

Uncovering the Invisible: The "Hidden Figures" of History

Lesson Overview

Target Age: 10 Years Old

Duration: 45 Minutes

Context: Homeschool, Classroom, or Small Group

Learning Objectives

By the end of this lesson, the learner will be able to:

- Define what it means for a historical figure to be "hidden" or "sidelined."
- Identify the specific contributions of the women of NASA (Katherine Johnson, Dorothy Vaughan, and Mary Jackson).
- Analyze why certain people are often left out of history books.
- Advocate for a "hidden figure" by creating a "History Spotlight" profile.

Materials Needed

- Paper and writing utensils (colored markers or pencils recommended)
- A timer (phone or kitchen timer)
- Internet access or a library book about NASA's "Human Computers" (optional, for the "You Do" extension)
- Printable or hand-drawn "Spotlight Trophy" template (a simple circle or star shape)

1. Introduction: The Lego Castle Mystery (5 Minutes)

The Hook: Imagine you see a photo of a massive, 10,000-piece Lego castle in a magazine. In the photo, there is one person standing next to the castle, smiling and holding a trophy. You would probably think, "Wow, they are a master builder!"

The Question: What if I told you that 50 other people actually stayed up all night snapping the bricks together, doing the math to make sure the towers didn't fall, and following the instructions—but they were told to hide in the other room when the photo was taken? Is that fair? Why do you think only one person got the trophy?

Transition: Today, we are going to talk about "Hidden Figures." These are people—mostly women and people of color—who did incredible things but were "sidelined" (pushed to the side) by history. We are going to learn how to be "History Detectives" to bring their stories back into the light.

2. Content & Practice: The NASA Superstars (15 Minutes)

I Do (The Presentation): Before NASA had electronic computers like the laptops we have today, they had "Human Computers." These were people who did complex math by hand to launch rockets into space.

- **Katherine Johnson:** She was a math genius. She calculated the path for the first American in space. John Glenn, the astronaut, actually refused to fly unless Katherine personally checked the machine's math!
- **Dorothy Vaughan:** She was NASA's first African American manager. When she saw electronic computers were coming, she taught herself and her team how to code so they wouldn't lose their jobs.
- **Mary Jackson:** She had to go to court just for permission to take the classes she needed to become NASA's first Black female engineer.

We Do (Guided Discussion): Let's talk about why these women were "hidden." (*Discussion Prompts for Educator/Student*):

- In the 1950s and 60s, there were laws (Segregation) that kept Black and White people apart. How did that make their jobs harder?
- Back then, many people thought women weren't "suited" for math or engineering. How do you think the women felt proving everyone wrong?
- If these women did the math that saved lives, why weren't they on the news as much as the astronauts?

3. Activity: The "History Spotlight" (15 Minutes)

You Do (Independent Practice): It's time to fix the record! You are going to create a "Spotlight Poster" for one of the three women we discussed, or a different "hidden" woman you may know of (like Ada Lovelace or Elizabeth Blackwell).

Instructions:

1. Draw a large star or trophy in the center of your paper.
2. Inside the shape, write the person's name in bold letters.
3. List **three "Superpowers"** (skills or achievements) they had.
4. At the bottom, write one sentence starting with: "*We should remember her because...*"
5. Decorate the border with symbols of their work (stars, rockets, math equations, or books).

Success Criteria: Your poster should clearly show the person's name, at least one major struggle they overcame, and why their work was important to the world.

4. Conclusion & Recap (10 Minutes)

The Summary: Today we learned that history isn't just about the famous names on the covers of books. It's built by teams of people, many of whom were overlooked because of their gender or the color of their skin.

Learner Recap:

- Can you tell me one thing Katherine Johnson did that helped NASA?
- What does it mean when someone is "sidelined" in history?
- How can we make sure modern-day "hidden figures" get noticed today?

Final Takeaway: History is like a puzzle. If we leave out the "Hidden Figures," we are missing some of the most important pieces. Next time you read a history book, ask yourself: "*Who else was in the room that I'm not seeing?*"

Assessment Methods

- **Formative (During lesson):** Check for understanding during the "Lego Mystery" and the guided discussion prompts.
- **Summative (End of lesson):** Review the "History Spotlight" poster. Does it accurately reflect the figure's contribution and the concept of overcoming being "hidden"?

Differentiation Options

- **For the Creative Learner:** Instead of a poster, act out a 30-second "Breaking News" segment announcing the achievements of one of the women.
- **For the Advanced Learner:** Research a *different* hidden figure (e.g., Rosalind Franklin or Alice Ball) and explain why their discovery was credited to someone else at the time.
- **For the Reluctant Writer:** Use a "Graphic Organizer" style where they draw the achievement and only write keywords instead of full sentences.