

Archaeological Excavation

Grade: 3rd

Time: 4-6 days

Lesson Description: Students will learn archaeological terms and the process of excavating a site through hands-on activities.



Photo: Some common artifacts: From left, bone fishhook barb, hand-painted European ceramic plate fragment, chipped stone projectile point of red chert, slate lance with incised design, pecked stone plummet of greywacke.

Kit Includes:

- Archaeological Excavation PowerPoint
- Alutiiq sites matching game
- Four plastic containers
- Artifact pictures:
- Fishing Site:

1. Ulu	Hunting Site:
2. Net Sinker	1. Ground Point
3. Line Weight	2. Chipped Point
4. Cobble Scraper	3. Side Blade
5. Fishhook Shank	4. Ground Knife
6. Fishhook Barb	5. Piece Esquillee
	6. Chipped Knives
- Spoons/small trowels
- Small sieves
- Ruler
- Small plastic sandwich bags and quart-size bags
- Magnifying glasses
- Alutiiq Museum Technological Inventory
- Kodiak Archaeology: A Guide to Sites, Artifacts, and Historic Preservation
- Teacher Artifact Placement Guide

Materials Needed:

- Paint brushes to “clean” artifacts
- Packing peanuts and paper pet bedding

Vocabulary	Alutiiq Vocabulary	Art Elements	Art Principles	Content Connections
Archaeology	<i>Ulukaq</i> – Ulu	<input checked="" type="checkbox"/> Line	<input type="checkbox"/> Pattern	Social Studies- Local History, Culture, and Community; Alaska, the Changing State
Stratigraphy	<i>Nusiq</i> – Ground knife	<input checked="" type="checkbox"/> Shape	<input type="checkbox"/> Rhythm/ Movement	
Artifacts	<i>Iquq, Kukeglugaq</i> – Chipped point	<input checked="" type="checkbox"/> Color	<input checked="" type="checkbox"/> Proportion/ Scale	
Sites	<i>Iqsam iqua</i> – Fishhook barb	<input checked="" type="checkbox"/> Value	<input type="checkbox"/> Balance	
Hypothesis	<i>Iqsam ilakua'a</i> – Fishhook shank	<input type="checkbox"/> Texture	<input type="checkbox"/> Unity	
Theorize	<i>Kicauteq, Kitsuuteq</i> – Line weight	<input checked="" type="checkbox"/> Space/ Perspective	<input checked="" type="checkbox"/> Emphasis	
	<i>Kitsuuteq</i> – Net sinker			Archaeology
	<i>Ulukalleq</i> – Side blade			
	<i>Ipegca'imasqaq iquq</i> – Ground point			

Objectives and Assessment Criteria:

Students will learn...

- What archaeology is and the role of archaeologists.

- Some archaeology terms and how sites and artifacts help us learn about Alutiiq history.
- Why there are gaps in our knowledge of the past.
- The principles of stratigraphy and excavation strategies.
- How to measure, draw, and understand an excavation.
- How to help preserve archaeological sites.

Third Grade Reading Standards for Informational Text:

1. Ask and answer questions to demonstrate understanding of a text, (e.g., explaining what the text says explicitly, making basic inferences and predictions), referring explicitly to the text as the basis for the answers.

Writing Standards

2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
4. With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.

Speaking and Listening Standards

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
3. Ask and answer questions about information from a speaker, offering appropriate elaboration or explanations and detail.

Standards for Mathematical Content

3.MD.3. Select an appropriate unit of English, metric, or non-standard measurement to estimate the length, time, weight, or temperature (L).

Geography Standards:

- A5) Evaluate the importance of the locations of human and physical features in interpreting geographic patterns.
- B1) Know that places have distinctive geographic characteristics.
- B3) Relate how people create similarities and differences among places.
- B4) Discuss how and why groups and individuals identify with places.
- B5) Describe and demonstrate how places and regions serve as cultural symbols.

History Standards

C3) Apply thinking skills, including classifying, interpreting, analyzing, summarizing, synthesizing, and evaluating, to understand the historical record.

Third Grade Social Studies

1. Recognize how communities and people are dependent on others and their environment.
2. Understand that our island communities have unique historical and cultural aspects.

Cultural Relevance:

Archaeology is the study of history from the materials people leave behind. For tens of thousands of years, people have built shelters, made tools, harvested resources, raised families, and celebrated life. Archaeologists search for evidence of these activities and collect information to study past societies and how they changed. Archaeologists are historians who work with objects to reveal the past. Archaeologists study sites of all ages, from ancient times to the recent past. Many sites record life before written records and offer a rare glimpse of distant history. Archaeological studies can fill gaps in written history. For Native American people, ancient sites are particularly important as they illustrate the lives of ancestors.

Create:

Prep:

- Read the lesson to begin preparing for the excavation. Procure materials and create dig boxes following the step-by-step instructions in the Teacher Artifact Placement Guide. This lesson plan correlates with the Archaeology Excavation PowerPoint. Students should be able to follow along with the power point while you use the lesson plan to follow along.

Day 1:

- **Slide #3**–Ask students to turn and talk to a classmate about what they think archaeology is. Have students share their ideas with the class.
- **Slide #4**–Archaeology is the study of history from the materials people have left behind.
 - For tens of thousands of years, people have built shelters, made tools, harvested resources, raised families, and celebrated life.
 - Archaeologists search for evidence of these activities and collect information to study past societies and how they changed.
- **Slide #5**–Discuss what an archaeologist is and what they do.
 - Archaeologists study sites of all ages, from ancient times to the recent past.
 - Many sites record life before written records and offer a glimpse of distant history. Archaeological studies can fill gaps in written records.
 - For Native American people, ancient sites are particularly important, as they illustrate the lives of ancestors.
 - Common misconceptions:
 - Archaeologists do NOT dig dinosaur bones. Paleontologists study ancient animals.
 - Archaeologists do NOT study rocks. Geologists study rocks.
- **Slide #6**–Define archaeological records.
 - The archaeological record is the collection of materials created and left by people.
 - These materials are also known as cultural resources.
- **Slide #7**–Ask students to define the following archaeology terminology: Sites, features, artifacts, faunal remains, botanical remains, and provenience. Use slide #7 to show these terms together. Use slides 8 to 13 to see each term on its own slide.
 - **Sites:** Locations with archaeological materials. The places people lived and worked, like a village or a campsite.
 - **Features:** Structures built by people. Immovable objects like a house or a hearth.
 - **Artifacts:** Portable objects made by people like tools, clothing, toys, or artwork.
 - **Faunal Remains:** The remains of animals harvested by people.
 - **Botanical Remains:** The remains of plants harvested by people.
 - **Provenience:** The location of an artifact in a site.
- **Slide #14**–Exit ticket
 - What is one new thing you learned about archaeology today?
 - What is one thing that you are curious to learn more about?

Day 2: Slide #15

- Ask students to share something they learned in the previous lesson.
- **Slide #16**–Play the video. Stewards of Heritage: Kodiak Archaeology–A Library Underground <https://vimeo.com/141452250>
- **Slide #17**–Provide students with background information about Alutiiq sites.
 - More than seven thousand years ago, daring paddlers in skin-covered boats set out to explore a distant island. Braving wind-swept seas they settled the Kodiak Archipelago, founding the islands' Alutiiq culture.

- You won't find the story of these remarkable people in books. Alutiiq history is preserved in over 2,000 archaeological sites.
- These sites are a library of Alutiiq history, each has a unique story.
- Most of these sites hold stone tools.
- Some well-preserved deposits have bone and wood artifacts, and animal remains.
- The remains of sod houses are another common find. Alutiiq people built their houses by digging a hole, fitting it with a wood frame, and covering the frame with sod. When these houses age and collapse, they create depressions.
- **Slide #18**—Divide students into pairs or groups of 3 or 4. Pass out the Alutiiq site matching term cards. Have the students match the Alutiiq sites to their definition.
- **Slide #19**—When all groups are done, share the answers with the class, and have the students check theirs.
 - **Villages**=Long-term settlements
 - **Refuge Rocks**=Settlements on islets where people retreated for protection
 - **Camps**=Short term settlements
 - **Waiting Places**=Places where hunters watched the weather, the tides, and for game
 - **Caves**=Places where whalers stored gear and prepared for hunting
 - **Trap and Weirs**=Stacked stone walls used to trap fish
 - **Processing Sites**=Places where people cared for fish and game
 - **Quarries**=Places where people mined stone for tool making
 - **Rock Art Sites**=Places where people pecked images into boulders and bedrock
 - **Cairns**=Stacked stone markers
 - **Trails & Portages**=Habitually used overland routes
- **Slide #20**—Recent sites
 - Kodiak's archaeological record also includes sites representing recent history, from Russian conquest to the Cold War.
 - In Alaska, any property with evidence of human use over fifty years old can be considered a site.
 - What are some examples of more recent sites that you have seen in Kodiak?
- **Slide #21**—Examples of recent sites in Kodiak

<ul style="list-style-type: none"> ○ Airstrips ○ Brick Kilns ○ Buildings ○ Bunkers ○ Cabins ○ Campsites ○ Canneries ○ Cemeteries ○ Dory Knee Trees ○ Downed Aircraft 	<ul style="list-style-type: none"> ○ Fish Traps ○ Fox Farms ○ Gold Mines ○ Hatcheries ○ Ranches & Corrals ○ Roads ○ Salteries ○ Shipwrecks ○ Whaling Station ○ White Alice Stations
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- **Slide #22**—Discuss who owns archaeological sites in the United States.
 - In the United States, archaeological sites and their contents belong to the owner of the land on which they occur.
 - This includes sites of all ages— in any location, on land, on the beach, or underwater.
 - It is illegal to disturb or collect from a site without authorization and permission from the landowner.
- **Slide #23**—Ask students to brainstorm reasons a site might be lost or hidden. Share the following reasons after a brief discussion.
 - Trash can accumulate, decay, and turn into soil if it is biodegradable.
 - Eventually, people might build a new site on top of an old one, creating new layers of materials.

- Natural disasters such as fires, earthquakes, and volcanic eruptions can destroy sites or bury them in debris. An entire city could be rebuilt on top of fallen homes.
- Repeated flooding could damage a settlement and build up layers of mud.
- Abandoned sites eventually fall due to neglect.
 - Materials may be scavenged, and animals might move in.
 - Eventually grass and trees begin to grow causing the site/city to be covered by dirt and plants. The site may no longer be visible.
- **Slide #24**–What is site looting? And what are the consequences?
 - It is exciting to find an archaeological site, but you should never dig in one.
 - Recreational digging, or looting, is vandalism. Under state and federal laws, it is illegal to disturb a site without permission from the landowner. Looting is damaging and disrespectful.
 - Digging in a site without professional documentation is like ripping pages from a history book. It destroys information and makes it difficult to interpret the deposit.
 - Archaeologists get permission for their studies.
- **Slide #25**–How can we protect sites?
 - Never dig in a site. Take photographs and notes. Report your finds to the landowner, an archaeologist, or to the Alutiiq Museum.
 - Teach your family and friends to respect archaeological sites. Most people do not know that it is destructive, disrespectful, and illegal to alter sites.
 - Report site vandalism to Alutiiq Museum.
- **Slide #26**–Additional activity
 - Search for articles on the internet about archaeological sites that have been tampered with and/or damaged. Share findings.
 - Reasons sites might be damaged vary but could include:
 - Deliberate looting, animal digging, erosion, or damage from war.
 - Discuss as a class why we should protect archaeological sites.
- **Slide #27**–Exit ticket
 - List two kinds of Alutiiq archaeological sites.
 - What is one way you can help to protect archaeological sites?

Day 3: Slide #28

- **Slide #29**–Have students turn and talk to a classmate about what they think stratigraphy is and then share as a class.
- **Slide #30**–What is stratigraphy?
 - Stratigraphy is the study of layers of soil, rock, and other materials (garbage, house remains, etc.) that accumulate over time.
- **Slide #31**–Watch A Kids’ Guide to Stratigraphy with Grant Zazula, Yukon Paleontologist. YouTube: Yukon Beringia Interpretive Centre, 3:37, https://www.youtube.com/watch?v=TJkp_HWkVjM
- **Slide #32**–Ask students where they have seen examples of stratigraphy in Kodiak. Possible answers include banks of a river or stream, construction sites, rockslide, animal burrow.
- **Slide #33**–Watch the video: Stratigraphy at the Nunalleq Site in Womens Bay
- **Slide #34**–Have students turn and talk to a classmate about the following questions and then share as a class.
 - What do you expect to find when you dig?
 - Why?
 - What other questions do you have?
- **Slide #35**–Archaeologists are not allowed to dig without a permit. We must write to the Archaeology Office to start the dig. The letter should include the following information. This can be done individually, in groups, or as a whole class.

- Research question: Based on your conversation with your classmates, what do you want to study and why is this interesting?
- Research strategy: How will you conduct your study – by excavation?
- Description of your record-keeping methods: All artifacts and features will be mapped. Detailed pictures of all artifacts will be drawn.
- Identification of a museum that agrees to preserve the results of the excavation: The Alutiiq Museum
- **Slide #36**–Sample letter

To whom it may concern,
 My name is _____. I am a junior archaeologist at _____ and am writing to request permission for an archaeological dig. I am very curious to know _____. I plan to excavate the site to find out. All artifacts and features that I find will be mapped out. Detailed pictures of all artifacts will also be drawn. The Alutiiq Museum will preserve everything from my excavation—the finds and all my notes. May I have permission to proceed?

Sincerely,

 Junior Archaeologist

- Exit ticket is the letter to the archaeology office.

Day 4: Slide #37

- **Slide #38**–Share the letter from the archaeology office with the class.

Dear Junior Archaeologists,
 Thank you for writing to the archaeology office for permission to dig in Kodiak, Alaska. We have reviewed your research questions and strategies. Your record-keeping methods meet our expectations. We grant you a permit to proceed with your dig and are excited to learn about your finds.

Sincerely,
 The Archaeology Office

- **Slide #39**–Go through the list of excavation tools and share their functions.
- **Slide #40**–Review Digging do and don'ts

Do:	Don'ts:
Dig carefully.	Dig quickly.
Dig in flat/horizontal movements.	Dig a hole/vertical movements.
Expose artifacts.	Scoop out artifacts.
Record position of find(s) and all objects around it.	Immediately remove find(s).
Dig one layer at a time.	Put excavated dirt back in the box.
Put excavated dirt in a bag to be sieved.	Put all artifacts in one bag.
Bag each artifact individually.	

- Divide your class into teams. Go over all the jobs/roles on the excavation team. You can choose to do a more complex excavation, or a basic one based on the needs of your class/students.
- Provide each group with one copy of the Alutiiq Museum's Technological Inventory. They will use this to identify the artifacts found.
- **Slide #41**–Complex excavation team roles
 - Excavator–Uses trowel/spoon to horizontally remove dirt/layer. When an artifact is found, use a brush to clear away all debris.
 - Mapper–Draws picture/diagram of artifact location on graph paper.

- Artifact Recorder–Takes measurements of the artifact found and draws a picture of it on the artifact recording sheet.
- Artifact Bagger–Uses a brush to clean off an artifact, places it in a bag, and labels the bag with the layer it was found in. For example, “Layer 2”.
- Overseer–Makes sure that everything is running smoothly and provides help when needed. They read instructions, measure the soil depth, and fill out the soil profile.
- Sieve Specialist–Takes the excavated dirt and puts it through the sieve to look for missed artifacts.
- Go over the following instructions and then provide students with time to excavate. The instructions were created so that each student would find an artifact in both layers. You may decide to have your students switch roles at a specific time instead of after an artifact is found. You can also have students keep the same jobs for the entire excavation.
- **Slide #42**–Basic excavation team roles
 - Excavators–Take turns using the trowel/spoon to horizontally remove dirt/layer.
 - Recorders–Read instructions, measure the soil depth, and fill out the Soil Profile. Recorders will use the Alutiiq Museum Technological Inventory to identify the artifact.
 - Examiners–Make sure that everything is running smoothly and provide help when needed. After an artifact has been found, use the brush to clean it off. They will take measurements of the artifact and draw a picture of it on the Artifact Recording Sheet. Then they will place it in a bag and label the bag with the layer it was found in. For example, “Layer 2”.
- Exit ticket is the instruction sheet with the soil profile.

Day 5: Slide #43

- **Slide #44**–How are artifacts cared for and labeled in a museum?
 - Artifacts are: Cleaned, cataloged, stored in archival bags or boxes, and stored in drawers or shelves in a secure room.
- **Slide #45**–Video: Labeling Artifacts [YouTube: 5:36]
https://www.youtube.com/watch?v=uMIOByGE_gs
- **Slide #46**–How are chipped stone tools created?
 - This style of making stone tools is also called flint knapping.
- **Slide #47**–Video: Flintknapping Demonstration by the Cleveland Museum of Natural History. [YouTube: 8:15]
<https://www.youtube.com/watch?v=f2CcHYuOEsE&t=1s>
- **Slide #48**–How are ground stone tools created?
- **Slide #49**–Video: How to make a ground slate ulu
<https://vimeo.com/418607236>

Day 6: Slide #50

1. **Slide #51**–Write a report to the archaeology office with your findings. Include the following:
 1. Thank the archaeology office for giving permission to dig.
 2. Restate your research question. For example, my research question was _____.
 3. Were you able to answer it?
 4. What are you curious to know as a result of your findings?
- **Slide #52**–Listen to Alutiiq Museum’s Curator of Archaeology Patrick Saltonstall talk about the site.
 - Have students compare and contrast thoughts/stories/results with their finds.
- **Slide #53**–The Alutiiq Museum Mobile Museum Visit
 - Schedule museum staff to come to your class with the mobile museum and lead a presentation. Students will get to see/touch the artifacts in the teaching collection.

Close and Assessment:

- Students learned what archaeology is and how it helps us understand how Alutiiq ancestors lived.

- Students learned archaeology terminology and the types of sites found around Kodiak.
 - Students learned why it is important to preserve archaeological sites and how people can help to protect sites.
 - Students learned about excavating a site through hands-on experience.
 - Students learned about studying, documenting, and recording artifacts.
 - Students learned how Alutiiq people used different tools.
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Modification:

- Contact the Alutiiq Museum to schedule an archaeology walk.
 - Contact the Alutiiq Museum to have an archaeologist visit your class.
 - Learn about stratigraphy by sharing a clear container that you fill with three separate layers. They can look through the sides and see the changes in soil color/composition.
 - Choose either the complex or basic excavation to fit class needs.
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Additional Resources:

- The Alutiiq Museum Archaeology Brochure:
https://alutiiqmuseum.org/wp-content/uploads/2023/12/AM_Archaeology_Brochure.pdf
- Old Harbor Site pamphlet:
https://alutiiqmuseum.org/wp-content/uploads/2023/12/Old_Harbor_Site_Pamphlet.pdf
- Ancestors Handout:
<https://alutiiqmuseum.org/wp-content/uploads/2024/01/Ancestors2022.pdf>
- Archeological Institute of America: Interactive Digs
<https://www.interactivedigs.com/>
- Archeological Institute of America: Shoebox Dig
https://www.archaeological.org/pdfs/education/digs/Digs_shoebox.pdf
- Alutiiq Word of the Week Archive: Ulu — Ulukaq
<https://alutiiqmuseum.org/collection/Detail/word/520>
- Alutiiq Word of the Week Archive: Carve It — K'ligluku
<https://alutiiqmuseum.org/collection/Detail/word/146>
- Alutiiq Word of the Week Archive: Hammer — Mulut'uuk, Murut'uuk
<https://alutiiqmuseum.org/collection/Detail/word/268>
- Alutiiq Word of the Week Archive: Whetstone — Minguutaq
<https://alutiiqmuseum.org/collection/Detail/word/538>
- Alutiiq Word of the Week Archive: Fishhook — Iqsak
<https://alutiiqmuseum.org/collection/Detail/word/232>

Mock Dig – Artifact Placement Guide

Step 1: Fill the bottom layer of the plastic container with paper pet bedding.



Step 2: Place the hunting artifacts over the paper pet bedding as shown below. These will include the ground point, chipped point, side blade, ground knife, piece esquillée (wedge), and chipped knife.



Step 3: Add more paper pet bedding to cover the artifacts.



Alutiiq Museum
215 Mission Road, Suite 101
Kodiak, AK 99615, 844-425-8844

Step 4: Next add one of the laminated pictures showing a layer of dirt in an excavation.



Step 5: Cover the picture with packing peanuts.



Step 6: Add the fishing artifacts as shown below. These include an ulu, net sinker, line a, cobble scraper, fishhook barb, and fishhook shank.



Step 7: Add packing peanuts to cover the artifacts.



Team Name: _____

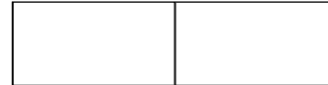
Date: _____



Excavators _____

Recorders _____

Examiners _____



Instructions:

The **Excavators** will use a ruler to divide the box in half.

1. The **Excavators** will take turns removing a thin layer at a time from one half of the box and place it in a plastic bag.

2. When the **Excavators** reach a laminated dirt layer (laminated picture).



➤ The **Recorders** will measure how deep the layer is compared to the layer that has not yet been excavated using metric units (cm) and record the data on the soil profile.

➤ After all artifacts have been found and documented in the first half, remove the other half until the same depth is reached. Document all artifacts found.

3. When the **Excavator** finds an artifact.



➤ Remove the material surrounding the artifact and hand it to the **Examiners**.

➤ The **Examiners** will take turns cleaning off the artifact. They will record the information and draw a picture of the artifact on the artifact recording sheet.

➤ The **Examiners** will place the artifact in a plastic bag and label it with the layer it was found in (i.e., Layer 2) and hand it to the **Recorders**.

➤ The **Recorders** will use the Alutiiq Museum Technological Inventory to identify the artifact. They will record the same artifact in the soil profile and tell the **Examiners** the name of the artifact for the artifact recording sheet.

4. Keep working until your teacher tells you to stop and switch jobs. When it is time to do so, follow the arrow. Excavators become Recorders, Recorders become Examiners, and Examiners become Excavators.

5. **Soil Profile:**



Layer:	Depth:	Color:	Artifacts found:
Layer:	Depth:	Color:	Artifacts found:

Team Name: _____ Date: _____

Excavator _____
 Mapper _____
 Artifact Recorder _____
 Artifact Bagger _____
 Sieve Specialist _____
 Overseer _____



Instructions:

1. The **Overseer** will use a ruler to divide the box in half.
2. The **Excavator** will remove one layer at a time from one half of the box and place it in a plastic bag.
3. When the **Excavator** reaches a dirt layer (laminated photo). 
 - The **Overseer** will measure how deep the layer is compared to the layer that has not yet been excavated using metric units (cm) and record the data on the soil profile.
 - Everyone will switch jobs following the arrow. The excavator will become the mapper, etc.
4. When the **Excavator** finds an artifact. 
 - Do not remove the artifact. The **Mapper** will document its size and position on the graph paper and then hand it to the **Artifact Recorder**.
 - **SKIP THIS STEP IF YOU DO NOT HAVE A SIEVE SPECIALIST.** The **Sieve Specialist** will check the layer for any missed artifacts by putting it through the sieve.
 - The **Artifact Recorder** will take the artifact and measure it. They will record the information and draw a picture of it on the artifact recording sheet. Then they will use the Alutiiq Museum Technological Inventory to identify the artifact and record its name etc. Once the artifact has been identified, they will hand the artifact to the **Artifact Bagger**.
 - The **Artifact Bagger** will clean it off, place it in a plastic bag, and label it with the layer it was found in.
 - Everyone will switch jobs following the arrow.
5. After all the artifacts have been found and documented in the first half, remove the other half until the same depth is reached. Document all artifacts found.
6. Remove the next layer and repeat the steps.

Soil Profile:

Layer: Depth: Color:	Artifacts found:
Layer: Depth: Color:	Artifacts found:

ARTIFACT RECORDING SHEET



Group Members: _____

Layer	Dimensions	Drawing	Name of Artifact
	Length: Width:		
	Length: Width:		
	Length: Width:		
	Length: Width:		
	Length: Width:		

Layer	Dimensions	Drawing	Name of Artifact
	Length: Width:		
	Length: Width:		
	Length: Width:		
	Length: Width:		
	Length: Width:		

Layer	Dimensions	Drawing	Name of Artifact
	Length: Width:		
	Length: Width:		

Day One Exit Ticket



Name: _____

Date: _____

What is one new thing you learned about archaeology today?

What is one thing that you are curious to learn more about?

Day Two Exit Ticket



Name: _____

Date: _____

List two kinds of Alutiiq archaeological sites.

What is one way you can help to protect archaeological sites?



ARCHAEOLOGICAL EXCAVATION

THIRD GRADE CURRICULUM

ALUTIIQ MUSEUM ARCHAEOLOGY EDUCATION BOX



Photo: Piece of a woven grass mat found at Karluk Lake.

Day One



Turn & Talk

What is archaeology?

What is archaeology?

- Archaeology is the study of history from the materials people left behind.
- For tens of thousands of years, people have built shelters, made tools, harvested resources, raised families, and celebrated life.
- Archaeologists search for evidence of these activities and collect information to study past societies and how they changed.





What is an archaeologist?

- Archaeologists study sites of all ages, from ancient times to the recent past.
- Many sites record life before written records and offer a glimpse of distant history. Archaeological studies can fill gaps in written records.
- For Native American people, ancient sites are particularly important, as they reflect the lives of ancestors.

Common misconceptions:

- Archaeologists do NOT dig dinosaur bones. Paleontologists study ancient animals.
- Archaeologists do NOT study rocks. Geologists study rocks.

Excavation of a small shelter with a stone-lined hearth, *Kugyasiliwik* site.



Archaeological record

- The archaeological record is the collection of materials created and left by people.
- These materials are also known as cultural resources.

Archaeology terminology

Sites: Locations with archaeological materials. The places people lived and worked, like a village or a campsite.

Features: Structures built by people. Immovable objects like a house or a hearth.

Artifacts: Portable objects made by people like tools, clothing, toys, or artwork.

Faunal Remains: The remains of animals harvested by people.

Botanical Remains: The remains of plants harvested by people.

Provenience: The location of an artifact in a site.



Photo: Fish bones from an archaeological site

Turn & Talk



What are sites?

Locations with archaeological materials.
The places people lived and worked, like a village or a campsite.

Turn & Talk



What are features?

Structures built by people. Immovable objects like a house or a hearth.

Turn & Talk



What are artifacts?

Portable objects made by people like tools, clothing, toys, or artwork.

Turn & Talk



What are faunal remains?

The remains of animals harvested by people.

Turn & Talk



What are botanical remains?

The remains of plants harvested by people.

Turn & Talk



What is provenience?

The location of an artifact in a site.

Exit ticket

- What is one new thing you learned about archaeology today?
- What is one thing that you are curious to learn more about?

Day Two

Video: Stewards of Heritage, Kodiak Archaeology: A Library Underground



Alutiiq sites

- More than seven thousand years ago, daring paddlers in skin-covered boats set out to explore a distant island. Braving wind-swept seas they settled the Kodiak Archipelago, founding the islands' Alutiiq culture.
- You won't find the story of these remarkable people in books. Alutiiq history is preserved in over 2,000 archaeological sites.
- These sites are a library of Alutiiq history, and each has a unique story.
- Most of these sites hold stone tools.
- Some well-preserved deposits have bone and wood artifacts, and animal remains.
- The remains of sod houses are another common find. Alutiiq people built their homes by digging a hole, fitting it with a wood frame, and covering the frame with sod. When these houses age and collapse, they create depressions.





Matching terms

Divide into pairs or groups of 3 or 4. Using the Alutiiq site matching term cards match the sites to their definitions.

Check your answers

Villages = long term settlements

Refuge Rocks = settlements on islets where people retreated for protection

Camps = short term settlements

Waiting Place = places where hunters watched the weather, the tides, and for game

Caves = places where whalers stored gear and prepared for hunting

Trap & Weirs = stacked stone walls used to trap fish

Processing Site = places where people cared for fish and game

Quarries = places where people mined stone for tool making

Rock Art Sites = places where people pecked images into boulders and bedrock

Cairns = stacked stone markers

Trails & Portages = habitually used overland routes



Recent sites

- Kodiak's archaeological record also includes sites representing recent history, from Russian conquest to the Cold War.
- In Alaska, any property with evidence of human use over fifty years old can be considered a site.
- What are some examples of more recent sites that you have seen in Kodiak?

Photo: World War II Lookout



Examples of recent sites

- Airstrips
- Brick Kilns
- Buildings
- Bunkers
- Cabins
- Campsites
- Canneries
- Cemeteries
- Dory Knee Trees
- Downed Aircraft
- Fish Traps
- Fox Farms
- Gold Mines
- Hatcheries
- Ranches & Corrals
- Roads
- Salteries
- Shipwrecks
- Whaling Station
- White Alice Station





Who owns it?

- In the United States, archaeological sites and their contents belong to the owner of the land on which they occur.
- This includes sites of all ages— in any location—on land, on the beach, or underwater.
- It is illegal to disturb or collect from a site without authorization and permission from the landowner.

How do sites get lost or hidden?

- Trash can accumulate, decay, and turn into soil if it is biodegradable.
- Eventually, people might build a new site on top of an old one, creating new layers of materials.
- Natural disasters such as fires, earthquakes, and volcanic eruptions can destroy sites or bury them in debris. An entire city could be rebuilt on top of fallen homes.
- Repeated flooding could damage a settlement and build up layers of mud.
- Abandoned sites eventually fall due to neglect.
 - Materials may be scavenged, and animals might move in.
 - Eventually grass and trees begin to grow causing the site/city to be covered by dirt and plants. The site may no longer be visible.

Looting

- It is exciting to find an archaeological site, but you should never dig in one.
- Recreational digging, or looting, is vandalism. Under state and federal laws, it is illegal to disturb a site without permission from the landowner. Looting is damaging and disrespectful.
- Digging in a site without professional documentation is like ripping pages from a history book. It destroys information and makes it difficult to interpret the deposit.
- Archaeologists get permission for their studies.



How can we protect sites?

- Never dig in a site. Take photographs and notes. Report your finds to the landowner, an archaeologist, or the Alutiiq Museum.
- Teach your family and friends to respect archaeological sites. Most people do not know that it is destructive, disrespectful, and illegal to alter sites.
- Report site vandalism to the Alutiiq Museum.

YOU CAN HELP

RESPECT & PROTECT KODIAK HISTORY



Additional activity

Search for articles on the internet about archaeological sites that have been tampered with and/or damaged. Share findings.

Reasons sites might be damaged vary but could include:

- Deliberate looting, animal digging, erosion, or damage from war.
- Discuss as a class why we should protect archaeological sites.

Exit ticket:

List two kinds of Alutiiq archaeological sites.

What is one way you can help to protect archaeological sites?

Day Three

Turn & Talk



What is stratigraphy?



What is stratigraphy?

Stratigraphy is the study of layers of soil, rock, and other materials (garbage, house remains, etc.) that accumulate over time.

Video: A Kids' Guide to Stratigraphy with Grant Zazula, Yukon Paleontologist

By: The Yukon Beringia Interpretive Centre





Where have you seen examples of stratigraphy in Kodiak?

Eroding Alutiiq village site in Kiliuda Bay, 2022.

Video: Stratigraphy at the Nunalleq Site in Womens Bay



Turn & Talk



Based on what you just learned...

- What do you expect to find when you dig?
- Why?
- What other questions do you have?

Before you dig...

- The first step is to get permission from the archaeology office. Archaeologists are not allowed to dig without a permit. We must write to the archaeology office to start the dig.
- Your letter should include the following:
 - **Research question:** Based on your conversation with your classmates. What do you want to study and why is this interesting?
 - **Research strategy:** How will you conduct your study – by excavation?
 - **Description of your record-keeping methods:** All artifacts and features will be mapped. Detailed pictures of all artifacts will be drawn.
 - **Identification of a museum that agrees to preserve the results of the excavation:**
The Alutiiq Museum

Sample letter

To whom it may concern,

My name is _____. I am a junior archaeologist at _____ and am writing to request permission for an archaeological dig. I am very curious to know _____. I plan to excavate the site to find out. All artifacts and features that I find will be mapped out. Detailed pictures of all artifacts will also be drawn. The Alutiiq Museum will preserve everything from my excavation—the finds and all my notes. May I have permission to proceed?

Sincerely,

Junior Archaeologist

Day Four

Dear Junior Archaeologists,

Thank you for writing to the archaeology office for permission to dig in Kodiak, Alaska. We have reviewed your research questions and strategies. Your record-keeping methods meet our expectations. We grant you a permit to proceed with your dig and are excited to learn about your finds.

Sincerely,

The Archaeology Office





Excavation tools

- Tablecloth/piece of plastic
- Spoons or small mason trowels
- Containers for excavated dirt
- Small sieves
- Sandwich size plastic bags to hold the artifacts from each layer
- Quart-size bags for excavated dirt
- Ruler
- Waterproof black markers to label the bags
- Pencils
- Brushes
- Notebook
- Record sheets
- Clipboards
- Artifacts and/or laminated images of artifacts.

Digging do and don'ts

Do:	Don'ts:
Dig carefully.	Dig quickly.
Dig in flat/horizontal movements.	Dig a hole/vertical movements.
Expose artifacts.	Scoop out artifacts.
Record position of find(s) and all objects around it.	Immediately remove find(s).
Dig one layer at a time.	Put excavated dirt back in the box.
Put excavated dirt in a bag to be sieved.	Put all artifacts in one bag.
Bag each artifact individually.	



It takes a team...

Complex excavation team roles

- (1) **Excavator**–Uses trowel/spoon to horizontally remove dirt/layer. When an artifact is found, uses brush to clear away all debris.
- (2) **Mapper**–Draws picture/diagram of artifact location on graph paper.
- (3) **Artifact Recorder**–Takes measurements of the artifact found and draws a picture of it on the *Artifact Recording Sheet*.
- (4) **Artifact Bagger**–Uses a brush to clean off an artifact, places it in a bag, and labels the bag with the layer it was found in. For example, “Layer 2”.
- (5) **Overseer**–Makes sure that everything is running smoothly and provides help when needed. They read instructions, measure the soil depth, and fill out the *Soil Profile*.
- (6) **Sieve Specialist**–Takes the excavated dirt and puts it through the sieve to look for missed artifacts.



It takes a team...

Basic excavation team roles

- (1) **Excavators**—take turns using the trowel/spoon to horizontally remove dirt/layer.
- (2) **Recorders**—Read instructions, measure the soil dept, and fill out the *Soil Profile*. Recorders will use the Alutiiq Museum Technological Inventory to identify the artifact.
- (3) **Examiners**—Make sure that everything is running smoothly and provide help when needed. After an artifact has been found, examiners will use the brush to clean it off. They will take measurements of the artifact and draw a picture of it on the *Artifact Recording Sheet*. Then they will place it in a bag and label the bag with the layer it was found in. For example, “Layer 2”.

Day Five

How are artifacts cared for and labeled in a museum?

Artifacts are:

- Cleaned
- Cataloged
- Stored in archival bags or boxes
- Stored in drawers or shelves in a secure room



Video: Labeling Artifacts at the Alutiiq Museum



How are chipped stone tools created?

Flint Knapping



Illustration by Eric Carlson

Flint Knapping Tools and Products



This style of making stone tools is also called flint knapping.

Video: Flintknapping Demonstration by the Cleveland Museum of Natural History





Cut



Snap



Grind

Illustration by Eric Carlson

How are ground stone tools created?

Video: How to make a ground slate ulu



Day Six



Write a report to the archaeology office with your findings. Include the following:

1. Thank the archaeology office for giving permission to dig.
2. Restate your research question. For example, my research question was _____.
3. Were you able to answer it?
4. What are you curious to know as a result of your findings?

Listen to Alutiiq Museum's Curator of Archaeology Patrick Saltonstall talk about the site.



Fishing Site:

1. Ulu
2. Net Sinker
3. Line Weight
4. Cobble Scraper
5. Fishhook Shank
6. Fishhook Barb

Hunting Site:

1. Ground Point
2. Chipped Point
3. Side Blade
4. Ground Knife
5. Piece Esquillee (Wedge)
6. Chipped Knives

