LET'S LOOK UP! Observing the sky

Use this guide as a starting point, but there's so much more to see and do at Adler! Don't forget to take time and space to explore what interests you and your group.

Groups with early readers: Much of this guide helps adults have conversations with their groups. Read each prompt to the group and encourage them to draw their responses in the appropriate section.

Where do you want to start your visit?

- UPPER LEVEL, start on page 2
- LOWER LEVEL, start on page 5



PLANET EXPLORERS

UPPER LEVEL

#4 on the map (at the end of this guide)

This space is for Pre-K through third graders. If your group is older, please head to the next exhibit.

As you enter, you will be in the Home section.

Choose a book from the basket to read together!



When you move to the next area, you'll find yourself in the backyard. Lie down under the stars and look up! What do you see in this nighttime sky? Have you ever seen stars like this? **Share your stargazing stories with your group.** You can write or draw about them here too.

Imagine you are an astronaut. How would the Sun, Moon, stars, look different if you were in space? Try the spacewalk to see! Note: the spacewalk is dark. Please walk carefully! Can you see this many stars from home? Why not?



OUR SOLAR SYSTEM

UPPER LEVEL #3 on the map

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⋇

Look for the rotating Earth. Choose a person from your group to be the Sun and point to Chicago on Earth. As the Earth rotates, decide with your group what time of day it is! Remember, it is daytime for the part of the Earth facing the Sun, and nighttime for the part facing away.

By the windows, find the solar system stands. Start at the Sun and walk, stopping at each planet, until you reach Pluto. Which planet is closest to Earth? Which is farthest away? Draw them here:

Can you find our Moon?

Sketch what you see. While you're sketching, talk with your group: Does the Moon look like this from your home? How is it different? How is it the same?

OUR SOLAR SYSTEM

UPPER LEVEL #3 on the map

DI

There is a real piece of the Moon that you can touch! Before you find it, make a prediction: **what color do you think it will be?**

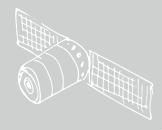
Touch the Moon! It is near the Earth station. What does it look like? How does it feel? Write or draw about it:



While you explore the planets, can you find the one star in our solar system that we can only see during the day? We'll give you a hint: it's big and yellow! **Draw a picture of how the Sun looks different from the other stars we see at night!**



SPACE VISYALIZATION LAB (SVL)



LOWER LEVEL #12 on the map

DI

Outside of the SVL, there is a model of the solar system, called an orrery. **Can you find the Sun, Earth, and Moon?**

X

The	_ is in the center. The	revolves around it, and
the	revolves around the Earth.	

Draw a model of the Sun, Earth, and Moon.

Enter the SVL and go to the screen on the right side. On the control pad menu (=), choose *Solar System*, then *Moon Phases*.

This shows how the Moon looks from Earth over a year's time. **Draw or write about some changes you observe.**



COMMUNITY STARGAZERS' HUB

UPPER LEVEL #14 on the map

Things in our solar system are pretty far away from Earth! Telescopes help us see objects in space that are hard to see with just our eyes. Find the Near and Far section at the lens table.

Can you use the lenses to look at the images of the Moon on the wall? Hint: try using two lenses together to make a telescope!

Explore the other lenses on the table too! Draw or write what you notice about the shape of the lenses.

You can look through a real telescope in this exhibit too! Look for the sign "Putting the Art in Artisan." This is a very old telescope, so even though it's BIG, it is not as powerful as telescopes we use today. **Look through the telescope- what do you see?**

Hint: you may need to move your eye around a bit to find the right spot for you.



UNIVERSE IN YOUR HANDS

LOWER LEVEL #6 on the map

D

Objects like the Sun, Moon, and stars move across the sky in patterns. In this exhibit, you can learn how different cultures tracked objects in the sky. As you enter the exhibit from Stargazers' Hub, use the large astrolabe in the center of the exhibit to find the star **Arcturus** on the wall.

Stay to your right to explore the sundials. Before we had clocks, people used sundials to tell time. **Try the hand sundial.** What time does the sundial say it is? Find a sundial you would like to carry in your pocket. **Talk to your group about why you picked it.**



Can you use the big sundial? Put the Sun as close to today's date as you can and move the Sun across the sky until the sundial matches what time it is right now. **Draw what you see below.**







LOWER LEVEL #15 on the map

Watch the <i>Making Sense of Eclipses</i> video to learn what causes a solar eclipse.		
During a solar eclipse, the Moon is between the Earth and the		
and the Moon's falls on Earth.		

Draw a solar eclipse! You could draw a model of the Sun, Earth, and Moon, or you could draw what it looks like from Earth. Look around the exhibit for ideas!

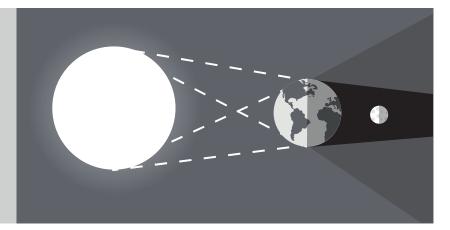


THE MAGNIFICENT MOON

LOWER LEVEL North Stairwell on the map

Stop for a quick group picture with the Moon!

While you're there, read about lunar eclipses. Here is what a lunar eclipse looks like



During a lunar eclipse, the Moon is in the shadow of the _____

Talk to your group: has anyone seen a solar or lunar eclipse? What was it like?



CHICAGO'S NIGHT SKY

LOWER LEVEL #8 on the map

DI

A constellation is a group of stars that formed a picture in a stargazer's imagination. Try Create a Constellation to make one of your own! **Draw your constellation here:**

X

47

Chicago creates a lot of light that can make it hard to see the stars! Look at the map on the floor—can you find the Adler Planetarium? Hint: it is on Lake Michigan. Is there a lot of light around the Adler? Do you think we can see a lot of stars from here at night? **Take a selfie with your group!**



UPPER LEVEL

1 mission moon

Step inside the story of Captain James A. Lovell, Jr., and witness the beginnings of America's journey into space.

2 GRAINGER SKY THEATER A TICKEts available at the box offices. Destination Solar System Imagine the Moon

3 OUR SOLAR SYSTEM

Explore the many worlds—planets, moons, dwarf planets, and asteroids —that orbit the Sun. Red Rover: Mars Activity Station is set up here.

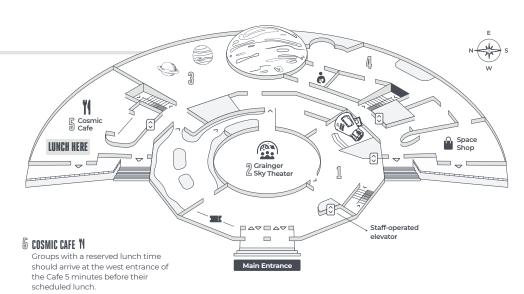
${\it 4}$ planet explorers

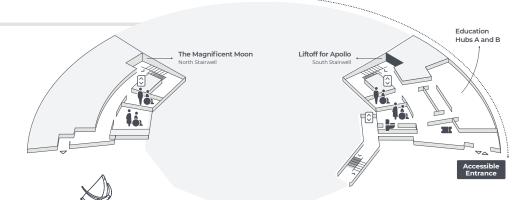
Children in Pre-K through 3rd grade can blast off to Planet X and take the helm in this modern-day space adventure.

MID-LEVEL

AMENITIES ON THIS LEVEL INCLUDE:

Restrooms equipped with changing tables Water fountains Ground level exits Vending machines (South) All Gender restroom





Doane Observatory

LOWER LEVEL

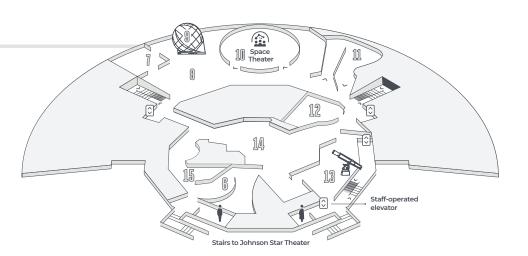
🖁 UNIVERSE IN YOUR HANDS

Go back in history to learn about some of the cultures that have engaged in the quest to understand their place in the Universe.

COMMUNITY STAR STUDIO Let your imagination shine in this collaborative design space. Check at exhibit for available times.

CHICAGO'S NIGHT SKY Discover how your night sky connects you to everyone, past and present, in every place on Earth.

- Ithe Atwood SPHERE The Atwood is not operational at this time.
- SPACE THEATER A Structure of the second s
- 11 THE UNIVERSE: A WALK THROUGH SPACE & TIME Visit distant corners of the cosmos and witness how the Universe has evolved over 13.8 billion years.



12 SPACE VISUALIZATION LABORATORY

Both Adler and visiting experts collaborate to create new ways for people to virtually explore the Universe. III TELESCOPES: THROUGH THE LOOKING GLASS Uncover the extraordinary beauty and technology of some of the world's most important telescopes.

A COMMUNITY STARGAZER'S HUB

Unravel the mystery behind tools of observation.

15 CHASING ECLIPSES

Discover how people past and present have predicted when and where to stand in the narrow corridor of totality—and prepare to chase down a total solar eclipse for yourself.

