



GALILEO

A re-creation of his 1633 trial for heresy

KATHERINE B. WARD, the author of GALILEO, graduated *Phi Beta Kappa* from Williams College with a B.A. in history. She is currently working on her M.A. in history at California State University, Los Angeles, where she wrote the prize-winning graduate paper for the 1990 Southern California *Phi Alpha Theta* Historical Conference. At the Marlborough School in Los Angeles where Katherine teaches history, she is also the Seventh Grade Coordinator and the Junior State of America club adviser.

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Interact

10200 Jefferson Boulevard

P.O. Box 802

Culver City, CA 90232

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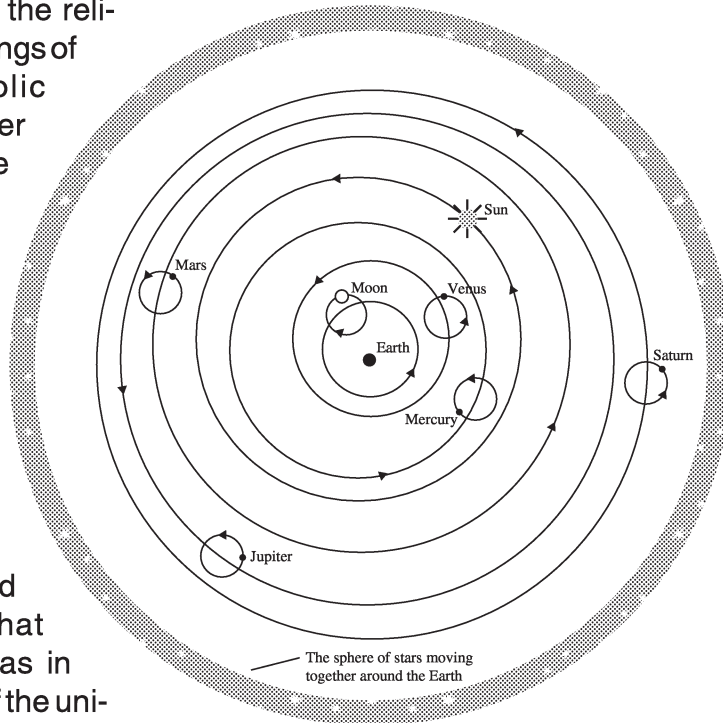


PURPOSE - 1

Galileo Galilei

At the beginning of the scientific revolution in the late 16th and early 17th centuries, new scientific ideas often came into direct conflict with the religious teachings of the Catholic Church. Ever since the classical Greek times, scholars had accepted the views of two Greek masters, Aristotle and Ptolemy, that the earth was in the center of the universe and the sun and stars travelled around it. Because certain passages in the Bible seemed to confirm this view, the church adopted the position that any different proposal could not be valid.

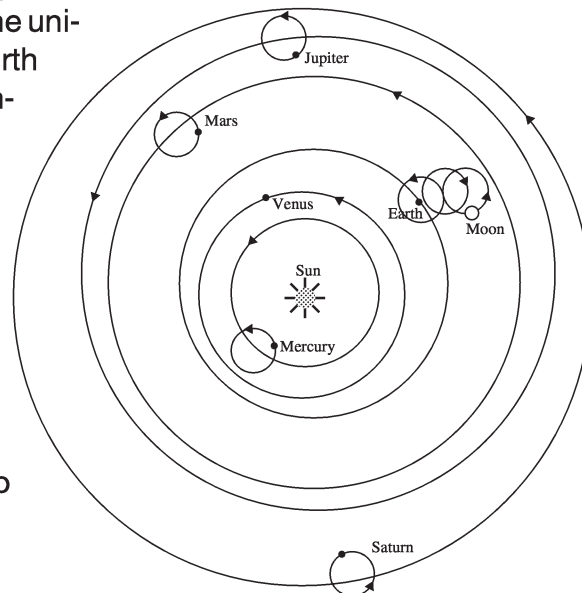
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The Ptolemaic System

In 1543, a Polish monk named Nicolaus Copernicus published a book in which he proposed a different idea—that the sun was actually the center of the universe and that the earth was only one of the planets that orbited around the sun. For about 50 years very few people read his book, until it was re-discovered by a new generation of scholars, such as Johannes Kepler in Germany and Galileo Galilei in Italy.

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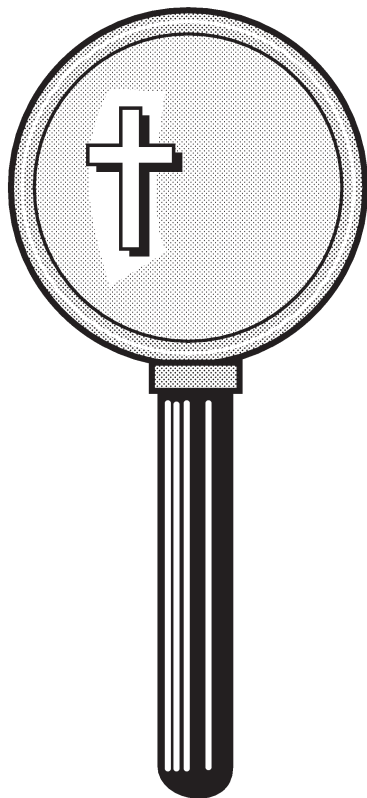


The Copernican System



PURPOSE - 2

In order to accept that the earth moves around the sun, however, it was necessary to interpret certain Biblical passages figuratively, rather than literally, as when the scriptures mention the sun moving across the sky. Unfortunately, the church was unwilling to allow individuals such as Galileo to claim that they could interpret the scripture to fit their views of the universe. Therefore, when Galileo published his book *Dialogue Concerning the Two Greatest World Systems* that supported the Copernican system, the Roman Inquisition brought him to trial for heresy. This simulation presents the events leading up to the trial and a re-creation of the trial itself. Specifically your students should experience the following:



Knowledge

1. The conflict between faith and science in the 17th century
2. The contributions of Galileo to science
3. The impact of the Protestant Reformation on the actions of the Catholic Church
4. The circumstances leading up to Galileo's trial in 1633
5. The workings of Italian politics in the 17th century within numerous states such as Florence and Venice, as well as the Papal states
6. The workings of the Roman Inquisition and understanding its interpretations of heresy and excommunication

Attitudes

1. Appreciating how deeply persons were troubled by the conflict between faith in the church teachings and personal observation of truth
2. Realizing why Galileo was willing to renounce his scientific beliefs because of his religious faith
3. Sensing how the church's presence permeated everyday life in 17th-century Italy

Skills

1. Speaking clearly and forcefully before a group
2. Analyzing and presenting material coherently to the class



OVERVIEW

This re-creation uses a fictional television broadcast to present the background information necessary to understand the trial. A fictional news network, **LHN (Living History Network)**, will present a documentary on the life of Galileo Galilei and his trial for heresy in 1633.

This program will be presented in five segments:



- **Part 1:**
Galileo's life and career
- **Part 2:**
A debate between supporters of the Copernican and the Ptolemaic systems
- **Part 3:**
Information on Galileo's first contact with the Inquisition in 1616
- **Part 4:**
The events that brought Galileo to trial in 1633
- **Part 5:**
The 1633 trial is re-created, ending with Galileo recanting his beliefs—if he is found guilty.

Finally, during a debriefing the class will discuss why Galileo renounced his views and how the position of the church affected the scientific revolution.

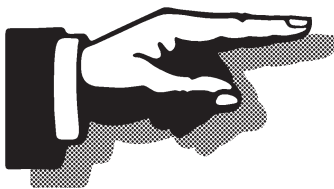


HISTORICAL ACCURACY

*How accurate is
this re-creation*



1. Of course, there was no television broadcast in 1633, but this format allows many figures in Galileo's life, both friends and critics, to present their views on the case; it also dramatically reveals information about different parts of his life and career.
2. All of the characters interviewed in the television broadcast were real people who played important roles in Galileo's life, but several of the individuals who are interviewed actually died before 1633:
 - Filippo Salviati,
 - Giovanni Francesco Sagredo, and
 - the Dowager Grand Duchess Christina de Medici.They have been brought back to life to present important information and to appear as interesting characters in the scenario.
3. At one point in the interview, Niccolo Lorini discusses traveling to Rome to bear witness against Galileo. Tommaso Caccini actually did this, but both men were working together against Galileo, and the interview makes more sense with Lorini discussing this detail.
4. This simulation discusses a letter that Galileo wrote to the Grand Duchess Christina de Medici regarding his reconciliation of faith and scientific observation. He actually wrote two letters, one to his friend Benedetto Castelli, which he later expanded into a longer letter to the grand duchess. In order to introduce Christina as an interesting character, this re-creation focuses on the second letter, although it was actually the letter to Castelli, not the one to Christina, that Lorini sent to the Inquisition.
5. The actual trial lasted from April 12, 1633, to June 22, 1633. In this re-creation it takes place in three sessions in order to simplify the trial.



Important: Explain to the students that Galileo changed his defense somewhat over time, and though this may seem abrupt in this trial, it would have made more sense over a period of two months.



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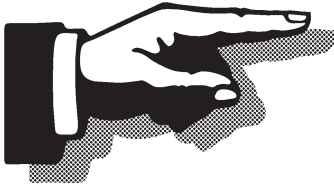
*See your friendly school librarian several days in advance of beginning this re-creation. A special **Reserve Shelf: GALILEO** might be set up for your students.*





SETUP DIRECTIONS - 1

1. Decide how you wish to select students for the various roles. You might have them volunteer for the roles they prefer or simply assign the parts yourself.



Note well: You should choose strong students to play Galileo and the two news anchors—Father Antonio and Sister Maria. (See Role Responsibilities on page 8 for each role’s specific functions.)

Study carefully the NOTE-TAKING MODEL handout to see if you plan to use it. It requires a commitment from both you and your students, but it is assuredly worth it.

2. Duplicate and distribute the following role handouts in this packet. Duplicate the number in parentheses.
 - BACKGROUND ESSAY (class set)
 - NOTE-TAKING MODEL (class set)
 - LHN PROGRAM GUIDE (3) Give one copy to each of the students playing the director, Father Antonio, and Sister Maria.
 - GIOVANNI FRANCESCO SAGREDO (1)
 - SISTER MARIA CELESTE (1)
 - CHRISTINA DE MEDICI (1)
 - PTOLEMAIC/ARISTOTELIAN POSITION (2)
 - COPERNICAN/GALILEAN POSITION (2)
 - FATHER NICCOLO LORINI (1)
 - ARCHBISHOP PIERO DINI (1)
 - FATHER NICCOLO RICCIARDI (1)
 - CATARINA NICCOLINI (1)
 - POPE URBAN VIII (1)
 - GALILEO GALILEI (1)
 - TRIAL PROCEDURE (14) Give one copy to each of the judges, one copy to Firenzuola, and one copy to the court clerk.
3. Assign several students to act as technical staff—directors, camerapersons, etc.—for the television broadcast. These students will usher the guests to their positions, run the cameras (perhaps they can even use real video cameras and create an actual tape of the “program”), start and stop the action, and organize the show.
4. Assign a student to act as court clerk. This person will keep the court in order, removing anyone who is causing a disruption. He or she also plays a role in the trial itself.



SETUP DIRECTIONS - 2

5. Have each student study his or her role carefully, and perhaps assemble a costume appropriate to his or her character—a robe for a priest, a habit for a nun, a cape and stockings for a Venetian nobleman, a gown for the grand duchess, papal vestments for Pope Urban VIII.

This recommendation is important: *Strive to get your students playing witnesses to be so well prepared that they play their roles without having to carry handouts or notes during the trial.*

6. Before the simulation, students should study very carefully the views and information their characters are to present so that during the simulation, they can speak convincingly and—*without reading from their handouts.*



ROLE RESPONSIBILITIES - 1



Spend time thinking about who should likely play certain roles.

*But don't always exclude less capable students from roles in participatory activities such as **Interact** produces. All students can profit from facing the challenges inherent in role-playing.*

Why not use several such simulations or activities during the school year so that you can sprinkle less capable students among the more capable ones—each time you use such an experiential unit.

Father Antonio and Sister Maria

These students act as the news anchors for the television broadcast and interviews each of the guests.

Director

The director of the television broadcast starts and stops the action, organizes the scenes, and maintains silence during filming.

Camerapersons

Two or more students will fill this important role, filming the broadcast with a school or home camcorder ... or a video camera and video recorder. The resulting video can be viewed by the class, by parents at Open House, or by future students role-playing in this re-creation in sequential years.

TV documentary guests

Several students will play important guests. Sagredo, Maria Celeste, Christina de Medici, Lorini, Dini, Ricciardi, Catarina Niccolini, and Pope Urban VIII will be interviewed on the television documentary. Colombe, Caccini, Castelli, and Salviati will appear on the debate section of the documentary.

Vincenzo Maculano da Firenzuola

This student is the president of the Court of Inquisition during the trial. This student is responsible for maintaining order in the courtroom and for calling upon different judges to ask questions of Galileo.

Judges

These 12 students are Dominican friars who must act as Galileo's judges and jury in the trial. At the end of the trial they will vote on whether he is innocent or guilty.

Court clerk

This student keeps the courtroom orderly, swears in the defendant, and removes anyone who causes a disruption. Another responsibility is reading aloud any documents presented as evidence in the trial.