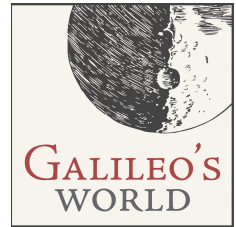


## Introduction to the Planisphere

EXHIBIT: *Galileo's World*  
GALLERY: Galileo, Engineer  
OBJECT: William Schickard, *Astroscopium* (Stuttgart, 1698).



The planisphere is a handy map of the night sky that works every night every season of the year.



1. Examine your planisphere, front and back. Note that **constellations** are labelled in ALL CAPS with a large font. Bright stars or asterisms are labelled in lower case with a smaller font.
2. Times are indicated on the planisphere in Standard time.  
From April to October add 1 hour to obtain Daylight Savings Time (DST) for Oklahoma and other areas that adopt DST. Remember that DST is one hour later than the Standard time the planisphere indicates.



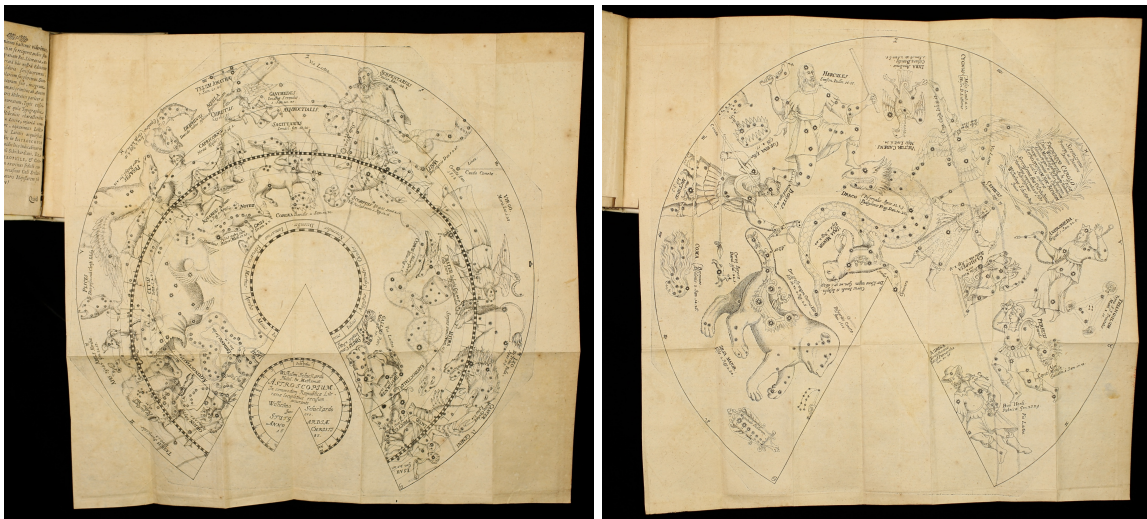
3. Find **Sagittarius the Archer** and **Scorpius the Scorpion** on the planisphere, turning the inside dial as needed.  
*On what date will Sagittarius and Scorpius be easily visible at 9 pm?*
4. Set the planisphere to 9 pm this evening.
5. Position yourself so that you **face south**. Star charts are usually designed for facing due south, optimized for about half-way up from the horizon.
6. Find the **north, south, east** and **west** horizons on the planisphere. First find north (designated by an arrow), then the other cardinal directions (“never eat slimy worms”).
7. **Read road maps looking down, but read star charts looking up.** Hold the planisphere above your head so that the north arrow points north, the south arrow points down, the west arrow points west and to the right, and the east arrow points east and to the left.
8. *What constellations will be visible in the sky tonight?*



## EXTENDED ACTIVITY

1. Compare the planisphere with a monthly star chart from **skymaps.com**: *What objects in space are included on the skymaps charts that are not found on the planisphere?*
2. Compare the planisphere with an **astrolabe**:  
*Do you see any corresponding lines or objects?*
3. Assemble the **Astroscopium**:

Assemble your own *Astroscopium* given printed copies of the two plates from Schickard (1689). Print the plates on card stock or heavy paper if possible. Cut out the three dials and discard the blank border. The large dial below left is the southern hemisphere, and the large dial below right is the northern hemisphere. These two dials will come together, printed sides visible, to make a somewhat flattened celestial globe.



Place the small dial (inset, left) on top of its larger dial, using a thread and some tape to hold them together so that it will rotate. Then tape the large dials together.





4. Compare the planisphere with the **Astroscopium**:

- What differences do you observe between the planisphere and the Astroscopium?
- How are they similar?
- Does the date for the optimal visibility of Sagittarius and Scorpius on the Astroscopium coincide with that obtained from the planisphere?
- How many days are they off from one another?

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(Ask about the *Galileo's World* iPad Exhibit Guide)

