

State Library of Pennsylvania Ben Franklin Collection

*Teaching with Primary Resources
Lesson Plan Template*

Description

Lessons and units connected to Common Core Standards for Science and Social Studies focused on materials by and about Benjamin Franklin from the State Library collection, digitized in commemoration of his 300th birthday.

Location of the digital materials

[The State Library of Pennsylvania - Ben Franklin](#)

General Curriculum Framework

- **Big Ideas:** Declarative statements that describe concepts that transcend grade levels. Big Ideas are essential to provide focus on specific content for all students.
- **Concepts:** Describe what students should know (key knowledge) as a result of this instruction specific to grade level.
- **Competencies:** Describe what students should be able to do (key skills) as a result of this instruction, specific to grade level.
- **Essential Questions:** Questions connected to the SAS framework and are specifically linked to the Big Ideas. They should frame student inquiry, promote critical thinking, and assist in learning transfer.

LESSON PLAN TEMPLATE

Section 1:

Primary Resource Set:

Include one sentence to describe the digital collection resource used for the lesson plan.

The following lesson was designed and based upon the PA State Library digitalized collection of excerpts from Ben Franklin's memoirs.

Teacher's Guide:

Include one to two sentences to introduce the lesson.

The following lesson was developed to help students realize that Ben Franklin was inventor who experimented with a variety of resources and materials including glass.

Historical Background:

Include two to three sentences to frame the background of the lesson.

Ben Franklin was well known for inventing many things, but not many know that he invented a new instrument called the armonica. Franklin was very interested in glass because of its connection to electricity, and as a result he used it in many different ways like making bifocals and musical instruments.

Primary Sources:

Title of Primary Source – Cite the digital resources/the permanent URL	Annotations for instructional use – how will you use the primary resource with your students?
The Choice of Glass	Students will work independently and in groups to analyze and compare Ben Franklin's various works with modern technologies.
Armonica	Students will work independently and in groups to analyze and compare Ben Franklin's various works with modern technologies.
A New Instrument	Students will work independently and in groups to analyze and compare Ben Franklin's various works with modern technologies.

Section 2:

Lesson Plan Title: Ben Franklin – *A Glass Guy*

Subject: Social Studies

Grade Level/Course: 9-12

Related Academic Standards:

CC.8.5: Reading Informational Text: Students read, understand, and respond to informational text – with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.

CC.8.6: Writing: Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.

8.1.12.B: Evaluate the interpretation of historical events and sources, considering the use of fact versus opinion, multiple perspectives, and cause and effect relationships. 3.2.9.B: Demonstrate how vibrating objects make sound and sound can make things vibrate.

Assessment Anchors:

R11.A.2: Understand nonfiction appropriate to grade level.

R11.B.1: Understand components within and between texts.

R11.B.3: Understand concepts and organization of nonfictional text.

Eligible Content:

Make inferences and/or draw conclusions based on information from text.

Cite evidence from text to support generalizations.

Big Idea:

The possibilities of using glass are nearly endless. Ben Franklin discovered that glass not only could be used in the sciences and industry, but in the musical variety as well.

Essential Questions:

- How was glass utilized in the creation of a musical instrument?
- What other observations and inferences did Ben Franklin make concerning the use of glass?

Concepts:

Learn how early possibilities of glass were realized through various disciplines.

Competencies:

- Identify and describe the main idea of a reading passage.
- Organize and generalize important findings and details of the passage.
- Compare and contrast details of various passages across different groups in the classroom.
- In both writing and oral process, summarize and present main idea and concepts of reading passages to class as a whole.
- Utilize classroom technology in a manner that supports exploration and learning in a classroom environment.

Objectives:

- Students will be able to explain the pros and cons of using glass in everyday life.
- Students will be able to identify key parts of an armonica which utilized glass to produce sound and music.

Vocabulary:

- unvetrified sand, glass, hemispheres, tones, harpsichord, spindle=

Duration: 45 minute class period

Materials: Pencil, Notebook, Internet, Computers, Smart Board, Classroom Library

Related Units and Lesson Plans:

- Prior to this lesson the students have defined and have been quizzed upon the vocabulary terms from this and the five lessons discussing Ben Franklin.
- [Prior to this lesson students have learned about the life of Ben Franklin by watching, summarizing, and discussing the following video](#)
- This lesson is in collaboration with five other lessons that highlight the memoirs of Ben Franklin which can be found at the PA State Library and its website.

- Prior to this lesson students have already learned the proper way to solve academic dilemmas on their own through the use of classroom resources including but not limited to: Dictionaries, Encyclopedias, Historical Biographies, and the Internet.

Formative Assessment:

- Throughout the lesson the teacher and teacher's assistant will be assisting students that may be off track, struggling, or confused. The teacher and teacher's assistant will document any abnormalities they may notice during this process.
- Students understanding and growth during the lesson will be assessed through the grading of individual work that was completed and turned in.
- This process can be a great asset when identifying at risk students before it is too late.

Suggested Instructional Supports:

- Throughout the lesson the teacher and the teacher's assistant will be checking student progress and assisting with any road blocks that may arise.
- The teacher and the teacher's assistant will often be stopping and assisting students with comprehension and understanding of the assigned readings.
- The teacher may feel it is necessary to not have the groups chosen randomly. This may be true in the case of students needing more support from their classmates and/or the instructor, or the student/s may need to be separated from certain individuals.
- The classroom should have some sort of reference library available to the students including but not limited to: Dictionaries, Encyclopedias, Historical Biographies, and the Internet.

Instructional Procedures:

- The class is based on certain routines and procedures thus, as the students enter the room they will know to get their materials and to be prepared to learn.
- (5 minutes) Upon the ringing of the late bell, students will be asked to watch a clip from the show "[How It's Made](#)" While watching students are to make a list of what is needed to produce the glass products that were not around during the American Colonial times.
- (10 minutes) Students will then be randomly assigned one of the three preselected excerpts from the Ben Franklin memoir collection. Students will be given the URL link to search and read the excerpt they were assigned. Printable copies can be made available if computer access is limited.

- (5 minutes) While reading the students will write a sentence or two describing the main idea of the excerpt.
- (3 minutes) Students are then asked to find the other classmates that have read the same excerpt.
- (5 minutes) In these groups the students will try to hypothesize how Ben Franklin was able to form and create glass products without the modern technologies of today.
- (9 minutes) Students will then select a spokesperson to present their finding to the class in a short 3 minute summary.
- (5 minutes) the students will then have the opportunity to see and hear [what the glass armonica looks and sounds like](#) by watching the following video.
- (4 minutes) The students then be asked to write one or more sentences answering the following question: Do the inventions and ideas that Ben Franklin discussed affect American society still today? If so, what impact do they have on everyday life? If not, why?
- If there is any time left the students will begin to watch [a documentary discussing the inventions of Ben Franklin](#). This video will be the conclusion of the Ben Franklin unit.
- As the students leave the classroom for the day they are asked to ensure their name is on their work and informed to place it into the grading bin.