

Observe the Night Sky

Enjoy looking for planets in the night sky!

For thousands of years, people around the world have tracked the planets' movements in the sky. They use these observations to tell time, navigate, and predict the weather.

No Materials Needed. Binoculars or a telescope can help get a closer look at planets. However, they can be difficult to use with young children. We suggest focusing on what you can see with the naked eye.

Note: This activity can be done in the morning just before sunrise, or in the evening after sunset. Choose a time that works best for you.

Instructions:

As the nights grow longer, go outside on a clear night and look up at the sky. Plan your timing so you can look for some of the planets in our Solar System! They appear as bright dots in the sky, but do not twinkle like stars.

Step 1: Plan your timing.

Go to www.timeanddate.com/astronomy/night/usa/fairbanks to see which planets will be visible. Make sure your location is set (e.g. Fairbanks, AK). Click on each planet to see when it will be visible in your location. Use the sky map to find where in the sky it is visible.

Step 2: Go outside! Try to spot planets in night sky! Talk about what you see. Did anything surprise you? What would you like to know more about?

In September and October 2020, Mars will be shining brightly. Both Mars and Venus can be seen just before sunrise. Look for Jupiter and Saturn close to the horizon after sunset.

For more details on what to look for in the sky this month:

- Go to the UAMN Astronomy Calendar: bit.ly/akspacescience
- Watch a video from NASA: www.youtube.com/watch?v=GjqvXVUWvEQ

Hint: You can also download a stargazing app on a phone or tablet to identify the planets and stars.



The Planets and the Night Sky



Venus, Jupiter, and the Moon.
[Photo by Wang Letian, via NASA.](#)

The stars in the sky appear to move in predictable ways, always keeping the same position relative to each other. Tracking their movements is fairly simple. However, planets are not as predictable; they constantly move in relation to the background stars, and follow close to the paths of the Sun and Moon across the sky. The ancient Greeks called the planets "wandering stars", and the word planet comes from the Greek word *planetes*, meaning "wanderer."

Five planets are visible in the sky with the naked eye: Mercury, Venus, Mars, Jupiter, and Saturn. Around the world, people in many cultures have tracked the movements of these planets. They use these observations to tell time, navigate, predict the weather, create art, tell stories, and make sense of the world around them.

The Athabascan peoples of Interior Alaska identify a bright star, possibly the planet Jupiter, near the moon as the "moon's dog". The appearance of the moon's dog indicates different kinds of weather. For the Koyukon people, when the moon's dog appears ahead of the moon, it means cold weather or a storm is coming. When it appears behind the moon, it means warm weather is coming. For the Ahtna people, it is reversed, with cold weather indicated by the moon's dog being ahead of the moon.

In many Inuit cultures in northern Canada, the planets are called *ulluriaqjuat*, which means "great stars". In some areas, the appearance of Venus in the sky indicates the return of the Sun after the long winter darkness. Venus is also sometimes known as the "morning star".

Note: Astronomy traditions vary across cultures, communities, and individuals. This information is a small sample of how some cultures view the night sky.



Moon, Jupiter, and Venus in the night sky.
[Photo by nanamori, via Wikimedia Commons](#)



Night sky at Denali National Park.
NPS Photo / Jacob W. Frank

What stories do YOU know about the planets and the night sky?