

**4<sup>TH</sup> GRADE CURRICULUM**  
**SCATTERED VILLAGE – THROUGH THE EYES OF SCIENCE**

**PURPOSE**

The video program *Scattered Village – Through the Eyes of Science* is intended for use in the classroom. It is a tool to educate students about archaeology in the context of Scattered Village, an archaeological discovery made in Mandan, North Dakota in 1998. Students will learn the steps involved in research, excavation, and analysis of such a discovery. They will also learn how to associate past and present cultures to their lives on a more personal level.

**RESOURCES REQUIRED**

Video: *Scattered Village – Through the Eyes of Science*

Segment One crossword game (included)

Segment Two crossword game (included)

Segment Three crossword game (included)

Segment One Vocabulary match game (included)

Segment Two Vocabulary match game (included)

Segment Three Vocabulary match game (included)

Wintercount samples (included)

Clay (or play dough)

Magazines or newspapers that can be cut up

Poster board

Drawing paper

Glue / Scissors

Paper bags

Markers / crayons / colored pencils

**ESSENTIAL QUESTIONS**

At the end of this unit, students will be able to answer a few essential questions, such as;

- Why is archaeology important?
- What kinds of information can be learned from studying the archaeological remains of past cultures?

Although many things can be learned from this unit, one significant understanding is that despite the absence of advanced electronic technology, early Native American cultures were quite sophisticated in many ways, including: material production, agriculture, medicine, spirituality and politics. Not only do scientists get to learn more *about* these early cultures through archaeology, but also in many cases they get to learn *from* these early cultures through archaeological discoveries such as Scattered Village.

## **RELATION TO CURRENT GRADE CURRICULUM**

This video is designed to touch on many grade appropriate topics: history, social studies, science, English, and creative writing. Many of the games and exercises included in the attached curriculum are intended to spark imaginative thinking as well as developing the ability to tie different classroom subjects into one topic. This program will work particularly well in tandem with Lewis and Clark / Louisiana Purchase classroom units.

## **INTENDED AUDIENCE**

*Scattered Village – Through the Eyes of Science* is targeted for 4<sup>th</sup> grade students. The video presentation is designed to be viewed over the course of several days with chapter breaks built into the menu to allow teachers to start and stop as needed. The curriculum includes activities that encourage a team approach to learning (simulating working as a team in an archaeological context) as well as individual projects and puzzles for extra credit and extra fun.

## **TEACHER GUIDE**

The *Scattered Village* video is designed to be viewed in three segments, one segment a day, and each segment is divided into chapters for easy stops and starts when needed. Attached is a plan for viewing the video over three days with a fourth day for presentations and review. Included are in-class projects ideas as well as enrichment project options if students are interested.

COMMENTS/NOTES:

## Day 1

Watch video – Segment One

Review talking points with the class

Segment One games / Winter count examples

Option 1: In-class discussion – Traditions

Objective: To recognize the connection between information learned through archaeology and every day life.

- Have the children think of “rituals” that belong to their family, (for example camping every summer or a family game night) and then describe that activity and why it is important to them.
- Discuss in class why it is important to learn and pass on stories that belong to the child’s family. (This can also be tied into why we study history and social studies in school.)
- \* Instructors: In discussing the topic of “tradition”, you may be called upon to describe the differences between the words “rite/ritual” and “tradition”. “Ritual” refers to a formal, ceremonial set of acts or actions. Ritual is typically religious in nature. The separation between the religious and secular life was not at all distinct in the Native American culture, as was undoubtedly the case with the inhabitants of Scattered Village. Today, there is a very distinct separation between our religious and secular life. This is important in that the pupils will equate their camping trip with truly “ritual” acts that may have been prescribed in certain settings prehistorically. While their camping trip may be “tradition”, it is probably not “ritual”. Although the general public has shifted to a definition more centered on “formalized, repetitive, and highly stereotypical”, there is still a very strong religious connotation to the word. Take, for instance, “pre-game rituals” that we occasionally hear about from sports stars. When the Kiwi “All Blacks” perform their pre-game chant/dance, or when the batter habitually crosses himself before stepping to the plate, most would agree that this is actually “ritual”. However, other habitual acts, such as wearing your “lucky socks”, or eating steak and eggs for breakfast, may be better termed “tradition” or habit rather than “ritual”.

Option 2: In-class discussion – Information

Objective: To explain how important cultural information can be passed on in many different ways.

- How does the child’s family pass on stories? (For example: do they tell the same stories to each generation? Do they make home movies, have family reunions, or use photographs, drawings or quilts to keep their stories alive?) This may be an excellent way to make the students think and actually draw the answers out of them. For instance, if you ask some specifics, like: “We all have family stories. Think about how YOU found out about your grandparents, or how you know about your relatives who live in a different state.”
- Does the child’s family have any heirlooms that have been in the family for generations? (For example: a clock, a book, a medal, photo albums, quilts, fishing rod, etc.) Ask questions such as, “What do you know about these items?”, “How did you find out about these items?”, “Do any of you have things that remind you of family stories?”

### Option 3: In-class discussion – Information

Objective: To describe how information survives time and social spin.

Explore why we know so much more about Lewis and Clark than we know about the early Plains Indians before Lewis and Clark arrived. For example: record keeping was primarily oral in early Native American tribes vs. documents, diaries and letters of the explorers. A good analogy would be a modern ballad, and the story that it relates. Ballads are stories set to song. Songs are a formal way to pass on a story, because they are “highly formalized”, or in other words, they are sung to a certain rhythm and with rhymes and beat to force the “teller/singer” to repeat verbatim. Native Americans used songs to pass along stories as well, for the same reasons. With that said, while songs and storytelling were effective ways to keep records within the tribe, events such as tribal priorities, relocation, outside influence, disease and war could adversely affect the tribe and therefore affect the ability to share the stories or the facts within. Then, as now, many Native American stories and cultural experiences were sacred and meant only for tribe members, were exclusively available to certain people who had earned the right to hear the stories or were entitled to the information by birth. Over time, a number of tribal stories and histories (Scattered Village is a perfect example) were lost or were taken out of context. Conversely, Europeans were creating more widely accessible written records, including diaries, newspaper articles, accounts that were sent back to Jefferson and drawings that were made on the spot. As time passed, historians and scientists could easily access this information so the bulk of the expedition’s experiences have survived time relatively in tact. Also, while tribes were more self-contained, there were large outside audiences in place for the explorers through government and media involvement at the time.

#### Enrichment Project 1:

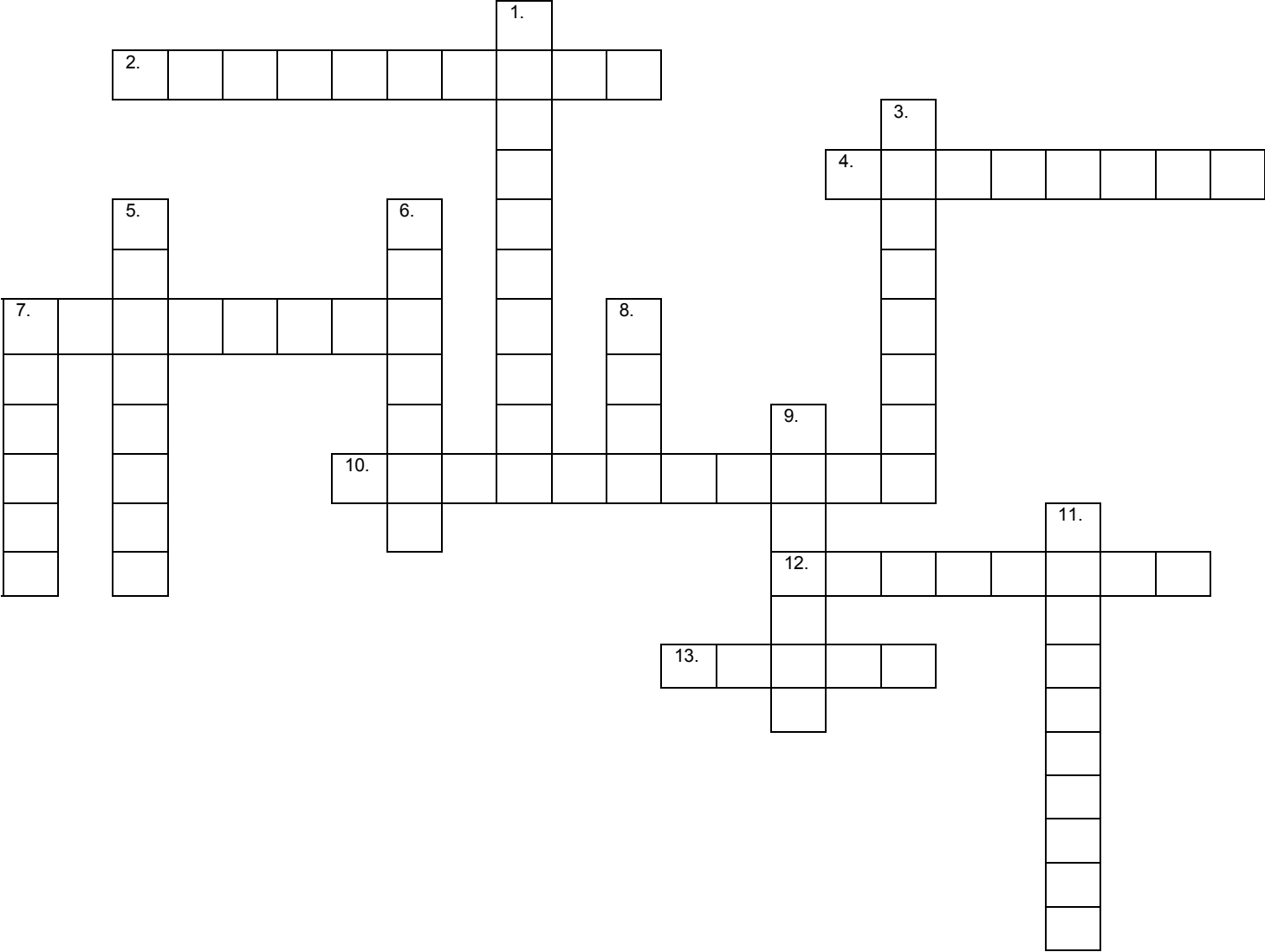
Have the students draw a few pictures or “pictographs” of his or her favorite memory or activity. This can be done either in class or as homework. Have the students use the included “wintercount” pictograph samples for reference. Encourage the children to be creative in the way they communicate their stories.

#### Enrichment Project 2:

As demonstrated by the story of *Frost On Top*, have the child write and illustrate a “morality” tale about a current issue (For example: Don’t do drugs, Stay in school, be nice to people, etc.)

COMMENTS/NOTES:

SEGMENT ONE PUZZLE



## QUESTIONS & WORDS FOR SEGMENT ONE PUZZLE

### Across

2. The process of methodically uncovering and searching for remains of the past.
4. The systematic collection of information used to learn more about a subject.
7. An object made from buffalo hide and wood, used to transport people and items in the water.
10. The study of material evidence such as buildings, tools and pottery to find out about human cultures of the past.
12. An object that was made or used by humans that provides information about human behavior in the past.
13. A unit of people consisting of a number of families, clans or other groups who share a common ancestry and culture.

### Down

1. A type of writing in which symbols are used to tell a story or record an event.
3. A formal act or set of acts performed as prescribed by ritual or custom.
5. The traditional beliefs, myths, tales and practices of a people, shared orally.
6. Containers made out of clay and sand that can be hardened in the heat of a fire or oven.
7. The practice of trading one item for another.
8. An area designated for archaeological exploration by excavation and/or survey.
9. Describes a group of people who frequently move from one location to another in search of food.
11. Native American dwellings made of soil, sod, grass and wood.

RESEARCH  
TRIBE  
EXCAVATION  
EARTHLODGE  
SITE  
PICTOGRAPH  
BULLBOAT  
BARTER  
ARCHAEOLOGY  
NOMADIC  
POTTERY  
CEREMONY  
FOLKLORE  
ARTIFACT



## QUESTIONS & WORDS FOR SEGMENT ONE PUZZLE - ANSWERS

### Across

2. The process of methodically uncovering and searching for remains of the past. (excavation)
4. The systematic collection of information used to learn more about a subject. (research)
7. An object made from buffalo hide and wood, used to transport people and items in the water. (bullboat)
10. The study of material evidence such as buildings, tools and pottery to find out about human cultures of the past. (archaeology)
12. An object that was made or used by humans that provides information about human behavior in the past. (artifact)
13. A unit of people consisting of a number of families, clans or other groups who share a common ancestry and culture. (tribe)

### Down

1. A type of writing in which symbols are used to tell a story or record an event. (pictograph)
3. A formal act or set of acts performed as prescribed by ritual or custom. (ceremony)
5. The traditional beliefs, myths, tales and practices of a people, shared orally. (folklore)
6. Containers made out of clay and sand that can be hardened in the heat of a fire or oven. (pottery)
7. The practice of trading one item for another. (barter)
8. An area designated for archaeological exploration by excavation and/or survey. (site)
9. Describes a group of people who frequently move from one location to another in search of food. (nomadic)
11. Native American dwellings made of soil, sod, grass and wood. (earthlodge)



## SEGMENT ONE VOCABULARY MATCH GAME

1. **Crops** ----- The practice of trading one item for another.
2. **Pictograph** ----- A portable dwelling made with hide and wooden poles.
3. **Archaeology** ----- Native American dwellings made of soil, sod, grass and wood.
4. **Ceremony** ----- An area selected for archaeological exploration by excavation.
5. **Tepee** ----- Cultivated produce such as grain, vegetables or fruit.
6. **Bullboat** ----- A group of people who share a common ancestry and culture.
7. **Artifact** ----- Symbols or drawings used to tell a story or record an event.
8. **Research** ----- Hardened containers made out of a combination of clay and sand.
9. **Excavate** ----- The traditional beliefs, myths and tales of a people, shared orally.
10. **Nomads** ----- The study of materials to find out about human cultures of the past.
11. **Earthlodge** ----- A formal activity performed according to ritual or custom.
12. **Folklore** ----- To expose or uncover an item through the process of digging.
13. **Site** ----- A group of people who frequently move from one location to another.
14. **Barter** ----- An object used to transport people and items in the water.
15. **Pottery** ----- An object made or used by humans in the past.
16. **Tribe** ----- Collecting information to learn more about a subject.

## SEGMENT ONE VOCABULARY MATCH GAME - ANSWERS

1. **Crops**                      14   The practice of trading one item for another.
2. **Pictograph**              5   A portable dwelling made with hide and wooden poles.
3. **Archaeology**            11  Native American dwellings made of soil, sod, grass and wood.
4. **Ceremony**               13  An area selected for archaeological exploration by excavation.
5. **Tepee**                      1   Cultivated produce such as grain, vegetables or fruit.
6. **Bullboat**                 16  A group of people who share a common ancestry and culture.
7. **Artifact**                  2   Symbols or drawings used to tell a story or record an event.
8. **Research**                15  Hardened containers made out of a combination of clay and sand.
9. **Excavate**                 12  The traditional beliefs, myths and tales of a people, shared orally.
10. **Nomads**                  3   The study of materials to find out about human cultures of the past.
11. **Earthlodge**              4   A formal activity performed according to ritual or custom.
12. **Folklore**                 9   To expose or uncover an item through the process of digging.
13. **Site**                     10  A group of people who frequently move from one location to another.
14. **Barter**                    6   An object used to transport people and items in the water.
15. **Pottery**                  7   An object made or used by humans in the past.
16. **Tribe**                     8   Collecting information to learn more about a subject.

## SEGMENT ONE TALKING POINTS

### 1. How does understanding the past help us understand our world today?

We can learn about growing patterns, cultural adaptation both physical and social, and how cultural movements or events impacted our society. (ex: Expansion by Europeans into the west and how it effected the Native American way of life, women's suffrage movement and changes in gender roles, civil rights movement, progress in technologies and how they effect the direction and speed with which our cultures develop, etc.)

Perhaps the most important reason to study the past is to learn from the past. If we understand the mistakes that were made in the past, we will be less likely to repeat them!

### 2. Why is research so important before starting an excavation?

Research helps scientists form an idea of what to look for, where to look for it, and what it means once they find it and research helps them focus on the questions they want to answer. Scientists formulate research questions, and then they identify the data that they need to answer those questions. Sometimes, that data has already been collected, and research will bring that to their attention, and keep them from duplicating the work. This is comparable to how students do projects. Once they are given the assignment, how can students best execute the assignment? They must research the topic, learn as much as is already known about the topic and then they must form their own opinion or solution. Many times new opinions are formed based on the research completed by others.

### 3. When looking at a culture or community, why should archaeologists know about other communities in the area?

Knowledge of contemporary cultures can help scientists interpret artifacts, architecture, and sustenance patterns of the culture they've found. That same knowledge will help them identify the culture or provide evidence that a new culture has been uncovered.

Typically don't set out "looking for" a new culture or community. Instead they "discover one" and then go back and look at the cultural setting through the eyes of research. It is true that they look at the existing body of knowledge about the cultures and sites in an area to better understand new discoveries, and to help them look in the right places, and for the right evidence of a culture or community when they are trying to discover new sites.

4. Why is it important to understand gender roles within the community scientists are exploring?

Understanding gender roles helps us to understand many things about a community, such as division of labor, political structuring within the community and how exterior influences impacted the subject community.

It also helps archaeologists interpret the distribution of artifacts and features within a site, in light of where certain activities that are typically performed by each gender are likely to take place. For instance, flint knapping projectile points (a male activity) may be contrasted with pottery making (a female activity) to begin to understand the areas and features within a site that are associated with gender-specific activities.

5. Explore with the students what impact story telling has on them. Review popular morality tales (such as *The Boy Who Cried Wolf* or *Hansel and Gretel*) and ask them to recall stories that their family passes down from generation to generation.

Ask if they have any stories about their parent or grandparents that they have heard from other family members, but are not written down anywhere. The Scattered Village inhabitants like most Native American cultures, used story telling as a way to pass along their history from one generation to the next, and to honor individuals. Ask if they know any stories of their family members that may not be written down, but have been told to them, which honor one of their family members. War stories, hunting and fishing stories, child birth stories, marriage stories, etc. are common in our culture, and were also common themes honored in Native American stories.

COMMENTS/NOTES:

## Day 2

Watch video – Segment Two  
Review talking points with the class  
Segment Two games

Project Option 1: Construct clay pots

Objective: To express in a simulation one aspect of early Native American life.

- Use clay or play dough to make pots or vessels. Have the children decorate their creations either with designs or drawings.

Project Option 2: Compile “artifacts”

(Two day project to simulate compiling and analyzing “artifacts”)

Objective: To apply archaeological skills and analyze personal artifacts.

Goal: To trigger imagination while utilizing some of the archaeological skills covered in the video.

- At the end of the class, students are divided randomly into groups.
- Each student is to bring in one item or two items from home that tell the most about them, for class the following day. For example the student could bring in an item they’ve made, a ribbon that they won in a contest or a favorite toy. Try to discourage them from bringing in anything with their name on it. It would be too easy if the second group already knows to whom the items belongs. If there are multiple classes involved in viewing the **Scattered Village** videos, switch bags between classes to increase the “blind” status of exercise.
- Ultimately, there should be at least 6 items from each group.
- Encourage the students to bring in diverse items, including: metals, woods, textiles, plastics, tools (including utensils), toys, books, photos, mystery items (broken or incomplete items), food wrappers, etc.
- Also, have the students begin to compile a list of questions they might want to ask about the items other students bring in, based around the “who, what, why, when, how” format in the video.

Enrichment project:

Have student compile a list of crops that were grown by early Native Americans in North Dakota and a list of crops grown in North Dakota today. How do they compare and what can the student learn about growing patterns, creation of hybrid produce, etc. Another option: instead of crops, the child could investigate local natural medicines.

COMMENTS/NOTES:

## CROPS OF NORTH DAKOTA

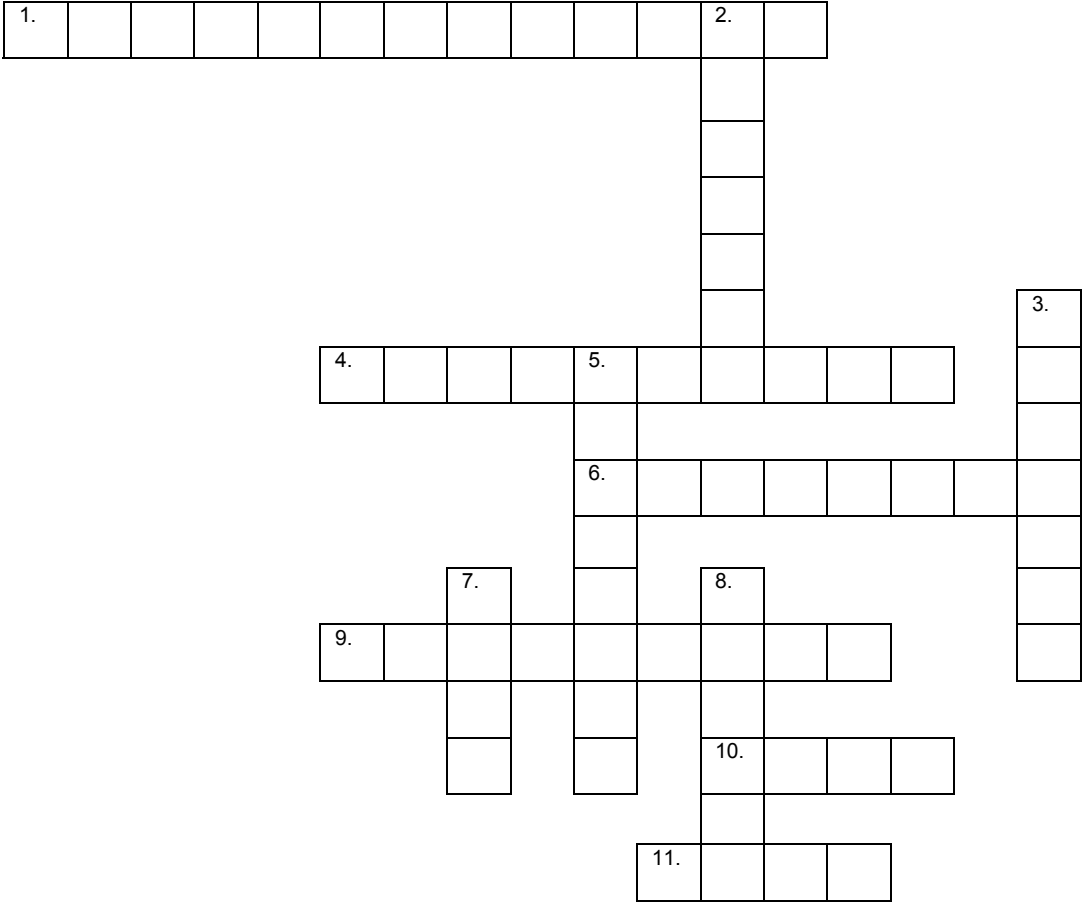
### **SCATTERED VILLAGE ERA**

BEANS  
CORN  
SQUASH  
SUNFLOWER

### **TODAY**

BEANS  
WHEAT  
SUNFLOWERS  
BARLEY  
FLAXSEED  
OATS  
SQUASH  
CORN  
POTATOES  
HONEY  
OATS  
BEETS  
HAY  
SOYBEANS

SEGMENT TWO PUZZLE



## QUESTIONS & WORDS FOR SEGMENT TWO PUZZLE

### Across

1. An early Egyptian method of writing using symbols and drawings.
4. The structural base on which a building is constructed.
6. A deep pit dug into the ground and used to store dried food.
9. The process by which items at a dig are separated from dirt by rinsing with water.
10. A collection of facts from which conclusions may be drawn.
11. Small marked off section in a grid.

### Down

2. To gather artifacts at an excavation.
3. Something that a human made in the past that has not been or cannot be moved.
5. To carefully record measurements, findings and procedures used at an excavation.
7. This is made by dividing an archaeological site into uniform squares.
8. A mound or deposit containing shell, animal, bone or other refuse.

SCREENING  
UNIT  
DOCUMENT  
FEATURE  
HIEROGLYPHICS  
FOUNDATION  
DATA  
COLLECT  
MIDDEN  
CACHE PIT  
GRID





## QUESTIONS & WORDS FOR SEGMENT TWO PUZZLE – ANSWERS

### Across

1. An early Egyptian method of writing using symbols and drawings. (hieroglyphics)
4. The structural base on which a building is constructed. (foundation)
6. A deep pit dug into the ground and used to store dried food. (cache pit)
9. The process by which items at a dig are separated from dirt by rinsing with water. (screening)
10. A collection of facts from which conclusions may be drawn. (data)
11. Small marked off section in a grid. (unit)

### Down

2. To gather artifacts at an excavation. (collect)
3. Something that a human made in the past that has not been or cannot be moved. (feature)
5. To carefully record measurements, findings and procedures used at an excavation. (document)
7. This is made by dividing an archaeological site into uniform squares. (grid)
8. A mound or deposit containing shell, animal, bone or other refuse. (midden)

## SEGMENT TWO VOCABULARY MATCH GAME

1. Hieroglyphics ----- A mound or deposit containing shell, animal, bone or other refuse.
2. Cache pit ----- The structural base on which a building is constructed.
3. Document ----- A deep pit dug into the ground and used to store dried food.
4. Feature ----- An early Egyptian method of writing using symbols and drawings.
5. Midden ----- This is made by dividing an archaeological site into uniform squares.
6. Screening ----- To gather artifacts at an excavation.
7. Foundation ----- To record measurements, findings and procedures at an excavation.
8. Grid ----- Small marked off section in a grid.
9. Collect ----- A collection of facts from which conclusions may be drawn.
10. Unit ----- Something that a human made that has not or cannot be moved.
11. Data ----- The process by which items are separated from dirt by rinsing.

## SEGMENT TWO VOCABULARY MATCH GAME – ANSWERS

1. Hieroglyphics      5      A mound or deposit containing shell, animal, bone or other refuse.
2. Cache pit          7      The structural base on which a building is constructed.
3. Document          2      A deep pit dug into the ground and used to store dried food.
4. Feature            1      An early Egyptian method of writing using symbols and drawings.
5. Midden            8      This is made by dividing an archaeological site into uniform squares.
6. Screening          9      To gather artifacts at an excavation.
7. Foundation        3      To record measurements, findings and procedures at an excavation.
8. Grid                10     Small marked off section in a grid.
9. Collect            11     A collection of facts from which conclusions may be drawn.
10. Unit              4      Something that a human made that has not or cannot be moved.
11. Data              6      The process by which items are separated from dirt by rinsing.

## Segment Two Talking Points

### 1. Why is a data recovery plan important?

A plan like this helps focus the search, it helps track and organize the scientist's findings and it ensures that every member of the team understands their role in the excavation. Organization is key!

### 2. Why is it important to keep track of where every artifact originated in the site?

It is important to keep all discoveries in context (For example: trash came from cache pit, which tells us that when the cache pit no longer stored food, it was used for refuse). It also helps keep track of lifestyle patterns; show which sets of tools may have been used together if found together, all steps in production processes, etc. Also, if there is an anomaly in the artifacts found, scientists have a better chance of discovering how it fits into the picture as a whole. Basically, this detailed information helps archaeologists see patterns in artifact distribution that may mirror patterns in human behavior.

### 3. Why do scientists have to be so careful when they pull artifacts from the ground?

A few reasons for being so careful is that artifacts can break easily, get mixed up with items from other units, or they can be lost all together.

The CONTEXT of the artifact is what archaeologists are after during excavation. They study the physical attributes of the artifact in great detail in the lab. In the field, the main concern is recording exactly how the artifact was found. For instance, by noting the angles of certain artifacts, like flakes or pot sherds, they can tell if the artifacts are situated just how they were left by their users, or if they were moved and re-deposited elsewhere (like in a midden). That can help them in turn, to understand where certain activities took place within the site, and also help them understand the things that affect the artifacts and deposits after being left by their original users.

COMMENTS/NOTES:

### Day 3

Watch video – Segment Three  
Review talking points with the class  
Segment Three games

Project: Analyze “artifacts”

Objective: To simulate archaeological lab work.

- On this day, the children bring in their items and the teacher will put each group’s items into a paper bag with their number on it.
- The bags are then traded between the groups on a “blind” basis.
- The groups will then make up the story about the original group by putting all the pieces together. They can’t ask questions of the teacher about the original group but they can speak with other people as part of their “research”. Students have to make everything up according to what they can guess about the people from the items in the bag.
- If there is an item they don’t recognize or if they need more information on that item, have the child do a little research using encyclopedias or the web if available. Make sure that the fundamental questions asked in the video are answered in this experiment: Who, What, Why, When, and How.

For example: Who would own this kind of item? What is it made of? Why would someone own this item? When would someone use this item? How was it used? Encourage the students to get creative in their thinking! Develop the stories as far as they can.

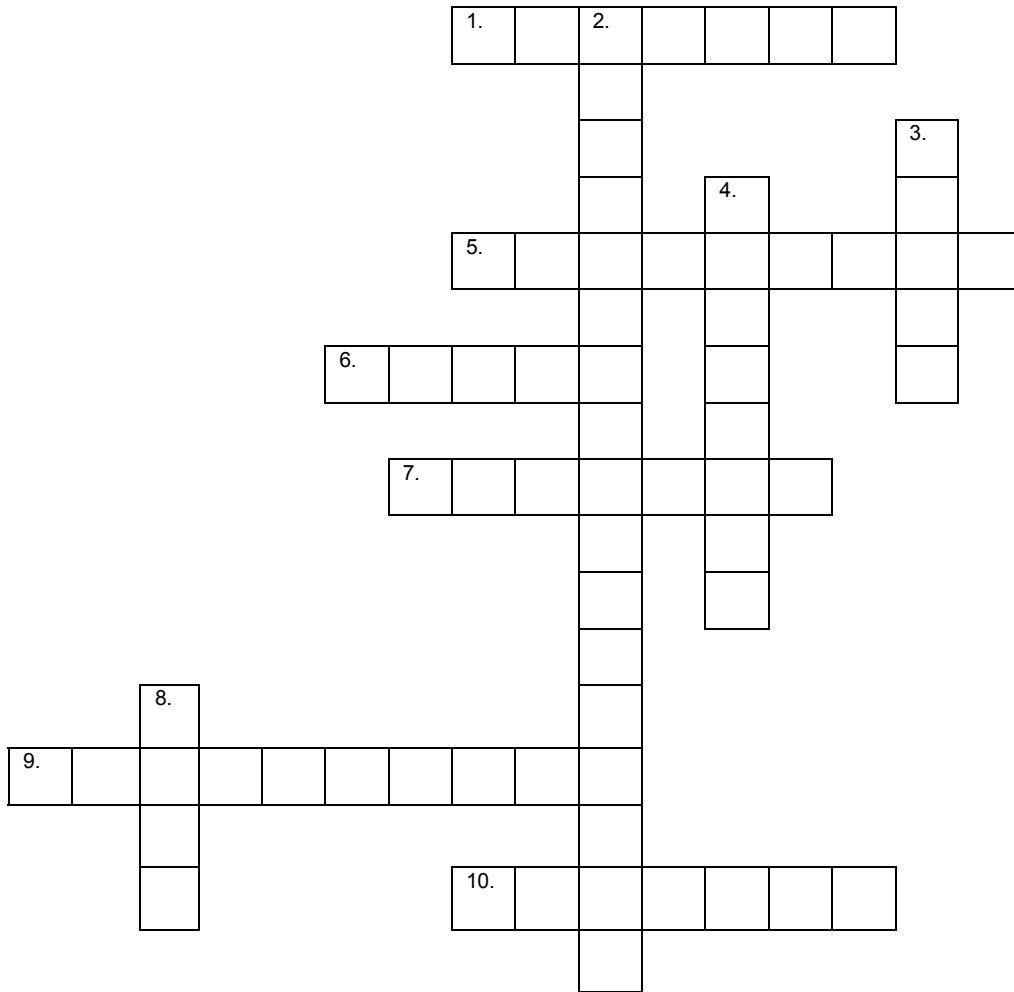
Also, one thing archaeologists do is “classify” the artifacts. A fun activity would be to have each group “classify” their bag of artifacts, and to explain what criteria they used to classify the objects. Some possible classifications may include what they are made of, their shape, their function, their color, etc. There is no “correct” method of classification. Some classifications are just better than others at helping archaeologists answer specific questions (like our research questions).

Enrichment project:

Have students collect rocks and research what kind of rocks they’ve found. Have the student research what uses can be found for the minerals found in the rock (for example, granite, quartz, lime, etc.)

COMMENTS/NOTES:

### SEGMENT THREE PUZZLE



## QUESTIONS & WORDS FOR SEGMENT THREE PUZZLE

### Across

1. A body of knowledge that represents events of the past.
5. Item categorized as a plant or plant life.
6. A hard stone commonly used to make arrowheads and stone knife blades.
7. A substance of animal or vegetable origin.
9. A bone tool typically made from the shoulder blade of a bison.
10. A tool used to scrape and clean hides.

### Down

2. A naturally or artificially perforated tool of bone or stone.
3. The straight, wooden section of an arrow.
4. The production or shaping of stone artifacts by means of chipping or flaking.
8. A heavy stone implement with blunted or rounded edges used for pounding and/or crushing.

HISTORY

MAUL

FLESHER

KNAPPING

SCAPULA HOE

SHAFT

SHAFT STRAIGHTENER

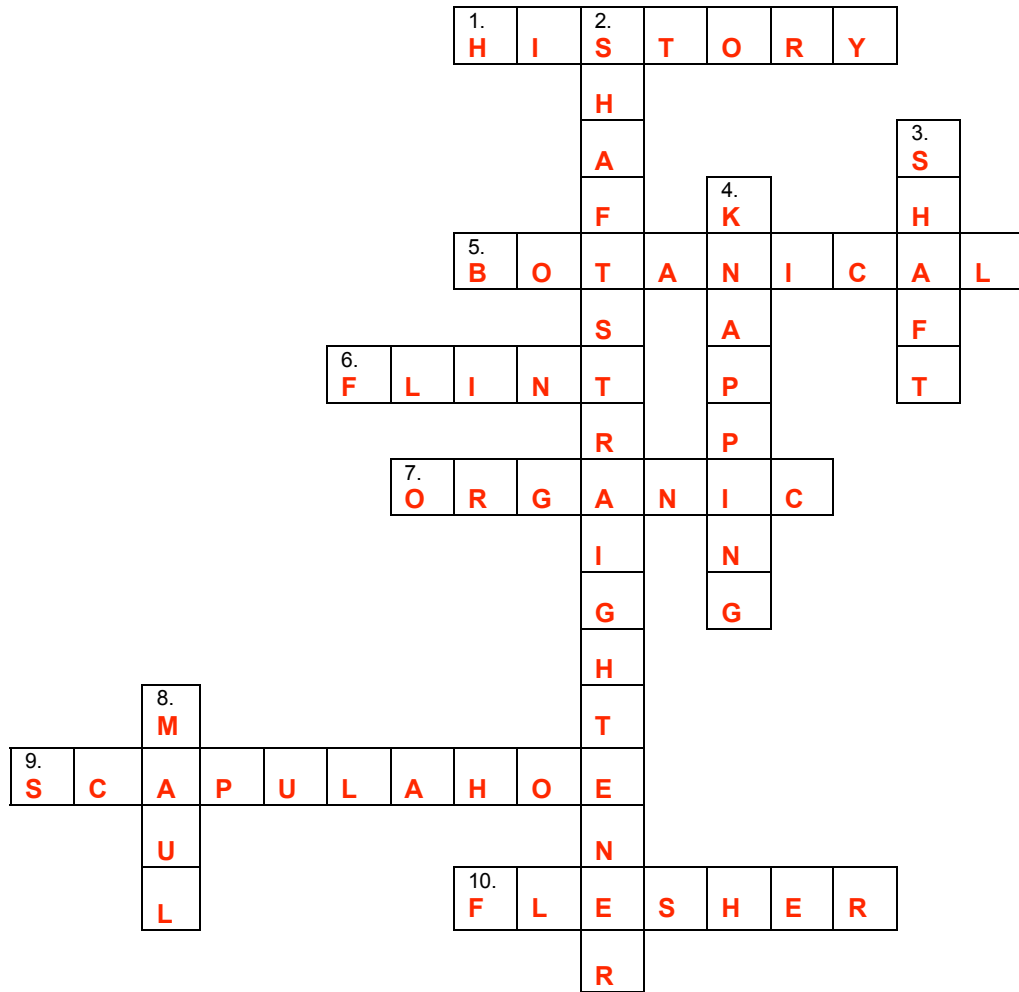
ORGANIC

FLINT

BOTANICAL



SEGMENT THREE PUZZLE – ANSWERS



## QUESTIONS & WORDS FOR SEGMENT THREE PUZZLE

### Across

1. A body of knowledge that represents events of the past. (history)
5. Item categorized as a plant or plant life. (botanical)
6. A hard stone commonly used to make arrowheads and stone knife blades. (flint)
7. A substance of animal or vegetable origin. (organic)
9. A bone tool typically made from the shoulder blade of a bison. (scapula hoe)
10. A tool used to scrape and clean hides. (flesher)

### Down

2. A naturally or artificially perforated tool of bone or stone. (shaft straightener)
3. The straight, wooden section of an arrow. (shaft)
4. The production or shaping of stone artifacts by means of chipping or flaking. (knapping)
8. A heavy stone implement with blunted or rounded edges used for pounding and/or crushing. (maul)

### SEGMENT THREE VOCABULARY MATCH GAME

- |                       |       |   |
|-----------------------|-------|---|
| 1. History            | _____ | The straight, wooden section of an arrow.                             |
| 2. Botanical          | _____ | A tool used to shape and straighten wood.                             |
| 3. Scapula hoe        | _____ | A body of knowledge that represents events of the past.               |
| 4. Maul               | _____ | Item categorized as a plant or plant life.                            |
| 5. Organic            | _____ | A tool used to scrape and clean hides.                                |
| 6. Knapping           | _____ | A stone tool with blunted or rounded edges used for Hammering.        |
| 7. Flint              | _____ | The shaping of stone artifacts by means of chipping or flaking.       |
| 8. Shaft straightener | _____ | A substance of animal or vegetable origin.                            |
| 9. Shaft              | _____ | A hard stone commonly used to make arrowheads and stone knife blades. |
| 10. Flesher           | _____ | A bone tool typically made from the shoulder blade of bison.          |

## SEGMENT THREE VOCABULARY MATCH GAME - ANSWERS

- |                       |           |   |
|-----------------------|-----------|---|
| 1. History            | <u>9</u>  | The straight, wooden section of an arrow.                             |
| 2. Botanical          | <u>8</u>  | A tool used to shape and straighten wood.                             |
| 3. Scapula hoe        | <u>1</u>  | A body of knowledge that represents events of the past.               |
| 4. Maul               | <u>2</u>  | Item categorized as a plant or plant life.                            |
| 5. Organic            | <u>10</u> | A tool used to scrape and clean hides.                                |
| 6. Knapping           | <u>4</u>  | A stone tool with blunted or rounded edges used for hammering.        |
| 7. Flint              | <u>6</u>  | The shaping of stone artifacts by means of chipping or flaking.       |
| 8. Shaft straightener | <u>5</u>  | A substance of animal or vegetable origin.                            |
| 9. Shaft              | <u>7</u>  | A hard stone commonly used to make arrowheads and stone knife blades. |
| 10. Flesher           | <u>3</u>  | A bone tool typically made from the shoulder blade of a bison.        |

## Segment Three Talking Points

### 1. Why is it important to stay organized in the lab?

For many of the same reasons it is important to stay organized in the field. The lab is where all the information comes together, not only for the scientists who participated in the dig, but for other people who need the information and weren't present, such as archaeologists studying other Native American sites in the same area. It is important that the information is as precise as possible, since so many people will be using that same information in their studies.

Many different people study the artifacts in the lab. And they are studied in many different ways. Therefore, they are laid out perhaps according to the material from which they are made and then according to where they were found within the site, and then perhaps according to how they were made. And each of these analyses could be performed by a different researcher, and even across the country in a different lab. It is critical that artifacts are not mixed up in the lab, lest the analyses be flawed. The best way to prevent such mix-ups is to be absolutely diligent in labeling and handling the artifacts.

### 2. Why do archaeologists separate all the different kinds of items, even if they came from the same bag?

Different types of artifacts are studied in different ways. Different people, often experts who specialize in a certain type of artifact analysis, study the different types of artifacts. For instance, there are specialists who study the bone artifacts, people who study the chipped stone artifacts, and different people again who study the pottery. These people may be working in separate labs thousands of miles apart! All of these different people need to know where the artifact was found, and often what other artifacts were found around it. Organization is critical to keep this type of information intact, and to keep everybody working towards answering the research questions without duplicating effort.

It is important to know how much of one type of item is seen not only in one spot, but also throughout the entire dig. For example, if there were only a few bison bones found, the scientists might conclude that the tribe that was there didn't eat a lot of meat and visa versa. If there were a lot of metal tools found but no process for making the tools, then the scientists might reasonably conclude that there was a lot of trade with Europeans, and visa versa. In the case of Scattered Village, archaeologists found a large amount of evidence of the physical production of antler bracelets, including every stage of production from raw materials to finished product. As a result of this find, they came to the conclusion that the tribe that originally occupied the site was involved in trade and manufacturing.

3. Why didn't archaeologists just tear up the city of Mandan to excavate the rest of the village?

One reason is because people have homes and businesses on that site. Plus, enough artifacts were gathered from the site that archaeologists were able to get a really thorough picture of life at Scattered Village. Also, because technology is constantly changing and advancing, scientists wanted to leave parts of the site untouched for future investigation.

## **Day 4**

Content review

Project Option 1:

Present findings

- Present stories made up from the previous day.
- The group that received the bag stands in front of the class and presents their “findings” and the process by which they came to these conclusions. Who did they talk to for more information? Where did they find their information?

Project Option 2:

Discuss as a group elements of our culture that might survive a thousand years after us and why it would survive. For example: technology, storage devices, plastics, steel, world community, etc.

Enrichment project:

Have the student pick an object and investigate how that object has changed since its initial inception. For example: what did early hammers look like compared to how a hammer looks today or examine cooking processes over time, from early outdoor cooking over a fire to microwave ovens, etc.

COMMENTS/NOTES:

## USES FOR BISON HIDES

TIPI  
SHIELDS  
CLOTHES  
SHOES  
ROBES  
TRADE  
BLANKETS  
BULLBOATS  
ART CANVASES  
RUGS  
PARFLECHE (BAG)  
SLEDS  
SCARECROWS  
MASKS  
TOYS (BALLS/TRAMPOLINES,ETC.)  
CORD  
CONTAINERS  
FOOD STORAGE  
POTS FOR BOILING  
AND MANY MORE!



## **\* TOPIC SITES**

<http://www.state.nd.us/hist/index.html> (State of North Dakota)  
<http://www.nps.gov/knri/> (Knife River Park Service)  
<http://photoswest.org/collect.htm> (Denver Museum)  
<http://www.archives.gov/> (National Archives)  
<http://www.nga.gov/education/index.shtm> (National Gallery of Art)  
<http://memory.loc.gov/ammem/> (Library of Congress home page)  
<http://memory.loc.gov/pp/pphome.html> (Library of Congress Photos Archive)  
<http://lib.fbcc.bia.edu/fortberthold/Tmln01.asp> (Fort Berthold/Tribal timeline)  
<http://fbcc-lsweb.fbcc.bia.edu/FortBerthold/TATBIO.htm> (Fort Berthold Tribal biographies)  
[http:// www. Si.edu](http://www.Si.edu) (Smithsonian Institute Home page)  
<http://siris-archives.si.edu/> (Smithsonian Institute Archives Home page)  
[http://www.peabody.harvard.edu/Lewis\\_and\\_Clark/default.html](http://www.peabody.harvard.edu/Lewis_and_Clark/default.html) (Lewis and Clark/Native American experience site)  
<http://l3.ed.uidaho.edu/index.asp?ShowFlash=true&ExpeditionID=1> (Interactive Lewis and Clark Map)

## **FUN SITES**

<http://www.pbs.org> (Cool site for teachers)  
<http://school.discovery.com> (Cool site for teachers)  
<http://www.owl.org> (Cool site for teachers)  
<http://www.digonsite.com> (Archaeological site for kids)  
[http://www.archaeolink.com/glossary\\_of\\_archaeology.htm](http://www.archaeolink.com/glossary_of_archaeology.htm) (Archaeological glossary for kids)  
<http://www.archaeolink.com> (Archaeological Web ring for kids)  
<http://www.kathimitchell.com/Natam.htm> (Educational web ring for kids)

## **SAMPLE SEARCH TERMS**

CARL BODMER  
GEORGE CATLIN  
EDWARD S. CURTIS  
JOSEPH DIXON  
PLAINS INDIANS  
MANDAN INDIANS  
THREE AFFILIATED TRIBES  
NATIONAL ARCHIVES  
ARCHAEOLOGY  
ARCHIVE PHOTOS

\*Many of these sites are subject to change.

COMMENTS/NOTES: