

Amazing Auroras

ART TECHNIQUE

Painting & Drawing

AGE GROUP

Appropriate for students 6 -12 years old

CONCEPT

In this STEAM (Science, Technology, Engineering, Arts, Mathematics) lesson, students learn about the environment of the Arctic and Antarctic Circles and the science behind auroras. Using oil pastels and liquid watercolors, students will create an original painting featuring an animal of the region and the Aurora Borealis/Aurora Australis.

SESSIONS

2 x 60 minute sessions

MATERIALS

- 11" x 14" or larger watercolor paper
- Oil Pastels
- Chroma Liquid Washable Watercolors in assorted colors such as: Yellow, Coral, Orange, Pink, Fuchsia, Magenta, Red, Red-Violet, Violet, Purple, Blue, Turquoise, Blue-Green, and Green.
- Palette with wells/ice cube trays
- Baby oil for blending pastels
- 1 round and 1 flat paint brush per student
- Pencil for sketching
- 1 bucket to wash brushes in, per table
- Plastic tablecloths or newspaper to protect surfaces

Other Chroma paints, such as Chroma 2 Washable Tempera or Chromatemp can be substituted in this lesson. Temperas will need to be thinned with water to consistency of watercolor and test oil pastel resist prior to application.

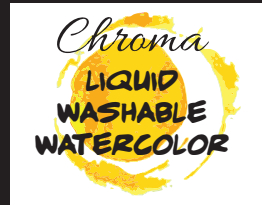


The Aurora Borealis in the Arctic, and the Aurora Australis in the Antarctic, often shimmer in the dark polar skies. By studying the science behind these phenomena along with the animals that have adapted to conditions in these harsh regions, students can engage in a creative STEAM exploration. Using oil pastels to paint a polar animal and Chroma's Liquid Washable Watercolors to paint the Northern or Southern Lights encourages creativity and a deeper understanding of polar regions.

National Core Arts Standards (Visual Arts):
Creating: VA:Cr1.1.K-5: Generate and conceptualize artistic ideas and work.
VA:Cr2.1.K-5: Organize and develop artistic ideas and work.

Next Generation Science Standards (NGSS):
NGSS: Earth's Systems
2-ESS2-3: Obtain information to identify where water is found on Earth and that it can be solid or liquid.
5-ESS2-1: Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact





Amazing Auroras

OBJECTIVES

1. Students will learn about the science behind auroras.
2. Students will learn about the wildlife that lives in the Arctic and Antarctic.
3. Students will demonstrate their understanding by drawing a polar animal with oil pastels.
4. Students will explore watercolor techniques to depict the vibrant auroras of their region.

VISUAL REFERENCES

Visit earthsky.org/sun/what-causes-the-aurora-borealis-or-northern-lights/ to learn about the auroras. Visit kids.nationalgeographic.com/nature/habitats/article/polar to learn about animals that live in these regions.

FIRST SESSION

INTRODUCTION

Begin by discussing the auroras and what causes this natural light display in the sky. Explain that it happens in polar regions and is caused by solar wind particles interacting with the Earth's magnetic field. Auroras that occur in the Arctic region are called the Aurora Borealis, or Northern Lights, while auroras in the Antarctic region are called the Aurora Australis, or Southern Lights.

Next, discuss how these polar regions are similar and different. In the north, the Arctic Ocean is mostly ice-covered, and the Arctic region is characterized by frozen ocean surrounded by land. In the south, the Antarctic is a continent covered by a massive ice sheet, which contains about 70% of the world's fresh water.

Talk about the different wildlife of each region such as:

Arctic

- Polar Bears
- Arctic Foxes
- Arctic Hares
- Arctic Wolves
- Caribou
- Snowy Owls
- Narwhals
- Beluga Whales
- Harp Seals

Antarctic

- Emperor Penguins
- Adélie Penguins
- Macaroni Penguins
- Wandering Albatross
- Blue-eyed cormorants
- Elephant Seals
- Fur Seals
- Blue whales
- Minke whales

RESEARCH & SKETCHING

Choose a polar animal and research images. Create a sketch of the animal, noting any particular features (the tusk on a narwhal, the yellow tufts on the macaroni penguin, etc.) Make sure these features are present in the sketch.

SECOND SESSION

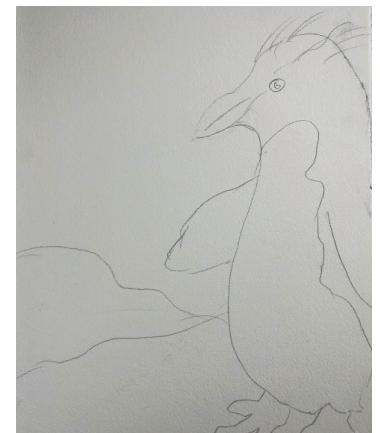
On watercolor paper, use a pencil to lightly draw the chosen polar animal and relevant landforms, such as the tundra, glaciers, lakes, rivers or oceans, and mountains. At least 1/3 of the surface should be reserved for the sky.

Use oil pastels to paint the animal and land form. Use baby oil to blend as needed. Remember to paint the animal white if needed, and outline in black, dark blue or violet to maintain facial features and limbs.

Pick at least 3 colors of Chroma Liquid Washable Watercolors.



By Wojtek Szkutnik - Imported from 500px (archived version) by the Archive Team. (detail page), CC BY 3.0 <https://commons.wikimedia.org/w/index.php?curid=81385169>



Sketch of Macaroni Penguin



After painting with oil pastel

Amazing Auroras

Apply a wash of water on the sky area and create a gradient using Liquid Washable Watercolors. Red auroras are most often seen towards the top, blue and violet auroras are found towards the bottom, and green is the most common aurora. However, colors blend and change due to ever changing chemistry in the Earth's atmosphere.

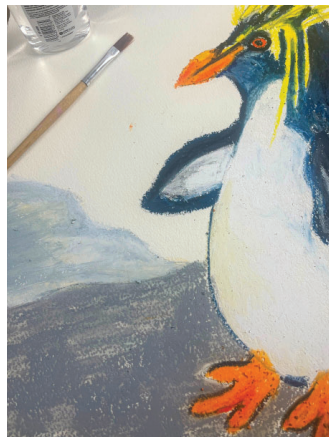
The oil pastels will act as a resist to the watercolors. As long as oil pastels are applied to all of the landforms and the animal, the watercolor will only adhere to the sky.

Once the watercolors are dry, add any additional details or highlights to the animal or landscape.

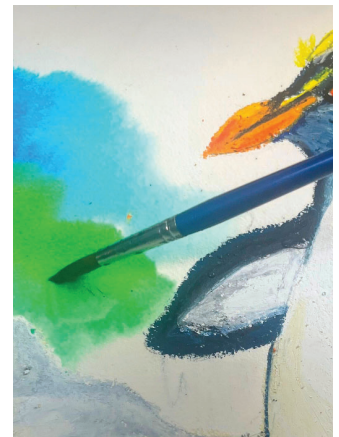
EXTENSION

Students can write a creative story about how their animal felt or what it did next, after it saw the aurora.

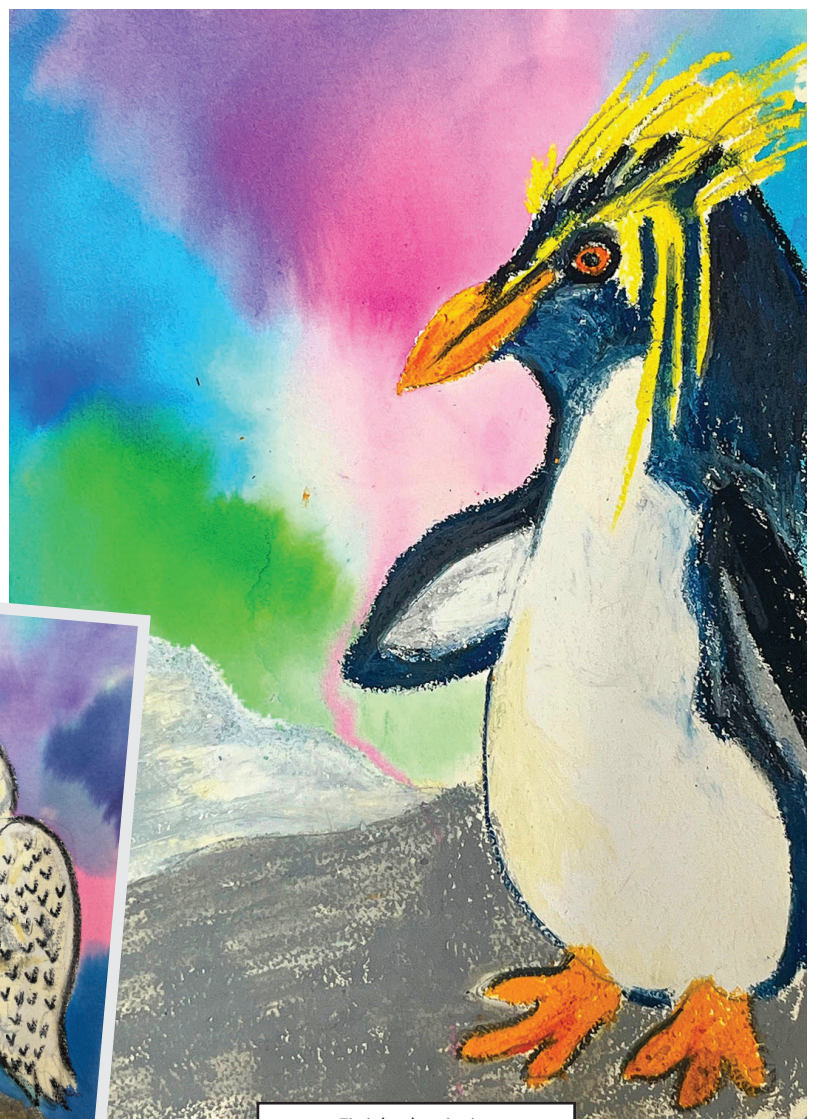
Older students also can include a paragraph about how auroras are formed.



Oil pastels blended using baby oil



Adding Liquid Washable Watercolor



Finished painting





CHROMA PAINTS AT A GLANCE

The below chart can help you determine which paints will suit the classroom purposes best. While most of Chroma's Educational lines could be used at any grade level for a variety of projects, particular Chroma brands will meet students' growing skills and provide richer, more sophisticated painting experiences.

Product	Color Range	Acrylic	Tempera	Watercolor	Heavy Body Consistency	Medium Body Consistency	Lightfast	Washable	Indoor/Outdoor	Best for Elementary	Best for Middle School	Best for High School	Canvas	Paper	Canvas Board	Wood	Murals/Sets	General Crafts	Paper Maché	Printmaking
A2 Lightfast Heavy Body Acrylic	40	X			X		X					X	X	X	X	X				
Chromacryl Students' Acrylics	37	X				X				X	X	X	X	X	X	X		X	X	X
Chromacryl Acrylic Essentials	20	X				X				X	X		X	X	X	X		X	X	X
Chromacryl Fluid Acrylic	16	X								X	X	X	X	X	X	X		X	X	X
Chroma Drawing Ink	12	X					X				X	X	X	X	X	X			X	X
Chroma Mural Paint	37	X				X	X		X			X					X			
Chroma Mural Paint Markers	25	X				X	X		X			X					X			
Molten Metals Metallic Acrylics	10	X				X				X	X	X	X	X	X	X		X	X	X
Chroma 2 Intense & Opaque Heavy Bodied Washable Tempera	14		X		X			X		X	X	X		X				X	X	X
Chromatemp Artists' Tempera	32		X		X					X	X			X				X	X	X
Chroma Glitter Paint	12		X			X		X		X				X				X	X	X
Chroma Liquid Washable Watercolor	15			X				X		X	X			X						X

www.chromaonline.com • 800-257-8278 • infousa@chromaonline.com



facebook.com/chromainc



[@chroma_inc](https://instagram.com/chroma_inc)



youtube.com/chroma0001



pinterest.com/chromainc