Junior Archeologist

National Park Service
U.S. Department of the Interior

Archeology Program

Junior Ranger Activity Book

Ages 6-12

EXPERIENCE YOUR AMERICA™

Instructions

My name is _____ and I am _____ years old. I want to be a Junior Archeologist!

1) Earn recognition by completing the following number of activities. Feel free to complete more than required!

Age Range	Symbol	Activities
6-9		10
10-12		20

2) Read and sign the Junior Archeologist Pledge at the end of the activity book.

3) Send your completed activity book to the address below for official recognition from National Park Service Archeology Program headquarters!

NPS Chief Archeologist
National Park Service
1201 Eye Street NW (2275)
Washington, DC 20005

Mark Your Progress

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What is Archeology?

Archeology happens all over the world, including the national parks in the United States and its territories. Get started on your Junior Archeologist adventure by learning the basics of what archeology is and what archeologists do. Look to the glossary for definitions of bolded words. (Psst: adults and parents – check out the Parent's Guide). Ready? Let's go!

ARCHEOLOGY is the study of people from the past and their day-to-day lives: what they ate, where they lived, what clothes they wore, what they made, and what technology they used. Archeologists study people who lived as recently as 50 years ago, or as distantly as 2,000 years ago or more.

Sometimes people confuse archeology with **GEOLOGY**, the study of how the earth changes over time; **PALEONTOLOGY**, the study of ancient plants and animals; or **HISTORY,** the study of the past through documents, like newspapers, and personal accounts of what happened, like diaries.

Even though archeologists, geologists, paleontologists, and historians all study different parts of the past, they sometimes use similar information for their research. For example, archeologists and historians both may use old documents. Or archeologists, geologists, and paleontologists may all use plant or animal remains that have become rocks, called **FOSSILS**.

While rocks and written documents can help **ARCHEOLOGISTS** learn more about humans and their lives, archeologists have their own unique source of information. They use **ARTIFACTS**, items people have made, used, and left behind. Artifacts could be **PROJECTILE POINTS**, also known as "arrowheads," pieces of pottery, called **SHERDS**, glass bottles, metal nails, musket balls, jewelry, toys, and much more!

Archeologists find artifacts at **ARCHEOLOGICAL SITES**, which can be in cities, in deserts, underwater, in ancient trash piles, called **MIDDENS**,

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What is Archeology?

CONTINUED FROM PAGE 4

and everywhere people could have been! Examples of archeological sites could be homesteads, battlefields, hunting camps, or cities both ancient and modern. Archeologists study artifacts and sites after carefully recording where they were found and removing them from the ground, through **EXCAVATION**.

Archeologists use all the information they gather from sites and artifacts to learn about all the different and interesting ways people have lived around the world and how human **CULTURES** change throughout time. A culture is a people's beliefs, activities, and traditions that defines the group and helps them identify who they are and what people, places, and things mean to them.

Archeologists take everything they learn through excavation at sites, study the artifacts more closely, then share the results with other archeologists and the public. They publish reports or research papers. If you've been to a national park, archeology might have come up in an exhibition, a ranger talk, or a special tour or event. That's **INTERPRETATION**, or how archeologists get stories about real people in the past to the public.

Archeological research and interpretation can be especially meaningful to descendants of the people whom archeologists have studied. These communities may have traditional knowledge or memories passed from generation to generation to share with archeologists. **ORAL HISTORY** is one way for archeologists to record this information. Archeologists and descendants can learn a lot from each other as both groups try learn more about life in the past.

Why is archeology so important? Through archeological research, we can learn about people from many different angles. Archeology can connect descendants of past peoples to their history. Archeology allows us to learn from people in the past, who faced problems we still grapple with today: making friends with new cultures, adapting to changing environments, and learning new ways of doing things. We can learn from their experiences and grow together into better people!

Time Capsules

One way to think about archeology is the study of "time capsules." **TIME CAPSULES** are containers in which people place meaningful objects for someone in the future to find. Time capsules are often buried and untouched for many years, just like archeological sites and artifacts!

When you open a time capsule, you only get a small picture of the past based on a few objects. Archeology can be the same way: you may only find a few artifacts and have to use these artifacts to make educated guesses, called **INFERENCES**, about how people in the past lived.

TIME CAPSULES

DIRECTIONS: Draw three items in your time capsule for archeologists in the future to find.

Imagine an archeologist in the future finds your time capsule. What might these objects reveal about your life?

_____

_____

_____

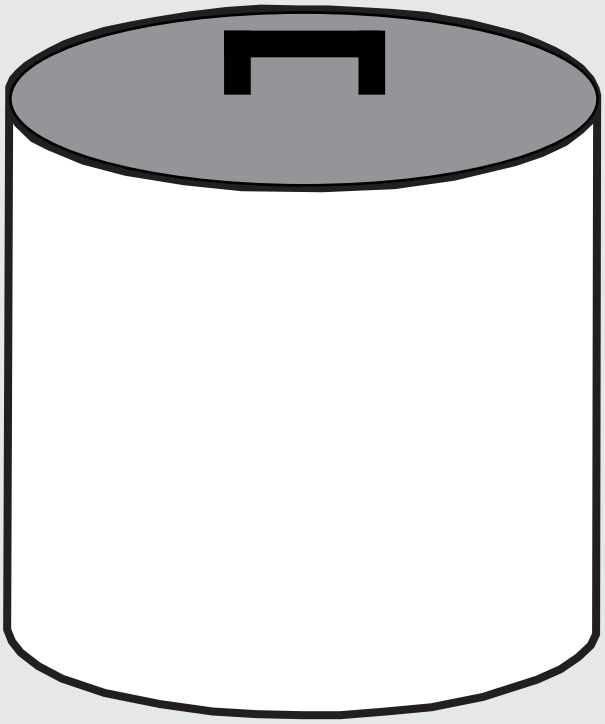
_____

_____

_____

_____

_____



Archeologists A to Z

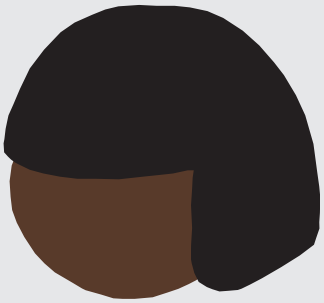
Many archeologists have a **SPECIALTY**: they are experts in a way of doing archeology. Some specialize in an archeological method, such as excavating on land or in water. Others are experts in a past culture, time period, or place.

MATCH ME

DIRECTIONS: Match the archeologist to what they study.

Historical archeologist

I SCUBA dive to excavate sites. I study shipwrecks in lakes and oceans.



Underwater archeologist

I like the learn about how people in the past thought about the stars and planets.

Zooarcheologist

I study how people in the past interacted with animals.

Archeoastronomist

I use historic documents in my research, and study cultures with written records.

Archeologists A to Z

Archeologists study **POTTERY** to learn about the ways that art was part of everyday life. **SHERDS** are pieces of broken pottery. From sherds, archeologists can infer the shape of a pot, its markings, and the way it was made. Pottery helps archeologists to learn about cooking and storage, but also the significance of decorations, designs, and markings to a person or a culture.

PAINTING POTTERY

DIRECTIONS: Design your own pottery below.

If an archeologist found your pottery in the future, what might they think?

_____

_____

_____

Archeologists A to Z

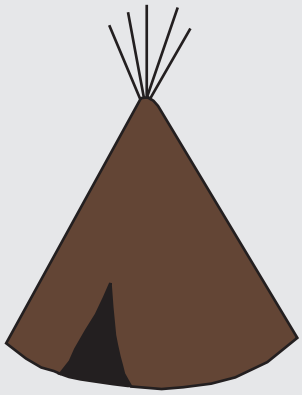
Some archeologists study homes from the past. People have lived in many different types of homes. What could an archeologist learn about you from studying where you live?

HOME SWEET HOME

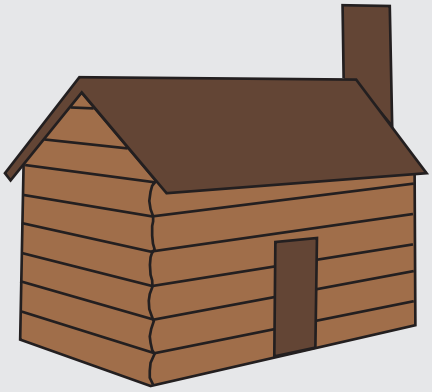
DIRECTIONS: Match the descriptions of a house on the left to a picture of that house on the right.

MY HOUSE is built from wood. I have a brick fireplace for warmth and cooking.

MY HOUSE is built from the earth. I like to work and play on my roof.



MY HOUSE is built from animal skins. I move around a lot, so my house is easy to pull down and take with me.



Some archeologists study **TRADE**, or the exchange of items. In the past, people sometimes traded instead of using money. Archeologists can learn which people were interacting with each other by finding traded artifacts at sites.

IT'S A BARGAIN

DIRECTIONS: Trade with a neighbor! Make sure you follow the trade regulations.
NOTE: There may be more than one correct answer questions 2-5.

YOU

5 blankets
1 gunpowder keg
2 lbs. tobacco
7 flour barrels
3 sugar barrels
1 1b. spices
1 tin skillet
1 whiskey bottle

REGULATIONS

1 tin skillet = 1 tin pot
3 blankets = 1 bolt of cloth
2 flour barrels = 1 sugar barrel
3 sugar barrels = 1 china plate
1 tin skillet = 2 flour barrels
1 gunpowder keg = 4 lbs. tobacco
1 lb. spices = 2 china plates
1 fur pelt = 2 whiskey bottles + 1 gunpowder keg
1 bolt of cloth = 1 whiskey bottle
1 lb. tobacco = 1 whiskey bottle

NEIGHBOR

1 blanket
3 gunpowder kegs
3 lbs. tobacco
2 flour barrels
3 china plates
2 bolts of cloth
1 fur pelt
5 whiskey bottles
1 tin pot

1) What do you think is the most valuable item you have? Why?

_____

2) What would you trade to get 2 bolts of cloth? _____

3) What would you trade to get 3 china plates? _____

4) What would you trade to get 1 fur pelt? _____

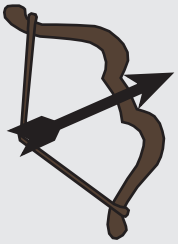
5) What would your neighbor trade to get 1 lb. spices? _____

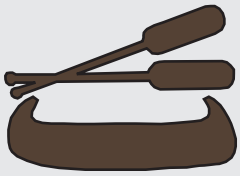
Our Story

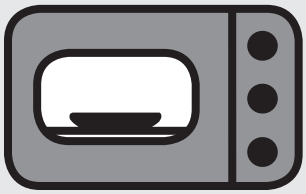
Whose lives do archeologists study? Archeologists study people from the past, people who were like you. Though life in the past was different from today, there are similarities: people learned, worked, ate, built and maintained shelters, played sports, and had fun.

PAST AND PRESENT

DIRECTIONS: Match an object from the past to a similar object we use now. What were these objects used for?







Be an Archeologist

How do archeologists find out information about the past? We come up with research questions, dig for artifacts, study those artifacts, and share what we learn with others!

STEP BY STEP

DIRECTIONS: Archeological excavation must be done in a specific order, and includes much more than just digging. An archeologist's "To Do" list below needs to be ordered correctly 1-9.

TO DO

___ *Write site report based on information from artifacts*

___ *Catalog, wash, photograph, and take notes on artifacts found during excavations*

___ *Use survey and map to choose places for excavation*

___ *Start by developing research question*

___ *Survey the selected site and make an accurate map*

___ *Design research plan to answer research question; select site, equipment, people, and set budget*

___ *Share information in the report through publications and museum exhibitions*

___ *Begin excavating scientifically and carefully*

___ *Move artifacts to the lab when finished excavating*

Let's Excavate

When archeologists excavate, they do much more than just dig holes and find artifacts.

*(1) Archeologists start excavations by laying ropes in lines to form boxes, called **UNITS**. When an artifact is found in one of these units, archeologists will know where it was found compared to other artifacts at the site.*

*(2) Using a special shovel, called a **TROWEL**, archeologists carefully dig up dirt.*

(3) Archeologists place the dirt on top of screens and (4) sift through the dirt to make sure no small artifacts are accidentally left behind.

(5) Once the dirt has been sifted, the leftover dirt is dumped into buckets.

(6) When artifacts are found, they are placed in plastic bags and labeled.

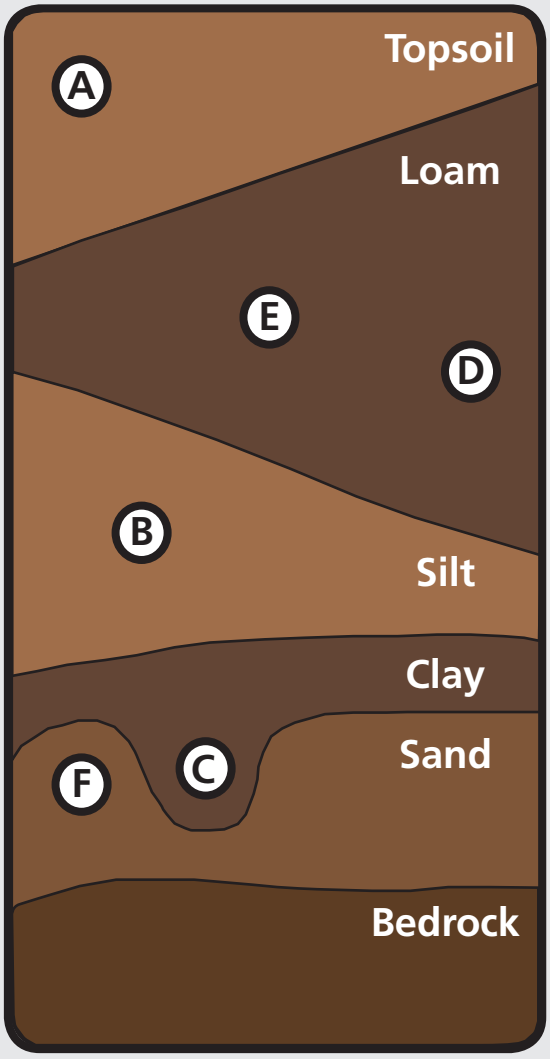
*(7) Archeologists are always recording their **OBSERVATIONS**, or things they notice about the artifacts, in their field notebooks.*

Stories in the Soil

Archeologists need to know how deep in the ground an artifact was found, because an artifact's depth is important for determining how old it is. An archeological site has many layers. Studying the different layers of soil is called **STRATIGRAPHY**. The deeper you dig, the older an artifact is!

DIGGING DEEP

DIRECTIONS: Answer the following questions about artifacts A-F from this archeological site.



1) Which artifact is the oldest? _____

2) Which artifact is the most recent? _____

3) Which artifact is in silt? _____

4) Which artifact is older, C or F? _____

5) If each soil layer takes about 150 years to build up, estimate how many years old artifact F might be. _____

6) Why do you think it is important to know how old an artifact is?

_____

_____

Trash Can Archeology

In **MIDDENS**, or trash piles from the past, archeologists may find food, clothes, pottery – all kinds of things! Often, middens were used for a long time, so archeologists can learn how communities changed over time.

One person's trash can be an archeologist's treasure!

DIRECTIONS: Excavate a trash can. Choose a trash can in your house as your archeological site, and use the site record on page 16 to record what you find. Start from the top and work you way to the bottom of the can. Observe each object and then make inferences based on what you have observed. After you're finished excavating, answer the questions below.

1) What conclusions do you have about the people who left this trash behind?

_____

_____

_____

2) What are the oldest artifacts? How do you know?

_____

_____

_____

3) Compare and contrast this activity and archeological research in the field (see page 13)?

_____

_____

_____

SITE RECORD

OBJECT #	OBSERVATIONS	INFERENCES
Example	*2 in. x 6 in. piece of thin, white paper; indicates there was a transaction of $20.33 for a variety of food items; a signature is at the bottom*	*It's likely that the people who lived here had a standard currency, could read and write, and could frequently buy a variety of food items from one location.*

Getting a Date

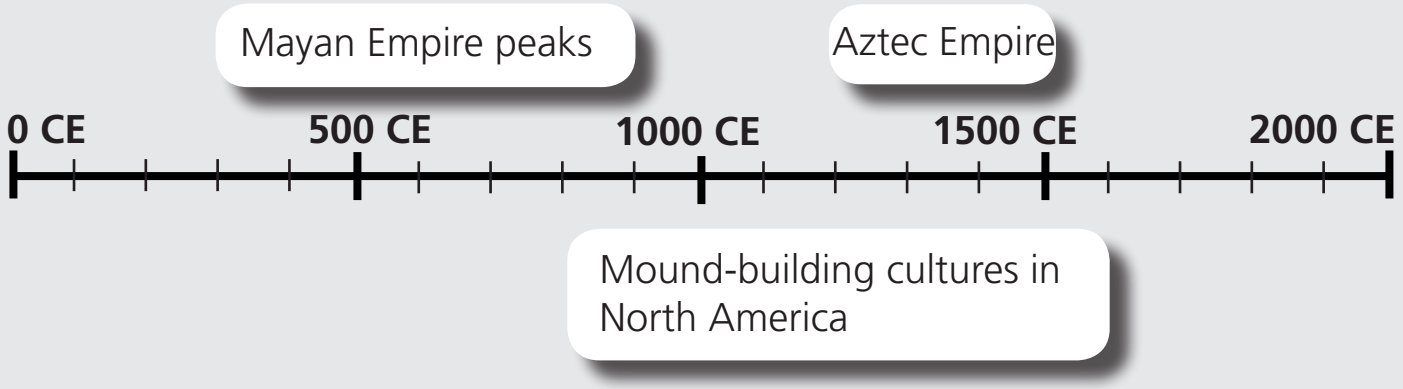
Archeologists use artifacts to put together a time line of how people used a site in the past, called a site's **CHRONOLOGY**. There are two ways archeologists find out how old a site is:

1) **RELATIVE DATING**: using stratigraphy to know how old an artifact is compared to other artifacts

2) **ABSOLUTE DATING**: using scientific processes to calculate a numerical age for an artifact

STEPPING BACK IN TIME

DIRECTIONS: Use the time line to answer the questions. Take one step for each 100 years.
NOTE: 2000 CE is "now." CE stands for Common Era, also known as AD, or *Anno Domini*.



1) For about how many "steps" did the Aztec Empire (1200-1500) exist? _____

2) About how many steps would take you back to the earliest peak of the Mayan Empire (300-900)? _____

3) For about how many steps did the Mayan Empire and the mound builders (800-1600) overlap? _____

Artifact Analysis

Artifacts are clues to activities in the past. Archeologists closely observe artifacts' characteristics, then put together the clues to understand what people did with them, and why.

ARTIFACT SLEUTH

DIRECTIONS: Select an object in your home. Pretend you have never seen this object before, and think of it as an artifact. Sketch the object below and answer the questions.

1) What materials is it made of?

_____

2) What is its texture?

_____

3) How much does it weigh?

_____

4) How tall, wide, and long is it?

_____

5) What colors is it?

_____

6) What do you think it is used for? Why?

_____

_____

_____

_____

It Belongs in a Museum

DIRECTIONS: Choose an object in your home, (you can use the same artifact from the activity on page 18). Help a museum curator create an exhibition. Sketch the object below and write a label for the object. Your label should:

1) Include descriptive information about the object
2) Share why this object may be important
3) Share with museum visitors why this object is interesting

Object:

_____

Dates to:

_____

Location found:

_____

Made by:

_____

More information:

_____

_____

_____

_____

_____

_____

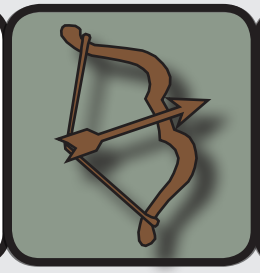
_____

Artifact Adventure

DIRECTIONS: Sometimes artifacts take a long journey before being found by an archeologist. Join in on the adventure! You will need one small token per player (like a button) and a coin. Each player flips the coin at the start of their turn, and moves forward one space for heads and two spaces for tails.

START

A hunter makes a point for the tip of his arrow.



The arrowhead breaks during a hunting trip! The hunter stops and tries to repair it.

SKIP NEXT TURN

The arrowhead can't be repaired. The hunter leaves it at his camp site when he moves to another location to hunt.

MOVE AHEAD ONE SPACE

For years, the broken arrowhead is moved around by rivers, rain storms, and animals.

MOVE BACK TWO SPACES

The broken arrowhead washes up on a river bank. Someone sees it, and lets an archeologist know about the artifact.

MOVE AHEAD ONE SPACE

FINISH

The arrowhead is found by an archeologist!

Puzzle Pieces

An artifact needs the **CONTEXT**, or a place in time and space, of its archeological site for an archeologist to learn as much information as possible. When an artifact is removed from its context, archeologists can make wrong inferences.

CHANGING CONTEXT

DIRECTIONS: Observe the artifacts below. Answer the following questions.

1) What do you think happened at this site? Think about how the artifacts might have been used.

_____

_____

_____

_____

_____

_____

2) How would the story change if the doll wasn't found at the site? The horseshoe?

_____

_____

_____

_____

_____

Preserving the Past

Archeologists study people who lived in the past. But information about these people is being threatened as sites are destroyed by weather, animals, and humans. Archeologists need to be aware of these threats and make sure that their sites are protected so information about the past is not lost.

PROTECT YOUR SITE

DIRECTIONS: Unscramble the words to identify the threats to your archeological site. Think about how you could protect archeological sites from these threats.

IUHRNRCAE

_____

CIOOTRUNSCTN

_____

GLTIOON

_____

EFRI

_____

TERE RTOOS

_____ _____

DRONETS

_____

Archeology Matters

We need more than just laws to keep archeological sites safe. We need Junior Archeologists, like you, to act as ambassadors for archeology and help preserve sites for the future.

One of the worst ways that archeological sites are destroyed is through **LOOTING**. This is when people illegally take artifacts from sites in a non-scientific way.

Often, looters use metal detectors or other equipment to find sites. They might dig for pottery in the Southwestern United States, or metal Civil War battle artifacts in the Southeast, often ignoring artifacts that do not seem exciting or valuable. Most of the time, these artifacts are for looters' personal collections or are sold to other people for a profit.

Why is looting bad? As we learned on pages 12 and 13, archeological research is more than just digging for exciting artifacts. Archeology is a science: we dig only when we need to answer specific and important questions about people in the past. We always record everything about where an artifact was found. We share what we learn with everyone through interpretation, and we never sell artifacts for a profit.

Archeological excavation is a one-time thing: once a site has been excavated, it can never be re-excavated in the same way again. Archeologists take this responsibility very seriously. When a site is looted, information is lost forever.

Archeologists could also be misled through incorrect information. Think back to the activity on page 21: how did the story change if certain artifacts were not found at the site? Sometimes archeologists do not know that a site has been looted and make wrong inferences about the site because artifacts are missing.

Looting is against the law in many places in the United States, including the national parks. But this does not stop people from looting. Many laws in the United States protect archeological sites. These laws have been passed because U.S. citizens think archeology is important and our sites are important to protect for the future.

Dear...

As Junior Archeologists, we know that archeology is important and that archeological sites should be protected. However, not everyone knows what we know, and people continue to destroy our shared past.

DIRECTIONS: Write a letter to an imaginary person who loots archeological sites. Use what you know about archeology to convince this person to stop looting.

Dear _____

Sincerely,

_____

How You Can Help

DIRECTIONS: Read how you can help protect archeological sites. Then find all the underlined words in the puzzle.
NOTE: Words can be found in the puzzle backwards and diagonally.

Archeological sites are being destroyed at an alarming rate. If people like you stand up for archeology, that might change. You can help by setting a good example for others and sharing what you have learned as a Junior Archeologist.

Archeology tells important stories, and each artifact is part of that story. If you find artifacts in the national parks, leave them where you found them and tell a ranger. Remember, removing artifacts from their context erases crucial information about that artifact.

If you see other people removing artifacts, tell a ranger. Looting is illegal in national parks. It is also illegal to use a metal detector at national parks. People who take artifacts from public lands are stealing from our shared past.

Act as an ambassador for archeology. If someone is unaware of why archeology is important, speak up! Share what you know about the stories told by archeology. If more people understand that archeology is important and want to preserve and protect sites, less sites will be destroyed.

T	P	R	E	S	E	R	V	E	F	O	C	R
C	G	L	L	E	R	A	A	U	P	O	M	O
A	U	N	N	L	O	O	T	I	N	G	P	G
F	R	O	I	A	R	U	E	T	P	F	R	R
I	S	C	T	L	R	I	E	T	L	Y	O	T
T	T	E	H	E	A	X	L	A	I	D	T	R
R	O	T	C	E	T	E	D	L	A	T	E	M
A	R	D	E	Y	O	R	T	S	E	D	C	P
N	I	E	T	N	E	L	S	S	O	G	T	A
G	E	R	D	E	O	A	O	T	A	P	A	E
E	S	C	T	A	B	P	F	G	S	P	O	L
R	E	A	Y	M	L	G	E	L	Y	D	R	E
N	T	N	A	T	R	O	P	M	I	O	O	L

Your words and opinions matter!
You can help preserve our past for our future.

The Right Thing

Archeologists often have to think about **ETHICS**, or the difference between doing what is right and what is wrong. Sometimes doing the right thing is hard, but archeologists have a responsibility to be ethical. Doing the right thing is a sign of respect to other archeologists and people in the past.

DIGGING DECISIONS

DIRECTIONS: Consider the decisions archeologists made. Decide if you think the archeologists did the right thing or the wrong thing.

RIGHT	WRONG	DECISION
☐	☐	An archeologist goes out of their way to share their research with others through publications and museums.
☐	☐	An archeologist sees a volunteer on a dig sneak an artifact into their pocket. The archeologist doesn't say anything and lets the volunteer take the artifact from the site.
☐	☐	An archeologist notices their site has been disturbed. They contact the authorities, document the damage, and do their best to ensure that the site is protected throughout the rest of the dig.
☐	☐	An archeologist sells an object they found to a collector so they can increase their funding for further research.

Why Archeology?

We have learned that archeologists study how people in the past lived by observing the sites and artifacts they left behind. But why is archeology important? *If we didn't have archeologists to excavate sites, what would be lost?*

DIRECTIONS: In the space below, express why you think archeology is important.

Photo by Alicia Paresi

Meet a Ranger

DIRECTIONS: With a guardian, use *www.nps.gov* to find national parks near you. If possible, visit a national park and interview a ranger. Alternatively, contact a park via e-mail or phone and ask to interview someone at the park remotely.

Park: _____ *Ranger:* _____

1) How long have you been a ranger in the National Park Service? _____

2) Why did you decide to become a ranger?

_____

_____

3) What archeological research has been conducted at the park?

_____

_____

4) Can you tell me about people from the past who are important to this park?

_____

_____

5) Why do you think archeology is important?

_____

_____

_____

_____

_____

Storytellers

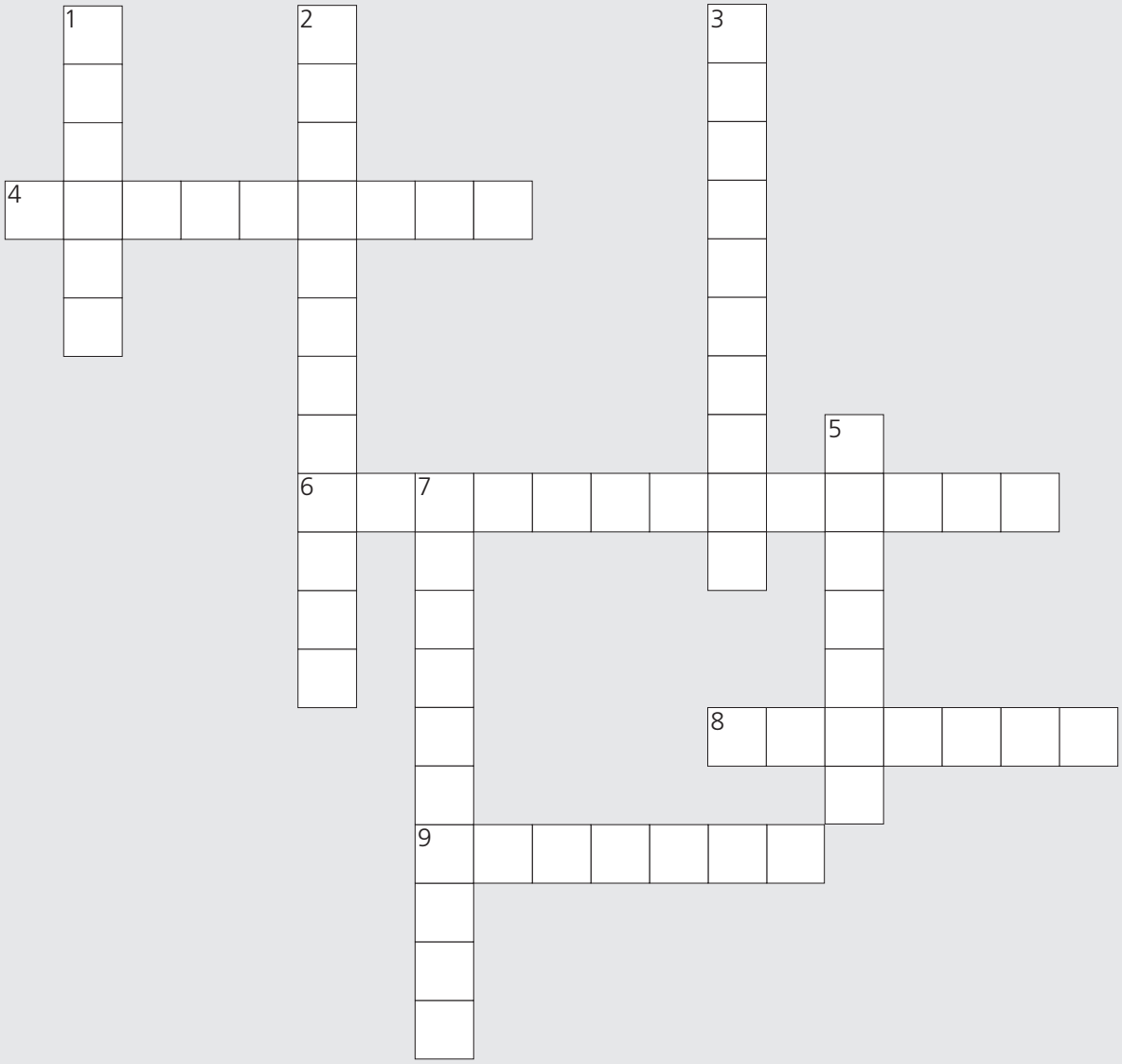
The United States has some of the most incredible archeology sites. **RANGERS** at national parks share our nation's archeology with visitors from all around the world.

RANGER "ME"

DIRECTIONS: Use the space below to draw yourself as a ranger at a national park. What you would tell visitors about archeology?

Wrapping it Up

DIRECTIONS: Test your knowledge of what you learned as a Junior Archeologist!
HINT: Answers are **BOLDED** throughout the activity book.



ACROSS

4. Objects archeologists find
6. Those who study people and artifacts from the past
8. A place in time and space
9. A destructive, illegal behavior

DOWN

1. Small pieces of broken pottery
2. Studying different soil layers
3. Scientific digging
5. Trash piles from the past
7. A time line of events

Glossary

ABSOLUTE DATING	Using scientific processes to calculate a numerical age for an artifact
ARCHEOLOGICAL SITE	Places where archeologists excavate to find artifacts
ARCHEOLOGIST	A trained professional in archeology
ARCHEOLOGY	Study of past peoples and cultures through their sites and artifacts
ARTIFACT	An object made or used by humans
CHRONOLOGY	A time line of when events happened in order from oldest to newest
CONTEXT	A place in time and space
CULTURE	A people's beliefs, activities, and traditions that defines that group and helps them identify who they are and what is important to them
ETHICS	The difference between doing what is right and doing what is wrong
EXCAVATION	The scientific removal of artifacts from an archeological site
FOSSIL	Plant or animal remains that have mineralized into rocks
GEOLOGY	The study of how the earth changes
HISTORY	The study of the past through documents and personal accounts
INFERENCE	An educated guess
INTERPRETATION	How people use museums, ranger talks, field trips, etc. to tell true stories about the past

Glossary

LOOTING	The illegal destruction of archeological sites through the non-scientific removal of artifacts
MIDDEN	Trash pile from the past
OBSERVATION	Something you notice when looking closely at an artifact
ORAL HISTORY	Stories passed from generation to generation
PALEONTOLOGY	The study of ancient plants and animals
POTTERY	Objects made from clay; often decorated
PROJECTILE POINT	The scientific name for "arrowheads"
RANGER	Someone who works for the National Park Service
RELATIVE DATING	Using stratigraphy to know how old an artifact is compared to other artifacts
SHERD	A small piece of pottery
SPECIALTY	A time period or place an archeologist knows a lot about
STRATIGRAPHY	The study of different layers of soil used to determine how old an artifact is
TIME CAPSULE	Containers in which people place objects for someone in the future to find
TRADE	An exchange of goods; used instead of money
TROWEL	Special shovel used by archeologists while excavating
UNITS	Boxes formed when using ropes to divide a site into a grid

Answer Key

Activity: Match Me **Page:** 7

Historical archeologist

I use historic documents in my research, and study cultures with written records.

Archeoastronomist

I like the learn about how people in the past thought about the stars and planets.

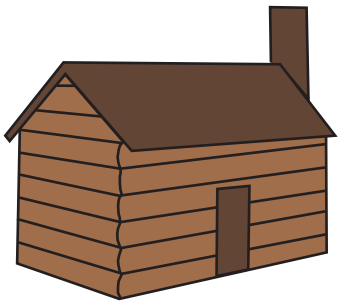
Underwater archeologist

I SCUBA dive to excavate sites. I study shipwrecks in lakes and oceans.

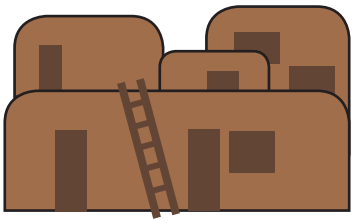
Zooarcheologist

I study how people in the past interacted with animals.

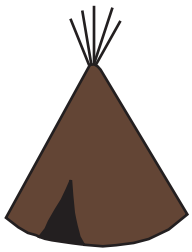
Activity: Home Sweet Home **Page:** 9



MY HOUSE is built from wood. I have a brick fireplace for warmth and cooking.



MY HOUSE is built from the earth. I like to work and play on my roof.

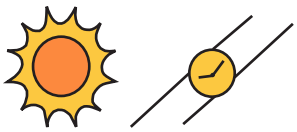


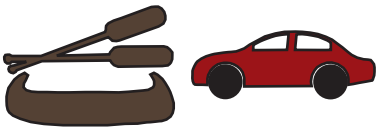
MY HOUSE is built from animal skins. I move around a lot, so my house is easy to pull down and take with me.

Activity: It's a Bargain **Page:** 10

1) 1 lb. spices. Because, according to the trade regulations,the spices can be traded for 2 china plates (worth 3 sugar barrels each), making the spices the most valuable item.
2) 3 blankets and 1 whiskey bottle
3) 1 lb. spices and 3 sugar barrels
4) 1 gunpowder keg and 2 lbs. tobacco
5) 2 china plates

Activity: Past and Present **Page:** 11





Answer Key

Activity: Step By Step
Page: 12

_8_ Write site report based on information from artifacts
_7_ Catalog, wash, photograph, and take notes on artifacts found during excavations
_4_ Use survey and map to choose places for excavation
_1_ Start by developing research question
_3_ Survey the selected site and make an accurate map
_2_ Design research plan to answer research question; select site, equipment, people, and set budget
_9_ Share information in the report through publications and museum exhibitions
_5_ Begin excavating scientifically and carefully
_6_ Move artifacts to the lab when finished excavating

Activity: Digging Deep
Page: 14

1) F
2) A
3) B
4) F
5) 750 years
6) The age of an artifact can tell you when a site was used by humans in the past. Stratigraphy places everything in context, a place in time and space, which is crucial for archeological research.

Activity: How You Can Help
Page: 25

T	P	R	E	S	E	R	V	E	F	O	C	R
C	G	L	L	E	R	A	A	U	P	O	M	O
A	U	N	N	L	O	O	T	I	N	G	P	G
F	R	O	I	A	R	U	E	T	P	F	R	R
I	S	C	T	L	R	I	E	T	L	Y	O	T
T	T	E	H	E	A	X	L	A	I	D	T	R
R	O	T	C	E	T	E	D	L	A	T	E	M
A	R	D	E	Y	O	R	T	S	E	D	C	P
N	I	E	T	N	E	L	S	S	O	G	T	A
G	E	R	D	E	O	A	O	T	A	P	A	E
E	S	C	T	A	B	P	F	G	S	P	O	L
R	E	A	Y	M	L	G	E	L	Y	D	R	E
N	T	N	A	T	R	O	P	M	I	O	O	L

Activity: Stepping Back in Time
Page: 17

1) 3
2) 17
3) 1

Activity: Digging Decisions
Page: 26

RIGHT

An archeologist goes out of their way to share their research with others through publications and museums.

An archeologist notices their site has been disturbed. They contact the authorities, document the damage, and do their best to ensure that the site is protected throughout the rest of the dig.

WRONG

An archeologist sees a volunteer on a dig sneak an artifact into their pocket. The archeologist doesn't say anything and lets the volunteer take the artifact from the site.

An archeologist sells an object they found to a collector so they can increase their funding for further research.

Answer Key

Activity: Protect Your Site
Page: 22

IUHRNRCAE
HURRICANE

CIOOTRUNSCTN
CONSTRUCTION

GLTIOON
LOOTING

EFRI
FIRE

TERE RTOOS
TREE ROOTS

DRONETS
RODENTS

Activity: Wrapping it Up
Page: 30

ACROSS
4. Artifacts
6. Archeologists
8. Context
9. Looting

DOWN
1. Sherds
2. Stratigraphy
3. Excavation
5. Middens
7. Chronology

Unless otherwise specified, all photos courtesy of the National Park Service.
Junior Archeologist activity book created by Leah Burgin, with thanks to the NPS Archeology Program.

Junior Archeologist Pledge

AS A JUNIOR ARCHEOLOGIST,
I PLEDGE TO:

EXPLORE ARCHEOLOGY IN MY COMMUNITY AND LEAVE DIGGING TO THE PROFESSIONALS

LEARN MORE ABOUT ARCHEOLOGY

PROTECT OUR NATIONAL PARKS AND ARCHEOLOGICAL SITES

SHARE WHAT I KNOW ABOUT ARCHEOLOGY WITH OTHERS

SIGNATURE: _____

DATE: _____

MORE TO EXPLORE!

1) Go to ***www.nps.gov/archeology*** to learn more about archeology in the national parks

2) Check out your regional National Park Service Archeology Centers for local events

3) Find national parks near you at ***www.nps.gov***

4) Become a Web Ranger at ***www.nps.gov/webrangers***

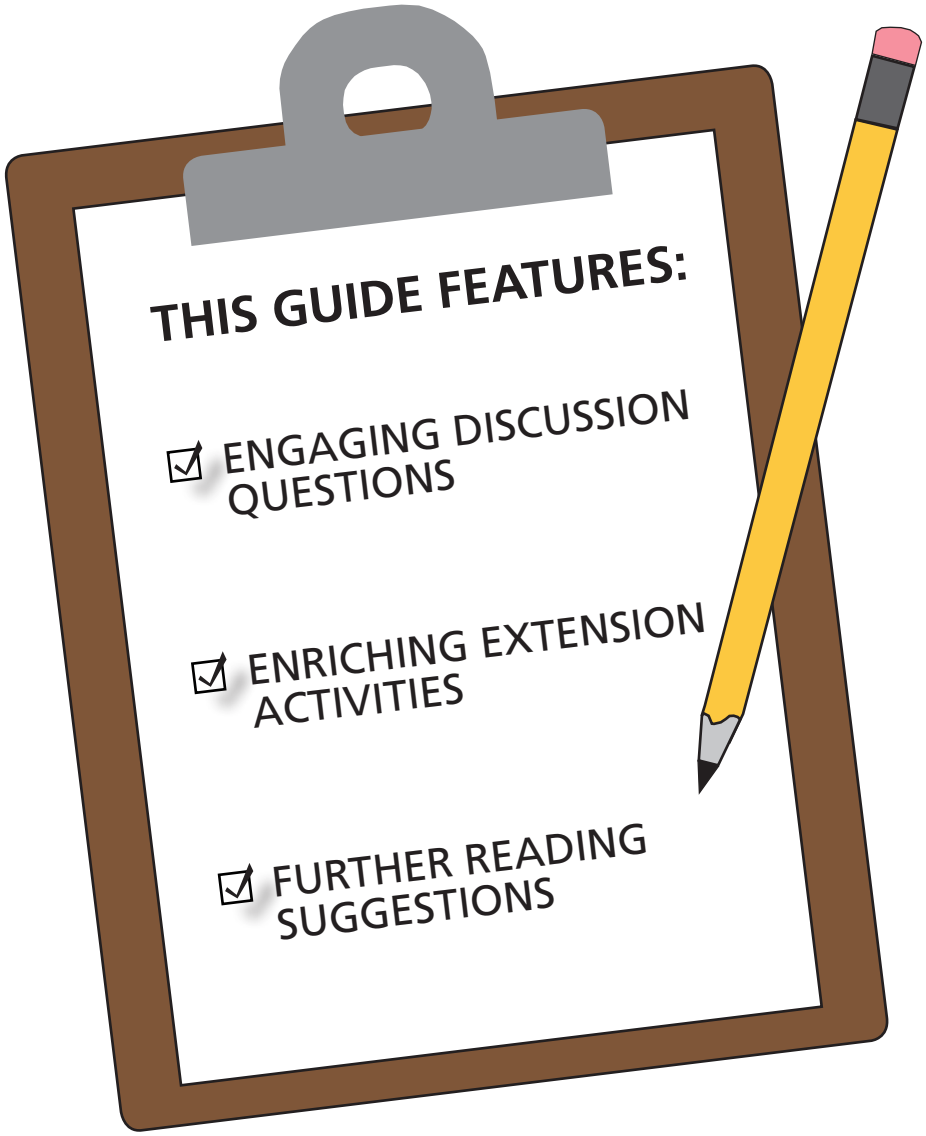
Junior Archeologist

National Park Service
U.S. Department of the Interior

Archeology Program

Parent Guide

Use this guide to dig deeper into archeology with your Junior Ranger. Pose discussion questions while your Junior Ranger works on the activity book, or pursue extension activities and other reading after the activity book is completed.



We hope the parent guide inspires you to find more opportunities for your little archeologist, and learn more about archeology in the national parks along the way.

This guide is just the starting point!

Discussion Questions

Activity: Match Me **Page:** 7

1) What would you want to study if you were an archeologist? Why?
2) Why are there so many different archeology specialties? Why doesn't every archeologist study everything from the past?

Activity: Painting Pottery **Page:** 8

1) From pottery sherds, archeologists can learn what foods people ate, what technology people had, which resources they had access to, and what designs people liked. These things changed over time. What might archeologists infer based on observations of the pottery in your home?

Activity: Past and Present **Page:** 11

1) Technology changes over time. What objects do we use today that you think will be obsolete in 50 years? 100 years?
2) What are some other objects we use today that people in the past might have had in a different, but similar way? For example, today we get our water from sinks and indoor plumbing. People in the past used wells, rivers, and lakes for their water needs.

Activity: Trash Can Archeology **Page:** 15-16

1) Some archeologists study landfills. What do you think they find? What could "garbologists" conclude from our trash?
2) Today, our trash biodegrades at different rates and is mixed in with trash from other people. How might this impact those conclusions?

Discussion Questions

Activity: It Belongs in a Museum **Page:** 19

1) Why are museum labels so important for telling an artifact's story?
2) Think back to the last time you went to a museum. Were the labels you read informative? Were they interesting? If you did not read the labels, why not?

Activity: Artifact Adventure **Page:** 20

1) Sometimes artifacts are disposed of by one group, picked up by another, thrown away again, moved around by nature, and then, years later, found by archeologists. Why does this make an archeologist's job difficult?

Extension Activities

Activity: Match Me **Page:** 7
Extension: Knowing North

Learn how to orient yourself using the night sky. Why do you think the stars have been important for cultures for thousands of years?

This activity is adaptable for grades 3-9 and can be further enhanced with a visit to Chaco Canyon National Historical Park.

Link: www.exploratorium.edu/chaco/HTML/TG-north.html

Activity: Match Me **Page:** 7
Extension: The Spanish Treasure Fleets of 1715 and 1733: Disasters Strike at Sea

Use this Teaching with Historic Places lesson plan to learn more about underwater archeology.

This activity is adaptable for grades 5-12 and can be further enhanced with a visit to any underwater preserve or sanctuary around the country.

Link: www.nps.gov/teachers/classrooms/129shipwrecks.htm

The word "archeology" can be spelled two ways: archeology and archaeology. Both are correct, but the National Park Service typically uses archeology.

Extension Activities

Activity: Painting Pottery **Page:** 8
Extension: Pottery of the Ancestral Pueblo

Make and decorate your own pottery, and learn about pottery's form, function, and cultural significance.

This activity is adaptable for grades K-12 and can be further enhanced with a visit to Aztec Ruins National Monument.

Link: www.nps.gov/azru/forteachers/classrooms/pottery-of-the-ancestral-pueblo.htm

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President Thomas Jefferson, an amateur archeologist, excavated sites near his home in Virginia.

Activity: Home Sweet Home **Page:** 9
Extension: Geology Makes a Home

Discover how people used geological formations to build homes.

This activity is adaptable for grades 4-5 and can be further enhanced with a visit to the Flagstaff Area National Monuments.

Link: www.nps.gov/waca/forteachers/classrooms/geology-makes-a-home.htm

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Extension Activities

Activity: It's a Bargain **Page:** 10
Extension: At a Crossroads: The King of Prussia Inn

Use this Teaching with Historic Places lesson plan to learn how inns and transportation affected the trade of goods and ideas in New England during the 1700s.

This activity is adaptable for grades 5-12 and can be further enhanced with a visit to the King of Prussia Inn.

Link: www.nps.gov/teachers/classrooms/119king.htm

ARCHEOLOGY FUN FACT!

As many as 7,000 archeologists work in the United States.

Activity: Trash Can Archeology **Page:** 15-16
Extension: Stuff, Then and Now

Investigate resource consumption by comparing packing lists for a modern day camping trip, Native American hunting trip, and the Oregon Trail. How many resources were renewable?

This activity is for 4th grade and can be further enhanced with a visit to Craters of the Moon National Monument and Preserve.

Link: www.nps.gov/crmo/forteachers/classrooms/the-stuff-we-use-then-and-now.htm

Extension Activities

Activity: Stepping Back in Time **Page:** 17
Extension: Tree Ring Activity

Discover how archeologists use tree rings to date archeological sites.

This activity is adaptable for grades 3-5 and can be further enhanced with a visit to the Flagstaff Area National Monuments.

Link: www.nps.gov/waca/forteachers/classrooms/tree-ring-activity.htm

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Activity: Changing Context **Page:** 21
Extension: It's Not My Fault!

Explore how different perspectives can influence how the story of an historical site is told with a case study: the War of 1812 Battles of the River Raisin. Extend this lesson plan by talking about how archeology could further complicate how historical stories are told, especially if archeological evidence contradicts historical records.

This activity is adaptable for grades 3-5 and can be further enhanced with a visit to River Raisin National Battlefield Park.

Link: www.nps.gov/rira/forteachers/classrooms/its_not_my_fault.htm

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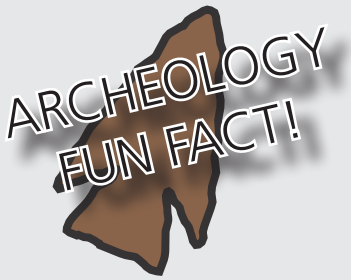
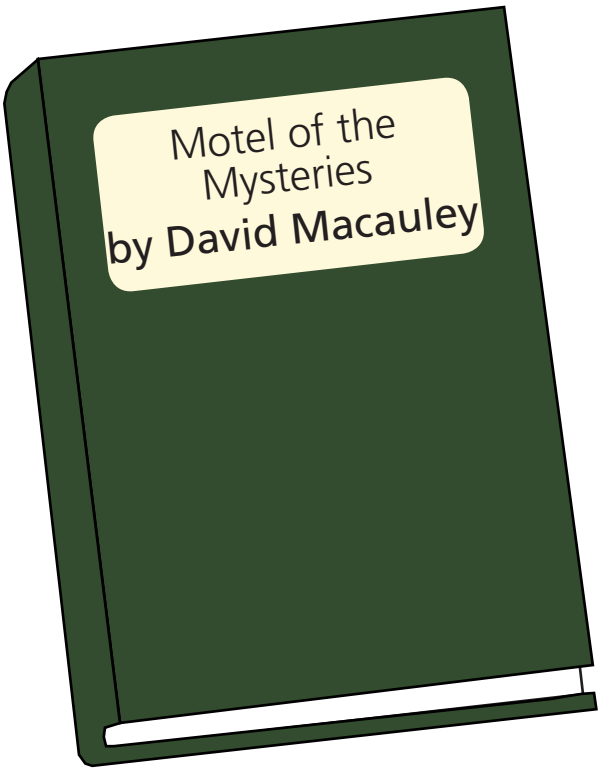


You can learn more about NPS archeological research projects at www.nps.gov/archeology.

Further Reading



From the book jacket:

"It is the year 4022; all of the ancient country of Usa has been buried under many feet of detritus from a catastrophe that occurred back in 1985. Imagine, then, the excitement that Howard Carson, an amateur archeologist at best, experienced when, in crossing the perimeter of an abandoned excavation site, he felt the ground give way beneath him and found himself at the bottom of a shaft, which, judging from the DO NOT DISTURB sign hanging from an archaic doorknob, was clearly the entrance to a still-sealed burial chamber.

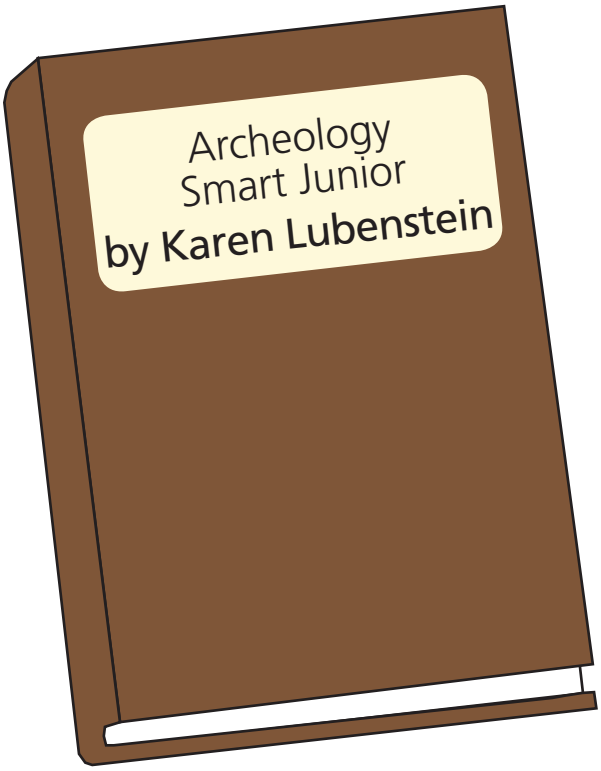
Carson's incredible discoveries, including the remains of two bodies, one of them on a ceremonial bed facing an altar that appeared to be a means of communicating with the Gods, and the other lying in a porcelain sarcophagus in the Inner Chamber, permitted him to piece together the whole fabric of that extraordinary civilization."

From the book jacket:

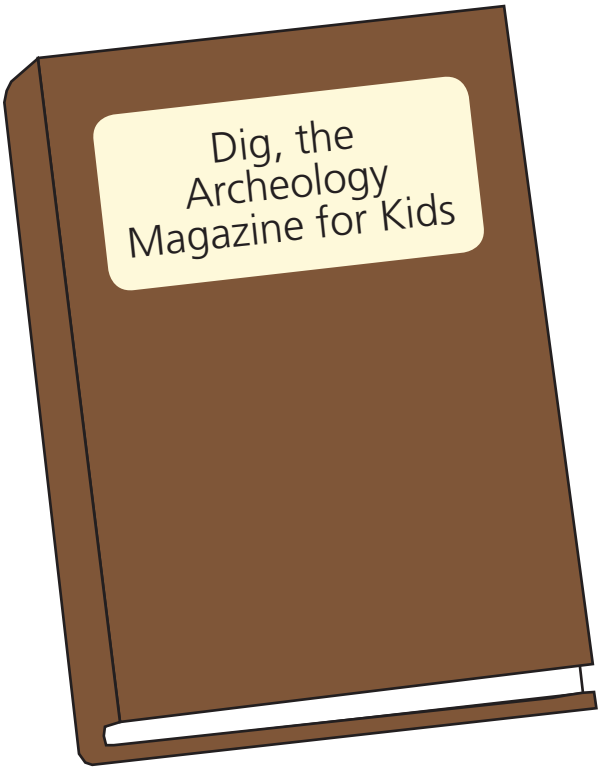
"If you have ever day-dreamed about discovering a lost city that no one ever knew existed, or finding a set of ancient footprints and trying to solve the mystery of who (or what) left them, then this is the book for you.

When Beauregard the cat digs up a bag full of ancient artifacts stolen by the evil Dastardly Looter, it's up to him and his friends Barnaby, Bridget, and Babette to return them to their proper places before they are caught by the sinister thief. Hop aboard their time machine and visit ancient worlds, mysterious ruins, and famous archaeological digs.

Not only is Archaeology Smart Junior *an exciting story, it also tells how archaeologists find and study the clues that tell us all about prehistoric eras. You'll be getting a head start on the science courses you'll take in high school by learning how scientists think and work as they solve the puzzles of the past.*



Further Reading



From the *Dig* website:

"Each issue is theme-related with a special 10- to 12-page section that focuses on an archaeological discovery or topic related to the issue's theme. Writers are most often experts in the area as accuracy and up-to-date information are key. The text is always engaging, vivid, and interesting. Geared to our readers, it complements the principles of Common Core and offers a great springboard for discussion, curriculum-related projects, and cross-disciplinary lesson plans."

From the book jacket:

"Written by renowned archaeologist John White, Ph.D., this book shows any teacher or parent how to help kids become young archaeologists. Imagine the thrill students will experience as they discover artifacts from the past. There isn't a single student who won't love the activities in this book!

From creating simulated archaeology digs in the classroom to digs in the community, this book is a how-to for teaching archaeology. Of equal importance is that while learning the discipline of archaeology, students will be acquiring skills in math, biology, geology, art, geography, history, and language skills, as well as motor, social, and conceptual skills."