Archaeology Merit Badge
PART THREE
Eric Cutright, January 2022
Scoutmaster Troop 1029 (F)
Archaeology Merit Badge

Your Troop 1029 Merit Badge Counselor
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Part 1 – Summary of Requirements, Introduction, Site Sampling, Mock Dig
Part 2 – Artifact ID/Preservation, Dating, Cool Archaeological Sites around the world
Part 3 – Artifact ID, Looting, Time Capsules, YOUR Requirement 7 and 8 presentations
Part 4 - Experimental Archaeology, Cool Careers in Archaeology
Part Three – Diggin’ Deep

• Troop 1028 Field Trip Summary
• Refresher: Artifact Identification
  – Patrol Competition: Artifact Identification
• Site Protection and Looting
  – What to do if you find an archaeological site
  – How to protect sites from looting
• Time Capsules
  – What are they?
Troop 1028 Field Trip to Ash Lawn-Highland
Our Field Trip to Ash Lawn-Highland (Cville, near Monticello)

- Ash Lawn-Highland was the home of James Monroe, fifth President of the United States from 1799-1823
- The original house was thought to be lost to fire and the existing structures were built later (mystery!)
- Archaeological excavation by “shovel hole” sampling and then a bigger excavation around the garden sidewalk found a large buried cellar, chimney structure, and burnt floor planks. Now filled back in.
- They recently took dendrochronology samples from house beams in order to date the current structure
- Nobody knows what the original house really looked like!
Our Field Trip to Ash Lawn-Highland
Our Field Trip to Ash Lawn-Highland

- Our host Dr. Sara Bon-Harper
Our Field Trip to Ash Lawn-Highland
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Our Field Trip to Ash Lawn-Highland
Artifact (Mis)Identification: Motel of the Mysteries

• Howard’s wife Harriet poses with some of the priceless artifacts
  - The Sacred Collar
  - The Ceremonial Headband
  - Magnificent *plasticus petrificus* ear ornaments
  - Exquisite silver chain and pendant from the highly polished white sarcophagus found in every tomb
Artifact Identification

• The moral of this story?
  – People in ancient times knew exactly what artifacts were used for since they used them every day
  – For us, artifact identification can be very difficult, particularly if items are not used by our modern culture

• Time for a Patrol competition about this!
Patrol Competition – Artifact Identification
The Rules:
1. Each Patrol is a team
2. Must raise your hand to answer
3. Winning hand may confer with Patrol
4. Wrong answer, move to next Patrol
5. Most correct answers out of 20 wins
NOTE: Correct answer may be “nobody knows”

The Amazing Prize:
Artifact ID Quiz – Artifact 1: What is it?

- Origin: Egyptian
- Size: 12 inches across
- Material: Ceramic
Artifact ID Quiz – Artifact 1: Egyptian Head Rest

– African Head Rest in Use
Artifact ID Quiz – Artifact 2: What is it?

- Origin: Egyptian
- Size: 6 feet long, 3 feet high
- Material: Wood
Artifact ID Quiz – Artifact 2: Egyptian Bed / Couch
Artifact ID Quiz – Artifact 3: What is it?

- Origin: Roman
- Size: About 2 to 3 inches diameter
- Material: Metal
Artifact ID Quiz – Artifact 3: Nobody knows!!

Several hundred have been found
Artifact ID Quiz – Artifact 4: What is it?

- Origin: Denmark
- Size: 1.5 inches tall
- Material: Plastic
Artifact ID Quiz – Artifact 4:
“Super Eric” LEGO Mini-figure!
Artifact ID Quiz – Artifact 5: What is it?

- Origin: Egyptian
- Size: 2 feet across
- Material: Stone or ceramic
Artifact ID Quiz – Artifact 5: Mehen – Game of the Snake
Artifact ID Quiz – Artifact 6: What is it?

- Origin: Roman
- Size: 2 feet long
- Material: Metal
Artifact ID Quiz – Artifact 6: Roman Mirror
Artifact ID Quiz – Artifact 7: What is it?

- Origin: US
- Size: 4 inches square
- Material: Wood
Artifact ID Quiz – Artifact 7: “Folk Toy” Smoke Grinder

a.k.a. A “Do Nothing”
Artifact ID Quiz – Artifact 8:
What is it?

- Origin: Aztec
- Size: About 1 foot long
- Material: Stone
Artifact ID Quiz – Artifact 8: Nobody knows !!
Artifact ID Quiz – Artifact 9: What is it?

- Origin: Roman
- Size: 3 inches long
- Material: Ceramic
Artifact ID Quiz – Artifact 9: Miniature Oil Lamp
Artifact ID Quiz – Artifact 10: What is it?

- Origin: Egyptian
- Size: 2 feet wide
- Material: Wood
Artifact ID Quiz – Artifact 10: Hounds and Jackals Game
Artifact ID Quiz – Artifact 11: What is it?

- Origin: US
- Material: Plastic
- Size: About 5 inches square, 1/8” thick
Artifact ID Quiz – Artifact 11: Computer Floppy Disk
Artifact ID Quiz – Artifact 12: What is it?

- Origin: Roman, found in Ethiopia
- Material: Glass
- Size: 4 inches high
Artifact ID Quiz – Artifact 12: Perfume Bottle from 100 AD
Artifact ID Quiz – Artifact 13: What is it?

- Origin: Iron Age
- Size: 8 inches square
- Material: Wood, Iron encrusted in Rock
Artifact ID Quiz – Artifact 13: Ancient Hammer
Artifact ID Quiz – Artifact 14: What is it?

- Origin: China
- Size: 3 inches diameter
- Material: Rubber
Artifact ID Quiz – Artifact 14: Rubber Band Bracelet

From the “rubber band jewelry” craze a few years ago
Artifact ID Quiz – Artifact 15: What is it?

- Origin: Roman
- Size: 12 inches long
- Material: Metal
Artifact ID Quiz – Artifact 15: Roman Bath Oil Scraper
Artifact ID Quiz – Artifact 16: What is it?

- Origin: Greek
- Size: 12 inches long
- Material: Metal
Artifact ID Quiz – Artifact 16: Mycenaean “Lion Hunt Dagger”

Above: Dagger Reconstruction

Right: Detail from original blade

About 1,500 BC
Artifact ID Quiz – Artifact 17: What is it?

- Origin: China
- Size: 4 inches long
- Material: Plastic
Artifact ID Quiz – Artifact 17: “Stranger Things 2” Dart Toy
Artifact ID Quiz – Artifact 18: What is it?

- Origin: Greek
- Size: 5 inches in diameter
- Material: Brass
Artifact ID Quiz – Artifact 18:
Ancient Greek Astronomical Computer

• Antikythera mechanism found in Greek shipwreck
• 2000 years old, used to predict astronomical movements

Xray and a modern reproduction
Artifact ID Quiz – Artifact 19: What is it?

- Origin: Scotland
- Size: 4 inches high
- Material: Walrus ivory
Artifact ID Quiz – Artifact 19: Scottish Chess Pieces

- Ancient 12th century chess set from Scotland, Isle of Lewis. 79 pieces in all – British Museum + National Museum of Scotland
Patrol Competition – LAST ARTIFACT
Artifact ID Quiz – Artifact 20:
What is it?

- Origin: US
- Size: 3 inches long
- Material: Wood
Artifact ID Quiz – Artifact 20: “Folk Toy” Belt Balancer
Patrol Competition –
And the winner is ??
Looting and Site Protection
(Requirement 6)
What if you find something?
(MB Book pages 22-24, 27-28, 38, 67, Req’t 5/6)

• Many archaeological sites have been discovered by accident by normal folks
• What should you do if you find something?
  – Leave it in place
  – Report to Park Ranger, or to state historic preservation officer
  – Report any unauthorized digging or looting to police
Why not take that Arrowhead?  
(MB Book page 36, Req’t 6)

- Arrowheads (a.k.a. projectile points) might be evidence of an undisturbed archaeological site
- By its shape and size, the point could help archaeologists identify the culture that made it
- If not made of local material, could indicate trade patterns
- The arrowhead could be the key to dating the entire site
- When you take an artifact, you take away a unique clue that an archaeologist may need to analyze the site!!
Looting
(MB Book pages 22-24, 27-28, 38, 67, Req’t 5/6)

- Looting is the unauthorized removal of artifacts from an archaeological site
- Looters (a.k.a. pothunters) may keep artifacts for themselves or sell them for money
- Worldwide black market in stolen or looted antiquities
  - Most countries have laws against looting
- Looters destroy priceless archaeological information !!
Site Protection
(MB Book pages 22-24, 27-28, 38, 67, Req’t 5/6)

• Archaeologists must take steps to protect active sites from looting

• Situation is particularly dangerous if there are valuable artifacts such as gold or jewels
  – Inca excavations in Peru
  – King Tut’s tomb
  – Atocha shipwreck

• What do they do?
  – Fences and locks
  – Site enclosures to limit visibility to public
  – Armed guards 24/7
Time Capsules
(OLD Requirement 7a)
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(OLD Requirement 7a)

• A time capsule is a historic cache of goods or information, usually intended as a method of communication with future people and to help future archaeologists, anthropologists or historians.

• There are thousands of capsules buried worldwide.

• Currently, four time capsules are "buried" in space:
  – The two Pioneer Plaques and the two Voyager Golden Records have been attached to spacecraft for the possible benefit of spacefarers in the distant future.
  – A fifth time capsule, the KEO satellite, which is scheduled to be launched in 2015, carrying individual messages from Earth's inhabitants addressed to earthlings around the year 52,000, when it is due to return to Earth.
Boston Time Capsule – July 4, 1795

• In December 2014, workers found a time capsule in the Massachusetts State House in Boston

• It was placed there by Paul Revere and Samuel Adams (then state governor) on July 4, 1795
  – Had been previously found, cleaned, and replaced in 1855

• What was in it?
  – Five folded newspapers
  – Massachusetts commonwealth seal
  – Title page from Massachusetts colony records
  – 24 coins including a one-shilling piece from 1652
  – Copper medal depicting George Washington
  – Silver rectangular plate made by Revere and Adams
1795 Boston Time Capsule
Contents
Other Cool Time Capsules

- **George Lucas Time Capsule**
  - Buried at Skywalker Ranch in 1997 (20th anniversary of SW), contains artifacts from his Star Wars movies and his company

- **Billings, Montana - Campfire Girls Troop 23**
  - Buried in 1976 (America’s Bicentennial), scheduled to be opened 2076 (America’s Tricentennial)
  - Contains Princess telephone, digital watch, box of bullets, tapes of music and news programs, and 1976 Bicentennial stamps

- **National Millennium Time Capsule, Washington DC**
  - Buried in 2000, scheduled to be opened in 2100
  - Contains piece of Berlin Wall, Hostess Twinkie, WWII Helmet, a cell phone, and Louis Armstrong’s trumpet
Pre-Requisite Assignment: Requirement 7
Pre-Requisite Assignment: New Requirement 7

7. Do ONE of the following and discuss your findings with your counselor:
   a. Visit a museum to observe how artifacts aid in conveying history.
   b. Present to your counselor a significant family artifact/heirloom and discuss its history.
   c. Make a list of the trash your family throws out during one week. Discuss with your counselor what archaeologists might learn about you and your family if they found your trash a 1000 years from now.
Pre-Requisite Assignment: New Requirement 8
Pre-Requisite Assignment: Requirement 8

8. Research a group of people who lived in your area more than 100 years ago.

• Find out about their ways of life, including housing, clothing, arts and crafts, tools, trade and markets, rituals and religions, and diets, and their relationships with other groups of people in the area.

• Describe what you would expect to find at an archaeological site where these people lived.

• Explain how these people influenced your current community.