

Putting it into Context

Through a series of activities, students learn about the importance of artifacts in context for learning about the past and the people who lived there in preparation for their field trip to Lovelock Cave.

Grade Level: 4th

Phenomena:

What do artifacts tell us about the past?

Objectives:

- Students will explain the importance of artifacts and their context.
- Students will evaluate why it is important to leave what you find where you find it.

Materials:

- Index cards
- Pencils
- Room cards
- Exploring the Pits signs
- Paper

Appendixes:

- Room cards pg. 6
- Mortar and Pestle pg. 7
- Clue Cards Pgs. 8-11

Time Considerations:

Preparations: 10 minutes

Lesson Time: 50-60 minutes

Introduction: 5minutes

Activity 1: 20 minutes

Activity 2: 20minutes

Conclusion: 5minutes

Related Lesson Plans:

Lovelock Cave Field Trip
Impact Monster
Trash Timeline
LNT Memory
Know Before You Go
Stop the Invasion!



Next Generation Science Standards

5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Science and Engineering Practices (SEP):

Obtaining, Evaluating, and Communicating Information.

Disciplinary Core Ideas:

Human Impacts on Earth's Systems

Crosscutting Concepts:

Systems and System Models

Excellence in Environmental Education Guidelines

Strand 1 - Questioning, Analysis, and Interpretation Skills E)

Organizing information - Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics.

Strand 1 - Questioning, Analysis, and Interpretation Skills G)

Drawing conclusions and developing explanations - Learners can develop simple explanations that address their questions about the environment.

This lesson has been adapted from Smith, Shelley J., Moe, Jeanne M., Letts, Kelly A., and Paterson, Danielle M. "Context." *Intrigue of the Past: Investigating Archaeology*. Utah Interagency Task Force on Cultural Resources,

Background

The things that people own can tell something about the person. The objects a person has chosen to have can indicate the person's age, gender, and interests. For example, a baseball bat and a football helmet in someone's bedroom suggests that the owner likes sports. Posters of pets and a collection of stuffed animals could mean that the person is an animal lover. The objects (**artifacts**) can only tell a complete story if they are found together, where the owner has left them (**context**).

Archaeologists rely on the objects people made (**artifacts**) and where they left them

(**context**) to learn the story of past people. Think of a prehistoric pottery bowl, beautifully painted. It has a very different meaning if it is found at a prehistoric site in a grave than if it is found full of corn in an ancient storage room. Its meaning changes further if it is found in someone's modern living room -the bowl has now lost its original context and all connection with its prehistoric owners. It has become only a thing, no longer a messenger from the past.

Archaeologists preserve the context of artifacts they recover from sites by recording the location of everything they find. The artifact and its

context provide more information to the archaeologist than the artifact alone. When context is lost, information is lost. **Without context an artifact is only a thing.**

This lesson is taught by Nevada Outdoor School, in part, to prepare fourth grade students for a field trip to the historic Lovelock Cave. This lesson is intended to instill a deep respect for this historical site as well as any other natural areas they may visit in the future.

Preparation

- Make sure there are enough index cards and pencils for each group.
- Number the index cards by group. (group 1, group 2, etc.)
- Make sure the students understand that context is everything to what the artifact was used for and how it was made.

Doing the Activity

Introduction:

After introducing yourself, begin the lesson by talking about the upcoming field trip. Ask students to raise their hand if they can tell you where they are going? (Lovelock Cave!)

Ask students if they are excited for the field trip? (YES!) Let students know that you are also excited for the field trip and to see them at Lovelock Cave.

Spend the next couple of minutes reviewing the history of Lovelock Cave and any relevant vocabulary through a question

and answer format.

- Who can tell me what was found in Lovelock Cave when it was excavated (dug up)? (Over thousands of artifacts: human remains, blankets made of fur and feathers, textiles, cordage rope, twine, braids, bone artifacts, animal remains, wooden artifacts, shell artifacts, stone artifacts, and duck decoys.)
- Hopefully one of the students will mention duck decoys, if not be sure to mention them yourself.
- The duck decoys were one of the greatest discoveries in the cave. Eleven duck decoys were found in total, and at 2,000 years old they are the oldest duck decoys found anywhere in the world! Let students know they will see a replica of the duck decoys (not one of the actual duck decoys found in the cave, but one that was made later to look just like it) on their tour of the Marzen House Museum.

After brainstorming, ask students if they know what word we would use to describe all of the “stuff” found in the cave? (artifacts). One way to help you remember the definition of an artifact is to think of them as clues to the past. Artifacts are anything made or used by people of the past and they help us answer questions about how they may have lived years ago.

- Today professionals study artifacts to learn about the people who were here before us.

Raise your hand if you know what we call people who study artifacts? (archaeologist) This is a good lead into talking a bit more about what the students should expect during their field trip.

- While on the field trip there will be an actual archeologist who will tour them through the cave, show them where they found the artifacts, and talk about how the archeologist excavated the artifacts from the cave.
- A wildlife biologist will be there with skins and skulls from a variety of animals found throughout the region.
- There will be a skit about life on the Emigrant Trail and the trials they traveled while crossing the 40-mile desert.
- Another archaeologist will teach us about the Paiute Indian’s daily life as well as give us an atlatl (spear throwing) demonstration.
- You will also go on a tour of the Marzen House Museum where they have many artifacts that were found in the cave, as well as many other artifacts from the first settlers of Lovelock. All in all it will be a fun and full day!

Now is a good time to explain to students you are here not only to get them excited for their field trip, but also to talk about something that is very important to remember whenever you are outside and especially while we are on our field trip to Lovelock Cave - Leave No Trace.

Ask students if anyone has heard of Leave No Trace before.

If so, have the student share with the class what Leave No Trace means to them. (responsible outdoor recreation)

Today we will be talking about one particular principle of Leave No Trace.

Activity 1: What on Earth is this place?

This activity focuses on the importance of context:

Now that we know that artifacts are clues to the past and archeologists study those clues, we want to look at context.

A ball was found, can you guess what kind of ball it was? (You should get all sorts of answers)

Tell them you're going to share what was found with the ball, then they can have another chance to guess.

The ball was found with a long smooth piece of wood, in the middle of four white plates shaped like a diamond, and next to a giant leather glove. (baseball)

You can give them other examples: A ball was found on a grassy field divided into half by a line that had a giant circle in the middle of it, on both ends of the field there are large posts with nets between each of them. (soccer ball)

If needed: A ball was found with an interesting item - a smooth stick and attached to the top of that stick was a round piece of wood that has stiff netting in the middle, it was on a large flat hard surface with a net set up across the middle of it. (tennis

ball)

Ask students how they knew the type of ball you were describing. (what and where it was found with) Another word for that is context!

Give students the sentence with all the vocabulary words.

Ask students if it's possible to know the function of a room with only a few objects listed.

What about if an object is out of place, does it affect the context of all the other artifacts?

Tell the students they are going to play a game requiring that they think like archaeologists.

Divide the class into groups of five to six students, and assign each group a different number. Give each group one index card per student and one pencil per student. Also, give each group one piece of paper to write their guesses on.

Have groups select a room card - make sure they keep it a secret. Have the students brainstorm what types of objects (artifacts) are found in the room to make it distinctive.

Then have each student write one object on their card, for a total of five to six objects. Each index card should also have the group number listed on the back. (You can do this before hand or have them do it.) Make sure they only write one item on their card and that they do not write what the room is.

The stack of index cards from each group is passed to the next group, until each group has

seen every stack of cards and tried to guess the function of each place. Make sure they write their guesses down, along with the group number that they are guessing about. Be sure the other groups do not hear the correct answers. Each time, before the cards are passed, have a student remove one card and place it off to the side so it does not get mixed up with the other sets of cards.

By the last pass there should only be one item left. If there are more remove the rest and set those aside.

Review each group's room one at a time - start by asking the last group that got the cards to guess and progress to the first group. Hopefully, the first groups that got the cards with all of the objects listed will have the correct answer, while the last groups to get the cards with just one item will have a wrong guess. After you've found out everyone's guesses go through the items and give the correct answer. Do this for each group.

Ask the students if it was difficult to tell what the function of a room was with only a few items.

Ask them what would happen if we'd kept passing the cards until there were none left.

Have students look at the random assortment of cards they have on their desk - would those items make sense if found in a room together?

Ask them why is it important to have all of the artifacts in their original location.

You want to get the point across

that removing artifacts from a site removes them from their context and makes it very difficult to get a complete understanding of past people.

Ask them if they know the Leave No Trace principle you're talking about? (Leave What You Find!)

Activity 2: Exploring the Pits

Students will explore one artifact found in two different contexts.

Tell students that they know certain items found together can signify what a place was used for. What happens if we find the same item in two different places, but with different artifacts.

Many different artifacts were found in various parts of Lovelock Cave. We're going to look at a couple of items that were found in two different contexts - mortars and pestles.

Post the picture of the mortar and pestle on the board. Tell students to put their archeologist hats back on and pretend this is all they found in a pit at Lovelock Cave - what do they think it was used for (mortars and pestles were used for food preparation.)

Tell them that after they excavated a bit more they found these artifacts in the pit: woven carrying cases, nets made of twine, and rubbing stones. Post these signs on the board to the left of the original signs under the sign Pit A.

Now have them think about what the function of that room was and if that changes the

meaning of the mortar and pestle. Have them write it on the back of a piece of paper from the first activity.

Ask students what they think the purpose of Pit A was and why? (Pit A is meant to signify dwelling area or a storage area so it could have been used for actual food preparation or preparing medications) *(skip to number 10 if time is short)*

Tell them they were excavating at Pit B and found another mortar and pestle but this time they were found with these artifacts: woven matting, shell necklaces, and human remains. Post these signs on the board to the right of the original signs under the sign Pit B.

Now have them think about what the function of that room was and if that changes the meaning of the mortar and pestle. Have them write it on the back of a piece of paper from the first activity.

Ask students what they think the purpose of Pit B was and why? (Pit B signifies a burial site so it could have been meant for an offering or something for the person to take with them to the after life)

Ask the students if they would have been able to form these conclusions if the other artifacts hadn't been found with the mortars and pestles.

OK, archeologists...tell me this, how can we apply what we just learned through these activities to our Lovelock Cave fieldtrip? (Leave What You Find!!) That's right, it is incredibly important to Leave What You Find while visiting archeological sites.

Conclusion

I have a story for you about Lovelock Cave. A few years ago, right before the annual fourth grade field trip, an archeologist found a piece of a basket. This was an incredibly exciting discovery and they decided to leave it where they found it until after the field trip so the students could see an artifact in the cave. About halfway through the week the basket piece went missing. Now, it's sitting on someone's bookshelf or forgotten under someone's bed. Either way - other students didn't get to see it and neither do you; because this person didn't Leave What They Found...

Tell students you know they are all trustworthy and will respect the artifacts found at the cave and you greatly appreciate that. Thank them for having you in their class and let them know you're excited to see them at the cave!

Assessment

Evaluate students knowledge when reviewing answers for activity two and three.

Extensions

Discuss with students or have them research what being an archaeologist entails - how they form hypotheses, research, conduct excavations... Explore how archaeologists rely on context. How could that affect their hypotheses? Will we ever find out for sure what happened in the past or will we continue to rely on artifacts and context?

Vocabulary

Artifact: an object made or used by humans that give us clues to the past

Archaeologist: an anthropologist who studies prehistoric people and their culture

Atlatl: a throwing device usually consisting of a stick fitted with a thong or socket to steady the end of the spear and extend the length it travels

Context: the relationship artifacts have to each other and the situation in which they are found

Duck Decoy: a duck used to lure wild ducks into a decoy

Excavation: a hole formed by digging; the site of archaeological exploration

Flint Knapping: shaping flint into tools, mainly used by prehistoric people

Mortars and Pestles: Used together as a tool to crush, grind, and mix substances

Obsidian: a usually black or banded, hard volcanic glass

Tule: either of two large bulrushes, *Scripus Lacustris* or *S. acutus*, found in California and adjacent regions in inundated lands and marshes

Assessment

Extensions

Sources

- Loud, Llewellyn L. and Harrington, Mark R. *Lovelock Cave: A source book of prehistory unique in its richness and scope*. Sparks, NV: Falcon Hill Press, 1991
- "Pestle & Mortar." stock.XCHNG. Web. 12 Jan 2010. <www.sxc.hu/photo/73631>.
- Smith, Shelley J., Moe, Jeanne M., Letts, Kelly A., and Paterson, Danielle M. "Context." *Intrigue of the Past: Investigating Archaeology*. Utah Inter agency Task Force on Cultural Resources, 1997. 19-21.

Barn

Bedroom

Gym

Bowling Alley

Swimming Pool

Kitchen

Laundry Room

Vet Office

Doctor's Office

Hardware Store

Classroom

Pet Store

Mortar and pestle



Pit A

Pit B

Woven Carrying Case

Twine Nets

Rubbing Stones

Woven Matting

Shell Necklaces

Human Remains