

Camp Fire  
MINNESOTA

# My nature connection

## THE NORTHERN LIGHTS

GRADES: K-12  
TIME: 40-50 min

When is the best time to view the Northern Lights?

Nights during late fall and winter are the best times to see the Northern Lights! Follow along to learn more about how this phenomenon works...

### ACTIVITY (40-50 minutes)

#### 1. INTRODUCTION

The Northern Lights — known as the Aurora borealis in the northern hemisphere and Aurora australis in the southern hemisphere— is a combination of many galactic forces at work. Earth is surrounded by a magnetic field that deflect and protect us from harmful radiation and other materials in space. This magnetic field runs towards the north and south poles of the planet, speeding up particles and sending them in those directions.

As Earth orbits (or follows a path around the Sun), the Sun releases particles in the form of solar wind. These happen frequently and often times fly towards Earth. The solar wind particles are then captured by other atoms and molecules in space that turn them into gas. When the gas is released into the Earth's atmosphere, it appears as a colorful array of lights called the Northern Lights. It may appear as a single color or a rainbow of many colors dancing across the sky.

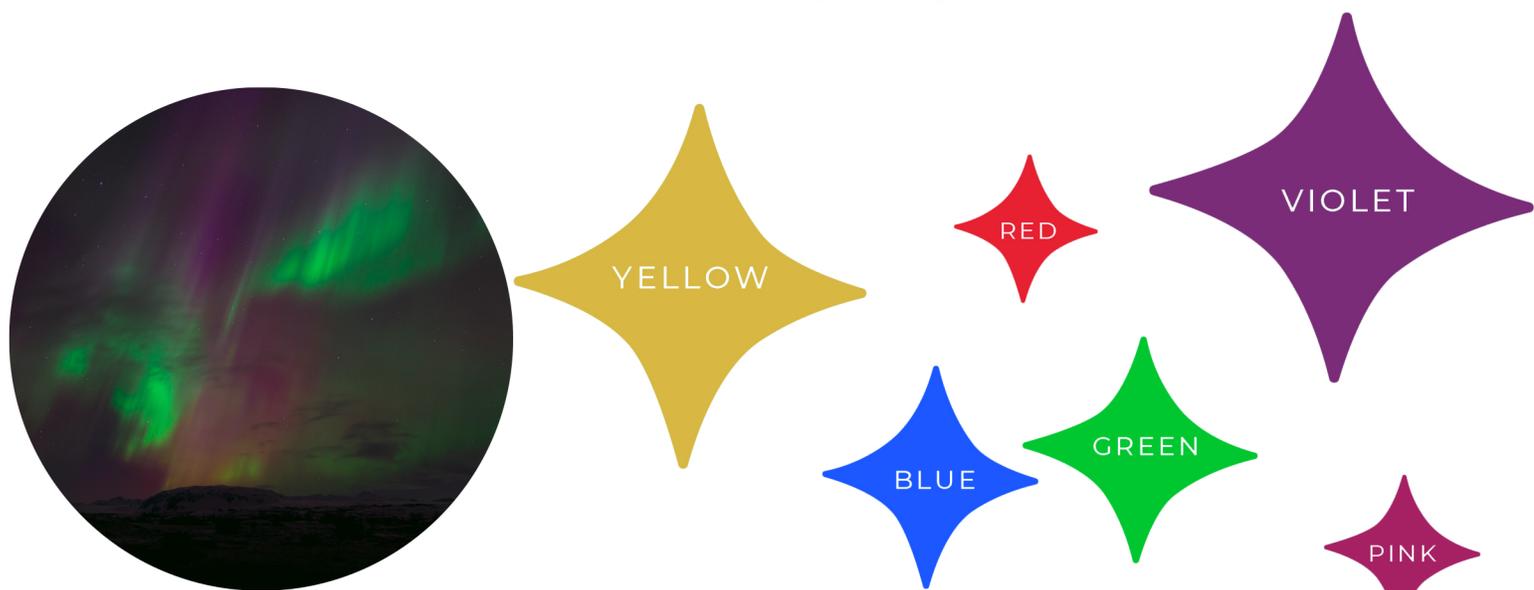
#### WHAT YOU'LL NEED

Art materials: 2 pieces of paper (white or colorful), markers, 1 paint brush

A small cup of water



The Northern Lights appear in many different colors depending on the number of atoms present, their location in the atmosphere and many other factors. Some colors even combine with other colors to form new ones. Colors you may see include:



## PAINTING YOUR OWN

Using water color paints, markers, or colored paper, create your own Northern Lights.

1. Start with a piece of paper. Paint, color or collage a changing colors in the area that is your sky. Consider adding ripples or other designs as well.
2. Give this time to dry .
3. Either by drawing or making cut-outs, add animals and plants that resemble a fall or winter landscape. Often times, the further north that you travel from the Twin Cities, the easier it is to see the many different colors. Consider what it may look like in northern Minnesota, Canada, Alaska or even Antarctica!

MY AURORA FORECAST IS AN AVAILABLE APP THAT SHARES NORTHERN LIGHTS SIGHTINGS AROUND THE WORLD.