

Curriculum Guide

Her Eyes on the Stars: Maria Mitchell, Astronomer by Laurie Wallmark, illustrated by Liz Wong

isbn 9781954354135, non fiction, picture book biography, STEM title

Guided Reading Level V; Grade Level Equivalent 5; Interest Level by Grade 3-8; CSS-ELA Literacy Strands: L.5.3, 4, 4a, 5, 5a, 5b, 6; RF.5.3, 3, 4, 4, 4c; RI.5.1, 2, 3, 4, 5, 6, 8,9, 10; SL.5.1, 1c, 1d, 2, 3, 4, 5, 6; W.5.2, 3, 4, 7, 8, 9, 9b, 10; NGSS: PS2A, PS2B, ETS1A, ETS1B, ETS1C

CCSS.ELA-Literacy.L.3.3,4,4a,5,5a,5b,5c,6

CCSS.ELA-Literacy.RI.3.1,2,3,4,7,9,10

CCSS.ELA-Literacy.RL.3.1,3,4,7,10

CCSS.ELA-Literacy.SL.3.1,1a,1c,1d,2,3,4,6

CCSS.ELA-Literacy.W.3.2,2a,2b,2c,2d,4,7,8,10

STEM content: Astronomy, Physics, Technology and Science. Solving real world problems.

History: Women's rights, Women in STEM, Women's colleges, mid-1800s.

Literary elements: setting, plot and character development, conflict, illustrations enhance meaning and tone, new scientific and mathematical vocabulary. Back matter: Author's note, Timeline, Glossary.

Comprehension strategies: make text to world connections, identify cause and effect relationships, main idea and details, sequence of events, author's purpose, compare and contrast then and now.

Themes: • STEM • Growth Mind Set: showing determination and perseverance. • Women Heroes: powerful women in history. • Critical Thinking Skills: problem solving. Objectives: • Connect with literature. • Teaching children about women's contribution to the field of astronomy. • Perseverance: Help students understand what it means to set goals and work toward those goals. • Education: Introduce students to the concept that education is not freely available to all people. • Problem Solving: Learning ways in which we can approach problems in a variety of ways.

Plot and character development:

Maria Mitchell was not only the first American to discover a comet in the mid 1800s, she went on to many other firsts. Make a list of her achievements and discuss how one led to another.

What sparked Maria's interest in astronomy? What challenges did she face in learning more about astronomy? How did she pursue her interests?

Informational text:

This book conveys a lot of complicated information in a simple picture book format. Does the art help clarify the story? How? What do you learn about astronomy in the mid1800s? About using stars in the sky for navigation? About observations?

Write a paragraph about the information you learned about this time period in the mid 1800s. How have things changed now?

What information does the author put into the author's note at the end? Why do you think that information wasn't included in the story itself? What can an author use a note like this for?

Write your own author's note for this book. Include things that you think the reader might want to know or should know that weren't included in the main story. Do you want to know more about Maria?
About astronomy?