

Summer Assignment: 11th Grade Accelerated
2020-2021

***Galileo's Daughter* by Dava Sobel.** Galileo Galilei is famous for many significant scientific discoveries, as well as for his conflict with the Catholic Church. This book adds to that story the voice of Galileo's daughter who, despite living most of her life in a cloistered convent, was very connected to her father and the wider world. Galileo disagreed with the common belief of the day that the sun, moon, and planets orbited around the Earth. He supported the theory of **heliocentrism**, the belief that the sun was at the center and the planets orbited around it. He used **empiricism**, learning by experimentation and observation, to expand understanding of physics and astronomy. The Catholic Church ended up putting Galileo on trial for heresy because of his writing on heliocentrism. **As you read, think about the role of both science and religion in Galileo's life.**

If you have any questions, please contact Mrs. Scheinmann (rscheinmann@jbha.org)

Optional but useful: The Nova documentary *Galileo's Battle for the Heavens* is based on *Galileo's Daughter*. It is available here: <https://www.youtube.com/watch?v=XCxkdR092c4>. A transcript is available here: https://www.pbs.org/wgbh/nova/transcripts/2912_galileo.html

Read parts 1 through 4. Take notes on the following questions as you read. Note key quotes and page numbers. You will use them for an in-class essay during the 1st week of class.

Key Characters:

- **Suor Maria Celeste:** Galileo's older daughter, AKA Virginia. They wrote a lot of letters to each other.
- **Suor Arcangela:** Galileo's younger daughter, AKA Livia.
- **Vincenzo:** There are two people named Vincenzo. One is Galileo's nephew; the other is his son.
- **Cosimo II de Medici:** Galileo's student who then becomes the Grand Duke of Tuscany. The Medici family was one of the most powerful families in Europe.
- **Cardinal Barberini/Pope Urban VIII:** Scholar and friend of Galileo who becomes Pope.
- **Madame Cristina:** Cosimo's widowed mother, very religious and very influential.
- **Cardinal Bellarmine:** Advisor to the Pope, inquisitor, known for going after heretics.

1. What was the significance of Galileo's telescope? How did it affect his career? What other discoveries did it lead to?
2. Why did Galileo find the heliocentric theory more plausible than Aristotle's theory?
3. What arguments did Galileo use with Madame Cristina? Were they successful?
4. What did the Cardinals decide about Copernican theory in 1616? What was Galileo's response?
5. Describe the lifestyle of Galileo's daughters at the convent. How did he support them?
6. How did Suor Maria Celeste support her father in his work?

7. What were the main issues that Urban VIII faced as Pope?
8. Describe the obstacles that Galileo faced in getting his *Dialogue* published. How did he overcome them?
9. Why was Galileo put on trial? Was the trial fair? Explain.
10. What was the outcome of the trial?

Optional, but recommended:

Candide by Voltaire (Enlightenment)

John Adams by David McCullough (American Revolution and Early Republic)

The Killer Angels by Michael Shaara (US Civil War)

A Tale of Two Cities by Charles Dickens (French Revolution)

The Two Princes of Calabar by Randy Sparks (African Slave Trade)

The Scarlet Pimpernel by Emmuska Orczy (French Revolution)

Revolutionary Mothers by Carol Berkin (American Revolution and Early Republic)

Founding Brothers by Joseph Ellis (American Revolution and Early Republic)

The Invention of Wings by Sue Monk Kidd (Slavery and Abolitionism)