

# Exploring Auroras: the Science, the Art, and Participatory Science

## Link Bank

### Aurorasaurus:

This participatory science project tracks auroras, also known as the Northern and Southern Lights, using crowdsourced observations from social media and a mobile app. The project offers community alerts, the ability to take and share pictures, and tracks rare auroras. The site also includes real-time space weather data, information about auroras, and blogs on a variety of topics.

### Aurorasaurus Blogs of Interest:

- [Cozy Aurora Reads](#): Includes a review of a variety of books about auroras.
- [Why do auroras at lower latitudes look red?](#) Describes the different types and causes of red auroras.
- [HelioCrafts: Aurora Altitudes Hat](#): Describes how to make an artistic aurora winter knit hat that uses colors to denote the altitudes of the different parts of an aurora.



### Aurora Educational Materials

#### Aurora Activities

Many of these activities by University of Alaska's Museum of the North are ideal for library programs. Some favorites include:

- [Aurora Bracelet](#): Make a colorful bracelet to remind you of the aurora colors.
- [Aurora Chalk Art](#): Create your own artwork inspired by the northern lights. [Watch a how-to video here!](#)

- [Aurora Storytelling](#) (*Courtesy of Cultural Connections*): Listen and watch elders tell stories about the northern lights. Videos are available at the [Cultural Connections website](#).
- [Northern Lights Storybook](#): Learn about the aurora by reading stories from Iñupiat elders and write your own northern lights stories. [Download the story sheets here](#). Listen to Iñupiaq elders tell these stories at the [Cultural Connections website](#).

### **Cultural Connections: The Northern Lights**

Developed by University of Alaska's Museum of the North, this project created videos and online activities connecting aurora science with Iñupiat culture and language. The website also features downloadable lesson plans, Iñupiaq vocabulary pronunciation, and interviews with elders.

- [Student Guides](#): *Email NASA @ My Library after the webinar with your shipping address, and the team will mail you a copy!*
- [Teachers Manual](#)

### **STAR Net Clearinghouse Activities**

- [Neato-Magneto Planets](#): Participants study magnetic fields at four separate stations: examining magnetic fields generated by everyday items, mapping out a magnetic field using a compass, creating models of Earth's and Jupiter's magnetic fields, and observing aurora produced by magnetic fields on both planets.
- [Exploring the Universe: Observe the Sun](#) Participants practice safely viewing the Sun by constructing a solarscope!

### **Websites**

- [What Is An Aurora?](#): Kid-friendly explanation of the aurora, from NASA Space Place.
- [Mystery of Purple Lights](#): Article about how NASA solved an aurora-related mystery with help from citizen scientists.
- [The Mystery of the Aurora](#): Short 2008 video about how NASA is studying the aurora.
- [A Physicist Explains The Shimmering Science Behind Auroras](#): Read an interview with aurora scientist Liz MacDonald.

### **Publications**

- [Explore Auroras](#) 2021 NASA Infographic, bookmark, and poster
- [What Causes the Northern Lights and other information about the aurora borealis](#) 2002 NASA two-sided colorful brochure describes aurora for adults.
- [Live from the Aurora Educator's Guide](#) 2003 Teachers guide including classroom activities related to the Sun, the Earth's magnetic field, and auroras.
- [Aurora ... fabled glowing lights of the Sun-Earth connection](#) 2002 NASA educational poster on auroras.