

MONTANA ANCIENT TEACHINGS

How to Use This Curriculum

THE BIG PICTURE

Montana Ancient Teachings is a set of curriculum materials designed to introduce human prehistory and archaeology into Montana schools.

Montana Ancient Teachings targets intermediate students in grades 4–5, and middle school students in grades 6–8. Activities are adaptable to other levels.

Montana Ancient Teachings is divided into theme presentations:

Theme 1 ~ **Ancient Teachings in Archaeology**

Theme 2 ~ **Ancient Origins and People**

Theme 3 ~ **Ancient Technology**

Theme 4 ~ **Ancient Subsistence**

Theme 5 ~ **Ancient Shelter**

Each theme contains information necessary for a general understanding of prehistory and archaeology.

Ancient Teachings in Archaeology and **Ancient Origins and People** (Themes 1 and 2) are designed for introductory use. Ideally, intermediate students would receive this instruction. Instruction may also be at the middle school level if students did not receive Themes 1 and 2 in a prior grade.

Ancient Technology, **Ancient Subsistence**, and **Ancient Shelter** present a more in-depth look at Montana prehistory and archaeological methods and theories. Themes 3, 4, and 5 are best taught upon completion of Themes 1 and 2. Collaboration

among teachers, within a building or district, is necessary to determine which themes are to be taught at which grade levels.

Each theme has, or will have available, one or more traveling kits from the Montana Historical Society's Education Department to accompany instruction. Also available throughout the state is a variety of other materials. See the *Montana Archaeology Education Resource Catalog* below for further information.

Montana Ancient Teachings is designed to be an interdisciplinary unit. Mold it to suit your content and skill delivery requirements. See the **Educational Guide** later in this introduction to determine the focus for your curriculum needs.

Step right into archaeology, match your learner needs and goals, and have fun!

THE PIECES

The themes in *Montana Ancient Teachings* follow a consistent format. Each theme is identified by its number: 1, 2, 3, 4, or 5. Each lesson within a theme is indicated by a letter (A, B, C, etc.). Thus, 1B is Theme 1—Lesson B; 4D is Theme 4—Lesson D; and so on. Each theme is presented with a divider page. Located on this divider page is a list of lessons, each with a leading question and an overview statement. Each lesson consists of a *narrative*, a *vocabulary list*, and one or more *activities*.

TEACHER DELIVERY STRATEGIES:

~Use the leading question and

activity first to instruct from an inquiry model of delivery. Then follow up by reading the narrative.

~ Or use the narrative first for a reading lesson, along with the vocabulary list. Then follow up with the activity.

Review the format to determine your instructional path and choice of delivery. Develop a plan to accompany your teaching style and curriculum needs and, most importantly, to guide learners.

1. Narratives target the upper end of intermediate readers and are designed for use as a reading lesson. The narrative presents information to convey a main idea about archaeology and the ancient past. Vocabulary words are printed in **boldface**.

2. Vocabulary is listed, in alphabetical order, on a separate page. A **Glossary for Teachers**—defining all vocabulary words highlighted in the narratives—appears at the end of this curriculum.

3. Activities follow the narrative and vocabulary list. One or more may be included with an individual lesson. Activities may be used prior to the narrative, or upon completion of it. Communication arts, history and geography, math, science, arts, and technology content areas are represented. The **Curriculum Connections** at the end of this curriculum offer a cross-reference for content areas, both by theme and curriculum area.

The activity format has been designed with the relevant data at the top. This data includes grade level, activity time, subject matter, cooperative learning groupings, and the materials needed to perform the activity. Next comes the objective and outcome,

followed by the activity itself, presented step-by-step. The final portion is the extension, which offers ideas about how to delve further into a topic; sometimes there is also a listing here of additional available resources.

A student prerequisite to this unit is the creation of an **Arch(aeology) Journal**. A student completes activity work and vocabulary in the Arch Journal. Upon completion of a theme, students can use the information in their journals for culminating projects, such as books or presentations based on the knowledge they have acquired.

TIPS FOR TEACHERS AND ARCHAEOLOGISTS

A Hitchhiker's Guide to the Universe of Archaeology Education

Whether you are a teacher bitten by the archaeology bug or an archaeologist making a foray into the school system, how do you ensure that a *Big Mistake* does not occur? The answer is planning, communication, and developing a deeper understanding of the needs, demands, and issues related to teaching and archaeology. This section offers tips to intrepid archaeology education adventurers. These tips should help both students and teachers avoid problems and should help to create a mutually rewarding experience.

TIPS FOR TEACHERS

1. Archaeology is not a treasure hunt. Archaeologists seek knowledge of the past through a rigorous scientific process. Encouraging students to look for treasures in the ground may sound romantic and motivating, but it is seen as looting by archaeologists, and often

it is illegal. You should convey to students the ethic that the past is a shared heritage. The true romance of archaeology is not in finding treasures, but in helping people to understand their shared past. Excavated materials help us to explain bygone lifeways. They do not belong to any one person; rather, as stewards, we all have a responsibility to treat prehistoric and historic materials in a special way. Any excavation should be conducted under the auspices of a trained archaeologist.

2. Students should be taught proper archaeological methodology, which involves more than digging. It begins with a research design, where questions and potential sites are considered. A permit or license often is required to set foot on a site, and many sites purposely are left undisturbed unless potentially destructive forces require their study to reduce loss to the archaeological record. Archaeologists use techniques like surface collecting, aerial photography, and mapping of artifacts. They spend hours cataloging, restoring, and interpreting the larger site picture. Finally, they write a site report and submit it to the appropriate authority, such as the Montana State Historic Preservation Office (SHPO).

3. Because they are dealing with professionals in another field, teachers should be aware of the ethics, practices, and demands of the archaeology profession.

TIPS FOR ARCHAEOLOGISTS*

1. Most archaeologists are happy to contribute their fair share to public education. Unfortunately, an archaeologist's willingness to participate does

not assure that he or she has a natural ability to be an effective communicator in the classroom. A boring or poorly organized program is little better than no program at all, for in neither case do communication and education occur.

2. A public talk, whether in a classroom or to a group of adults, is different from "reading a paper" at a conference. A classroom talk should be prepared and presented with the audience in mind. Here are a few key do's and don't's:

- **Do keep your talk short.**

Twenty minutes is long enough.

- **Don't read your presentation.**

Be down to earth.

- **Do be relevant.** Put details in the context of your audience's lives.

- **Do use props and visual aids.**

Artifacts and pictures add life and depth.

- **Do invite questions.** And answers.

3. Slides often are the visual medium of choice for an archaeologist communicating about archaeology. However, what the trained eye of an archaeologist can see will often be invisible to the untrained eyes of kids and the public audience.

- **Choose your subjects carefully.** Make the images understandable and interesting.

- **Start your show with a map.** Put archaeology into spatial context.

- **Avoid pictures of invisible sites.** A map or drawing may illustrate such a site better.

- **Don't show detailed profiles.** Most profiles don't photograph

well enough.

- **Use artifact pictures.** While we want to avoid the “treasure hunt” image of archaeology, kids **do** want to see the objects uncovered.

- **Use slides of people in action.** Images of the crew excavating, screening, or gluing a pot create human interest.

- **Pace and plan your slide sequence.** Don’t leave kids staring at one slide too long; use duplicate slides to return to a previous image to make a point.

- **Preview your slides.** Backwards, upside-down, and stuck slides can compromise even the best show.

**Adapted from “Tips For Archaeologists Involved in Public Education” by Mary L. Kwas, SAA Archaeology and Public Education Newsletter 5(4):18 [1995].*

TIPS FOR FIELD VISITS TO SITES

Archaeologists:

1. When a teacher wants to visit a particular site, he or she needs to show that the visit and related activities have educational value and fit into the immediate curriculum. Archaeologists can learn about the students’ course of study by requesting local curriculum guidelines or by talking with the teacher. They also should know that teachers spend a lot of time getting permission, raising funds, phoning parents, and readying the class academically and behaviorally for a field trip.

2. Your plan to accommodate a class visit to the field should include having enough equipment and activities for the size of the group and the time it

will be at the site; providing for personal needs, snacks and lunch, and trash collection; having a foul weather plan; and sharing safety precautions and emergency procedures with the teacher.

Teachers and Archaeologists:

1. Communication between teachers and archaeologists is essential. Clarify in advance the class size, dates, times, purpose of the visit for the students, and the teacher’s and archaeologist’s objectives.

2. Determine the level of intellectual and physical skills that you can expect from the students. Do they have the mathematical skills to handle simple graphing and mapping of artifacts? Can they lift a wheelbarrow individually, or will partners be necessary?

3. Assess the knowledge that students bring to the visit. Have they studied local history? Do they know about the role of an archaeologist? Is the teacher clear about the problems of looting and the importance of archaeological ethics?

4. Understand any special needs of the students coming to the site. Do they have special abilities or disabilities? Are they academically accelerated or challenged? Can they work cooperatively in groups picked at random?

5. Determine how you will convey safety rules to the students.

6. Determine disciplinary alternatives. Although not usually a problem with a highly motivated group, this potential should be considered beforehand by the teacher and the archaeologist. While a teacher bears the primary responsibility for discipline, an archaeologist must be able to deal with minor situations.

7. Follow up on the visit. What will students be expected to do when they return to their school? How will the site visit prepare them for follow-up activities? What form of evaluation will the teacher, the archaeologist, and the students use, and what information will they seek?

TIPS FOR DISCOVERIES: HEY, LOOK WHAT I FOUND!*

Finding an artifact on the ground is perhaps one of the most exciting moments in archaeology. Even seasoned archaeologists still feel the “thrill of discovery” when they find an “arrowhead” lying just where it was left thousands of years ago.

But with discovery comes responsibility. For an artifact to mean anything in archaeology, it is essential that archaeologists document where it was found and what it was found with. If an artifact is simply picked up and taken away, it loses its association or “context”—and the information that the artifact might tell about the past is lost. With the removal of the artifact, the site from which it was taken is also damaged. Think about a book from which, each year, someone removes a page. After a while, the story the book tells no longer makes any sense.

Because archaeological sites on public land are protected under state and federal laws, it is important to know whose land you are on. When you find prehistoric or historic artifacts, “finders-keepers” is seldom the rule. Removing artifacts from federal and state land without a permit is illegal under the National Archaeological Resources Protection Act and the Montana State Antiquities Act. And in

Montana, if you find objects on private land, those objects belong to the landowner. You should respect the right of landowners (public or private) to control who is on their land and whether any artifacts are removed from it. Montana also has a human burial protection law (Montana Human Remains and Burial Site Protection Act) that protects all human burial sites—marked and unmarked—from willful disturbance, on both public and private land.

So, what should you do if you find an “arrowhead” on the ground?

The simplest and best thing to do is enjoy the arrowhead and then put it back where you found it. If you want, you can tell the landowner about what you found. Federal and state land-managing agencies have archaeologists on staff who would like to hear about your discoveries. And after checking them out, they would be happy to tell you more about the artifacts you found. In making your report to such an agency, it can be useful if you draw a picture or take a photograph of the artifact. You might also want to draw a map of exactly where you saw it. To help archaeologists find the artifact again, you can measure its distance and direction from some prominent landmark like a sign or a large rock. A private landowner may let you keep what you found. Professional archaeologists, however, do not keep artifacts for themselves. They catalog and add artifacts to public collections that are researched and may be put on display in a museum where everyone can see them and learn from them.

You should never dig for artifacts. This is called “pothunting” or “looting” and destroys an archaeological site

very quickly. Even an archaeological excavation changes a site forever. This is why archaeologists carefully record what they dig and where they find buried artifacts. With proper archaeological excavation, it should be possible to reconstruct in the laboratory exactly where each artifact was

found in the ground. This is what tells us how old artifacts are, how they were used, and what stories they can tell us about the ancient people who made them.

** From Mark Baumler, State Archaeologist, Montana Historical Society.*