CORE GALLERY TOUR SCRIPT

Please consider this tour script as an outline. We encourage our educators to add your unique perspective to the tours at Latimer House. We seek to elevate the student's voice and to promote an in-depth dialogue with visitors. Be sure to check in with your groups and their teachers to see what specific interests they may have and to customize the experience to meet their needs (where appropriate). This tour is designed for a broad age group and it is up to you to determine where more detail is appropriate and provide an experience that suits each group's educational goals.

Note: When groups make requests beforehand, the information will be in the calendar notes or the Education Associate will let you know ahead of time. Still, it's a good idea to check in with group leaders upon arrival to ensure that they get the most out of their trip.

Most common areas of interest:

• Inventing and engineering
• African American history
• Latimer’s experience as an African American in the workplace.

KEY:

• Discussion Questions- Orange Underlined
• Group Management- Italic Underlined
• Time and place-Red Bold
• Background Information-Blue
• Interpretive tools-Italic Green
Lewis Latimer House Museum

Lesson Plan: Lewis Latimer’s Life and Time - Core Gallery Tour

Grades 3-12

60 Minutes

Objectives: Students will learn about the life of Lewis Latimer and develop an in-depth understanding of the historical events and figures that influenced him throughout his career. They will learn about the cultural context in which Latimer lived and the obstacles he overcame to succeed. Students will learn about the early electric light industry of the late 1800s, electrical engineering, and patent drafting. Key terms: **patent, filament, Civil War, abolitionist, circuitry, and electrical engineering.**

Introduction: 5 Minutes-Main Gallery

Educator: Good Morning/Afternoon Everyone! Welcome to the Lewis Latimer House Museum. My name is ____ and I will be leading your tour today.

*Bring students to the main gallery and then have them take a seat on the floor.*

When you were coming in this space, what are some things you noticed?
Take a can look around the room, what are some of your observations?

We are sitting in someone's living room. Does this look like a museum? No, it's someone's house!
When we think of a museum, what is the first thought to come to mind?
What is a museum?
A museum is a space in which objects of historical, scientific, artistic, and cultural significance are stored.
What museums have you been to?

Can a house be a museum?

Yes! Here in this museum, we have many of the historical artifacts of Lewis Howard Latimer. This house holds many of Latimer's possessions, and they give us an idea of who he was as a father, scientist, and artist.

From what you see around you, what can you learn about Lewis Latimer?
Have any of you heard of him before?  
What was his claim to fame?  [Most groups will know that he "invented the light bulb." ]

Yes, Lewis Latimer was an inventor, among many other things, and he is famous for inventing the light bulb's carbon filament.

Allow for some time for students to point out some of the things they notice around the room (and house). Depending on how familiar the group is with Latimer already, you might skip this next section. If the group is less familiar, allow them to guess as to who he might have been and what he might have been interested in.

See how much information we gathered from the objects around us!
When you get home today, take a look around your house and see if your possessions can give people a glimpse of who you are.

So why do you guys think museums are important?
Museums bring history to life.

Do you guys have anything important to you in your home?
When people look at those things a hundred years from now, they are going to understand you a little better. While we are in Lewis Latimer's home, we will also get to understand him better.

**Latimer's Family History: 10 minutes-Main Gallery**

The story of Lewis Latimer's life begins quite a bit before he was born in 1848. His parents, George Latimer and Rebecca Smith started their remarkable life journey in Norfolk, Virginia, where George Latimer was born to a white slave-owner Mitchell Latimer and an enslaved woman named Margaret Olmsted. **Point to the pictures of George Latimer.**

You can ask the group what they already know about slavery. If they haven't studied it yet briefly establish some key terms and define the dynamics of slavery with the group. Avoid going into details here, you can suggest they book the George Latimer Tour if they want to learn even more about the impact slavery had on Lewis’ family and the history of the country.

- **Basic Key Terms:** Enslaved, Plantation, Slave-holder, Economy, Agriculture, Industry
- **Examples of works enslaved people were forced to do:** Farm/ agricultural work, Child care, Housework, Cooking, Carpentry, Masonry etc.
- **Basic Economics of slavery:** During Gorge and Rebecca's lifetime slave labor was the economic backbone of the south. Crops produced in the south, like cotton and tobacco, were essential in establishing America's wealth and power. The economy in the north was dependent on industry, factories, and banking, among other things. The economics
of slave labor allowed southern states to have more power in the country. By the time that Lewis's parents were alive, the trans-Atlantic slave trade had become illegal, meaning that it was no longer possible for southern slaveholders to capture more people in Africa and force them to work for free. The limitations of obtaining more free labor made it even more dangerous for enslaved people to escape. Southern slaveholders were so concerned with maintaining the status quo that it became a very lucrative business to catch fugitive slaves and return them to the south. These people were called slave catchers, and they would indiscriminately capture African Americans living in the north. The lack of legal recourse for fugitive slaves and free blacks living in fear of being captured became an important cause of the abolitionists, and Lewis's father George Latimer would end up playing a significant role in eventually changing the laws regarding fugitive slaves. The issue of escaped slaves in the north would become a big problem between the Northern free states and Southern slave states that would be a contributing factor that would eventually lead the country to Civil War.

In early 1842 George married Lewis' mom, Rebecca. However, George was only allowed to visit his wife at night, on the condition that he returns before sunrise.

There is no guarantee to family (in the traditional sense) when you're enslaved. So, when the couple found out they were expecting their first child, they decided to escape to the north. Knowing if they stayed in Virginia, their future child would be born into slavery and possibly taken away from them. They chose to escape from slavery for freedom, and most importantly, for their future children. This wouldn't have been an easy decision to make.

**What are some risks that escaped slaves would have faced?**
If they were caught during this journey, they could have been arrest or killed.

Their escape route took them through Baltimore, Philadelphia, and eventually to Boston, in the free state of Massachusetts. There is another famous escape route that people took to escape slavery. Does anyone know what it was called? The Underground Railroad!

Upon discovering that George and Rebecca were missing both of their Slaveholders took out ads for their capture.

*Pass around their Runaway Adds (located on the piano)*
*Pass around the abolitionist warning of slave catchers (located on the piano)*

Unfortunately, upon arrival, George was immediately recognized by an associate of his slaveholder and was imprisoned. Rebecca during this time, was hidden and protected by abolitionists in the area.
Does anyone know what an abolitionist is?

- An abolitionist is someone who wants to end the practice of slavery. **Abolitionism** was a social movement of people, both black and white, who worked collectively to resist the oppressive institution of slavery. Can anyone think of any famous abolitionists? We will be discussing some of the methods that abolitionists used to ignite social change for our activity.

By the 1840s, Boston had become a hub of **abolitionist** activity and George's arrest became a heated local event; it sent shockwaves through Boston and other abolitionist circles. The ensuing court hearings spurred multiple abolitionist meetings in and around the city. The newsletter *Latimer Journal and North Star* was created to update interested parties about the state of affairs. *Show the wall with the Latimer Journal.*

In the wake of this event, not one, but two petitions were created to change the laws of Massachusetts regarding slavery. One of these petitions sparked the 1843 Personal Liberty Act, to prevent state officials and facilities from detaining suspected fugitive slaves. At the same time, a fundraiser was created for George. It was this collective attempt that eventually gained George his freedom.

In November of 1842, $400 was raised by Reverend Samuel Caldwell and given to James Gray, so the legal matter was dropped. That would be over $10,000 today. George and Rebecca's first child George Jr. was born soon after their reunion. Eventually, they had three more children: William, Margaret, and Lewis.

**So why do you think it was essential to discuss George Latimer and Rebecca before talking about Lewis?**

**In what ways do you think Lewis' family history might have informed his decisions? His opportunities? His values? Who he became?**

*You can use one or two of these questions, depending on time.*

**Early Life: 10 Minutes-Main Gallery**

Lewis Latimer was born on September 4, 1848, in Chelsea, MA. The youngest of four, Lewis had two older brothers and one older sister.

Lewis' early life was full of upheaval. His family moved at least four times before he was ten years old. How do you think George's unwanted fame from his case and Rebecca's continued
status as a fugitive might have impacted the family? It made it dangerous for them to stay in any place for too long. In 1858, George Latimer left the family due to his continued notoriety as hostilities and racial tensions continued to rise in the years leading up to the civil war.

Unable to care for her children alone, Rebecca sent her daughter to live with her family friends and sons to Farm School. But within a year, Lewis, his brothers left school, and Rebecca did not force them back. By the time The Civil War broke out in 1861, Lewis was 12 years old. Both of his older brothers enlisted in the Union Army in 1862 when African Americans were authorized to enlist.

Do you know what the Civil War was?
• The civil war was when the north and south fought over whether or not slavery should be legal in the United States.

How do you think Lewis’ family would have felt about the war? Exactly! Given their family history, fighting for freedom would have been extremely important to them. Not one to be left behind, in 1864 Lewis, 16 years old, put up his age so he could join the Union navy.

Lewis served on a gunboat during his time in the navy. This time would begin his path to inventing *(Point to the photo of the gunboat)*. During his time in the navy, Lewis was exposed to technical drawings. Does anyone know what a technical drawing is? What makes it different than any other type of drawing?
• A technical drawing is a drawing that serves a specific purpose and explains how something is made—*[A good example is Blueprints or Lego instructions. Point to one of Latimer’s patent drawings on the wall or pass around a copy.]*

**Career: 20 minutes-Main Gallery**

In 1865 Lewis is discharged, the war ends, and slavery is abolished. Lewis returns to Boston and finds work at a patent law firm. Lewis managed to work his way up from office boy to head draftsman during his 11 years of working for the firm.

*Explain that he taught himself how the art of drafting and carefully pass around some of the drafting tools.*

**Who knows what a patent is?**
• A patent is a document submitted to the government to prove that you’ve invented something unique. A patent has two parts:
  o The legal text explains how the invention is to be used and how the inventor is supposed to be credited or compensated for their invention.
o A draft or drawing illustrates what the invention looks like and, most importantly, what makes it unique.

○ Point to the examples of Lewis’ patents and explain that you can patent an improvement to an existing invention.

Lewis's experience working for Crosby and Gould would expose Lewis to engineering and would allow him to work with many inventors. The most famous of whom was Alexander Graham Bell.

Does anyone know who Alexander Graham Bell was?

• He invented the telephone. Latimer helped him illustrate and draft the patent for the telephone.

  Show the vintage telephone.

  It’s heavy, so only pass around when it’s a smaller and older group.

Lewis even patented his own invention in collaboration with C.W. Brown. It was an improvement to bathrooms on trains! Invite students to take a look at that patent later.

Can you think of any inventions that are an improvement of a prior invention?

Working collaboratively with inventors like Alexander Graham Bell and C.W. Brown would inspire Lewis to pursue engineering.

In 1879 Lewis would move to Connecticut to work directly for an inventor named Hiram Maxim, who was the chief engineer at the Weston Electric Light Company. Latimer’s background in working with electric devices like the telephone prepared him for the new field of electricity. Latimer only worked for Maxim for three years, but he would significantly improve the electric lighting field over that short time.

What do you think people used before the light bulb?

Candles, their windows/ sunlight, a fireplace, the gas lamp.

Show students the gas lamp and explain how it worked.

What might have been some problems with the gas lamp?

It burned out too quickly, and could begin a fire!

When you think of the electric light bulb, who do you think of?

Edison, exactly! But, there was an issue with them.

Has anyone heard the word filament before?
A filament is the thin hair-like wire inside of the light bulb. In an incandescent light the filament heats up from conduction of electricity. Have you noticed that light bulbs get hot when they are turned on? That heat causes the filament to glow.

Show the group a vintage bulb and point to the filament.

The early light bulbs that Edison invented were amazing! And everyone was excited to usher in a new age of electricity! But inside of these early light bulbs Edison used paper and bamboo for the filaments, can you imagine what happens to paper when it gets really hot? Yes it can catch on fire!

Although Edison experimented with ways to coat filaments with carbon, which is a good conductor of heat, these light bulbs would not last very long and were not yet effective enough to be used in the average person’s home. In fact, the most successful part of Edison’s invention was the vacuum seal, which prevented oxygen from entering into the bulb and causing the filaments to explode or melt. But the filaments themselves were still not viable for long-term use.

While working for Maxim, Lewis would improve the life span of the light bulb by figuring out how to use carbon itself for the filament. He would patent the Method for manufacturing carbon for filaments, allowing the light bulb to last longer. Point to the patents on the wall panel. This invention allowed electric lighting to become mainstream and be installed in homes and on public streets. Sadly the credits all belonged to Maxim, together with the profits it brought. Why do we think Latimer was not given any credit?

Throughout the three years that Lewis worked for Maxim, he was traveling nationally and internationally to supervise the installation of these public electric lights for Maxim's Company. Eventually, being sent internationally to oversee these public lighting systems. In early 1882 Lewis and Mary relocated to London for a year to supervise the creation of a new Weston Electric factory. However, when Lewis returned in 1883, he found that Maxim had replaced him.

Not one to be passed over, later that year, Lewis was hired by the Edison Electric Light Company to work as a draftsman in their Manhattan office at 65 5th Avenue. Known as “the Wizard”, Thomas Edison was considered the father of invention, and he was Maxim's archrival. Lewis started in Edison's company as a draftsman in the engineering department. But, with most of the technical kinks worked out of the electric lighting industry, Latimer was transferred to a new legal division where he again put his patent law background to good use. Point to picture of Lewis with the legal department. In the cutthroat new world of electric lighting, lawsuits were plentiful, and experts in patent law were important new commodities.
Lewis stayed with Edison's company, the longest out of all his jobs. The stability allowed him to continue patenting his own inventions and improvements over the decades, including his "Apparatus for Cooling and Disinfecting," a proto-air conditioner, and "Locking-rack for Hats, Coats, Umbrellas". *Point to the patents on the wall.*

In 1896 Lewis became a member of General Electric's Board of Patent Control as the chief draftsman. In 1890 he authored a guide called Incandescent Electric Lighting: A Practical Description of the Edison System. Lewis worked for Edison and as a patent consultant until he retired.

*Transition: Invite students to stand and walk into the next room. For larger groups, this can be done in shifts.*

Please join me in the next room to talk a bit more about the house itself.

**The House: 10 Minutes- 2nd Gallery**

The house is a modest Queen Anne style wood-frame suburban residence constructed between 1887-1889, and this is an iconic style from the late 1900’s. Lewis and Mary bought the house in 1902, and Lewis would live here until he passed away in 1928.

*Point to the pictures of the house from 1903*

Take a look at the top photo. That's a photo of the house from 1904 just after Lewis and Mary bought the house. Below is a picture of the house as they were living in the house. Do you notice any changes? Yes, there is an additional room! Lewis and Mary made some customizations to the house. They added a dormer attic and an additional room that Lewis used as his lab for inventing. This room is now our Tinker lab, where we have hands-on STEAM activities. We will go in there in a little bit.

*Show students the photos of the house move.*

In 1988 the house on Holly Street was scheduled to be demolished. A group of citizens, including former Queens Borough President Claire Shulman (the first woman to hold the position), led by Winifred Latimer Norman (Lewis' granddaughter) formed the Committee to Save the Latimer House. This was not an easy undertaking! To save the house, Winifred had to prove the historical value of the home, which means that we have her to thank for preserving much of Lewis' archives.
Once the committee was formed and procured funding, and the appropriate partners, it still had to be moved to be preserved. As you can see in the pictures, the house was moved on the bed of a huge truck! It took over 3 hours to drive the house just over a mile because they had to be very careful, and volunteers from Con-Ed had to drop all of the electrical cables along drive.

In 1995, several years after the move, the house was officially landmarked. And in 1999 restoration was underway to make the house look like it would have when Lewis Latimer Lived in it.

Take a minute to compare the photos from 1988 with the photos from Lewis’ time. What differences do you notice? What similarities?

Exploration: (Optional) Time depending 3-5minutes 3rd and 2nd Galleries

Invite students to look around the room and investigate the touch-objects on the table independently for a few minutes.

Allow students to explore in the next room briefly and point out Lewis and Louise Rebecca’s Paintings, and the articles in the china case. This is a good time to talk more about Lewis’ family and discuss his interest in art poetry and music.

Point out the video of Winifred and if there’s time encourage students to take turns with the headphones.

Reflection: 5 Minutes-Tinker Lab

Bring students into the Tinker Lab for reflection and invite them to take a seat.

• Does anyone have any questions about what we’ve discussed today?
• With all that Lewis Latimer accomplished, how do you think his parents might have felt about his success?
• What are some of the obstacles that Lewis encountered in his professional career?
• Lewis was likely the only person of color who worked at these companies, what tensions or issues had he dealt with? Keep in mind this is before the Civil Rights Movement.

This program meets the following New York City Social Studies curriculum standards: 1.7, 1.8, 2.3, 2.4, 2.6, 2.7, 3.7, 3.8, 7.8c, 7.8d, 7.8e, 11.3