



South Carolina

Full STEAM Ahead:

Connecting Library of Congress Primary Sources and Picture Books

Lesson Plan Template

Author(s):

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Grade Level(s):

5

Subject:

ELA -

Length of Class:

45-minute class period

Insert visual or image that accentuates the lesson plan to make it appealing to educators: must be a public domain image



Image Citation: Dorothy Vaughan. Photo Courtesy of NASA. https://crgis.ndc.nasa.gov/crgis/images/2/29/VaughanBio.pdf	
Lesson Title:	Do girls build rockets?
Overview:	Brief and accurate description of the lesson plan in one sentence The student will be able to create an inquiry question about female rocket builders, answer brief questions and cite a source telling where the information was retrieved from.
Learning Objective:	Desired learner outcomes in precise, measurable, and obtainable terms. Limit your lesson to 1-2 objectives. Students will be able to cite a source using school citation prerequisites. Students will be able to refine an inquiry/research topic.
Standards:	Standards should be aligned with objectives ELA <ul style="list-style-type: none"> - Identify source of information and evaluate credibility and reliability. - Refining scope of Inquiry - Citing text evidence
Essential Question:	The essential question should be student-friendly and academic. It should be inquiry-based and connected to standards and learning objectives. Can girls build rocket ships?
Supporting Question(s):	What two or three questions support students answering the essential question? Is there any evidence that girls could build a rocket ship? Do men usually build rockets? Who are some black women that helped space travel?
Digital Primary and Secondary Sources:	List primary and secondary sources and include links. Library of Congress - Terrell, E. (n.d.). <i>Hidden Figures No More: African American Women in Space Exploration Inside Adams</i> . The Library of Congress. https://blogs.loc.gov/inside_adams/2017/02/hidden-figures-no-more-african-american-women-in-space-exploration/ SCDISCUS - Dorothy Vaughan - "Dorothy Vaughan." <i>Britannica School</i> , Encyclopædia Britannica, 19 Oct. 2023. school.eb.com/levels/elementary/article/Dorothy-Vaughan/628679 . Accessed 12 Mar. 2024.

Required Classroom Materials:	What materials do you need (computer, projector, etc.)? What materials do the students need (writing journals, laptop carts, textbooks, etc.)? Chromebooks, copy of Sadie Sprocket Builds a Rocket (Fliess, Sue)
Classroom Environment:	How is the room arranged for the lesson? What considerations will contribute to the lesson --- interactive bulletin board, learning stations/centers, table for panel presentation? An interactive white board will be used to share the picture book - Sadie Sprocket Builds a Rocket . Students will sit at desks provided in the school library. Students need internet access via Chromebooks to re: Google Classroom, Library of Congress website.
Differentiation and Adaptations:	In what ways will you differentiate for learners within the classroom? This is not how your lesson meets the needs of diverse learners, but how you could modify your lesson for a range of diverse learners.

Lesson Sequence/Procedures	
Estimated Time Needed	Detailed Description of Teaching and Learning
2 min.	Picture walk picture book - Sadie Sprocket Builds a Rocket
7 min.	Read the book.
2 min.	Discuss what's seen/done - building materials, crew members, lift off, floating in space, landing on Mars, activities on Mars
2 min.	Discuss - real or make pretend. Could you really go to Mars? Why or why not? Could a girl build a rocket ship? Why or why not?
2 min.	Narrow research question with guidance ending with are girls involved in building space rockets?
7 min.	Use Google Classroom to record notes on t-chart
7 min.	Visit LOC webpage
7 min.	Visit SC DISCUS.org
7 min.	Use Chatterpix to share outcome

Assessments:	What are the evaluation (informal and formal) tasks for this lesson? How do the evaluation tasks connect with the learning objectives? How
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	<p>do the evaluation tasks demonstrate student learning? How will students receive feedback? Download an image of one of the black women involved in early NASA. Use Chatterpix to share information from the t-chart about the chosen person.</p>
Learning Extensions:	<p>Ideas for extending the lesson or connecting to other curricular topics or lessons Students research other women or Black people involved in early NASA days.</p>