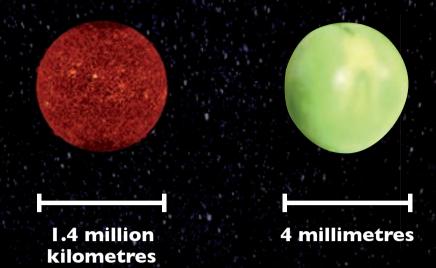
# IF THE SUN WERE THE SIZE OF A PEA



Imagine the Sun is the size of a small pea and is placed at the base of the Treasure House tower.

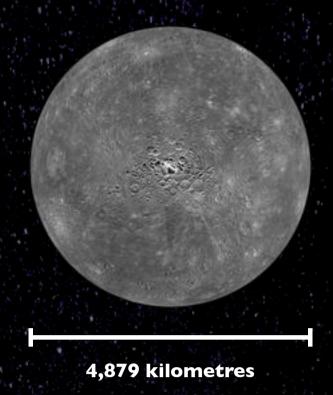
As you walk up the steps imagine you are in a spaceship spiraling out from the Sun and towards the distant dark edge of the Solar System.

If the Sun is the size of a pea, how many peas does it take to reach each planet?



NEXTSTO? MERCURY

# MERCURY



Mercury is 58 million kilometres from the Sun and the smallest planet in the Solar System, just a bit bigger than our moon.

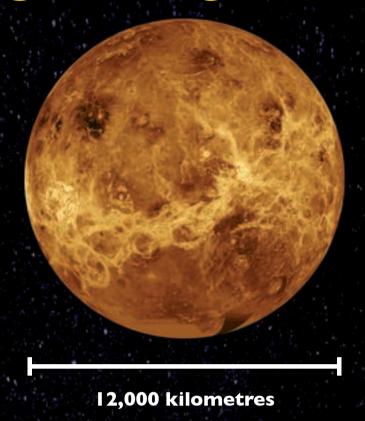
Light takes 3.2 minutes to travel from the Sun to Mercury.

Visit solarsystem.nasa.gov for more Mercury facts.



### NEXTSTO? VENUS

### VENUS



Venus is almost 109 million kilometres from the Sun and a little smaller than Earth at 12,000 kilometres in diameter.

Light takes 6 minutes to travel from the Sun to Venus.

Visit solarsystem.nasa.gov for more Venus facts.



### NEXTSTO? EARTH

#### EARTH (ND THE MOON)





Earth is nearly 150 million kilometres from the Sun.

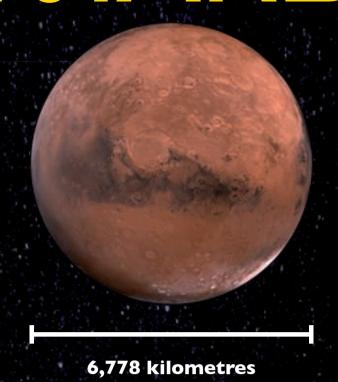
It takes light almost 8½ minutes to travel from the Sun to the Earth.

Visit solarsystem.nasa.gov for more Earth facts.



### NEXTSTOP MARS

# MARS



Mars is around 228 million kilometres from the Sun which means it takes light almost 13 minutes to arrive from it.

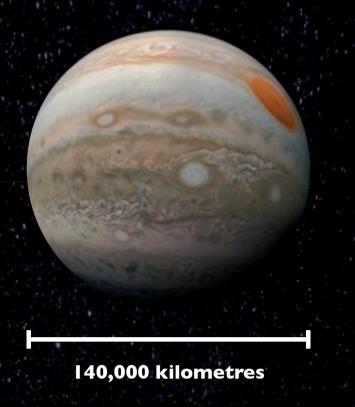
We are just over three steps up the tower and have already visited Mercury, Venus, Earth and Mars. As we move further out from the Sun and leave the inner Solar System the distances rapidly become much bigger.

Visit solarsystem.nasa.gov for more Mars facts.



### NEXTSTO? JUPITER

## JUPITER



Jupiter is 778 million kilometres from the Sun and the largest planet in our Solar System at 140,000 km diameter.

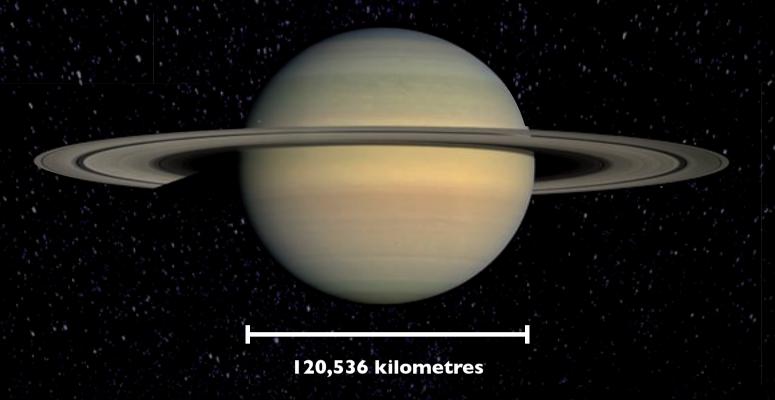
Light takes more than 43 minutes to reach Jupiter from the Sun.

Visit solarsystem.nasa.gov for more Jupiter facts.



# NEXTSTO? SATURN

# SATURN



Saturn is 1.427 billion kilometres from the Sun, nearly twice as far as Jupiter. Saturn is another gas giant and perhaps the most spectacular of all the planets (after Earth of course).

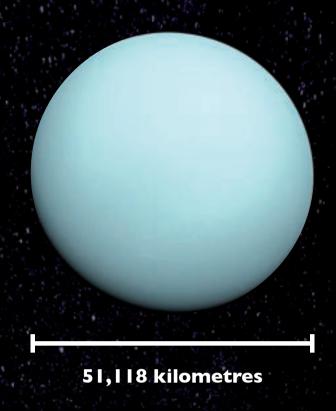
It takes 79 minutes for light to travel to Saturn from the Sun.

Visit solarsystem.nasa.gov for more Saturn facts.



# URANUS (EVENTUALLY)

# URMUS



The distances in the outer Solar System are beginning to be astronomical. Uranus is a distant 2.9 billion kilometres from the Sun.

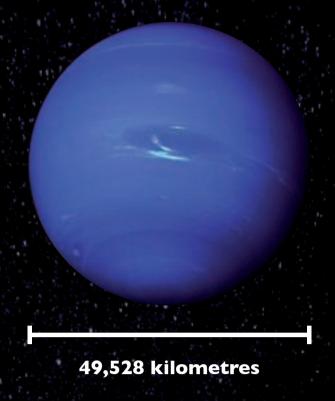
Uranus is 20 times further from the Sun than Earth and it takes light 2 hours and 40 minutes to arrive.

Visit solarsystem.nasa.gov for more Uranus facts.



### NEXTSTO? NEPTUNE (FINALLY)

### NEPTUNE



Neptune is the eighth and farthest planet from the Sun. We are now a massive

4.5 billion kilometres away from the Sun, far out in the Solar System but still in the grip of the Sun's gravity.

It takes light 4.1 hours to get here from the Sun.

Visit solarsystem.nasa.gov for more Neptune facts.



#### MELL DONE!

You've made it to the outer edge of the Solar System, where do you want to go next?

Pick up a planet sticker at Tourist Information

#### NEXT STOPS

Voyager I

17,143 PEAS



2.7m PEAS



#### Andromeda Galaxy

A lot of PEAS



In fact, all the world's pea harvest for 100 years! But it's visible from Beverley on a good night.



For more planet facts visit solarsystem.nasa.gov

# IF THE SUN WERE THE SIZE OF A PEA.

Explore the Solar System by climbing the Treasure House tower.

Look out for the signs as you go.



The eight planets of our Solar System are held in the grip of the Sun's gravity, forced to orbit yearly around the Sun.

Different planets are at different distances to the Sun and their year can be as short as Mercury's 88 days or as long as Neptune's 165 years.

As you travel from the Sun the distances between the planets grow larger and larger. It takes light over four hours to travel from the Sun to the furthest planet Neptune.

And that light will carry on travelling, perhaps reaching the end of the universe before the universe ends...

Take a look at the East Riding Astronomers exhibition near the library





eastridingastronomers.com