

Medicine in 1812

Target Grade Level: 1st - 5th

Time for Lesson: 15-20 minutes

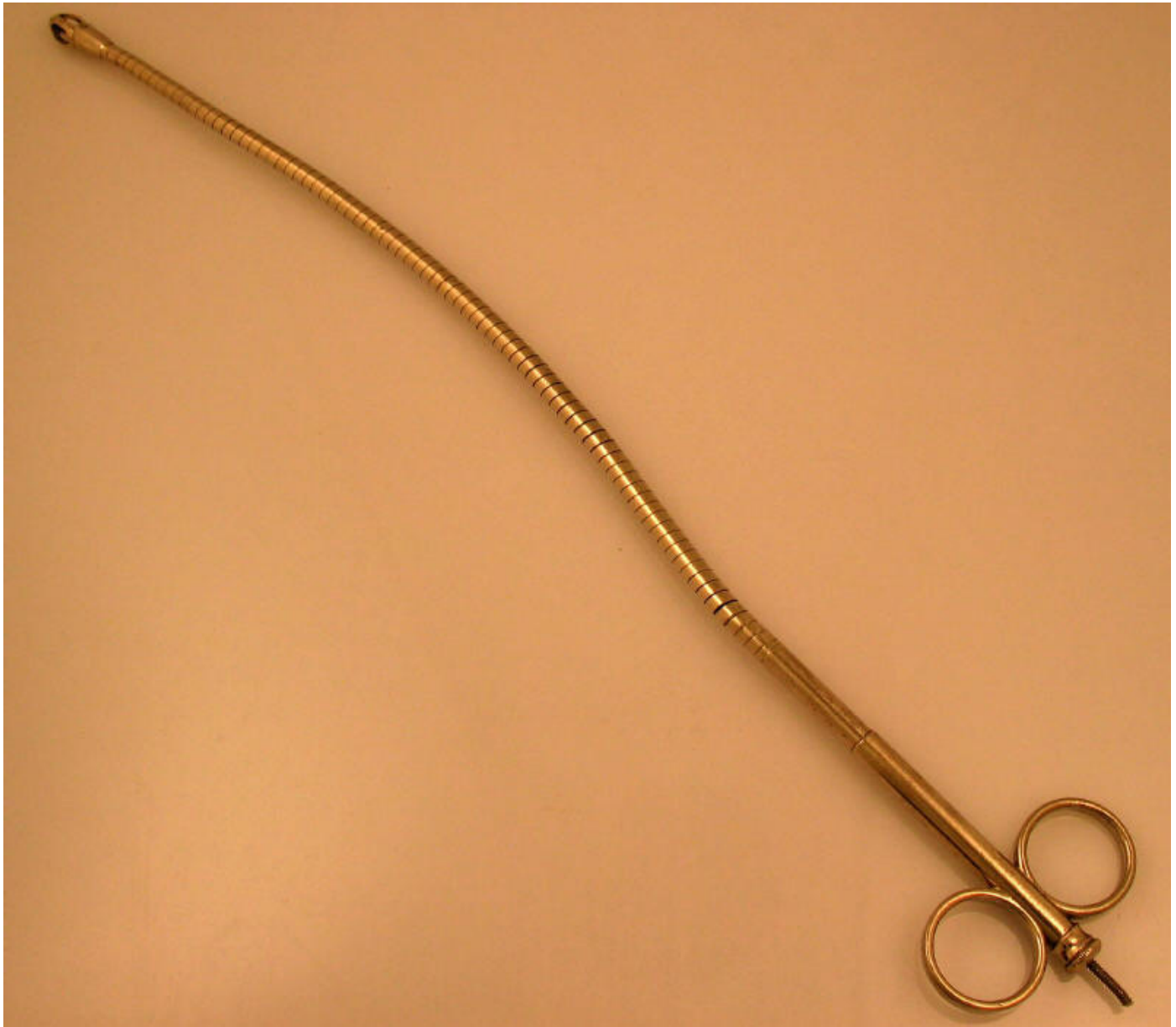
Overview & Major Themes

In this activity, the teacher will guide students in using observations of an artifact to understand how to learn from and think about unfamiliar objects.

| Objectives | Outcomes | Materials & Resources |
|--|---|--|
| Students will make observations, answer questions, and draw conclusions about an object from the collections of the USS Constitution Museum. | Students will report their learning in a format to be decided by the educator: oral report, group lists, etc. | <ul style="list-style-type: none">• Photos of bullet extractor, bullet probe, tooth key, and mortar and pestle. Teachers can also make photocopies in order to hand out to students, either individually or in small groups. |

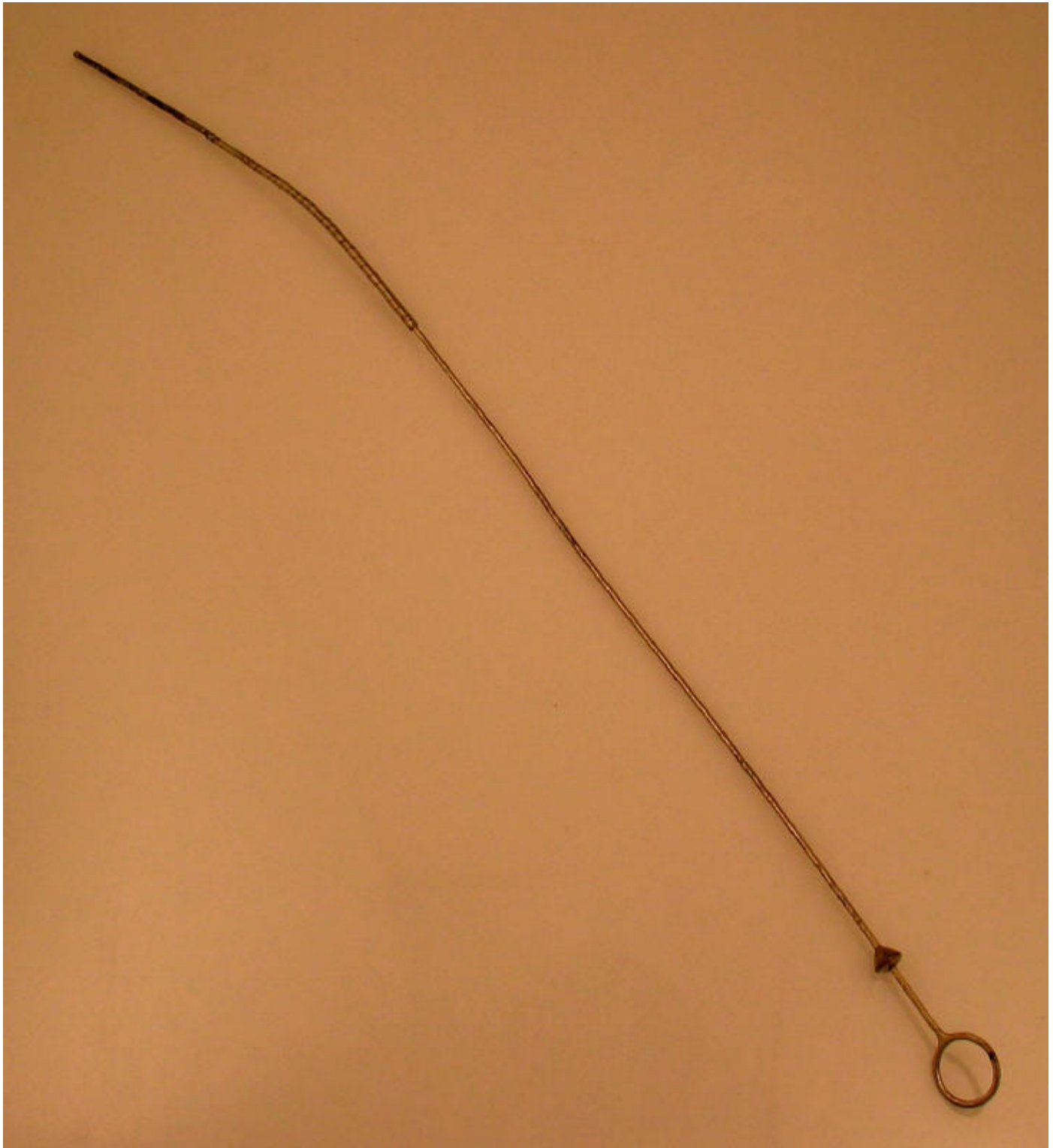
| Time | Instructional Activity |
|--------|--|
| 5 min. | Read the introduction to the class: People in the past may leave behind written documents for us to study. But they also leave behind many objects, ranging from clothing and weapons to vehicles and household items. We can learn a great deal by closely studying these items, asking questions, and hypothesizing about them. This type of critical observation and analysis can help us understand who people were, what their lives were like, how they thought, and what they valued or believed. Not only does it help us learn to use objects as sources of information, it encourages us to think and ask questions. |
| 5 min. | Tell students that the USS Constitution Museum has thousands of objects in its collection, including some related to 19th century medicine and surgery. We can learn by analyzing the photos of these objects. The class's task will be to study, make observations, and draw conclusions about these objects. |

| Time | Instructional Activity |
|---------|---|
| 10 min. | <p>Display the photo of one object or pass out photocopies. Do not identify what the object is. Lead students through a discussion using the following questions:</p> <ul style="list-style-type: none"> • What do you notice about this object? <ul style="list-style-type: none"> ◊ You can also prompt students by asking: What is it made from? How big is it? How heavy? Size? Shape? Texture? etc. • What might the object be used for? What makes you say that? <ul style="list-style-type: none"> ◊ Asking “What makes you say that?” is an important way to get students to explain their thinking. • What does it tell you about medicine in the early 19th century? <ul style="list-style-type: none"> ◊ Encourage students to compare the instruments with what ones that doctors use today. What can they learn from the fact that doctors used objects like this one back then? • Do you have or use something similar in your life? <p>Encourage students to draw a conclusion about what the object is and how 19th century doctors used it. This can be done several ways, including having students: volunteer ideas orally; write ideas on paper and hand them in; list ideas on the board and record votes. Use information from the appendices to inform students about the object. This activity can be extended at this time, or at a later point, by using another photo.</p> |



Bullet Extractor

There were many different kinds of bullet extractors developed during the 19th century. This extractor was fed into a patient's wound until it hit something hard – hopefully the bullet. The doctor would then turn the handle on one end, opening a set of jaws via a bendable screw that ran the length of the device. The handle was turned the other way to close the jaws down onto the bullet, which was then extracted.



Bullet Probe

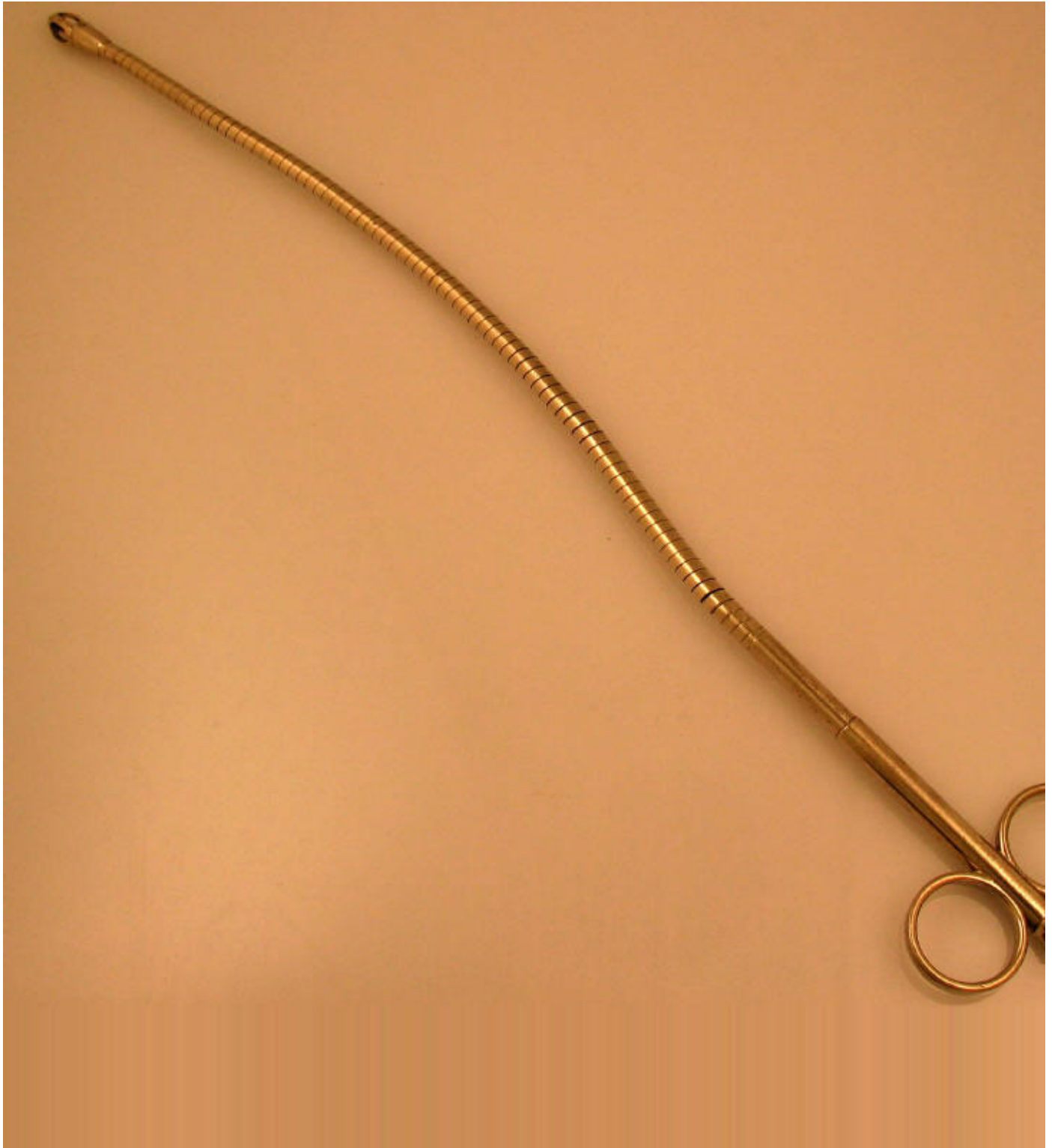
Musket balls would often get lodged in a wound and could be very harmful if not removed. Before the surgeon went in with scalpels and bullet extractors, he needed to know where the bullet was. A bullet probe would be inserted into the wound and moved around until it came in contact with something hard. The end of this probe was flexible to allow full exploration of the wound. All of this exploring could be as bad for someone's health as the bullet, however. Many people died from infections caused by overactive probing with unsterilized instruments.



From the collections of the Massachusetts Historical Society

Tooth Key

In the 19th century, dental hygiene as we know it today had yet to be developed. Though toothbrushes and a tooth cleaning powder were available, tooth decay was still rampant. Rotting and impacted teeth were frequently removed. On a ship, the surgeon doubled as the dentist, and often he had to pull out teeth. A tooth key was so named because of its similarity to an 18th century door key. The claw attached around a patient's tooth, and the surgeon gripped the handle at the top. He then twisted the instrument (like a key) until the tooth came out.



Mortar and Pestle

A ship's surgeon in 1812 did not have all of the necessary drugs waiting in pill form for him to administer to sick sailors. Each drug given to a patient was individually tailored to that person's needs. Surgeons were often called on to make useable drugs out of a mixture of raw ingredients. A mortar and pestle was crucial to this process. The surgeon put all the ingredients into the mortar and then ground them into a fine powder with the pestle. This set was probably meant for making larger batches of powders or pastes.