

Welcome!

Thank you for using G.R.A.V.E. (Gravestone Research and Volunteer-based Education) in your classroom. This series of lessons is designed to introduce your students to archaeology and local history by learning about and recording historic cemeteries. Through this process, students exercise critical thinking skills, make local connections to broad historical events, and contribute to their local communities.

The lessons are designed for use in Florida World History courses; however, they are appropriate for high school students and can be adapted for use in a variety of classes.

The project is organized into three sections:

1. Introduction to Cemeteries (1-4 class periods): The introductory classroom portion includes a drawing activity, a PowerPoint lecture, and two optional lessons to prepare your students for the cemetery visit.
2. Collecting Data in the Cemetery (1+ field trip): On your field trip to a local historic cemetery, your students will put their new skills to work by recording cemetery markers. If you are unable to visit a cemetery, you can create this experience in your classroom using photos of cemetery markers.
3. Sharing and Interpreting Data (1-4 class periods): After your field trip, students return to the classroom to unpack their experiences through a short discussion. There are three optional lessons that can be paired with this discussion or assigned as homework, and several suggestions for final projects, if desired.

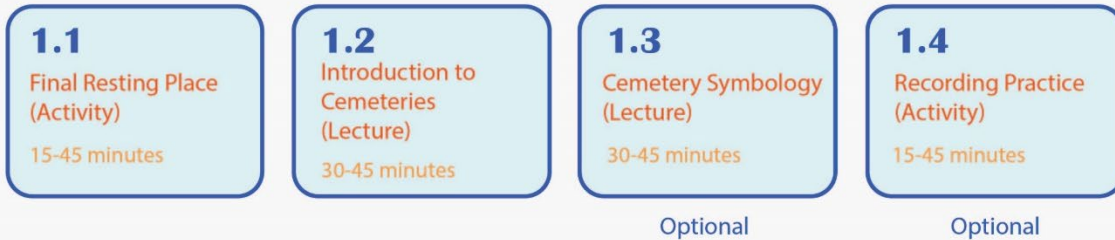
This packet includes background information and guidance for setting up a G.R.A.V.E. project, including:

- G.R.A.V.E. Program Outline (p.2)
- Curriculum Connections and Outcomes (p.3)
- Project Planning Guidance (p.4)
- Cemetery Safety Tips (p.5)
- Resources and Next Steps for Students (p. 6)
- Cemetery Introductory Letter Template (p. 7)

For more information or to request a G.R.A.V.E. teacher training, contact your local FPAN office at www.fpan.us. We look forward to hearing from you!

G.R.A.V.E. Program Outline

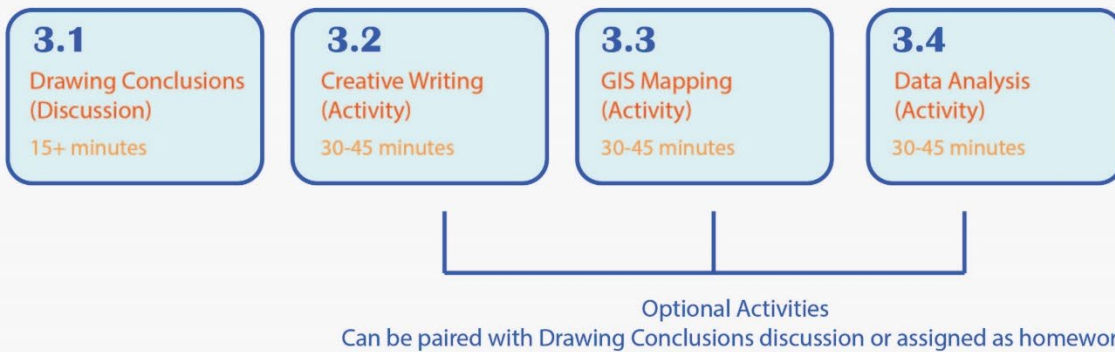
Phase I: Introduction to Cemeteries (Classroom)



Phase II: Collecting Data (At the Cemetery)



Phase III: Sharing and Interpreting Data (Classroom)



Curriculum Connections and Learning Outcomes

Relevant World History Standards and Benchmarks

Standard 1: Utilize historical inquiry skills and analytical processes.

SS.912.W.1.3 Interpret and evaluate primary and secondary sources.

SS.912.W.1.4 Explain how historians use historical inquiry and other sciences to understand the past.

Articulation with the Florida World History Textbook

There are several places where this series of lessons fit within the World History curriculum. Depending on the cemetery and the creativity of the instructor, these lessons could fit almost anywhere.

- Chapter 1: Ancient Civilizations and Chapter 14: Peoples of North American and Mesoamerica both emphasize archaeological skills. By drawing parallels between recent and ancient archaeological sites, students can learn how archaeologists use the same skills to investigate any time period, even the recent past, and can learn these skills firsthand.
- Chapters 27-29 discuss World War I, the Great Depression, and World War II, respectively. By studying cemeteries, students can better understand daily life and attitudes during these time periods. For example, a class might investigate the materials and decorations on grave markers before, during, and after the Great Depression to understand if burial practices were impacted by the economic crisis. Similarly, a class might compare markers from WWI and WWII to understand which military branches were represented during each war.
- Several chapters discuss religious practices. Religious symbology is very common on grave markers and can be easily tied to these chapters as well.
- World cultures can also be tied to local cemeteries through immigration patterns and burial customs.

General Learning Outcomes

- Students will learn archaeology is the study of human culture through material remains, both through excavation and through other processes
- Students will explore how archaeology can provide stories of daily life and average people, as well as perspectives that have been forgotten or obscured
- Students will employ the scientific method to study the past, understanding the same process is used whether examining artifacts from 50 years ago or 1000 years ago
- Students will use headstones as primary sources, employing several types of analyses to examine them in different ways
- Students will understand how archaeology and preservation are beneficial for communities and take pride in their local historical resources

Project Planning Guidance

Step 1: Identify a cemetery

Before beginning your project, you will need to identify a nearby historic cemetery. You can work with your local FPAN Public Archaeology Coordinator to make arrangements with the property owner or you can do this yourself. It is very important that the property owner knows about and approves of your project prior to doing any work in the cemetery. A sample letter for local cemetery representatives is attached and can be modified to include project timelines and number of students.

Step 2: Make a Plan of Action

Ideally, you or your local FPAN staff member will coordinate with a cemetery representative to identify any goals the cemetery wants to achieve. You might be able to help them reach these goals through the project activities. You may also want to create a recording plan, especially if you are visiting a large cemetery. You might assign certain rows or sections to groups of students to ensure they are not duplicating work or missing any markers.

Step 3: Organize your Cemetery Visit

Follow your school's policies to arrange busing, substitute teachers, and student permission slips. If you are unable to arrange busing, there may be a cemetery within walking distance of your school, or you can create a mock cemetery by printing out photos of markers and hanging them on the wall. Depending on your schedule, you may plan one day-long field trip or you might do one or more short cemetery visits. You might even visit multiple cemeteries during your field trip to compare them.

Step 4: Share your Data

Sharing your data ensures your students efforts make an impact on the broader community. If the cemetery is interested, you can send the completed forms to a representative for their records at the end of the project. With the permission of the cemetery, you could also make the data available by donating it to a local historical society or to an online platform, like UCF's RICHES database (<https://riches.cah.ucf.edu/>)

Step 5: Add your cemetery to the Florida Master Site File

Fill out this short online form to report your cemetery to the Florida Department of Historical Resources: <http://www.fpan.us/projects/florida-historic-cemetery-inventory/>. The state's cemetery inventory assists with the protection and preservation of historic cemeteries. If your cemetery is on private land, be sure to get the landowner's permission first.

Cemetery Safety Tips

Every cemetery is different, but there are a few general guidelines to ensure a safe visit to the cemetery, both to protect you and your students and the cemetery itself.

Environmental Protection

- Wear close-toed shoes and pants to avoid any foot injuries
- Wear sunscreen and hats to avoid sunburn
- Drink plenty of water to avoid dehydration
- Be aware of any student allergies, especially bees or plants, to avoid reactions
- Avoid snakes, ants, and other pests to avoid injuries
- If possible, bring a first aid kit to the cemetery for minor cuts and scrapes

Respectful Behavior

- Act respectfully and be mindful of other visitors. No running or yelling the cemetery
- Avoid touching unstable or leaning headstones so they do not fall over
- Do not remove any “trash,” like glass, pottery, or shells. Sometimes these items are actually grave offerings left by loved ones
- Do not walk on top of flat grave markers, both out of respect and for safety reasons. Sometimes these underground vaults are unstable and can collapse
- Do not make rubbings of the markers. This practice used to be common but can actually erode the face of the marker over time

Logistical Preparations

- Students should use the bathroom before leaving, as bathroom use will be limited
- Scope out the ground surface prior to visiting to determine potential parking spots and safe wheelchair routes
- If possible, note shady places to rest and take breaks when needed, especially on hot days
- Be sure the land owner knows you will be on site and has given you permission to be there

Resources and Next Steps for Interested Students

Continue Learning about Archaeology

- Visit the calendar on our website (www.fpan.us) for events and volunteer opportunities
- Follow Florida Public Archaeology Network on Facebook and Instagram

Cemetery Volunteer Opportunities

- Laying American flags for Veteran's Day and Memorial Day: Cemeteries commonly lay flags around these holidays to honor deceased veterans. Contact your local cemetery to see if they need help.
- Cemetery Clean-ups: Many cemeteries hold clean-up days where volunteers remove trash and perform basic maintenance. Reach out to your local cemetery or even organize a clean-up day to raise awareness. Your local FPAN office may also have cemetery clean-up dates on their calendar (www.fpan.us)
- Wreaths Across America (<https://www.wreathsassamerica.org/>) provides volunteer opportunities each December to lay commemorative wreaths on veteran graves. Visit their website to find an event near you.

Cemetery Research

- The Association for Gravestone Studies (<https://www.gravestonestudies.org/>) has more information about cemetery symbols and markers, and even has local chapters for those who want to connect with other cemetery enthusiasts
- The Chicora Foundation (<https://www.chicora.org>) has lots of resources about cemetery symbols and preservation, specifically of African American cemeteries, on their website
- Find a Grave (<https://www.findagrave.com/>) contains photos and information about millions of cemetery memorials. Students can search for local cemetery markers or can upload the information they collected.
- "Ask a Mortician" This YouTube series with mortician Caitlin Doughty is a fun way to learn more about burial practices, past and present.

Organize a Cemetery Resource Protection Training (CRPT)

FPAN offers a day long training about cemetery preservation, including best practices in cemetery maintenance and headstone cleaning. (<https://fpan.us/workshops/CRPT.php>) Students can organize a CRPT by contacting local FPAN staff, especially if they would like to provide an opportunity for other community members to get involved in preserving local cemeteries.

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(use school letterhead)

[Insert cemetery contact name and address]

[Insert date]

Dear [insert cemetery contact name here],

Our [grade level] class at [insert high school name here] is preparing to learn about historic cemeteries through Florida Public Archaeology Network's G.R.A.V.E. program (Gravestone Research and Volunteer-based Education). This project introduces students to archaeology and local history through the study of historic cemeteries. More information about this program can be found online at www.fpan.us/resources.

If possible, we would like to visit your cemetery as part of our unit. Through our project, we would record and research individual headstones by copying inscriptions, identifying symbols, sketching markers, and determining marker condition. We would not do any rubbings, maintenance, cleaning, removal of objects, or anything destructive in nature. We are also interested in working with you to record any markers of interest or to complete any goals you might have. The students' recordings and research can of course be shared with you if you wish.

Please contact me at [phone number] or [email address] at your earliest convenience, as we will not visit the cemetery without your permission. Written permission, either via letter or email, would be most appreciated. You can also reach out to your local Florida Public Archaeology Network office for more information about the program itself (www.fpan.us). We look forward to talking with you more about the project.

Thank you!

[insert your name here]

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Phase I: Introduction to Cemeteries

Time Frame: 1-4 class periods

Location: Classroom

The first phase of the cemetery project will take place in the classroom and is guided by the Introduction PowerPoint lecture. To hook students, Lesson 1.1 asks them to draw their “final resting place.” This can be a short activity or can last for a day, depending on time constraints. Next, students are introduced to archaeology and to cemetery preservation through Lesson 1.2, the Introduction to Cemeteries lecture.

There are two options for additional classroom lessons which are included at the end of the PowerPoint: Lesson 1.3, a lecture on cemetery symbology and Lesson 1.4, a practice session where students “record” cemetery markers depicted on photos.

Use the following symbols to modify the lessons to fit your schedule:



Ask your students



Can be assigned as homework



Optional activity



For more opportunities

Lesson 1.1: Final Resting Place Activity

Time Frame: 15-45 minutes (or as homework)

Students draw their “final resting place” on a sheet of paper. They can either share their drawings with the class or in pairs, depending on the time frame. This activity allows students to share their own perceptions of cemeteries and fosters a personal connection with the subject before beginning the project.



Can be assigned as homework

Required Materials

- Pens/Pencils or Markers
- Scratch Paper
- Optional: Introduction PowerPoint lecture (Slide 2)

Lesson Procedures

Slide 2: *Have students draw their “final resting place.” Encourage creativity and try not to let your own ideas about cemeteries or burial places influence their drawings. Have students share their drawings, either in pairs or with the class if time permits.*

Lesson 1.2: Introduction to Cemeteries

Time Frame: 30-45 minutes

This PowerPoint introduces students to historic cemeteries and discusses current issues in cemetery preservation to provide context for the cemetery visit. It can be paired with the Final Resting Place activity. There are several opportunities for students to share their own thoughts and experiences with cemeteries, making the time frame flexible.

The PowerPoint contains several words in gray; if desired, students can follow along on a note sheet (attached at end) and fill in the blanks with the gray words.

Required Materials

- Introduction PowerPoint lecture (Slides 3-11)

Lesson Procedures

Slide 3: Are cemeteries considered archaeological sites? Yes, historic cemeteries are archaeological sites! Archaeologists aren't necessarily the first people that come to mind when thinking about cemeteries, but they do study cemeteries, both above ground and below.

Archaeologists study human culture through material remains- anything left behind by human beings. Excavation (digging) is commonly associated with archaeology, but archaeologists use other tools to study past behavior as well. Even items on the surface of the ground, like headstones in cemeteries, are studied by archaeologists.



Ask students who has been to a cemetery. Bring up local cemeteries or famous cemeteries, like Arlington National Cemetery in D.C. or the New Orleans cemeteries.



If students ask, archaeology is different from paleontology (the study of fossils, including dinosaurs) and from geology, the study of rocks. Archaeologists only study things made, used, or modified by humans.

Slide 4: Archaeologists view historic cemeteries as “outdoor museums,” full of information about people from the past, and gravestones as primary sources that can be examined like historical documents.



Ask students if they have been to a museum and to share their experiences with a partner or with the class.

Cemeteries are often thought of as “spooky” places, but in the past they were seen as park-like places to visit loved ones. In addition to providing information about a historical population and serving as “final resting places,” cemeteries can be very

beautiful and even serve as tourist destinations (like St. Michael's Cemetery in Pensacola shown in the upper picture, which is actually a state park, and the New Orleans cemeteries, shown in the lower picture.)

Slide 5: What can cemeteries tell us?

Historical sources often address big events and sometimes leave out information about what day to day life was like or what the interests and beliefs of a population were.

Many perspectives are typically left out of the primary historical narrative, like those of women or minority groups. Headstones can fill in the gaps in the documentary record to provide information about non-dominant perspectives or those of the average person.



Ask students: "What kinds of information can we learn from cemetery markers?"

Slide 6: These are some of the types of information we can learn from individual headstones:

- decorative and symbolic significance
- biographical information
- familial relationships
- fraternal or social affiliations (like the Freemasons)
- occupational information
- Economic status
- Cultural or religious beliefs



As you introduce these elements, ask students to think of examples from their drawings or call attention to them yourself (i.e. pointing out any religious or secular symbols they might draw on their markers, calling attention to biographical information, such as age, name, family members, etc.)

Slide 7: Why is it important to study cemeteries? Many would argue we have a moral and ethical responsibility to protect and preserve burial grounds. Additionally, cemeteries contain abundant information about past populations, both above ground, through grave markers and monuments, and below ground, through skeletal remains. They are historical places with stories to tell. Finally, many cemeteries face a number of threats and run the risk of being forgotten or developed.

Slide 8: A major threat to historic cemeteries is vandalism. This is a picture of the Milton Historic Cemetery in Milton, FL, where 30+ graves were knocked over in Fall 2017.

By maintaining cemeteries and showing people why they are important, historic places, you can help prevent vandalism. Additionally, in the unfortunate instances when headstones are totally destroyed or stolen, you will have recorded valuable information about what they said so that history is not lost.

Slide 9: Neglect is another major threat to historic cemeteries. Many of Florida’s cemeteries are abandoned or neglected. When residents move away, churches close, or people begin burying their loved ones in newer cemeteries, older cemeteries are sometimes forgotten and can become overgrown

This picture shows Mt Zion cemetery in Pensacola, which the University of West Florida has begun to clean-up and maintain. Your work can help record these cemeteries and draw attention to their importance.



Ask students: “Have you seen any abandoned or neglected cemeteries in your neighborhood? Do you know who is responsible for caring for them?”



If students know of abandoned cemeteries, they can look up property ownership on the county Property Appraiser website.

Slide 10: There are a number of federal, state, and local laws protecting cemeteries on public lands; however, on private land, cemetery maintenance is the responsibility of the land owner. Sometimes, land owners don’t have the ability to maintain the grounds, and at times they don’t even know they are responsible for its upkeep. Florida law allows local governments to care for cemeteries that have been abandoned for over six months.

The Florida Master Site File is a list of all historic properties in the state of Florida, including historic buildings, archaeological sites, and historic cemeteries. This list is consulted during development projects to determine whether any historic properties would be impacted by construction projects. However, many known sites are not listed on the file, including a large number of Florida’s historic cemeteries. Projects like ours are important to ensure all historic cemeteries are recorded and protected.



If students ask: Though the Florida Master Site File doesn’t offer legal protection for listed sites, it does ensure that impacts to the properties are considered and mitigated during publicly funded development projects.

Slide 11: Through this project, we will:

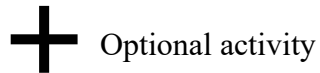
1. Learn new skills in the classroom
2. Visit the cemetery to record headstones
3. Analyze the information we collected after the trip

We won’t be doing any excavation while we’re in the cemetery. We will focus on studying what’s above ground, like grave markers, to understand the history of our local community. In this class we learn about different cultures. This is a way to learn about our own culture.

Lesson 1.3: Cemetery Markers and Symbology (Optional)

Time Frame: 30-45 minutes

This optional PowerPoint lecture introduces students to cemetery markers and symbology in preparation for their visit to the cemetery. It can be paired with Lesson 1.4, Headstone Recording practice, if desired. There are also opportunities for students to analyze the marker they completed in Lesson 1.1, Final Resting Place activity.



Required Materials

- PowerPoint Lecture (Slides 12-27)
- Optional: Symbology Packets

Lesson Procedures

Slide 12: Gravestones can be read just like other historical documents. There are three primary ways to examine them:

1. Analyze the writing
2. Interpret the symbols
3. Look at the stone for clues

Slide 13: Analyze the Writing: Just from this simple marker, we can collect biographical information, including: a person's name (Melissa Florida), their family members' names (John and Ann Campbell), the date they were born (October 14, 1834), the date they died (November 21, 1850), and their age (16).

Slide 14: What can we learn from this marker? *Students should point out name (James Thomson), occupation (Late Chief Engineer for West India and Pacific Company ship named Darien), birthplace (Scotland) birth date (June 1, 1851), death place (New Orleans), death date (October 19, 1893), and age (42)*



Ask students: "What information could someone learn about you from your final resting place drawing?"

Slide 15: Sometimes, graves contain epitaphs, which are short texts honoring a deceased person. These can be analyzed for clues into a person's qualities as well.

For example, this one reads: "Sleep on dear mother and take thy rest, God called the home, he thought it best."



Ask students: “What can we learn about Mary Settles from this epitaph?”

Click for responses: She was a mother, she was religious (probably Christian), her death was probably peaceful

Slide 16: Benn’s epitaph reads: “Pure at thy death as at Thy birth, Thy spirit caught no taint from Earth.” This refers to his young age, only 2 years old, and is actually a line from a poem.

Slide 17: In addition to reading the writing, archaeologists can interpret the symbols on the markers, which provide clue’s to a person’s identity.

Slides 18-20: These are a number of examples of symbols and their meanings.



Ask students: “Did you draw any symbols on your Final Resting Place? If so, why did you choose them? Do they have a deeper meaning? Would someone else be able to interpret the meaning?”

Slide 21: Finally, archaeologists look for clues in the actual stone. For example, stone carver might have hand-signed the marker, like in the one on the left. Archaeologists also examine the materials the marker is made of; especially here in Florida, where there isn’t much naturally occurring rocks, many materials were shipped long distances, indicating they were expensive

Slide 22: Many times, items will be intentionally left at a marker to honor the person buried there. These are referred to as “grave goods.” Common grave goods include flowers, flags, shells, stones, and figurines. Sometimes, these items can provide insight into an individual’s social, ethnic, occupational, or religious affiliations.


Slide 23: Archaeologists also look at the overall context of the cemetery to understand each grave as a part of a larger whole. How old is the cemetery? Are there any patterns in the burials? How does this individual marker compare to surrounding burials?


By looking at the entire cemetery, we can better understand an entire community and how it changed throughout history.

Slide 24: Now we’ll look at a few markers to practice our new skills. This marker has a last name, but no birth or death dates. Can we learn anything from the symbol? *Students should respond that the broken column represents life cut short, so the person buried here was likely young.*


Slide 25: What can we learn from this marker? *Students should answer with name (George Weiland), home state (Vermont), rank (Lieutenant Colonel), military branch (Army Air Forces), wars served in (World War I and II), birth date (July 1, 1894), death date (July 31, 1957), and age (63). They might also point out the flag represents his veteran status, the marker is government issue, and the cross indicates he is Christian.*

Slide 26: What can we learn from this marker? *Students should answer with name (Harold Murray Hirshberg), rank (private), military branch (army), war served in (WWII), was a husband, father, grandfather, and great-grandfather, and the star indicates he is Jewish.*

 *Leaving stones on cemetery markers is a Jewish tradition. There are different interpretations of this practice, but it is generally meant to symbolize the person's continued memory after their death.*

 *Compare this marker to the previous one. They are both government issue veteran markers, but the cross commonly found on these markers is replaced with the Jewish star on the second marker.*

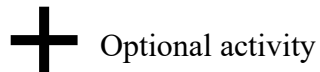
Slide 27: What can we learn from this marker? *Students should answer name (Samuel Joynes), birth date (February 21, 1857), death date (December 7, 1911), and age (54). They might also refer to the epitaph, which reads: Death is eternal life, why should we weep. This indicates his belief in the afterlife and a positive view of death.*

 *This marker is in the shape of a tree trunk and indicates Samuel Jhoynes belonged to Woodmen of the World, a fraternal order founded in 1890 that provided life insurance to its members. Members of Woodmen of the World received these distinctive grave markers.*

Lesson 1.4: Headstone Recording Practice (Optional)

Time Frame: 30-45 minutes

This optional activity familiarizes students with the Headstone Recording form and gives them an opportunity to practice recording markers before the visit to the cemetery. Four examples of markers are provided in the PowerPoint. If additional practice is desired, you can download more photos of cemetery markers and have students practice recording them individually or in small groups using the headstone recording form.



Required Materials

- PowerPoint Lecture (Slides 28-40)
- Optional: Headstone Recording Forms

Lesson Procedures

Slide 28: One of the most important fields on the Headstone Recording form is the inscription. There is a specific way to record inscriptions to keep these forms consistent.

1. Copy the inscription EXACTLY as it is written on the stone. Include all misspellings and reversals. Copy uppercase as UPPERCASE and lowercase as lowercase. Copy all punctuation, even if it looks wrong to you.
2. Use a slash “/” to indicate a new line of text.
3. NEVER guess what a word, letter, or number is. If you don’t know, leave a blank space: “ _____ ”

Slide 29: Practice writing this transcription. *Have students fill write the transcription on scratch paper, on the board, or on a headstone recording form.*

Slide 30: This is what the transcription should look like. *Note: January is misspelled on the headstone, so it is misspelled in the transcription.*

Slide 31: This is the headstone recording form, which we’ll use to record markers on our cemetery visit. In addition to recording the transcription, we will also record the marker type, the material, design elements, and the condition of the marker. *Walk through these elements with the students. They can use the recording packet to learn more about marker types, symbols, and materials.*

Slide 32: Practice writing this transcription. *Have students fill write the transcription on scratch paper, on the board, or on a headstone recording form.*

Slide 33: This is what the transcription should look like. *Note: The backward “N” in “born” is drawn backward in the transcription.*

Slide 34: This is the completed headstone recording form. *Walk through these elements with the students. They can use the recording packet to learn more about marker types, symbols, and materials.*

Slide 35: Practice writing this transcription. *Have students fill write the transcription on scratch paper, on the board, or on a headstone recording form.*

Slide 36: This is what the transcription should look like. *Note: The lowercase “i” in “died” is written in lowercase in the transcription.*

Slide 37: This is the completed headstone recording form. *Walk through these elements with the students. They can use the recording packet to learn more about marker types, symbols, and materials.*

Slide 38: Practice writing this transcription. *Have students fill write the transcription on scratch paper, on the board, or on a headstone recording form.*

Slide 39: This is what the transcription should look like. *Note: The difference between the lowercase and uppercase letters in the transcription.*

Slide 40: This is the completed headstone recording form. *Walk through these elements with the students. They can use the recording packet to learn more about marker types, symbols, and materials.*

Name: _____

Introduction to Cemeteries Notes

Introduction to Cemeteries

1. Are _____ considered archaeological sites?
 - _____, historic cemeteries are _____ sites.
 - Archaeologists study human _____ through material _____ – anything left _____ by human beings.
 - _____ is commonly associated with _____, but archaeologists use other _____ to study past _____ as well.
 - Even items on the _____ of the ground, like _____ in cemeteries, are studied by archaeologists.
2. Archaeologists view historic cemeteries as “_____,” full of information about _____ from the past and gravestones as _____ sources that can be examined like historical _____.
 - Cemeteries are often thought of as “_____” places, but in the _____, they were seen as _____ to visit _____ ones.
 - In addition to providing _____ about a historical _____ and serving as “final _____ places,” cemeteries are very _____ and are even _____ destinations like St. Michael’s Cemetery in Pensacola.
3. What can cemeteries tell us?
 - Historical sources address _____ but often leave out information about _____ life or the _____ and _____ of a population.
 - Headstones can fill in these _____ and provide us with other perspectives.
4. What types of information we can learn from headstones?
 - _____ and symbolic significance
 - _____ information
 - _____ relationships
 - _____ affiliations
 - _____ information
 - _____ status
 - _____ or _____ beliefs
5. Why is it important to study cemeteries?
 - To _____ and _____ burial grounds
 - To collect _____ about past _____
 - To learn the _____ these historical places _____ can tell
 - To prevent _____, _____, and _____

6. How can you help?

- Federal, state, & local laws _____ cemeteries on _____ lands.
- On _____ land, it is the responsibility of the land _____.
- Florida law allows _____ governments to care for _____ that have been abandoned for over _____ months.
- The Florida _____ File is a list of all _____ properties in the state of Florida.
- This list is _____ during _____ projects.
- Many known sites _____ listed on the file, including a large number of Florida's _____ cemeteries.
- Recording projects like _____ are _____ to ensure _____ historic cemeteries are _____ and preserved.

7. What will we be doing?

- Recording _____:
 - Transcribing _____
 - Sketching _____
 - Mapping _____
- Analyzing our _____
- We will _____ do any _____ while we're in the cemetery.
- We will _____ what's _____ ground to understand the _____ of our local _____

Cemetery Markers and Symbology:

Epitaphs:

- An _____ is a short text _____ a deceased person.
- What can this _____ tell us?
- *"Sleep on dear mother and take thy rest God called thee home, he thought it best"*
 - She was a _____
 - She was _____, probably _____

Symbols:

- Ivy: _____ & _____
- Lily: _____ & _____
- Rose: _____ & _____
- Olive Branch: _____ & _____
- Dove: _____
- Eagle: _____
- Snake: _____
- Anchor: _____ & The _____

- Harp/Lyre: _____ & _____
- Broken _____ : Life cut _____

Grave Goods:

1. Grave goods are _____ left behind by those who _____ the _____.
2. These items usually carry _____ significance.

Survey and Recording Transcription:

- Copy the inscription _____ as it is written on the stone. _____ all _____ and reversals.
 - Copy uppercase as _____ and lowercase as _____.
 - Copy all _____, even if it looks _____ to you.
- Use a _____ “/” to indicate a new line of _____.
- NEVER _____ what a word, letter, or number is. If you don’t know, leave a _____ space: “ _____ ”

Phase II: Collecting Data

Time Frame: 2 hours+

Location: Cemetery

The second phase of the project, data collection, takes place at the cemetery. This can take the form of a one-day field trip or can be implemented over multiple visits. The introductory activity, “Making Observations,” is designed to make students feel comfortable in the cemetery and to prompt them to think about the information markers can tell us. The Headstone Recording activity is flexible and depends on how many markers you want to record. It can also be supplemented with GPS Mapping for a simpler exercise.

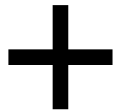
Use the following symbols to modify the lessons to fit your schedule:



Ask your students



Can be assigned as homework



Optional activity



For more opportunities

2.1: Making Observations

Time Frame: 30-45 minutes

Students will answer a set of questions designed to familiarize themselves with the cemetery and to reveal the types of data offered by cemeteries and grave markers. In groups, pairs, or on their own, students will explore the cemetery and make observations guided by the questions in the provided worksheet.

Required Materials

- “Making Observations” Worksheet (provided)
- Pen or pencil
- Writing surface

Lesson Procedures

1. Prior to beginning the lesson, you should provide a brief orientation to the cemetery. If you have any background knowledge of the cemetery to share or if a cemetery official is present and would like to speak with the class, this would be an appropriate time to do so.
2. Remind students of your expectations for their behavior in a cemetery, which was covered in the introductory lecture, including:
 - Acting in a calm and respectful manner
 - Avoiding broken or leaning headstones
 - Leaving items like pottery, shells, or glass in place
3. Break students into groups or partners (if desired) and provide them with the Making Observations worksheet. Allow them to explore the cemetery for about 20 minutes while they respond to the questions on the sheet.
4. Call the students back and discuss their observations as a group. This could be done as a class or students could compare their results in small groups. Below are a few sample discussion questions, but feel free to add your own questions.



Discussion Questions:

1. What was the oldest marker in the cemetery? (Use this as an opportunity to remind students the death date is the date the marker was made and to differentiate between birth and death dates)
2. What were some of the different symbols or social or religious affiliations?
3. What materials were used to make the markers? Are they available locally?
4. Are the markers hand-carved or machine carved? (Hand-carved markers might point to an earlier date or a less affluent community)
5. Based on all the collected observations, can we make any initial guesses about the population that is buried in the cemetery? (i.e. what time period does it date to, what social class, race, ethnicity, or religion were these people affiliated with, etc.)

Name(s): _____

Date: _____

Making Observations in the Cemetery

Wander through the cemetery and make some observations about what you see. Answer the questions below or use them as jump-off points to make your own observations. Use the back of the paper if you need to and be ready to share what you learned with everyone at the end of class.

1. What are some of the oldest dates you see on markers? What are some of the most recent dates?
2. What are some of the symbols you see on markers? Do you know their meanings? Are there any that you don't recognize?
3. Are there any markers that identify occupation or affiliation with any social or religious groups? How can you tell?
4. Can you tell if the markers are grouped in some sort of order? Are there similarities in family names, dates of birth or death, occupation, or anything else you notice?
5. What materials were used for markers and surrounding structures? What other types of materials might not preserve?
6. Are there any unusual epitaphs or inscriptions? Can you interpret them?
7. Are the markers mostly hand-carved or machine carved?

2.2: Recording Headstones

Time Frame: 20+ minutes

Students will use the Headstone Recording Form to record individual grave markers and monuments. An informational packet explaining marker types and common symbols is provided to assist with recordation. Students can work individually, in pairs, or in small groups. You may want to check their work throughout the activity to ensure they are writing clearly and the information is accurate and thorough.

This lesson can be completed multiple times and depends on how many markers you want to record. The students will use the information they collect to complete activities back in the classroom; however, afterward, this information can be provided to the cemetery board or property owner, if desired. More information about this is included in the teacher packet.

Required Materials

- Example Headstone Recording Form (provided for your reference)
- Headstone Recording Forms (provided)
- Informational Packet (provided)
- Phone with a GPS app (AppleMaps, GoogleMaps, etc.)
- Pencils
- Writing Surface
- Rulers/tape measures (optional)

Lesson Procedures

1. As a class, walk through the entire Headstone Recording Form together using one marker as an example. Use the Example Headstone Recording Form as a guide for best practices in cemetery recording. The provided informational packet will help answer questions about gravestone design and symbols. Leave fields blank as necessary and when you are unsure how to respond.
2. Explain how to identify the GPS coordinates for your current location with a phone.
 - a. In GoogleMaps, students should press down and hold the blue dot marking their current location and the latitude and longitude will appear in the search bar.
 - b. In Apple Maps, students should press down on the dot marking their current location and then swipe up on the informational panel at the bottom of the screen. The latitude and longitude will be displayed on the screen.
 - c. When collecting GPS points with a phone, it is very important to zoom in on your location as much as possible to get the most accurate point you can.
 - d. The coordinates for the points will be incredibly similar because the markers are close together, so be sure the students write down *all* of the digits instead of rounding up.
3. Break students into partners or small groups to record the headstones. Ensure that each group has at least one person with a phone that has a mapping app, such as Apple Maps, GoogleMaps, or Bing Maps.
4. Provide each student/group with several Headstone Recording forms and an informational packet. Be sure they write *clearly and legibly*, as they will later compile this data into an excel spreadsheet for data analysis.

- a. Students can also use their phones to photograph each marker as they record them. Photographs preserve details for future researchers and can be uploaded to the website Find a Grave if your cemetery is not already listed and photographed.
5. Students can complete as many or as few Headstone Recording Forms as necessary, based on your cemetery size, time constraints, and/or class research questions. If the cemetery is large, you may want to restrict students to a specific area of the property or to a specific type of marker (i.e. military markers or markers from a certain time period). You may also want to assign them specific markers to ensure they are not duplicating work.
6. If time allows, you can round them up as a group and revisit the “Making Observations” worksheet they completed earlier. Have any of the students’ responses changed? If so, how and why?

2.2 Modified Lesson: GPS Log

+ This lesson is optional

Lesson 2.2 can be modified by having your students record cemetery markers on a simple GPS Log instead of filling out the Headstone Recording forms. This simplifies the data collection process and produces less paper. The modified is best used when you have limited time or when the emphasis is on mapping, like in a Geography class.

Required Materials

- GPS Log (provided)
- Pencils
- Writing Surface
- Phone with a GPS App (Apple Maps, GoogleMaps, etc.)

Lesson Procedures

1. Divide students into pairs or small groups and provide each group with a GPS Log. Ensure that each group has at least one person with a phone that has a mapping app, such as Apple Maps, GoogleMaps, or Bing Maps.
2. Explain how to identify the GPS coordinates for your current location with a phone.
 - a. In GoogleMaps, students should press down and hold the blue dot marking their current location and the latitude and longitude will appear in the search bar.
 - b. In Apple Maps, students should press down on the dot marking their current location and then swipe up on the informational panel at the bottom of the screen. The latitude and longitude will be displayed on the screen.
 - c. When collecting GPS points with a phone, it is very important to zoom in on your location as much as possible to get the most accurate point you can.
 - d. The coordinates for the points will be incredibly similar because the markers are close together, so be sure the students write down *all* of the digits instead of rounding up.
3. Have students record the GPS points and other pertinent information on the log, recording pertinent information based on a research question. For example, have the class collect the points of every military grave and record the war served in and the military branch of each individual. Later, the students can create a map that shows the distribution of these graves across the cemetery. (This is described in Lesson 3.3)

FPAN Individual Marker Form

FPAN/Florida Historic Cemetery Recording Project							
Project #	N/A	Date (DD/MM/YY)	Surveyor Initials:	FS#	N/A		
Cemetery Name:		GPS: Use one set of coordinates collected during Lesson 2.3					
Section #	*	Row #	*	Grave #	*	Orientation (E/W or N/S, etc.):	inscription faces.
Photo #'s This is only necessary if students take photos with their phones. If used, you may want to create a numbering system							
Inscription (use back for more space, indicate here if back is used)							
<p>When transcribing a marker, ensure to copy it exactly as written, including spelling errors, punctuation, and lowercase/uppercase letters. If you can't read a letter or a word, use _____ to hold its place. Use a / to indicate a new line of text. Example: May Chambers/ Born JUN 22 1884/ Died FEB 28 1907</p>							
Type of Marker (check multiple if needed)							
<input type="checkbox"/> Above Ground Vault <input type="checkbox"/> Cradle <input type="checkbox"/> Government Issue <input type="checkbox"/> Ground Marker Use design guide to identify type		<input type="checkbox"/> Handmade <input type="checkbox"/> In-ground Vault <input type="checkbox"/> Ledger <input type="checkbox"/> Mausoleum			<input type="checkbox"/> Metal Temporary <input type="checkbox"/> Obelisk/Monolith <input type="checkbox"/> Table Tomb <input type="checkbox"/> Upright Other:		
Marker Material (check multiple if needed)							
<input type="checkbox"/> Concrete <input type="checkbox"/> Granite <input type="checkbox"/> Limestone <input type="checkbox"/> Marble Use materials guide to identify type		<input type="checkbox"/> Metal/Aluminum <input type="checkbox"/> Metal/Cast Iron <input type="checkbox"/> Metal/Zinc <input type="checkbox"/> Sandstone			<input type="checkbox"/> Wood <input type="checkbox"/> Other stone: <input type="checkbox"/> Other metal: Other:		
Material Notes (note kerbing, maker's marks, footstone, etc.): Use the design guide to include additional elements, like footstones, fencing, etc.							
Gravestone Design/Iconography (ex. Dove, Tree, Cross, Star of David, etc.)				Sketch marker below, use metric scale			
Use the symbol guide to identify these elements				Sketch the marker in this area. Measurements are not necessary, but if they are included, use the metric system.			
Grave Goods							
Includes items purposefully left at marker, such as flowers, flags, shells, ceramics, figurines, stones, etc.							
Condition of Marker							
<input type="checkbox"/> Good (minimal impacts, will last many years)							
<input type="checkbox"/> Fair (sinking, chipping, currently impacted)							
<input type="checkbox"/> Poor (at risk of loss in near future)							
Additional Notes							
Any additional information about the condition of the marker, such as weathering, staining, damages, threats, etc.							

*= Your cemetery may already have a system for section, row, and grave numbers. Work with your point of contact to determine whether or not you need to include this information. If not, leave it blank.

FPAN Individual Marker Form

FPAN/Florida Historic Cemetery Recording Project			
Project #	Date (DD/MM/YY)	Surveyor Initials:	FS#
Cemetery Name:		GPS:	
Section #	Row #	Grave #	Orientation (E/W or N/S, etc.):
Photo #'s			
Inscription (use back for more space, indicate here if back is used)			
Type of Marker (check multiple if needed)			
<input type="checkbox"/> Above Ground Vault <input type="checkbox"/> Cradle <input type="checkbox"/> Government Issue <input type="checkbox"/> Ground Marker	<input type="checkbox"/> Handmade <input type="checkbox"/> In-ground Vault <input type="checkbox"/> Ledger <input type="checkbox"/> Mausoleum	<input type="checkbox"/> Metal Temporary <input type="checkbox"/> Obelisk/Monolith <input type="checkbox"/> Table Tomb <input type="checkbox"/> Upright Other:	
Marker Material (check multiple if needed)			
<input type="checkbox"/> Concrete <input type="checkbox"/> Granite <input type="checkbox"/> Limestone <input type="checkbox"/> Marble	<input type="checkbox"/> Metal/Aluminum <input type="checkbox"/> Metal/Cast Iron <input type="checkbox"/> Metal/Zinc <input type="checkbox"/> Sandstone	<input type="checkbox"/> Wood <input type="checkbox"/> Other stone: <input type="checkbox"/> Other metal: Other:	
Material Notes (note kerbing, maker's marks, footstone, etc.):			
Gravestone Design/Iconography (ex. Dove, Tree, Cross, Star of David, etc.)		Sketch marker below, use metric scale	
		<div style="border: 1px solid black; width: 100%; height: 100%;"></div>	
Grave Goods			
Condition of Marker			
<input type="checkbox"/> Good (minimal impacts, will last many years)			
<input type="checkbox"/> Fair (sinking, chipping, currently impacted)			
<input type="checkbox"/> Poor (at risk of loss in near future)			
Additional Notes			

Cemetery Marker Guide



FLORIDA PUBLIC
ARCHAEOLOGY
NETWORK

WWW.FLORIDAPUBLICARCHAEOLOGY.ORG

Material Types



Concrete



Granite



Limestone



Marble

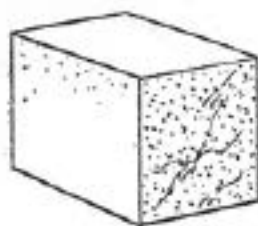


Sandstone

Design Elements



Fencing



Coping

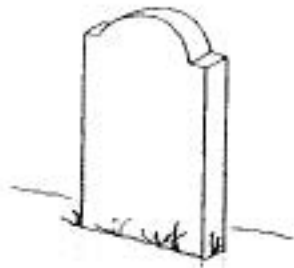


Urn

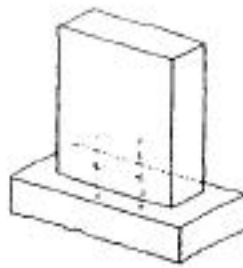
Images courtesy of the Chicora Foundation (2005)

Cemetery Marker Types

Upright Markers



Headstone

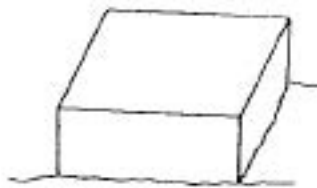


Die on Base



Government Issue

Ground Markers



Raised Top



Plaque



Lawn-Type Marker

Other Marker Types

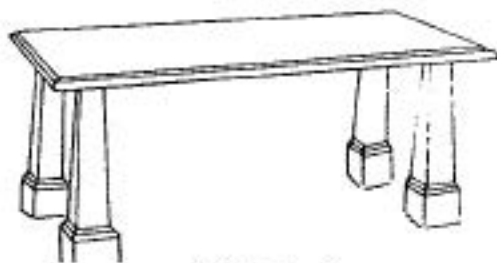
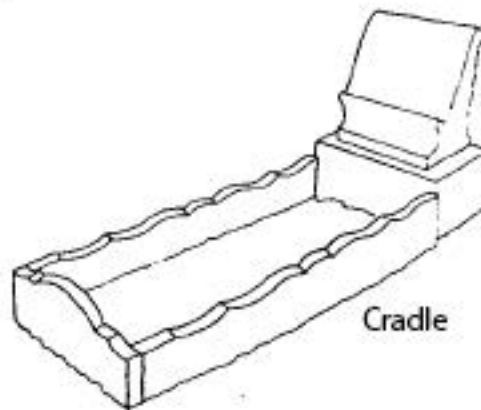


Table Tomb



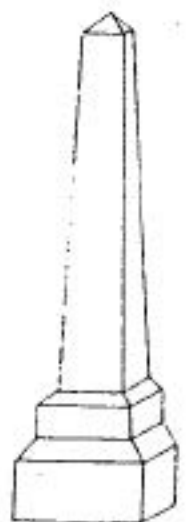
Cradle



Above Ground



Ledger



Obelisk

Cemetery Symbolology



Anchor

Symbol of hope; often a symbol for individuals associated with the sea



Clasped Hands

A sign of marriage: inseparable in life and inseparable in death



Drapery over anything

Sorrow



Angel

Judeo-Christian symbol; messengers and attendants of God



Cross

Christian symbol; resurrection



Hand pointing down

Christian symbol; hand of God, sudden death; can also hold a flower or broken chain



Open Book

Judeo-Christian symbol; represents the word of God



Cross with winding sheet

Christian symbol; descent from the cross



Hand pointing up

Christian symbol; soul is in heaven, reward of the afterlife



Broken Chain

A life that has been cut short



Crown

Christian symbol; reward of faithful



Hourglass

Symbol of the swift and unstoppable passage of time



Cherub

Judeo-Christian symbol; usually associated with children's graves



Crown and Cross

Christian symbol; sovereignty of Christ



Inverted torch with flames

Christian symbol found only in cemeteries; represents the soul's existence in the next realm

Cemetery Symbology



Upright torch with flames
Christian symbol; represents life, truth, or the Nativity



Lyre
Used to designate musical skill



Quatrefoil
Christian symbol; symbolizes the four evangelists: Matthew, Mark, John, Luke



Rocks
Christian symbol; represents the Lord; can also represent permanence, stability, and strength



Shell
Christian symbol; a symbol of a person's Christian journey through life; also, a tradition for those of African or Indian descent



Ship
Christian symbol; represents the mother church; if seen in profile, symbol of a seafaring profession



Star, five points
Christian symbol; star of Bethlehem



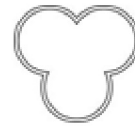
Christian symbol; represents the Father, heavenly wisdom



Star of David
Judaic symbol; symbol of divine protection



Sun
Christian symbol; represents God or Son (setting sun represents death; rising sun represents resurrection)



Trefoil
Christian symbol; symbolizes the Trinity (Father, Son, Holy Spirit) surrounded by the Circle of Eternity



Urn
Symbol of earthly death; associated with a repository for ashes of the dead



Dove
Purity and peace



Eagle
Resurrection and rebirth



Lamb
Christian symbol; represents Christ, innocence; often associated with children's markers

Cemetery Symbolology



Snake

Associated with death; with its tail in its mouth, symbolizes eternity



Cypress

Symbolizes sorrow; Roman symbol for mourning



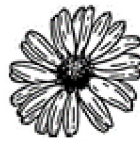
Laurel

Symbolizes victory, eternity; usually in form of a wreath



Anemone

Symbolizes withered hope



Daisy

Symbolizes innocence; usually associated with children's markers



Lilly

Represents innocence, purity, resurrection



Bouquet

Symbolizes grief



Flower bud

Represents a life that's been cut short



Oak Tree/Leaves

Symbolizes strength, endurance, virtue



Calla Lily

Symbolizes majestic beauty and marriage



Forget-me-not

Symbolizes remembrance



Olive Tree/Branch

Symbolizes peace, purity, strength, victory



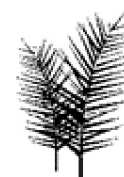
Cedar

Symbolizes strong faith



Ivy

Symbolizes abiding memory, immortality, fidelity



Palm Tree

Christian symbol; spiritual victory over death

Cemetery Symbolology



Poppy

Represents sleep, death, oblivion



Rose

Represents love, friendship



Sheaves of wheat

Symbolizes a fruitful life, immortality, resurrection



Tree Trunk

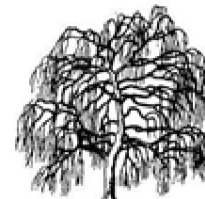
Represents a Woodman of the World (WOW); symbolizes equality and commonwealth; for more information, visit

<http://www.woodmen.com/>



Vine

Christian symbol; represents the Christian church, the symbolic blood of Jesus, the sacraments



Weeping Willow

Symbolizes mourning, bereavement, sorrow



Yew

Represents immortality

Sources: Douglas Keister (2004) *Stories in Stone: A Field Guide to Cemetery Symbolism and Iconography*, <http://www.gravestonestudies.org>, and <http://etc.usf.edu/clipart>

Phase III: Interpreting Data

Location: Classroom

Time Frame: 1-4 class periods

During this phase, students unpack their cemetery visit to make sense of what they learned. The Drawing Conclusions discussion allows students to process the information they collected in the cemetery and to share their thoughts with their classmates. This can be a standalone activity or can be paired with one of the three follow-up activities.

Three optional activities, Lesson 3.2, Drawing Conclusions Essay, 3.3, GIS Mapping, and 3.4, Data Analysis in Excel, can be done in-class or as homework assignments. You might also give students the chance to pick the activity that appeals most to them. A number of additional opportunities are provided to extend the project and share data with the broader community.

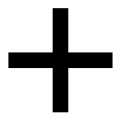
Use the following symbols to modify the lessons to fit your schedule:



Ask your students



Can be assigned as homework



Optional activity



For more opportunities

3.1: Drawing Conclusions Discussion

Time Frame: 15+ minutes

This discussion gives students a chance to unpack their experience at the cemetery and to share their thoughts with you and their classmates. It does not have to be a long discussion, but it is important to give the students a chance to process what they learned at the field trip. A series of sample questions are provided before; however, you can use as many or as few questions as you believe necessary.

If time is limited, this discussion could be quickly completed at the beginning of class after the cemetery visit. However, it could be extended or can be paired with one of the optional lessons (3.2, Drawing Conclusions essay, 3.3 GIS Mapping, or 3.4 Data Analysis) to fill an entire class period.



Discussion Questions

1. What kind of information can we learn from cemeteries? (*Students might list biographical information, family connections, socioeconomic status, religious or social affiliations, etc.*)
2. How long has this cemetery been used? How could you tell? (*Students should reference the oldest and most recent markers in the cemetery*)
3. Who are the people buried in the cemetery you visited? Can you tell if they were wealthy, if they were religious, or if they belonged to any ethnic or racial groups? How do you know this? (*Students should refer to the symbols and inscriptions on the markers, the different types of materials, and grave goods at the cemetery*)
4. What is the most interesting thing you learned on the cemetery field trip?
5. If you could talk to one person buried in the cemetery, who would it be and why?
6. Are historic cemeteries worth protecting and preserving? Why or why not?

3.2: Drawing Conclusions Essay

Time Frame: 1 class period (30-45 minutes)

Students choose one headstone they recorded during the cemetery visit. They then answer a series of questions about the marker and write a short essay based on their answers. They may want the Headstone Recording form for reference. Students should incorporate elements from the marker, such as the time period, the person's age, the symbols on the marker, and other family connections in the cemetery.

Students could write either from the perspective of the individual or in the third person. If desired, you could also encourage students to do some research on who this person was using websites like Ancestry.com.



Can be assigned as homework



Optional activity

Required Materials

- Drawing Conclusions worksheet (provided)
- Pencil

Name: _____

Drawing Conclusions from Cemetery Markers

Choose one marker that you recorded at the cemetery on your field trip and fill out this worksheet to understand more about the individual person or people it represents.

Name(s) on Marker: _____

1. List as much information as you can from the inscription, including name, date born, date died, age, other family members, and occupation.
2. Does your marker have an epitaph? If so, what is it? What do you think it means?
3. What symbols are depicted on your marker? What do they mean?
4. What material(s) is your marker made of? Are they available locally?
5. What grave goods were found near your marker? What do you think they signify?
6. On the back of this worksheet, write a one-page essay about the individual(s) represented by your marker. Use your answers to the questions above to help you imagine what life was like for this person.

3.3: GIS Mapping

Time Frame: 1 class period (40+ minutes)

Students will use ArcGIS Online, a free mapping software, to create maps of the GPS points they collected in the cemetery. The maps can then be published and shared on the ArcGIS website. As with the previous lesson, this lesson can either be performed as a class or individually. Similarly, you may want to have each student type up the points they collected and then combine all the data into a master spreadsheet.

An instruction sheet has been provided for students to perform the lesson independently; otherwise, you can walk them through these instructions while they follow along on a laptop. You can either create a class account or they can each create their own account.



Can be assigned as homework



Optional activity

Required Materials

- GIS Mapping Instructions (provided)
- Laptops with Internet Connection
- Data collected in cemetery and typed into an excel spreadsheet

Lesson Procedures

1. Remind students this activity is part of the data analysis phase of the project.
2. Either walk the students through this activity as a class using the attached instructions or hand out the instructions so students can work independently or in small groups.
3. Once students have finished creating their maps, have each student or group share them with the class.



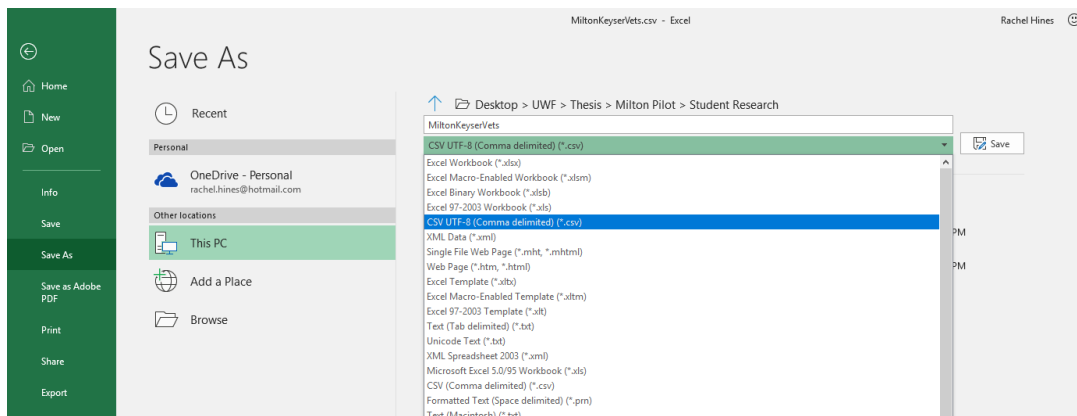
Discussion Questions

- Do they notice any patterns?
- How do the maps compare to one another?
- What does this data say about the population buried at the cemetery?

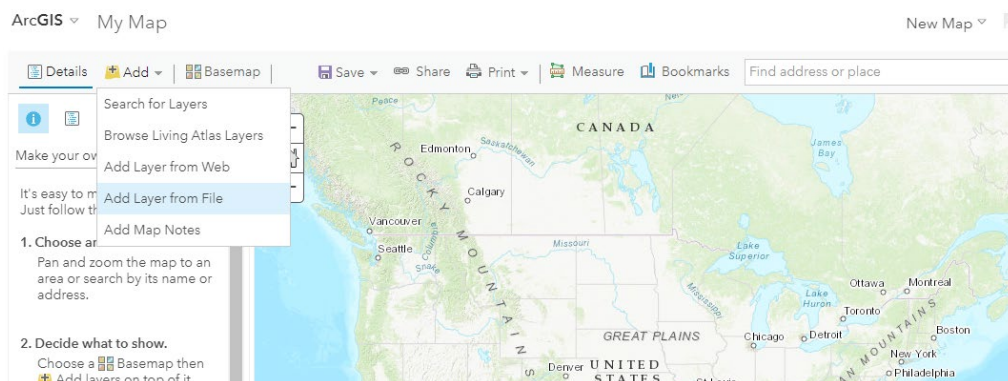
Lesson 3.3: GIS Mapping

Geographical Information Systems (GIS) applications present and analyze spatial and geographic data. We will be creating GIS maps of the GPS points you collected at the cemetery using ArcGIS Online, a free web-based GIS application. Follow the instructions below to create a GIS Map the cemetery data.

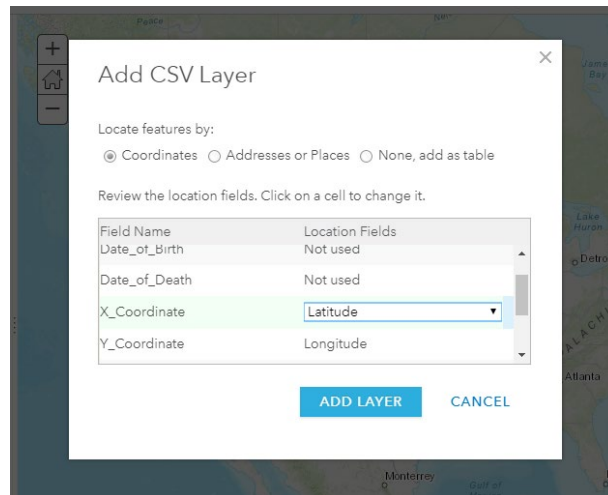
1. Prepare the data for ArcGIS Online by entering the data into an excel spreadsheet. Your spreadsheet must include two fields for the X and Y coordinates you collected in the cemetery.
2. Export your Excel spreadsheet into a .csv file by clicking “File” in the upper left hand corner of Word and choosing “Save As.” Choose .csv from the drop down list of file types. This file type is easier for the website to process.



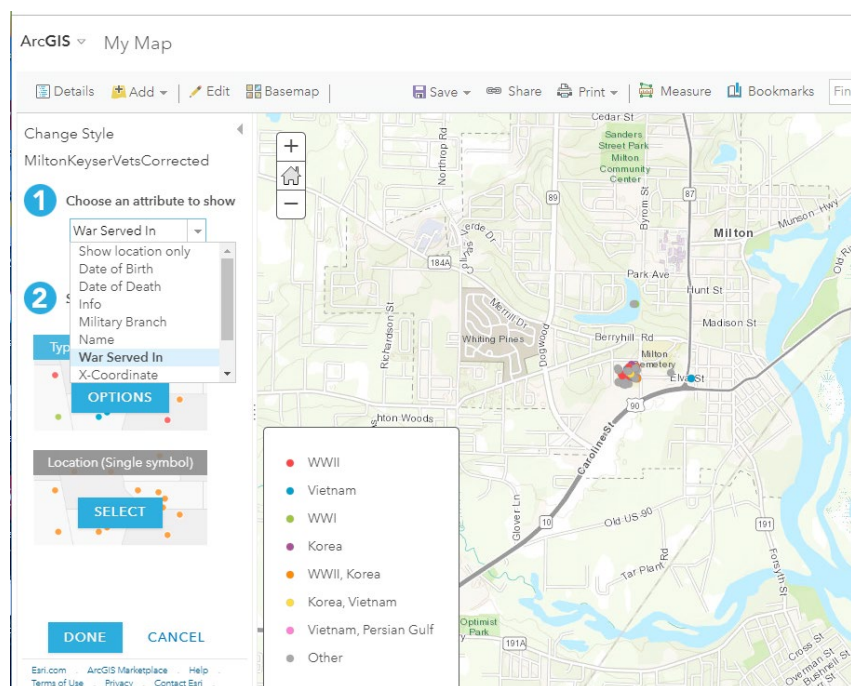
3. Go to www.arcgis.com and create a free account OR log-in to the class account that your teacher created.
4. Create a map by selecting “Map” at the top of the screen. This will bring you to a blank map document.
5. Upload the .csv file you created that contains the GPS points by clicking “Add” and selecting “Add layer from file.” Follow the instructions in the pop-up window to import your .csv file.



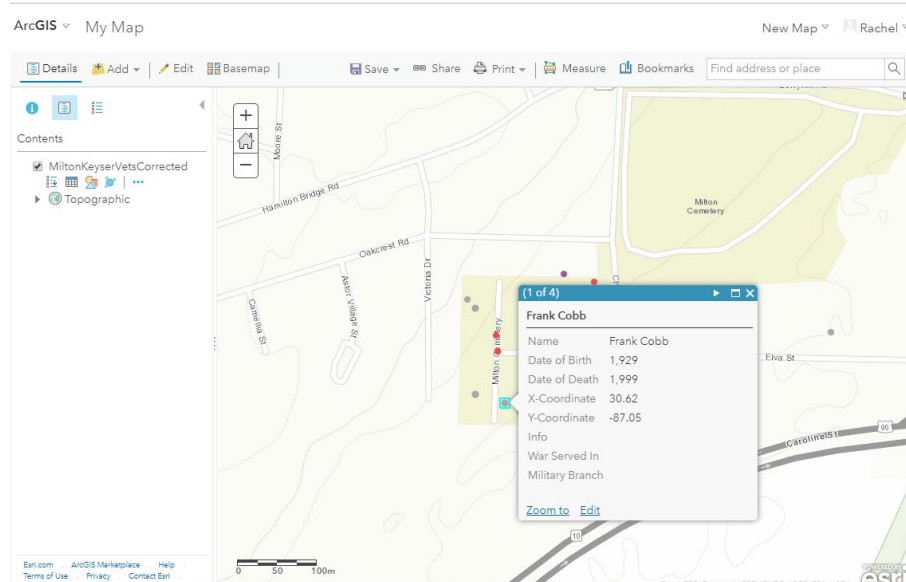
- When you upload the CSV file, you will have to specify that the X-coordinates are the Latitude and the Y-coordinates are the Longitude. Your GPS points should appear in the map. If your coordinates show up in the wrong place, you might have mixed up the latitude and the longitude. Double check your spreadsheet to make sure each X-coordinate has a positive value and each Y-coordinate has a negative value.



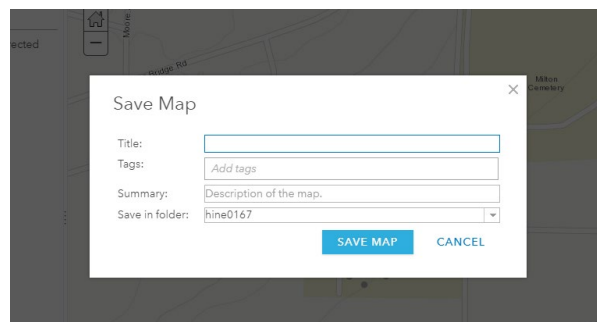
- A bar will appear on the left side of the screen where you can choose how to symbolize your points. First, you choose the field you want to symbolize. Then you select “Types (unique symbols)” as your drawing style. The map will automatically display your points as different colors.



- If you click on a point, a pop-up window will appear, allowing you to learn more about that point. You can edit this pop-up by clicking “edit” at the bottom of the window.



- Save your map by clicking “Save” at the top of the screen. Give your map a title, a couple tags (descriptive words about your map, such as “cemetery”), and a summary description of what the map shows.



- Finally, share your map with the world by clicking “Share.” This will make the map public, so others can view it.

3.4: Data Analysis in Microsoft Excel

Time Frame: 1 class period (30+ minutes)

Students will enter the data they collected at the cemetery into a Microsoft Excel spreadsheet and perform simple statistical analyses. You may want to have each student enter a few forms into Excel and then combine them all into one spreadsheet, depending on how many markers were recorded. This data can be used to create charts and graphs that illustrate the population represented at the cemetery.

This lesson can either be performed as a class or individually. An instruction sheet has been provided for students to complete the lesson independently; otherwise, you can walk them through these instructions while they follow along on a laptop.

Required Materials

- Microsoft Excel Instructions (provided)
- Laptops with Microsoft Excel
- Dataset collected at a cemetery

Lesson Procedures

1. Remind students this activity is part of the data analysis phase of the project.
2. Either walk the students through this activity as a class using the attached instructions or hand out the instructions so students can work independently or in small groups.
3. Once students have finished creating their charts and graphs, have each student or group share one or more of the charts they created with the class.
4. Discuss how these graphs compare with what you already knew about the cemetery.



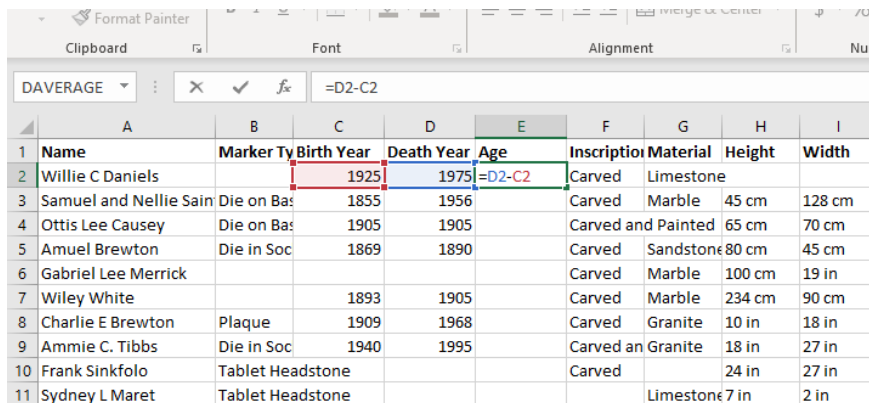
Discussion Questions

- Were there any surprises?
- Did you identify any trends or patterns?
- What does this data set say about the population buried at this cemetery?

Lesson 3.4: Data Analysis in Excel

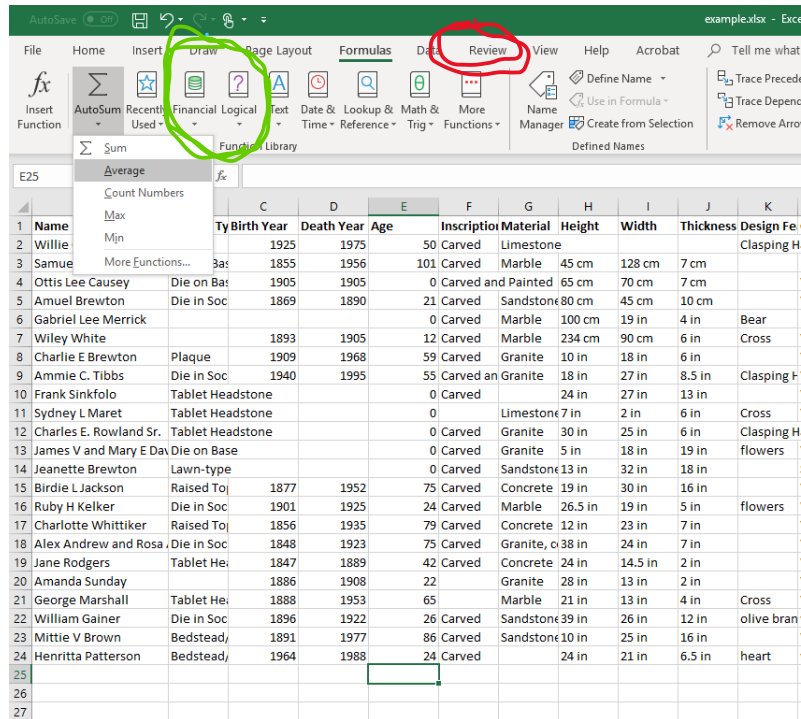
Follow the instructions below to create an Excel spreadsheet of the data you collected at the cemetery. Then you can use Excel to perform statistical measures and create graphs of your dataset to better understand the population buried at the cemetery.

11. Create a heading for each field from the headstone recording form.
12. Enter data from each headstone recording form on an individual line until all the forms have been typed.
13. Create two additional columns for birth year and death year by right clicking and choosing “insert column.”
 - Fill out these columns with the birth year and death year listed on the markers. Leave the field blank if there weren’t any dates listed on the marker.
14. Analyze the data using several formulas. First, create a new column next to the birth and death year columns called Age of Death and set up an equation to determine the age each individual was at the time of death.
 - This equation will subtract the “Birth Year” column (C, in the example below,) from the “Death Year” column (D) for each row. In the first empty field, type =D2-C2. (If your Death Year and Birth Year column letters are different than in the example, be sure to use those instead.)

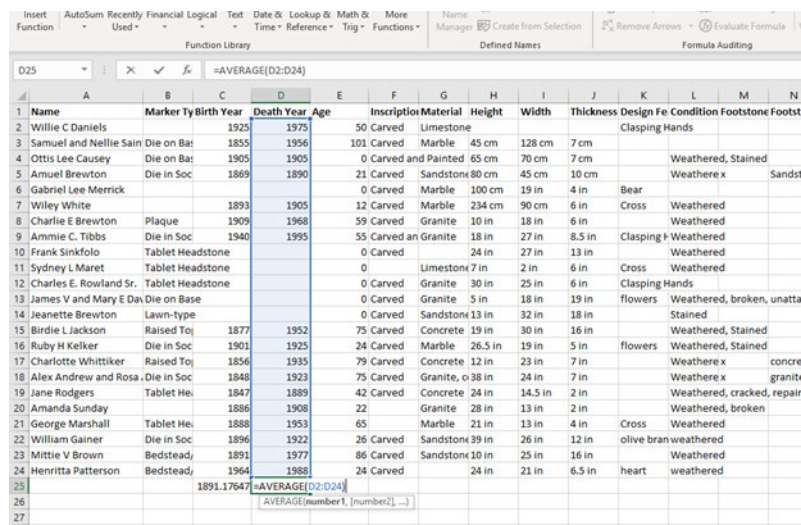


	A	B	C	D	E	F	G	H	I
1	Name	Marker Ty	Birth Year	Death Year	Age	Inscription	Material	Height	Width
2	Willie C Daniels		1925	1975	=D2-C2	Carved	Limestone		
3	Samuel and Nellie Sain	Die on Bas	1855	1956		Carved	Marble	45 cm	128 cm
4	Ottis Lee Causey	Die on Bas	1905	1905		Carved and Painted		65 cm	70 cm
5	Amuel Brewton	Die in Soc	1869	1890		Carved	Sandstone	80 cm	45 cm
6	Gabriel Lee Merrick					Carved	Marble	100 cm	19 in
7	Wiley White		1893	1905		Carved	Marble	234 cm	90 cm
8	Charlie E Brewton	Plaque	1909	1968		Carved	Granite	10 in	18 in
9	Ammie C. Tibbs	Die in Soc	1940	1995		Carved an	Granite	18 in	27 in
10	Frank Sinkfolo	Tablet Headstone				Carved		24 in	27 in
11	Sydney L Maret	Tablet Headstone					Limestone	7 in	2 in

- Move your cursor over the lower right hand corner of the box where you entered the formula. A white plus sign will appear. Right click on the plus sign and drag down to select the entire Age of Death column. Excel will automatically populate each box with the Age of Death for each marker.
15. Use the average formula to find the average age of death. On the top of the window, select the “Formulas” tab (circled in red in the example on the next page).
 - Select “AutoSum” (circled in green) and Choose “Average.” This will automatically calculate the average age of death for the individuals in your cemetery based on the ages you created with your last formula.



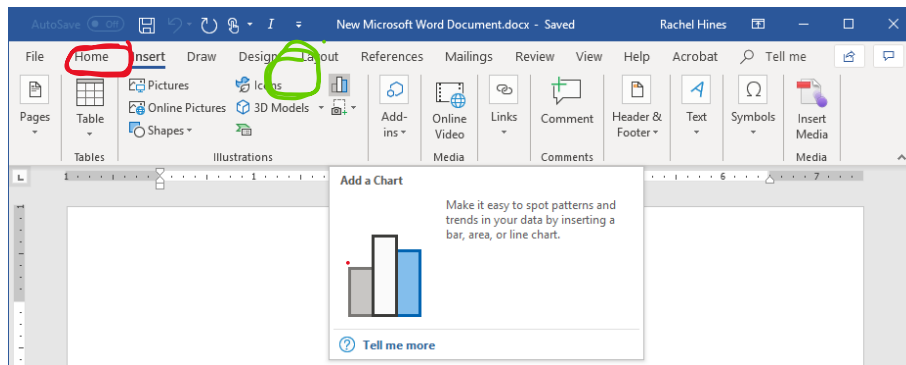
- Make sure every entry is highlighted; if there are some empty rows, Excel might automatically choose a group instead of the entire column. You may have to select it yourself.



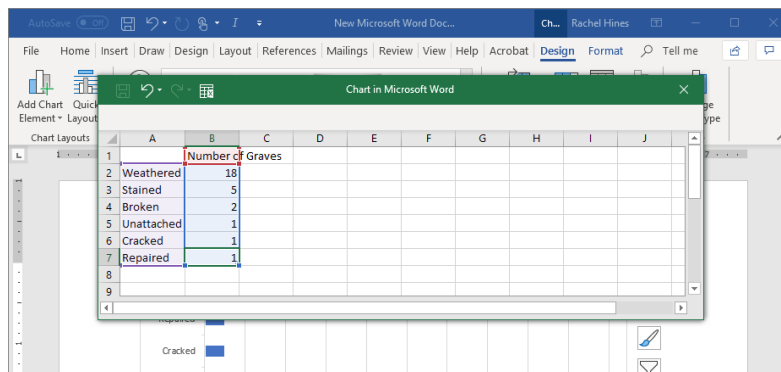
16. Use the average formula to examine some of your other fields, such as finding the average year of death or average year of birth to understand the time period of the cemetery.
17. You can also analyze your data by creating different types of charts. Excel makes this easy by providing suggested charts. Click on the “Recommended Charts” button in the “Insert” tab.

- A pop-up window will appear with a number of charts. If any of the charts are useful, you can select them and insert them into Excel.

18. You can also create charts on your own in Microsoft Word. Excel is better for analyzing numerical data, but it doesn't automatically produce charts for the text-based fields. Open Word and select the "Insert" tab (circled in red in the example below). Click on the chart symbol (circled in green below).



19. A list of charts will appear. Create 3 charts with your data. For example, you could create a bar chart that shows the condition types of the markers by selecting "Bar." Then count up the number of markers for each condition type and enter them into the spreadsheet that appears. It will automatically populate your chart.



20. Write a two-paragraph summary of what you've learned in Microsoft Word. Include some of the charts you created in Word and Excel as support for your summary. Address some of the following questions:

- What time period does your cemetery date to?
- What are the most common design styles?
- What are the most common marker material types?
- What is the condition of the cemetery?

Further Opportunities

Time Frame: 1 class period or more (45-90+ minutes)

Depending on time, resources, and preferences, there are several options for students to share the data they collected. These projects could be done in class or as homework assignments and could be performed individually, in groups, or as an entire class.



Can be assigned as homework



Optional activities

- Report your local cemetery to the Florida Master Site File
 - Check with cemetery officials or your local FPAN office to determine whether or not your cemetery is listed on the Florida Master Site File. Your class can report it to the Florida Division of Historical Resources by filling out an online form: <http://www.fpan.us/projects/florida-historic-cemetery-inventory/>
- Write a brochure or walking tour for your cemetery
 - This activity may require additional historical research, either online or at local archives or libraries
- Make an app for your cemetery by adding it to The Clío (<https://www.theclio.com/web/>) The Clío is a map-based website and app that provides information about local historical points of interest.
- Submit the data you collected to University of Central Florida's RICHES Database. Use the release form to donate your data to this database, making it available for other cemetery researchers (https://riches.cah.ucf.edu/?page_id=950) You will want to ensure this is okay with the cemetery officials.
 - This website also provides a platform for students to make "exhibits" about historical topics, if desired.
- Upload your marker photos and transcriptions to Find a Grave
 - Find a Grave (<https://www.findagrave.com/>) makes images and transcriptions of cemetery markers available digitally. If your cemetery is not listed on Find a Grave, students can add data to this website.
- Create a Story Map in ArcGIS Online
 - Several Story Map templates are available on ArcGIS Online (<https://www.arcgis.com/home/index.html>) Students can build on the products they created in Lesson 3.3 to make an interactive web tour of the cemetery.
- Plan a community engagement day at the cemetery
 - Working with cemetery officials, students could plan an open house or even a volunteer day for community members to learn more about the history of the cemetery and to accomplish any goals, such as cleaning markers or removing trash.