

# Inventor Research

Teacher: Kelly Knoll

**Grades:** 3-5

**Number of Days:** 6/7 Days

**Content Area:** Language Arts, Social Studies, Maps

**Time Frame:** 45 minutes a day

## Curriculum Objectives:

(Objectives are based on the Alabama Course of Study for third grade language arts and social studies. The course of study may be accessed online at [www.alsde.edu/html/sections/](http://www.alsde.edu/html/sections/))

Students will

- Exhibit awareness of how text features are used to convey meaning.
- Demonstrate literal understanding of print material.
- Interpret passages in print material.
- Exhibit a growing independence in selecting appropriate print and non-print media for a variety of purposes.
- Employ study strategies to gain information.
- Use appropriate reference sources with assistance for a variety of purposes.
- Use the writing process with guidance when composing different forms of written expression.
- Write in a variety of modes to express meaning.
- Write meaningful simple sentences and short paragraphs.
- Use cardinal and intermediate directions to find a location on a map or globe
- Demonstrate an understanding of simple grid lines

## Information Literacy Objectives:

(Based on *Literacy Partners: A Principal's Guide to an Effective Library Media Program for the 21<sup>st</sup> Century*. (2000) "Appendix B K-12 Information Objectives." Third Grade. Montgomery, AL.: Alabama State Department of Education. Office of Technology Initiatives. Bulletin no. 2000. p. 33. Online at <http://www.alsde.edu/general/LiteracyPartners.pdf>)

- Students will use the media catalog.
- Students will use an index to locate information on a topic.
- Students will use an encyclopedia to locate a topic.
- Students will classify information according to characteristics.
- Students will combine facts found in multiple sources.
- Students will use a simple format or chart to record information found during research

## Resources and Materials:

### Materials:

- Graphic organizer
- Trade books by Faye Gibbons  
*Mama and Me and the Model T*,  
*The Day the Picture Man Came*  
and *Full Steam Ahead*: These  
books may be used as "hooks" for  
the unit.
- Computers with internet access
- Media Catalogue

### Reference Sources:

- World Book Encyclopedia
- Alabama Virtual Library: Through this  
source, students may access Britannica  
Online School Edition Encyclopedia,  
KidsInfoBits, and Kids Search.  
<http://www.avl.lib.al.us/>
- Reference Collection's Biographies
- Student Dictionaries
- Roget's Student Thesaurus

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## Learning Activities:

### Day 1:

- Read and discuss Faye Gibbon's book *Full Steam Ahead*.
- Share with students some major inventions, their inventors, and the impact the inventions have made on our current lives. (sample inventors are provided below)

Henry Ford	Alexander Graham Bell	Thomas Edison
The Wright Brothers	Eli Whitney	George Washington Carver
Percy Julian	Cyrus McCormick	
Robert Fulton	Richard Trevithick	
- Brainstorm and create a list of inventors.
- Explain that the class is going to work on a research project. Each student will research an inventor, complete a graphic organizer, write a two-page report about the inventor, and present the paper to their classmates.
- Each student will choose/be assigned an inventor to research.
- Explain the graphic organizer and discuss the information required to complete it.
- Brainstorm possible reference sources.
- Explain how to use AVL, especially Kid Search, Britannica Online, and Kids InfoBits.
- Review how to use the media catalogue and locate biographies.
- Review how to locate and use the World Books.
- Review how to use an index, table of contents, and headings to locate information.
- Summarize with a brief review of possible sources and the assignment.

### Day 2:

- Read and discuss *Mama and Me and the Model T*.
- Review the assignment and the reference sources.
- Direct students to begin gathering sources and information.
- Assist students with locating and accessing sources for their research.
- Assist students with the use of information, deciding what information should be used and recorded from the sources.
- Assist students with classifying and organizing information.
- Summarize the lesson by having students share successes and challenges.

### Day 3:

- Students will complete research.
- Using the information gathered, students will begin writing reports.
- Discuss organization of a report (topic order, skip lines, paragraphs, etc.).
- Direct students to write their rough draft.
- Allow students to share work with peers.

### Day 4:

- Review the revision process as a class.
- Direct students to complete the rough draft and revise the report.
- Allow students to share their work with a classmate and get feedback on the draft.

### Day 5:

- Read and discuss *The Day the Picture Man Came*.
- Review the editing process.
- Have students edit their work.

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- Have students peer-edit the work.
- Have students write their final copy.

Day 6:

- Students will present their reports to the class.
- Assess the students' reports.

Social Science Integration

- Discuss which state the students live in.
- Have students share some of the locations where their inventor lived.
- Locate Alabama and the other locations on a US map.
- Review grids, cardinal directions, and intermediate directions.
- Have students complete the map integration practice page.

### Faye Gibbons Book Bibliography

Gibbons, Faye. *The Day the Picture Man Came*. Illus. Sherry Meidel. Honesdale, Pa.: Boyds Mill Press, 2003.

Gibbons, Faye. *Mama and Me and the Model T*. Illus. Ted Rand. New York: Morrow Junior Books, 1999.

Gibbons, Faye. *Full Steam Ahead*. Illus. Sherry Meidel. Honesdale, Pa.: Boyds Mill Press, 2002.

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## Inventor's Graphic Organizer

Inventor's Name: \_\_\_\_\_ Student's Name: \_\_\_\_\_

**Inventor's Birthday and Death Date:** \_\_\_\_\_

Source Title: \_\_\_\_\_ Page Number: \_\_\_\_\_ Author: \_\_\_\_\_

**What education the inventor had:** \_\_\_\_\_

\_\_\_\_\_

Source Title: \_\_\_\_\_ Page Number: \_\_\_\_\_ Author: \_\_\_\_\_

**What the inventor invented:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Source Title: \_\_\_\_\_ Page Number: \_\_\_\_\_ Author: \_\_\_\_\_

**Why the invention is important:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Source Title: \_\_\_\_\_ Page Number: \_\_\_\_\_ Author: \_\_\_\_\_

**How the invention has changed our lives:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Source Title: \_\_\_\_\_ Page Number: \_\_\_\_\_ Author: \_\_\_\_\_

**List three interesting facts about the inventor:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Source Title: \_\_\_\_\_ Page Number: \_\_\_\_\_ Author: \_\_\_\_\_

**Where the inventor lived:** \_\_\_\_\_

\_\_\_\_\_

Source Title: \_\_\_\_\_ Page Number: \_\_\_\_\_ Author: \_\_\_\_\_

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## Map Skills Integration Practice Page

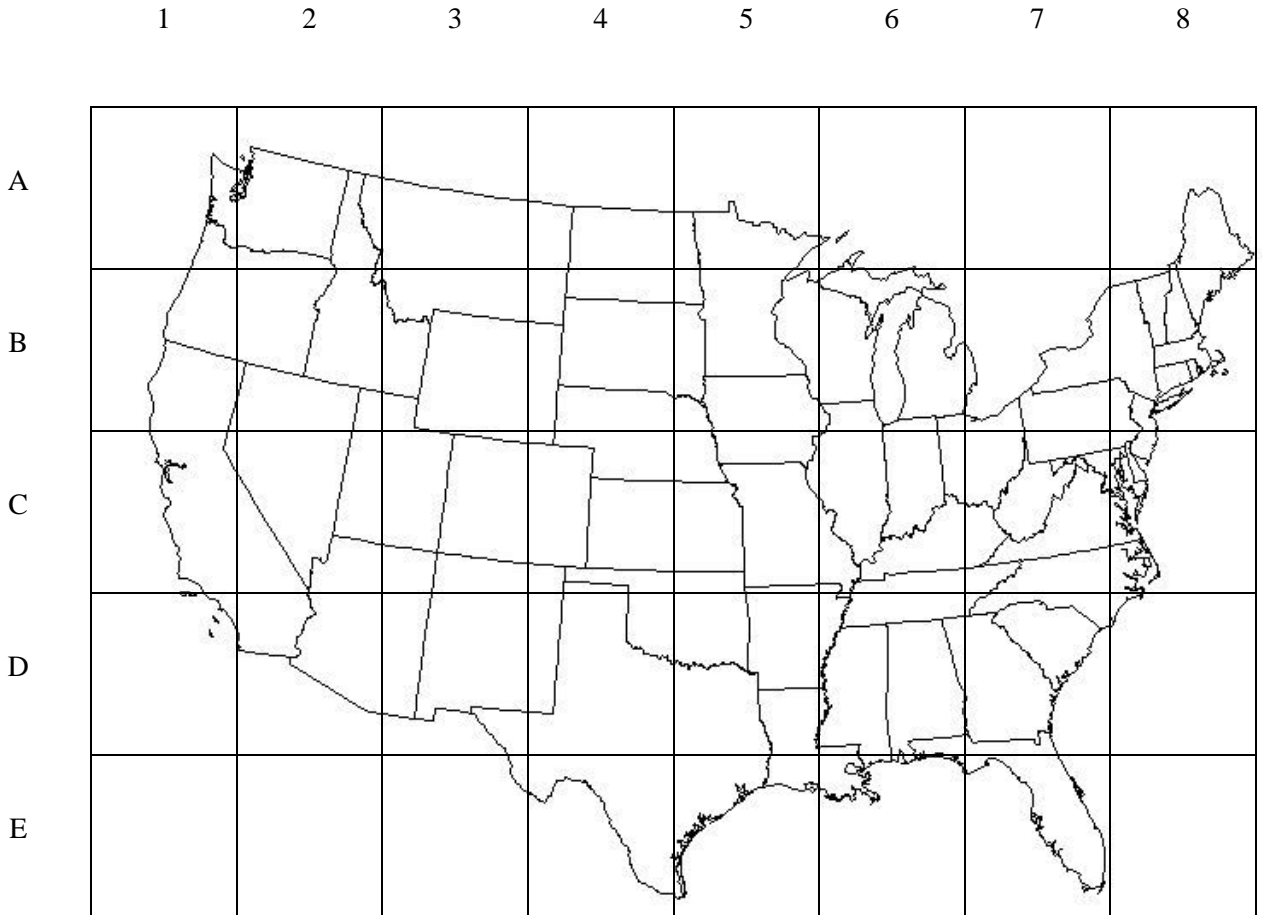
On the map below, shade in the state(s) the inventor lived in.

Color the state of Alabama blue.

If you travel in a line to visit the inventor from Alabama, what cardinal or intermediate direction you would need to take? \_\_\_\_\_

What grid coordinate is Alabama located in? \_\_\_\_\_

What grid coordinate(s) is the inventor's home state located in? \_\_\_\_\_



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### Report Rubric

CATEGORY	A	B	C	U
<b>Quality of Information</b>	Information clearly relates to the main topic. It includes several supporting details and/or examples	Information clearly relates to the main topic. It provides 1-2 supporting details and/or examples	Information clearly relates to the main topic. No details and/or examples are given	Information has little or nothing to do with the main topic
<b>Amount of Information</b>	All topics are addressed and all questions answered with at least 2 sentences about each	All topics are addressed and most questions answered with at least 2 sentences about each	All topics are addressed, and most questions answered with 1 sentence about each	One or more topics were not addressed
<b>Sources</b>	All sources are accurately documented in the desired format	All sources are accurately documented, but some are not in the desired format	All sources are accurately documented, but not in the desired format	Some sources are not accurately documented
<b>Mechanics</b>	No grammatical, spelling, or punctuation errors	Almost no grammatical, spelling, or punctuation errors	A few grammatical, spelling, or punctuation errors	Many grammatical, spelling, or punctuation errors
<b>Paragraph Construction</b>	All paragraphs include introductory sentence, explanations or details, and concluding sentence	Most paragraphs include introductory sentence, explanations or details, and concluding sentence	Paragraphs included related information but were typically not constructed well	Paragraphing structure was not clear and sentences were not typically related within the paragraphs
<b>Graphic Organizer</b>	Graphic organizer or outline has been completed and shows clear, logical relationships between all topics and subtopics	Graphic organizer or outline has been completed	Graphic organizer or outline has been started and includes some topics and subtopics	Graphic organizer or outline has not been attempted

\*This rubric was developed using Rubistar, an online resource.

### Map Integration Assessment:

Check each student's Map Integration Practice Page for accuracy. Answers will vary.

Each question is worth 20 points or 1/5

# **Inventor Research**

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## Student Scoring Chart

#	Students	Chart Use	Encyclopedia Use	Classify Info	Combine Fact	Index Use	Use Catalogue
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

**Assessment Scoring Guide**

Use the rubric (below) to complete the student chart (to the left). Write each student's name and note the student's level of performance (P, M, or U) for each given information literacy skill.

## Information Skills Rubric

Categories	Proficient (P)	Minimal (M)	Unsatisfactory (U)
Students will use a simple format or chart to record info found during research.	Uses graphic organizer to record info. found while researching and expands on organizer	Uses and completes organizer to record information found while researching	Does not use or complete graphic organizer to record information
Use an encyclopedia to locate a topic	Locates volume and topic independently	Locates correct volume, but needs guidance to locate topic	Unable to identify correct volume and locate topic
Students will classify information according to characteristics.	Identifies and classifies info, realizes that some info has 1+ classification.	Identifies info and classifies the info according to characteristics	Does not classify information according to characteristics
Students will combine facts found in multiple sources.	Uses graphic organizer that contains 3+ sources and combines the facts	Uses graphic organizer that contains 2 sources and combines the facts	Uses graphic organizer that contains one source and combines the facts
Students will use an index to locate information on a topic.	Uses index, as needed, to locate information within sources	Uses index to locate information within sources with guidance	Does not use indexes to locate information within sources
Students will use the media catalog.	Independently uses the media catalogue to identify 2+ appropriate non-fiction books	Ind. uses the media catalogue to identify 1 appropriate non-fiction book	Requires help to use the media catalogue to identify appropriate non-fiction books