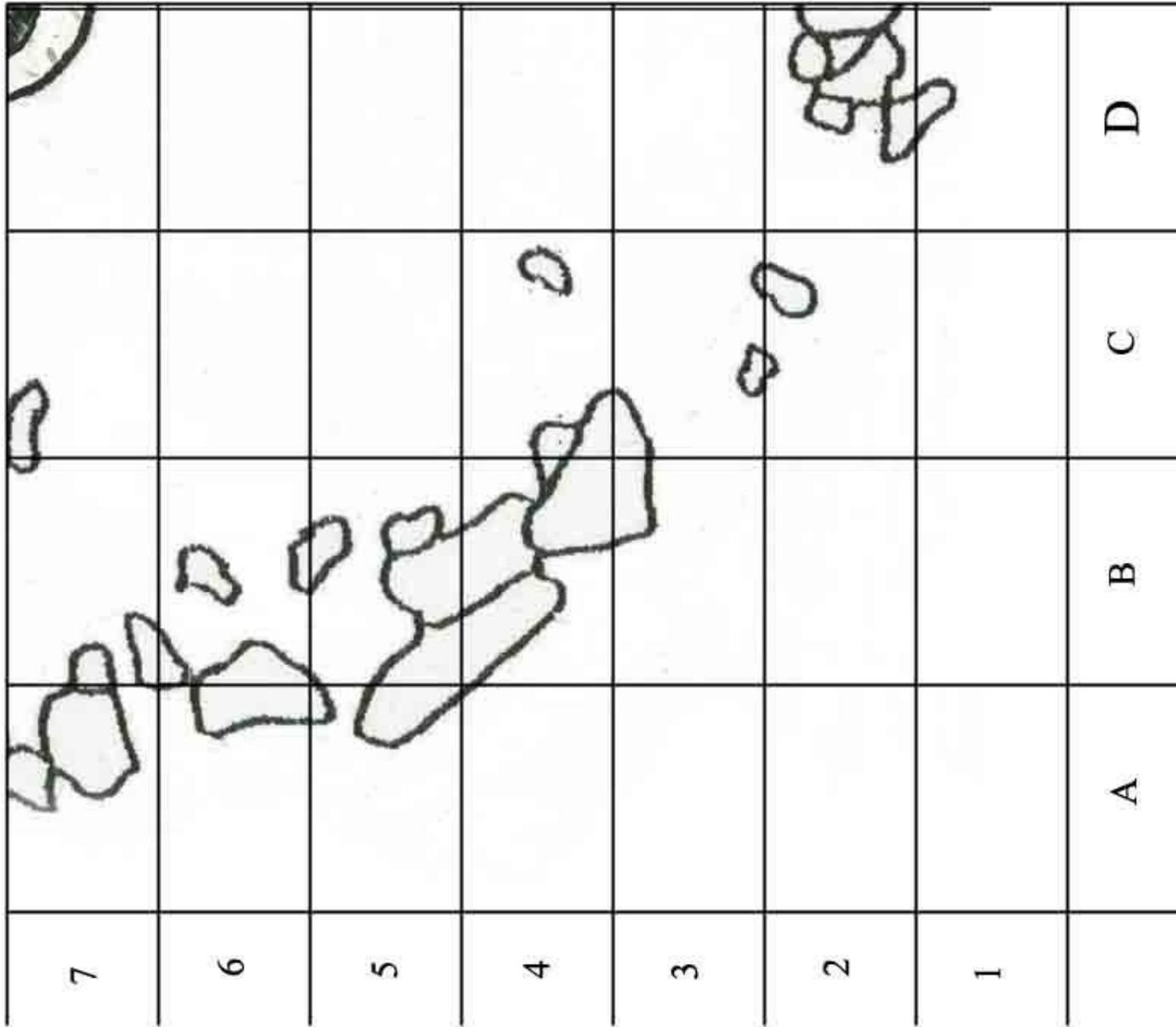


NORTHWEST QUADRANT ARTIFACTS

 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment
 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment
 Animal Bone Fragment Cluster	 Animal Bone Fragment Cluster	 Animal Bone Fragment Cluster	 Stone Flake Cluster
 Stone Flake Cluster	 Stone Flake Cluster	 Stone Flake Cluster	 Stone Flake Cluster
 Stone Flake Cluster	 Stone Flake Cluster	 Stone Scraper	 Arrow Point



Southwest Quadrant



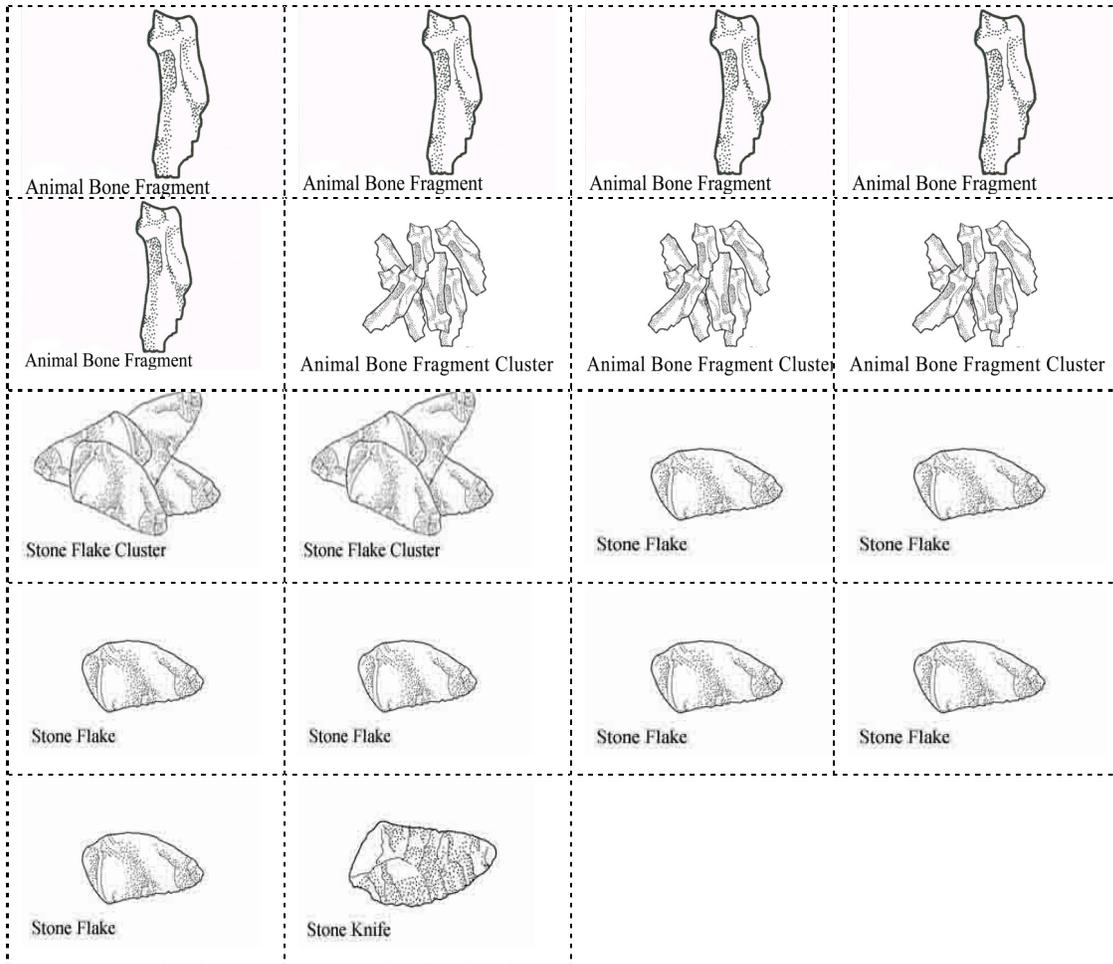
SOUTHWEST QUADRANT Artifact Locations

ARTIFACT	USE	AREA
Stone Flake Cluster	Waste from making stone tools.	C-7
Stone Flake	Waste from making stone tools.	B-6
Stone Flake	Waste from making stone tools.	C-6
Stone Flake	Waste from making stone tools.	B-4
Stone Flake	Waste from making stone tools.	C-4
Stone Flake	Waste from making stone tools.	C-5
Stone Flake	Waste from making stone tools.	C-6
Animal Bone Fragment Cluster	Possible remains of food	D-7
Animal Bone Fragment Cluster	Possible remains of food	D-6

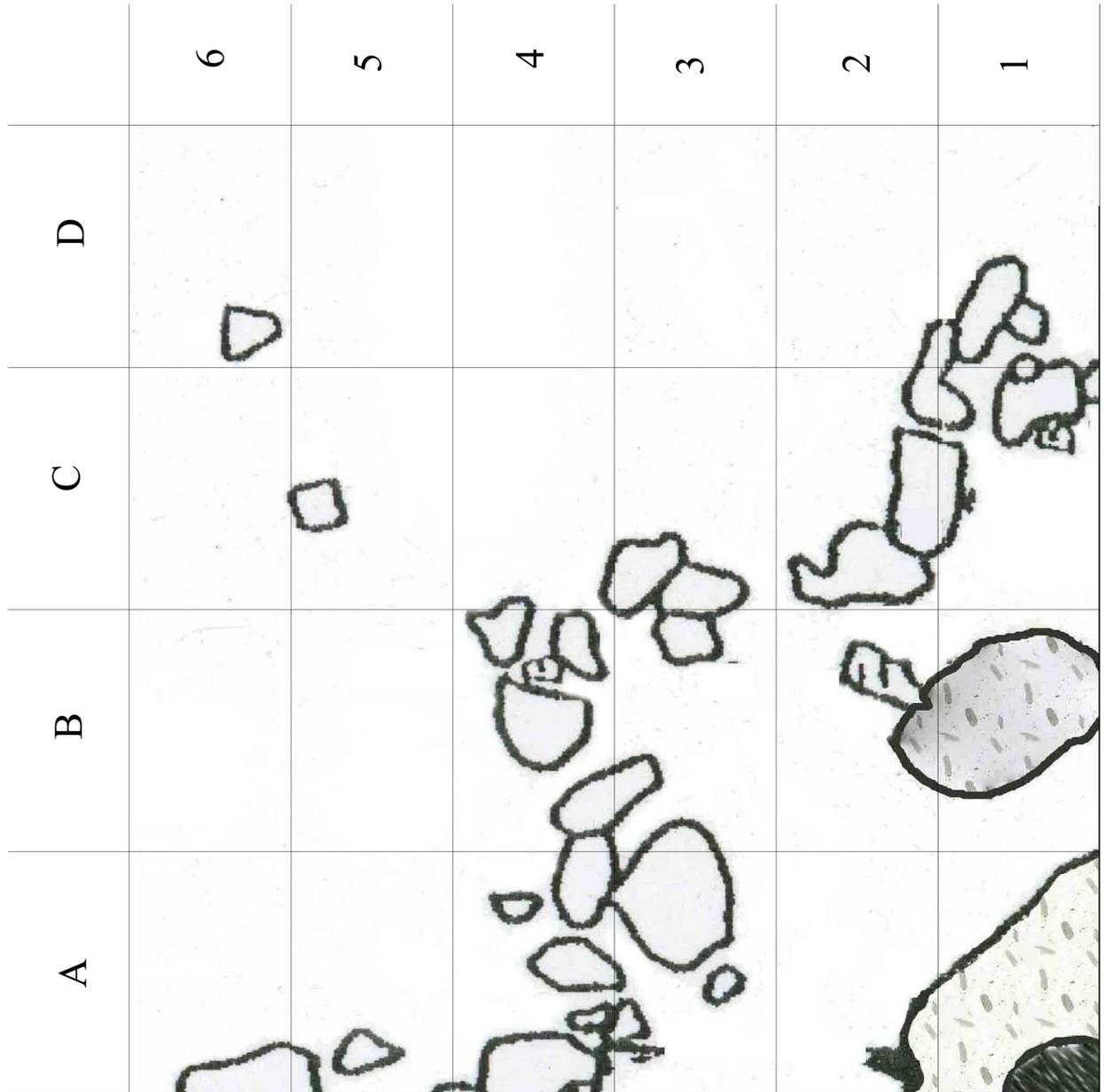
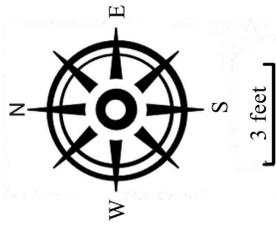
ARTIFACT	USE	AREA
Animal Bone Fragment	Possible remains of food	A-6
Animal Bone Fragment	Possible remains of food	A-5
Animal Bone Fragment	Possible remains of food	B-6
Animal Bone Fragment	Possible remains of food	B-5
Animal Bone Fragment	Possible remains of food	D-3
Stone Knife	A stone tool used for cutting	C-6
Stone Flake	Waste from making stone tools.	B-7
Stone Flake Cluster	Waste from making stone tools.	D-7
Animal Bone Fragment Cluster	Possible remains of food	B-4



SOUTHWEST QUADRANT ARTIFACTS



Northeast Quadrant



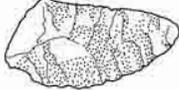
NORTHEAST QUADRANT Artifact Locations

ARTIFACT	USE	AREA
Animal Bone Fragment	Remains of food	A-2
Animal Bone Fragment	Remains of food	A-1
Animal Bone Fragment	Remains of food	B-1
Animal Bone Fragment	Remains of food	B-2
Animal Bone Fragment	Remains of food	C-2
Animal Bone Fragment	Remains of food	D-2
Animal Bone Fragment	Remains of food	C-5
Animal Bone Fragment	Remains of food	B-4
Animal Bone Fragment	Remains of food	B-3
Animal Bone Fragment Cluster	Remains of food	C-1
Stone Flake Cluster	Waste from making stone tools.	B-1
Stone Flake Cluster	Waste from making stone tools.	A-2
Stone Flake Cluster	Waste from making stone tools.	A-1

ARTIFACT	USE	AREA
Stone Flake	Waste from making stone tools.	C-2
Stone Flake	Waste from making stone tools.	B-2
Stone Flake	Waste from making stone tools.	C-1
Stone Flake	Waste from making stone tools.	B-3
Stone Flake	Waste from making stone tools.	D-1
Stone Flake	Waste from making stone tools.	A-3
Stone Flake	Waste from making stone tools.	A-2
Stone Flake	Waste from making stone tools.	A-3
Stone Flake	Waste from making stone tools.	A-1
Stone Flake	Waste from making stone tools.	B-1
Stone Knife	A stone tool that has flakes taken off on one side	A-1
Stone Arrow Point	Hunting tool	A-1
Animal Tooth	Remains of food	D-1



NORTHEAST QUADRANT ARTIFACTS

 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment
 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment	 Animal Bone Fragment
 Animal Bone Fragment	 Animal Bone Fragment Cluster	 Animal Tooth	 Stone Flake
 Stone Flake	 Stone Flake	 Stone Flake	 Stone Flake
 Stone Flake	 Stone Flake	 Stone Flake	 Stone Flake
 Stone Flake	 Stone Flake Cluster	 Stone Flake Cluster	 Stone Flake Cluster
 Stone Knife	 Arrow Point		



PART FOUR - Instructions for the Teacher

Materials

For Each Student

- “Investigating a Plains Tipi: Part Four” (Archaeology Notebook, pages ____)

Preparing to Teach

1. Make a copy of “Investigating a Plains Tipi: Part Four” for each student.
2. Read the “Reflect on New Knowledge” section below and be prepared to discuss these questions with the students.
3. Post the Word Bank words.

WORD BANK

architecture: the art and science of designing and erecting buildings or other structures

preserve: to maintain intact, to protect from injury or harm

performance standard: basis for measuring your work

REFLECT ON NEW KNOWLEDGE

1. Ask students:
 - Who is Dr. Medicine Crow?
 - Why is Dr. Medicine Crow included in the investigation of a tipi?
 - How is Dr. Medicine Crow’s life different from his ancestors’ life?
 - In what ways are you like Dr. Medicine Crow? Different from Dr. Medicine Crow?
2. Distribute “The Tipi Today.”
3. Have students read “The Tipi Today.” Ask students:
 - How did you play the role of an archaeologist in this investigation?
 - What archaeological tools did you use to help you in your investigation?
 - How did your conclusions about the tipi compare with what the archaeologists learned in their study?
 - How does the archaeological information complement the oral history?
 - How do the Crow use the tipi honor their past?
 - Why do you think the history of the Crow is important to the Crow? To all Americans?
 - How did knowledge of the Crow past help you think about the present? the future?
 - What was the best part of the investigation for you and why?
 - Is archaeology an important way to learn about past people? Why or why not?
 - Would you change anything about this investigation? If so, what, how, and why?
4. Assist students in defining the word **architecture** and add it to the Word Bank.



5. Have students read  “Preserving Tipi Ring Sites.” Assist students in defining the word **preserve** and add it to the Word Bank.
6. Ask students: Why is it important to preserve tipi ring sites? From an archaeologist’s perspective? From a Native American descendant’s perspective?



ASSESSMENT - Instructions for the Teacher

Materials

For Each Student

-  “Investigating a Plains Tipi: Assessment” (Archaeology Notebook, pages _____)

For each Group

-  Role Cards (page _____)
-  Final Performance of Understanding (page _____)

Preparing to Teach

1. Make copies of all student pages from  “Investigating a Plains Tipi: Assessment.”
2. Make enough copies of the  “Role Cards” and the  “Final Performance of Understanding” on card stock to distribute one to each group of four.
3. Post the Word Bank word.

WORD BANK

performance standard: basis for measuring your work

ASSESSMENT

1. Go over the cover sheet information for the **ASSESSMENT**.
2. Go over the “Final Composition” and performance standards and help students understand directions, expectations, and any words with which they may not be familiar. Assist students in defining the word **performance standards** and add it to the Word Bank.
3. Have students complete drafts of their expository compositions in class or as homework. Check the draft and make suggestions for changes and improvements. Have students revise their compositions and submit them for a final grade.
4. Repeat the process for “Bringing the Past Into the Future.”

