2018 **SKYWATCHER'S** GUINF



DISCOVER A NEW CELESTIAL OBJECT (AND A DIFFERENT NEIGHBORHOOD) EVERY MONTH OF THE YEAR.

NORTHERLY ISLAND PARK

Roosevelt

1521 S. Linn White Drive, Chicago, IL 60605

All month, starting around 6:30 pm

Orion the Hunter is easy to spot in winter. Starting around 6:30 pm, face southeast and look for three bright stars in a line. Two bright stars are to the upper left of the line, and two more are to the lower right. This is the famous hunteralthough he looks more like a sideways bow tie. Orion will be prominent in the sky for the rest of the winter & into early spring.



SIRIUS 95th/Dan Ryan 9501 S. Michigan Avenue, Chicago, IL 60619

All month, starting around 6:30 pm

Remember our friend Orion from January? He's a little higher in the sky after sunset this month. After sunset, face southsoutheast and find Orion's belt again. Follow the belt stars up and to the right, and the next bright star you will see is called Aldebaran (al-DEB-uh-rahn), part of Taurus the Bull. Follow the belt stars down and to the left, and you'll have no trouble spotting Sirius (SEER-ee-us), part of the constellation of Canis Major, the Big Dog.

ORION

^{o3}MAR

606 TRAIL WESTERN TRAILHEAD

California

1759 N. Ridgeway, Chicago, IL 60647

March 20, 7:00 pm

Enjoy sunset directly to the west on the first day of spring the only one of two days during the year when the Sun sets due west. Eagle-eyed skywatchers might also spot bright Venus low in the west just after sunset, with dimmer Mercury a little to Venus' right. In case of inclement weather, March 21 or 22 will also provide good views of the sunset.



PR



Roosevelt

1300 S. Lake Shore Drive, Chicago, IL 60605

April 21-22

Join us at the Adler Planetarium for Earthfest—a whole weekend of activities dedicated to celebrating our favorite home planet! A highlight will be your chance to see the Sun safely through our telescopes from 10 am-1 pm.



WELLES PARK

Western

4630 N. Lincoln Avenue, Chicago, IL 60625

All month, just after sunset The planet Venus! Watch it throughout the month.

⁶⁶ JUNE NATIONAL MUSEUM OF

MEXICAN ART

18th

1852 W. 19th Street, Chicago, IL 60608

June 15-30, 9:00 pm

Visit the beautiful Pilsen neighborhood of Chicago-and don't miss the National Museum of Mexican Art. At 9 pm, head to Harrison Park and face south. About a third of the way up in the sky will be a bright object-this is Jupiter, King of the Planets!

PALMISANO PARK

Halsted

2825 S Halsted Street, Chicago, IL 60608

July 31, starting at 8:15 pm Just after sunset, spot bright Venus setting in the west, and starting around 10-10:30 pm, see orange-colored Mars to the southeast as it is at its closest to Earth since 2003just 36 million miles away.







08 AUG

HARTIGAN BEACH PARK

1050 W. Albion Avenue, Chicago, IL 60626



August 11/12, evening to early morning

Loyola

Head to the beach, face east, and look up. See any bright, quick streaks of light moving outward from this part of the sky? These are meteors! The Perseid meteor shower happens each year when Earth runs into the trail of debris left by a comet. While it's always better to go out where it is much darker, you may see a small handful of bright meteors per hour under more light-saturated urban skies.

SEPT

CHINATOWN SQUARE MALL

Cermak-Chinatown

2154 S. Archer Avenue, Chicago, IL 60616

September 24, starting around 9 pm The Mid-Autumn Festival is celebrated by Chinese and Vietnamese people on the date of Full Moon during the 8th month of the lunar calendar. Head to Chinatown to take in the festival and then see the Full Moon after about 9 pm.

PASTEUR PARK

Midway 5825 S. Kostner Avenue, Chicago, IL 60629

October 14, 17, and 18, after sunset

Just after sunset on October 14, 17, and 18, see the Moon as it appears close to two planets in the sky. Just after sunset on October 14, face southwest. The crescent Moon will be just to the right, or west, of the planet Saturn. On October 17, the gibbous Moon-a bit larger this time—is to the right/west of orange-colored Mars. On October 18, the Moon is a little larger still and is to the left/east of Mars.



DUSABLE MUSEUM OF AFRICAN AMERICAN HISTORY

Garfield

740 E. 56th Place, Chicago, IL 60637

All month, after sunset

Visit the DuSable Museum of African American History during the day. After it closes, head into Washington Park. After sunset, face west and look about halfway up in the sky. Do you see three bright stars in the shape of a large triangle? There will be two stars on the right side, one above the other, and one star to the left. This is a group called the Summer Triangle—even though one of the best times to see it is in the fall! These three stars are part of three separate constellations, but the triangle is the easiest shape to see.

GARFIELD PARK CONSERVATORY

Conservatory-Central Park Drive 300 N. Central Park Avenue, Chicago, IL 60624

All month. 5:30 pm

Walk outside, face south at about 5:30 pm, and look almost overhead. See 4 stars in the shape of a large square? These are the stars of Pegasus! Look for the star on the lower left, or southeast part, of the square. The light that you see from this star left it over 300 years ago—when several of the oldest specimens in the Conservatory, the Cycads, were very young trees. On Wednesday nights, you can visit them at the Conservatory, too!

PEGASUS

PLANETARI

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SKYWATCHER'S Skywatcher's **3018**

THE UNIVERSE IS MORE THAN **90 BILLION LIGHT YEARS ACROSS.** IT'S A LOT TO TAKE IN.

The city of Chicago is a far more manageable 26 miles from Howard Street to 138th. But how much of it have you really seen?

Explore your Universe AND your city with the Adler Planetarium's 2018 Skywatcher's Guide! Inside, you'll find a new celestial object (and a different neighborhood) to discover for every month of the year.

These objects may be visible from elsewhere in the city, but we recommend riding the train to these spots, spending quality time in neighborhoods you don't visit often, and making new friends under the stars.

See you out there!

NO MATTER WHO OR WHERE WE ARE, WE ALL SHARE ONE SKY.

A few "shooting stars" are usually visible each hour on any given night. Shooting stars—also called meteors—are small bits of material from space that burn up in Earth's atmosphere, and they appear as quick streaks of light in the sky. You have the best chance of seeing meteors after midnight under very dark skies, as far as possible from the nearest city or town-no binoculars or telescopes required! If you are under urban or suburban skies, you may still spot a couple of meteors, but they'll be harder to see. The Moon's light might also interfere with your view, so if the Moon is out, turn your back to it.

GIVE AN ASTRONAUT THE THUMBS-UP

The International Space Station (ISS) is one of the brightest objects in the sky and is easy to see, even under bright city lights. It looks like an airplane, but without any of the blinking lights. Maybe an astronaut will be looking down while you're looking up! You can find out when the ISS will be passing overhead at NASA's Spot the Station website,





SPOT A SHOOTING STAR

TAKE (IN) A METEOR SHOWER

A meteor shower occurs when the Earth plows into the trail of tiny bits of debris left by a comet as the comet orbits the Sun. Instead of seeing a handful of meteors per hour or per night, you may see several dozen meteors per hour under dark skies. The meteors appear to radiate across the sky, and if you trace their paths backward, they seem to come from the direction of a single constellation. For example, meteors from the Perseid meteor shower, peaking around August 11 or 12, appear to radiate from the constellation Perseus. Meteors from the Geminid meteor shower, peaking around December 13 or 14, appear to radiate from the constellation Gemini, the Twins. But this "radiant point" is just an illusion of perspective. It's the same reason snowflakes seem to radiate from a single spot as you drive through a snowstorm. Go to the American Meteor Society's website at amsmeteors.org for a calendar of yearly meteor showers.

GO SIGHTSEEING ON THE MOON WITH THE TERMINATOR

Want to see a beautiful view of craters and mountains on our Moon? Grab a pair of binoculars and point it at the line between the lit part of the Moon and the dark-shadowed part. If you were standing on the Moon on this light/shadow line, called the "terminator," the Sun would be right at your horizon and shadows would be nice and long, making craters and mountains really stand out! When should you look for this? Any time of year is a good time, but avoid a few days right around new Moon or right around Full Moon. Use the U.S. Naval Observatory's website to let you know what the Moon phase is for a given night and what times sunrise, sunset, moonrise, and moonset are for your location: http://aa.usno.navy.mil/data/docs/RS_OneDay.php

A PLANET OR A STAR?

Stars and planets look very similar, but if you know what to look for and when to look, you can spot Mercury, Venus, Mars, Jupiter, and Saturn! How will you know if you're looking at a planet? A good rule of thumb is that stars twinkle and planets don't. When starlight passes through our atmosphere, air at different temperatures causes it to jiggle a bit. Because planets are so much closer to us than stars, the stronger beam of light they reflect holds steady as it passes through the atmosphere.



THERE'S A LOT MORE WHERE THAT CAME FROM

Get to know our sky even better-check out books like 365 Starry Nights by Chet Raymo and download an app that shows you where to find stars, planets, galaxies, the Moon, and other celestial objects. There are lots to choose from! Some apps also use GPS signals to allow you to point your phone at different parts of the sky and see what's behind the clouds or beyond the light pollution. And don't forget to take your Adler Skywatcher's Guide, too! Learning the sky takes some practice. Get out there and give it a try!