Introduction: The Industrial Revolution brought significant change to those living in Tennessee and the greater United States. The growing of cotton and Eli Whitney’s introduction of the cotton gin were responsible for much of the economic growth in antebellum Tennessee.

Guiding Questions:
- Identify lesson vocabulary
  - cotton boll: the seed-bearing part of the cotton plant in which the cotton fibers are formed
  - fiber: a fine, threadlike piece, produced by the cotton plant
  - cotton gin: a machine that quickly and easily separates cotton fibers from their seeds
- Who invented the cotton gin?
- How would you describe cotton bolls?
- What facts would you select to support the cotton gin as an important invention?
- Can you elaborate on the reason why the cotton gin was necessary?
- Can you explain how the cotton gin affected the process of making cloth?

Learning Objectives: The goal of this lesson is to look closely at a cotton boll and connect the impact of Eli Whitney’s cotton gin invention to the Industrial Revolution. In this lesson, students will become active learners as they view a primary source, examine cotton bolls and read a non-fiction passage. A reading comprehension assessment is also included.

Curriculum Standards:
4.57 Analyze and describe the factors of the Industrial Revolution occurring in the United States and in Tennessee, including:
- Eli Whitney-Cotton Gin, Samuel Slater-factory system, Watermills-influence geography, Fulton-steamboats

RI.4.3: Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
Materials Needed:

- Copy and print lab reports for student inquiry (see page 4)
- Student journals or notebook paper for K-W-L Chart
- Postcard of Cotton Ginning time in Memphis, Tenn.
- Cotton bolls
- Order cotton bolls from one of the following sources
  - http://cottonclassroom.com/buycotton.html
- Copy and print non-fiction reading passage for assessment
  (see page 3 for link)

Background:

“Cotton”  Author: Wayne Moore
Source Location: Tennessee Encyclopedia of History & Culture

“Cotton Gins”  Author: Carroll Van West
Source Location: Tennessee Encyclopedia of History & Culture

“Memphis Cotton Exchange”  Author: Lynette Boney Wrenn
Source Location: Tennessee Encyclopedia of History & Culture

Lesson Activities:

Introductory Activity

Students will view Cotton Ginning Time in Memphis, TN, postcard #37 from The Tennessee State Library and Archives collection.

1) While viewing the photograph students will create a K-W-L chart. This K-W-L Chart, which tracks what a student knows (K), wants to know (W), and has learned (L) about the topic, will be used before, during, and after research on Eli Whitney and the cotton gin.

2) Use the K-W-L chart to direct students’ thinking as they begin to view the postcard. Ask them to identify the title and encourage them to think about what they notice.

3) Then ask students to think about what they might already know about the topic. Encourage them to brainstorm about the time period and pose questions about the people, wagons, mules and cotton. These can be recorded on a chart as a class or individually.

4) As the lesson continues, instruct them to revisit their questions in the “What I want to know” column and answer them in the “What I Learned” column.
Lesson Activities Continued:

Small Group Activity: Investigation

1) In small groups distribute cotton bolls and lab reports (see page 4) for student observation.

2) With a partner, students begin to gather and record data.

3) Students examine the woody stem and the boll holding the fibers and gin the cotton by removing the seeds from the fibers.

4) Students draw conclusions and interpret data.

Independent Assessment: Making Cloth: The Industrial Revolution Begins

Students will read the 4th grade reading passage linked above (follow the redirect) on making cloth and answer the comprehension questions. Teachers may decide to use this as an independent assignment, additional whole-group reading instruction or as an assessment.
Name: _________________________
Date: ___________________________

Cotton Boll Lab Report

My lab partner’s name is __________________________________________________________________________________________

We predict we will find these things in our Cotton Boll:
______________________________________________________________________________________________________________________
______________________________________________________________________________________________________________________

Outside of Cotton Boll
Here is a sketch of the outside of our cotton boll:

Our boll feels like __________________________________________________________________________________________________

Our boll looks like _________________________________________________________________________________________________

Inside of Cotton Boll
Here is a sketch of the inside of our cotton boll:

Here is what we found inside __________________________________________________________________________________________

Details we see are __________________________________________________________________________________________________

_______________________________________________________________________________________________________________________

Our predictions were ______________________________________________________________________________________________

_______________________________________________________________________________________________________________________