

## **Planet/History Walk Proposal**

Dear Board Members,

This is a letter to let you know we are in the early stages of a new idea. Perhaps you have heard of a planet walk. There are over a hundred of them in the United States. Downtown Lansing has a great one that starts at the Impression 5 Science Center (with the Sun) and runs along the River Trail for 5.5 miles to the Potter Park Zoo. There is a sign explaining each planet, and they are scaled to the correct size and distance with the real solar system. It is a popular tourist destination.

We are proposing something similar that would begin at the Besser Museum and continue along the bike path for several miles to the outer planets. The exact route is still to be determined. We are exploring multiple options for grant and/or community funding. The funding would not deter from other projects at the Besser Museum.

Attached are some examples of planet walks in other communities. The flip side of each planet sign would be part of an Alpena History Walk. Each sign would contain a milestone of our local history, with the museum being the present day and the trails end highlighting the native American period. There would be pictures and illustrations. Each sign would indicate the direction and mileage to our museum, so it would serve as advertising as well as targeting the history, art, and science perspectives of our mission.

The signs would be produced locally, and we hope to get community support for the project which would cost upwards of \$25,000 depending on the design. The target date for installation would be Summer 2022. We would need to secure permission from the city, township and perhaps the DDA. Insurance on the signs would be covered by the entity that owns the property.

We would like to encourage any board members who would like to be a part of the planning to contact Christine. The full project design and implementation would be, of course, subject to the Board's approval.

# URANUS

NAMESAKE (Greek mythology)

*Father of Saturn*

## AVERAGE DISTANCE

FROM SUN

1.78 billion miles (1,839 feet in scale model)

FROM EARTH

1.69 billion miles (1,744 feet)

## DIAMETER

31,763 miles (.3608 inches)

## LENGTH OF DAY

17.2 hours

## LENGTH OF YEAR

Orbits the sun every 83.8 years

## MEAN TEMPERATURE

-320° F

## YOUR WEIGHT ON URANUS

150-pound person  
would weigh 133 pounds



**SATURN**

889 million miles  
(925 feet)



LOOPPLANETWALK.COM



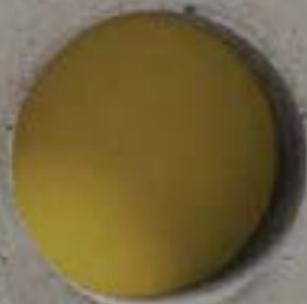
**NEPTUNE**

1.02 billion miles  
(1,041 feet)

**Scale model of the solar system**

One inch = 80,000 miles

Scale 1:5 billion



 **Sciencenter** 

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# MARS

## CRATERS AND CANYONS OF CLAY

**ONCE HEAVY TO STRONG LABEL AND POSSIBLE SCENES**

As a rocky planet, Mars has a surface covered in craters and canyons. The largest canyon, Valles Marineris, is a series of seven canyons that stretch for 4,000 kilometers (2,500 miles) across the equator. The largest crater, Hellas, is a circular impact crater that is 2,190 kilometers (1,361 miles) in diameter and 7 kilometers (4.3 miles) deep.

**STRONG SEASONS, CURVE VARIATIONS, WINDY OF COLOR**

Mars has a thin atmosphere that causes seasonal changes in color. The polar ice caps are made of water and frozen carbon dioxide. The atmosphere is mostly carbon dioxide, which causes the greenhouse effect. The atmosphere is also very thin, which causes the temperature to drop at night. The atmosphere is also very dry, which causes the soil to be very hard and rocky.





## Venus ♀

*Venus is one of the brightest objects in the night sky and is...*

Similar in structure and size to Earth, Venus' thick, toxic atmosphere traps heat in a runaway greenhouse effect. A permanent layer of clouds traps heat, creating surface temperatures hot enough to melt lead. Glimpses below the clouds reveal volcanoes and deformed mountains. Venus spins slowly in the opposite direction of most planets.



### Explore!

Did you think of time?

We can also scale our measurement of time. If we used a time scale similar to our distance scale, in which one second is equal to 5.28 billion seconds, a very interesting event would have occurred at Mt. Calavera (in front of you) approximately 33 hours ago.

Can you guess what happened?

Visit Earth for the answer.

*Solar System Walk*

An Eagle Scout Project by Colton Dieter of BSA Troop 750



City of Carlsbad  
"The Adventure"

ViaSat

City of  
Carlsbad

Anchorage Light Speed Planet Walk



Station #5  
**JUPITER**  
Super-Sized

Super...

**Big** - Jupiter is about three times the diameter of Earth, 1,000 Earths could fit inside.

**Mass** - Jupiter is 2.5 times more massive than all the other planets combined.

**Size** - It swells and shrinks under Jupiter, the size of our planet.

**Fast** - Jupiter spins so fast that it bulges at the equator. A day on Jupiter lasts only 10 hours, the shortest day in the solar system.

**Temperature** - Jupiter produces almost as much energy from its interior as it receives from the Sun. This heat is generated by gravitational contraction. Jupiter is actually shrinking by a few millimeters each year!

**Thin Rings** - Discovered by Voyager, they are now thought to be older than Saturn's rings.

**Colorful** - Jupiter's bands give it the appearance of a giant Easter egg. Beautiful orange, brown and white cloud patterns are produced by Jupiter's constant winds.

**Storms** - The Great Red Spot is a gigantic rotating storm, three times Earth's diameter. First discovered in 1666 by Robert Hooke, it will likely last for the hundreds to thousands of years.

*Voyager 1 obtained this dramatic view of Jupiter's Great Red Spot.*



Jupiter's Moons

The four largest moons of Jupiter are Io, Europa, Ganymede, and Callisto.



**Io** - Called the "volcano moon" because of its numerous active volcanoes, Io is the only moon in the solar system with active volcanoes. It is the only moon in the solar system with a surface that is hotter than the surface of the Sun.



**Europa** - This moon is thought to have a liquid water ocean beneath its icy surface. It is the only moon in the solar system with a surface that is smoother than the surface of the Earth.



**Ganymede** - Ganymede is the largest moon in the solar system. It is the only moon in the solar system with a magnetic field of its own.



**Callisto** - Callisto is the most heavily cratered moon in the solar system. It is the only moon in the solar system with a surface that is older than the surface of the Earth.

Jupiter  
Sponsored by  
Westchester Neighborhood  
Rotarians

Primary Sponsors  
of the Anchorage  
Light Speed Planet Walk  
Eatonson Foundation  
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Anchorage Light Speed Planet Walk

Walk across  
the Solar System  
at the speed of light!



The Anchorage Light Speed Planet Walk is a scale model of our Solar System.

By taking the walk, you experience the relative sizes of the planets and their distances from the Sun. The walk was chosen so that a leisurely walking pace mimics the speed of light. On this scale, each step equals the distance light travels in one second (300,000 kilometers or 186,000 miles). It should take you about 4 minutes to walk from the Sun station at 5th and G to the Earth station at 7th and K, just as it takes 8 minutes for a light beam to travel from the real Sun to Earth. Similarly, it takes you and a light beam 1 1/2 hours to reach Pluto. Of course, you can hop on your bike, roller blades or ski, and travel the distance at warp speed!

As you experience the Planet Walk, notice how small the planets are compared to the Sun, and how vast the distances are between them.

The Solar planets are along the Coastal Trail.



To Saturn: 27min  
To Pluto: 4hrs 47min  
To Mars: 30 min  
To the Sun: 43min

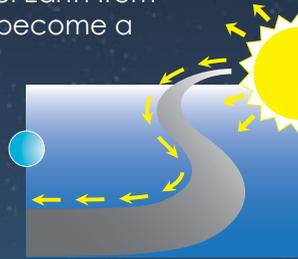
# What is the Anchorage Light Speed Planet Walk?



The Anchorage Light Speed Planet Walk is a scale model of our Solar System spanning 10.3 miles. The Planet Walk consists of ten stations, one for the Sun and one for each of the nine planets, including Pluto which has been reclassified as a "dwarf" planet.

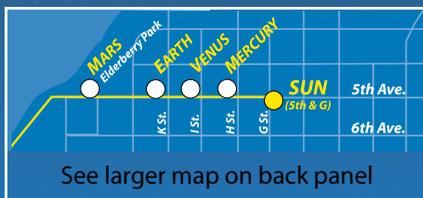
## What makes it a "Light Speed" Planet Walk?

This Planet Walk is scaled at light speed, which means that each step you take is equal to the distance light travels in one second (300,000 km or 186,000 miles). Just as it takes eight minutes for light to reach Earth from the Sun, it should take eight minutes for a Planet Walker to reach the model Earth from the model Sun. In essence, you become a light beam. Just remember, every step you take is a 300,000 kilometer journey through space!



## Where do I begin?

To begin, visit the Sun station on the corner of 5th Avenue and "G" Street. The map will guide you. Then proceed down 5th Avenue, following the signs to each of the four inner planet stations: Mercury, Venus, Earth, and Mars. If you're up for more, you can continue the Planet Walk along the Tony Knowles Coastal Trail to Jupiter, Saturn, Uranus, Neptune, and Pluto. Keep in mind, the farther you go, the greater the distance between planets!



# Scavenger Hunt

Visit the planet stations to find the answers to the following questions.

**Mercury** – The temperature on Mercury's surface ranges from \_\_\_\_ degrees Fahrenheit on the daytime side to \_\_\_\_ degrees Fahrenheit on the nighttime side.

**Venus** – What is the only feature on Venus not named for a woman? \_\_\_\_\_

**Earth** – The symbol of Earth is the Greek sign for \_\_\_\_\_

**Mars** – What are the names of the two moons of Mars? \_\_\_\_\_

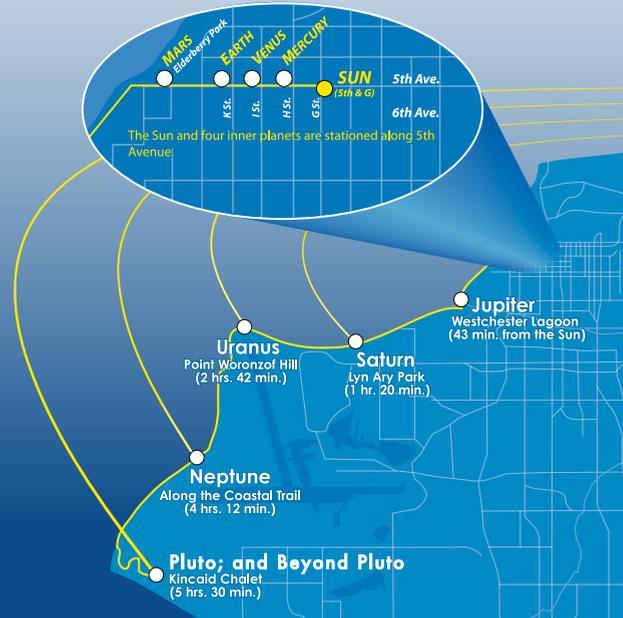
**Jupiter** – How many "Earths" could fit inside Jupiter? \_\_\_\_\_

**Saturn** – Which of Saturn's moons looks like the "Death Star"? \_\_\_\_\_

**Uranus** – Uranus is the only planet that \_\_\_\_\_

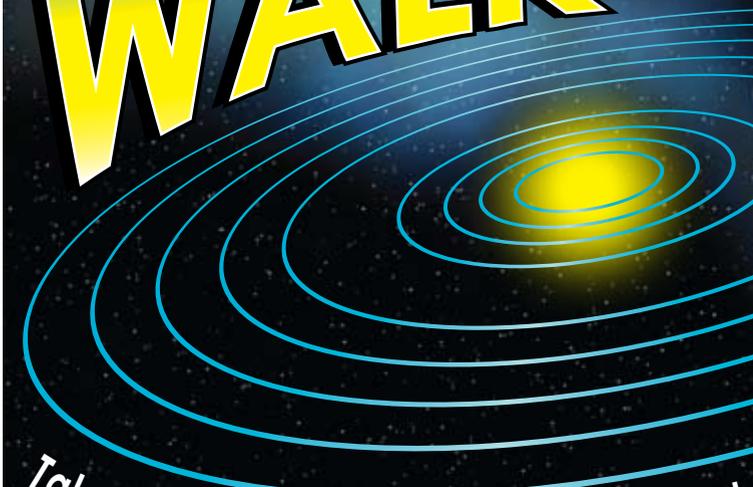
**Neptune** – \_\_\_\_\_, on Neptune, is the windiest place in the Solar System with winds reaching \_\_\_\_ mph.

**Pluto** – Together, Pluto and its moon, Charon, are about the same size as \_\_\_\_\_



This brochure has been made possible by the Anchorage Rotary Club.

# Anchorage Light Speed PLANET WALK



Take a side trip through our Solar System!



Walk at light speed.

Bike or skate or ski at warp speed.



Experience the distances between the planets and our Sun.

See the relative size of one planet to another and to our Sun.



Enjoy the beauty of Anchorage.