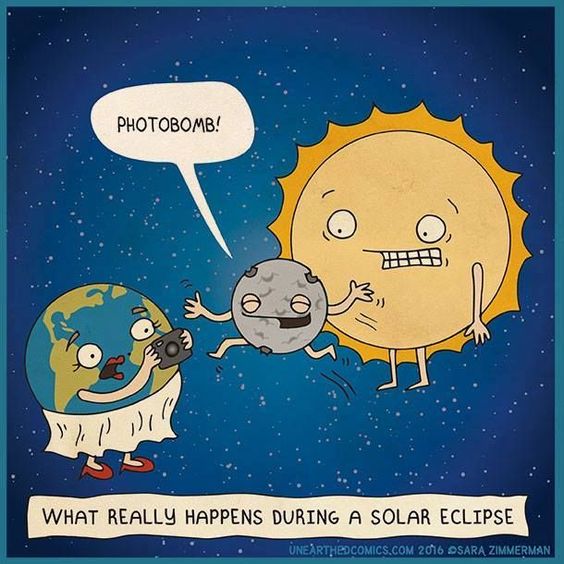
Stars and planets that are typically only visible after sunset will be visible during the total solar eclipse on August 21, 2017. The moon will completely cover the disk of the sun, darkening the sky and revealing normally hidden features of the universe.



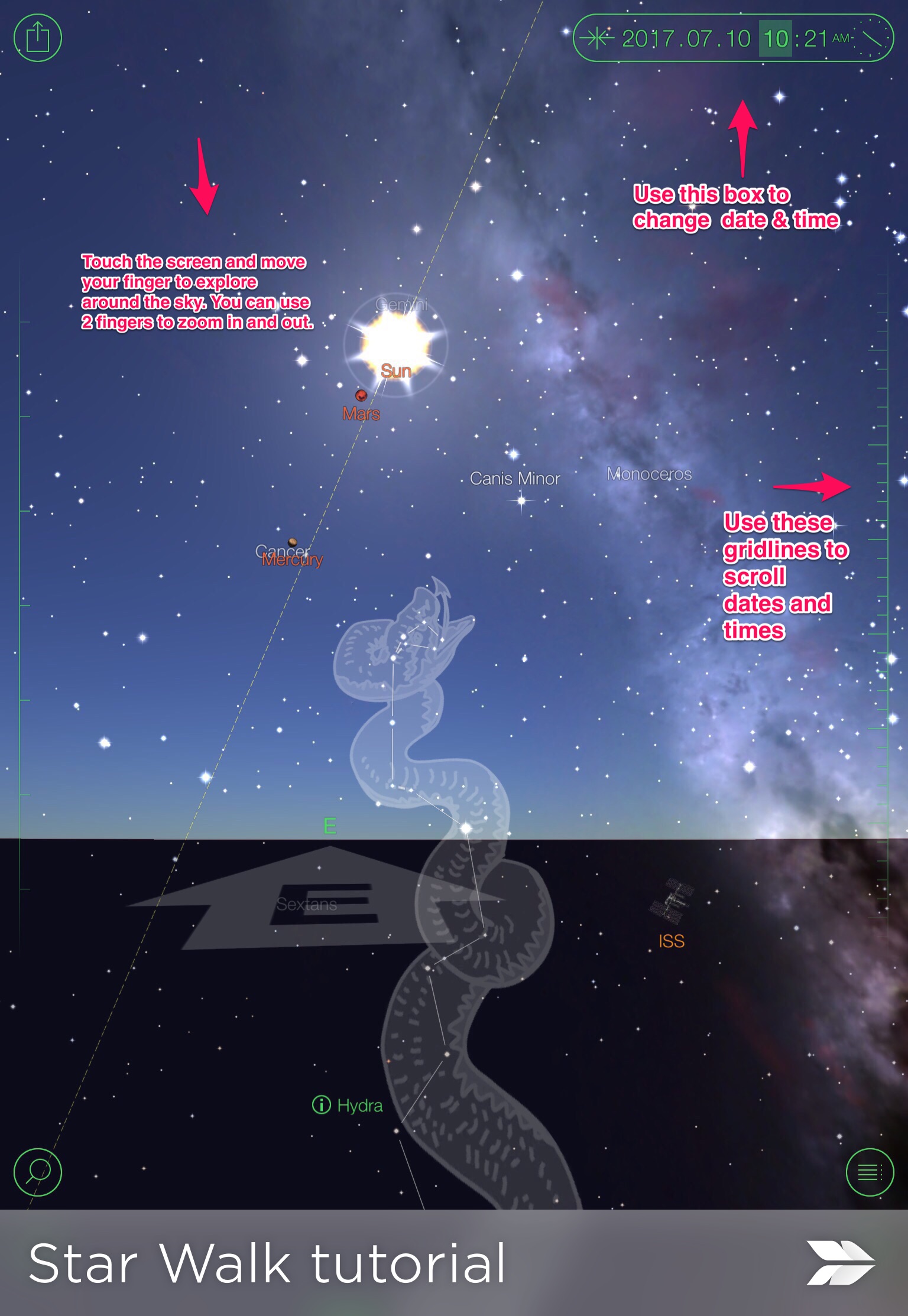


**PROBLEM**: Use the Star Walk App to create a map of the constellations and planets you could potentially see during the eclipse.

Watch a brief tutorial video of the Star Walk App. Scan the QR Code to view the video. *Note: view on iPad or larger. A phone is too small to view well.*

Change the date on the app to August 21, 2017. Position the screen so that you can see the moon above the horizon and the sun below the horizon at about 7:00 am. Slowly transition the time to early afternoon and observe the “movement” of the sun and the moon. You’ll need to reposition the screen as you change the time to keep watching the sun and moon. S*ee the image on the next page for a reminder of how to use the app.*

The time the total eclipse begins in our area of East TN begins at approximately 2:30 pm Eastern time. Position the app to this time and fill in constellations and planets that you see on the map provided.



To open the next lock, label the directions in which we can possibly see the following objects in the sky during the total solar eclipse. Use the up arrow for North, left arrow for East, down arrow for South, and right arrow for West. (*Be careful because East and West are reversed on sky maps as compared to the map of the Earth!*)

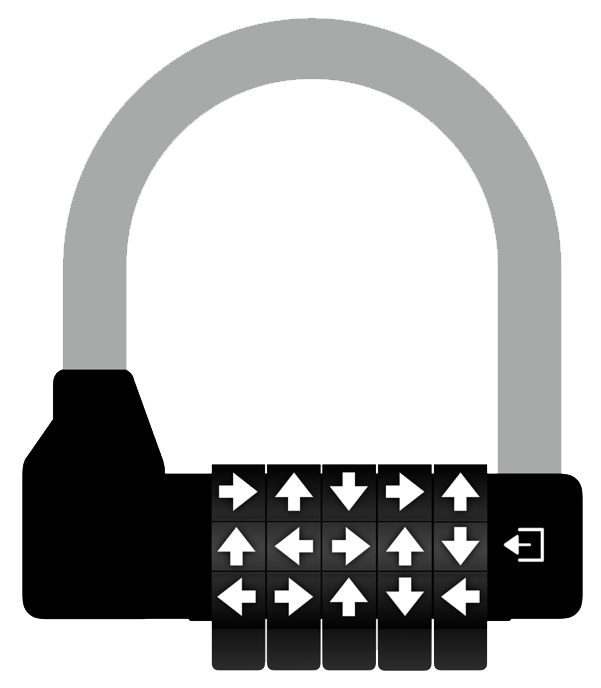
Sirius = South\_\_\_\_\_\_\_

Jupiter = \_\_\_\_\_\_\_

Venus = \_\_\_\_\_\_\_

Hydra = \_\_\_\_\_\_\_

Leo Minor = \_\_\_\_\_\_\_



**Fun Fact:**

### Why are East and West reversed on the sky map?

Compared to a street map, on which we **look down**, on the sky map East and West seem "reversed", because the sky map shows what we see **looking up** to the sky.

Imagine you are lying on the ground in a starry night and you are looking vertically up to the sky. Your feet are pointing to the south. West is at your right then and east at your left hand side, exactly like it is displayed on the sky map.  
<http://www.astroviewer.com/faq.php#2.2>

