## 2020 RFO Public Days



## Fiesta de Estrellas:

Viernes, abril 17,8p.m.
Viernes, julio 17,8 p.m.
Viernes, septiembre 25,7 p.m.
*PUBLIC EVENTS: Parking: $\$ 10$ day-use, 58
student/senior. Solar Obsevving is free. Evening Star Party: 55 per adult; under 18, free. Star parties generally close three hours after start time. In case of bad weather, obsenatory will remain open for tours and presentations.

Note that size of the planet in relationship to the Sun is represented by the dot or circle under the name of the planet on each sign.

## What is the Solar System?

The Solar System consists of the Sun and all the various planets and heavenly bodies the revolve around it. A planet's orbit is the path it follows as it revolves around the Sun. Each planet moves steadily along it's orbital path. The farther a planet is from the Sun, the more time it will require to conplete each orbit. This is true not only because the distant planets have longer orbits to complete, but because the farther an object is from the Sun, the more slowly it will move. Because of this, the planets will rarely, if ever, line up as neatly as they are arranged on the PlanetWalk.

Please visit the Observatory when it is open on public viewing days or check our web site for information concerning classes on astronomy, Public Star Parties, Solar Viewing or renting the RFO campsite and the Observatory. We have four telescopes and a cadre of knowledgeable Docents ready to host your family, friends, school group, Scout Troop or other group-up to 50 people!

Visit us at www.rfo.org

## We are a non-profit

 organization supported by memberships and donations
## Let's Walk To Pluto



## We start at the Sun!

The Robert Ferguson Observatory Inportant notice: The PlanetWalk trails and signs were severely damaged in the recent fires. New signs have been installed. It is possible to follow the Walk from the Sun.

## PlanetWalk

PlanetWalk is a scale model of the solar system designed to fit within the boundaries of Sugarloaf Ridge State Park. Most people know that the planets orbit the Sun, but it is difficult to visualize just how small the planets are compared to the immensity of the Sun. It is equally difficult to imagine the vast empty spaces between the planets.

PlanetWalk is designed to give you a first-hand experience of these spatial relationships. Unlike most models of the solar system which display either the relative sizes of the planet or the relative distances between them,

PlanetWalk does both. To accomplish this, we shrunk the solar system more than 2,360,000,000 times.



## Getting Started (Each planet is marked clearly)

To begin the PlanetWalk, start at the sign representing the Sun in the southeast corner of the Observatory parking lot. Follow the Map to find signs representing each of the solar system's planets. The planet Mercury is behind you in the RFO campsite. The planet Earth is posted on the observatory wall.
Please remember to bring water, wear good walking shoes, and be warned, that between Uranus and Pluto, the trail is sometimes steep and rocky and thus slippery.

## At the scale used for this model our neighboring sun is more than

$\mathbf{1 0 , 0 0 0}$ miles away. The PlanetWalk is small enough for the park to include the orbit of distant Pluto, and large enough that the smallest planets could be seen. Though Pluto has been reclassified as a "dwarf planet" it remains the largest known member of the Kuiper Belt, a remote region orbiting our solar system that contains 70,000 objects of significant size.
PlanetWalk begins at a large sign representing the Sun and takes you on a $4-1 / 2$ mile roundtrip journey to the orbit of Pluto. Along the way you will pass nine trail signs representing each of the planets in the solar system.
Each sign is placed at a distance from the PlanetWalk Sun proportional to the actual distance between the Sun and the orbit of that planet. On each planet sign you will find a representation of the planet itself, drawn to the PlanetWalk scale.
You may have noticed the signs along Adobe Canyon Road leading to the park. These signs mark the spots where the road crosses each planet's orbital path to the west of the PlanetWalk Sun.
With every step you take you will cross more than a million miles in space. To walk at the speed of light, take a step every 5 seconds.
Our Sun is so large that a million earths could fit inside it. Yet, it is only a medium sized star in comparison to the rest of the Universe.
(Thanks to Elaine Olson and Cecelia Yarnell for graphic design and content)

