



BURCHFIELD PENNEY ART CENTER *Weather Event* GALLERY GUIDE

"My diary seems to be a journal of the wind, sunshine and sky."

— Charles E. Burchfield, 1914



CHARLES E. BURCHFIELD & *WEATHER EVENT*

Charles E. Burchfield (1893-1967) is one of America's most original artists. Best known for his depictions of nature, Burchfield developed a unique style of watercolor painting that reflected the Western New York region and his respect for the environment.

Weather Event, an exhibition organized by the Burchfield Penney Art Center and climatologist Stephen Vermette, Ph.D., presents over 50 years of Burchfield's works of weather, wind, skies and sounds. Together, they are a unique historical record of the environment near Lake Erie.

This Gallery Guide may be used on a museum visit and in the classroom. Digital versions are available on the Burchfield Penney website. Please visit: www.burchfieldpenney.org/pdf/WeatherEventGuide.pdf

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SYMBOLS

DID YOU KNOW? Fun facts about the weather, Burchfield or the museum.

ART ACTIVITY Activities you can do with pencil in the galleries or at home with other art supplies.

WRITING ACTIVITY Jot down what you see or make a poem.

DISCUSSION QUESTION Start a conversation around a work of art.

YOUR WEATHER EVENT GLOSSARY

WEATHER is made up of the conditions that occur in our atmosphere at a particular time.

CLIMATE is the aggregate weather in a particular area over a period of time.

CLOUDS are formed when lifted air is cooled. The relative humidity increases with cooling to the point that the air becomes saturated, and the water vapor condenses as cloud droplets.

CUMULUS clouds are white and fluffy. The bottoms of these clouds are normally flat.

CUMULONIMBUS clouds produce severe weather, such as thunderstorms, lightning, and tornadoes.

CIRRUS clouds are made of ice crystals. These clouds are thin, wispy and high in the sky.

STRATUS clouds are low and spread out in thin layers.

LIGHTNING is caused by the buildup of static electricity in clouds. Lightning temperatures can reach over 50,000 °F (over five times hotter than the surface of the sun!). These temperatures rapidly heat the air causing shock waves that produce the sound of **THUNDER**.

HEAT LIGHTNING is lighting very far away that appears as a flash on the horizon. It is so far away that you cannot hear the thunder.

LAKE EFFECT SNOW occurs when cold air passes over a warmer lake, such as Lake Erie, and picks up moisture and heat. This condition causes localized snow showers.

An **ALL-DAY SKETCH** is a series of drawings completed over the course of many hours. Burchfield created All-Day Sketches when he observed the same scene and made a record of it at different times throughout the day.

A **HALOED MOON** is a moon that appears to have rings of different colors around it due to the presence of ice crystals in the air.

HEAT WAVES are the visual distortion of the landscape caused by humidity and heat rising from the ground.



BURCHFIELD'S ALL-DAY SKETCHES

One of Burchfield's lifelong fascinations was the changing landscape. In 1914 he saw Chinese scrolls in a museum in Cleveland, Ohio, and this occasion may have inspired him to make All-Day Sketches. By staying in one location for several hours, Burchfield captured the way a particular place was altered by the weather over time.

DRAWING EXERCISE

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Try making an All-Day Sketch of your own. Pick a place around your home or school and visit it at three different times during one day. Use the boxes on the following page to do your drawings and record the times of your sketches below:

DRAWING EXERCISE CONTINUED

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Morning ____: ____

Afternoon ____: ____

Evening ____: ____



WHAT COLOR IS THE SKY?

Burchfield's skies help us imagine the kind of day he painted. He captured the warmth of a summer's day and the grayness of a gloomy one. **Do you feel a certain temperature when you look at Burchfield's paintings? How do you read his skies?**

DID YOU KNOW ?

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On a clear sunny day the sky appears blue. But why is it blue?

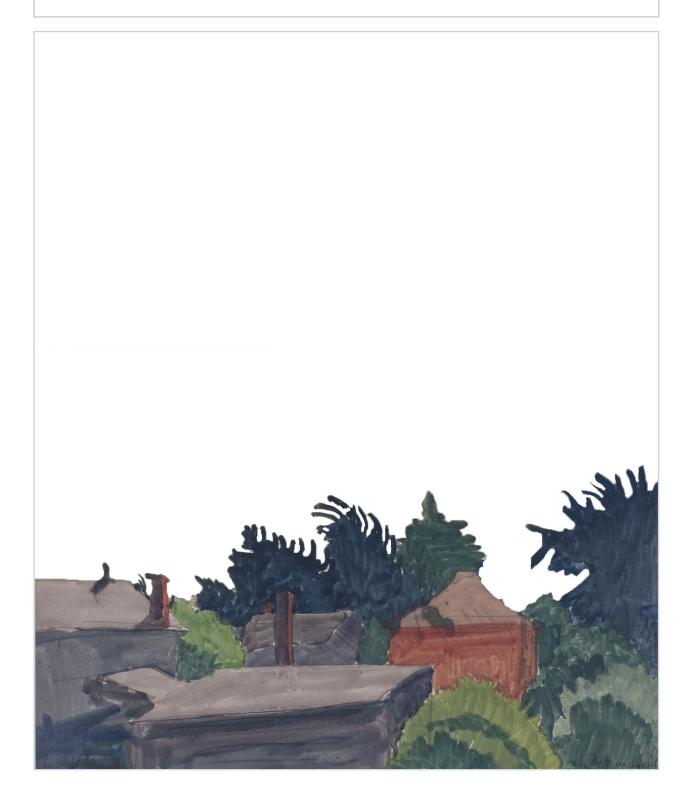
The sky is made up of the atmosphere, an invisible gaseous substance (mostly oxygen and nitrogen) that surrounds the earth. When different wavelengths of light travel from the sun through the atmosphere, we see different colors. The shortest waves are blue and the longer waves are red, orange and yellow. The blue waves are absorbed by the gases in the atmosphere and scattered across the sky. This is why the sky appears blue on a clear day.

Have you ever seen a red sky at sunset?

In the evening, the sun's light is low on the horizon and has to travel a longer distance to reach us. The shorter wavelengths of light are scattered before reaching our eyes, leaving only the longer wavelengths of light. This is why our sunsets are usually red, orange, yellow and pink. The most spectacular sunsets occur when the sky is filled with particles of dust and water. These particles cause the light to split up and shine in many directions.

PAINTING EXERCISE

What colors would you paint the sky above this red house featured in Burchfield's paintings? Use the space provided below.





SOUNDS OF THE SEASONS

Nature's Sounds

The world is filled with the sounds of nature. The next time you go outdoors, stop and listen to all the sounds around you. Each season has its own set of sounds. Let's think about the sounds that summer and winter bring:

Summer Sounds

Have you ever heard the grass growing? Or the bugs buzzing?

You can calculate the temperature of a warm summer day by listening to a cricket. Follow this link if you want to find out how: http://www.sciencebuddies.org/science-fair-projects/project_ideas/Zoo_p055.shtml

Winter Sounds

Have you ever heard the sound of snowflakes as they reach the ground? What about the crunchy snow beneath your boots?

WRITING EXERCISE

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Fill in the blanks below to make a poem:		
In the summer I hear	and	
When I am outside in winter I listen to _	, but inside	
I hear the sounds of	Burchfield's paintings make me hear	
and		

THE DAY THE SUN DISAPPEARED

Can you imagine what it would be like if the sky became dark in the middle of the afternoon and you had no idea why? On September 24, 1950, this happened in Buffalo. Burchfield recorded the event in his journal. Read this entry in the glass display case as well as newspaper articles from 1950 to find out about the Day the Sun Disappeared!

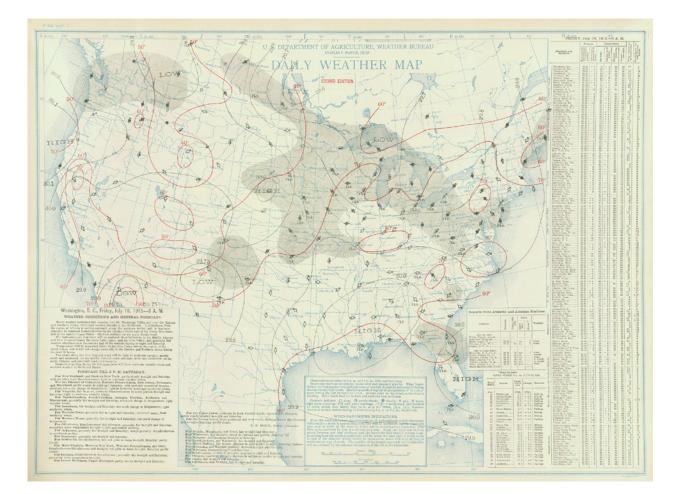
Sept. 34 - Dark and cold. It was not until non that 9 first noticed the strange reflem light intoide. It kept gitting darken and darken. The strange hot Tanny color at the genith, had the graphing of a cyellow congent afterglow, yet different. By 2:00 P. m. it was almost like might. In the west duch live Clark clands, than the sky went from Mans Vidit what to tanong orange - lower clands white and cold. In the S.E. building right at the hargin. In the S.E. building wellow hight at the hargin.

DID YOU KNOW ?

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Burchfield kept a journal from 1910 until 1967. That's more than 50 years!

The Burchfield Penney Art Center has over 10,000 pages of his journals!



WEATHER MAPS

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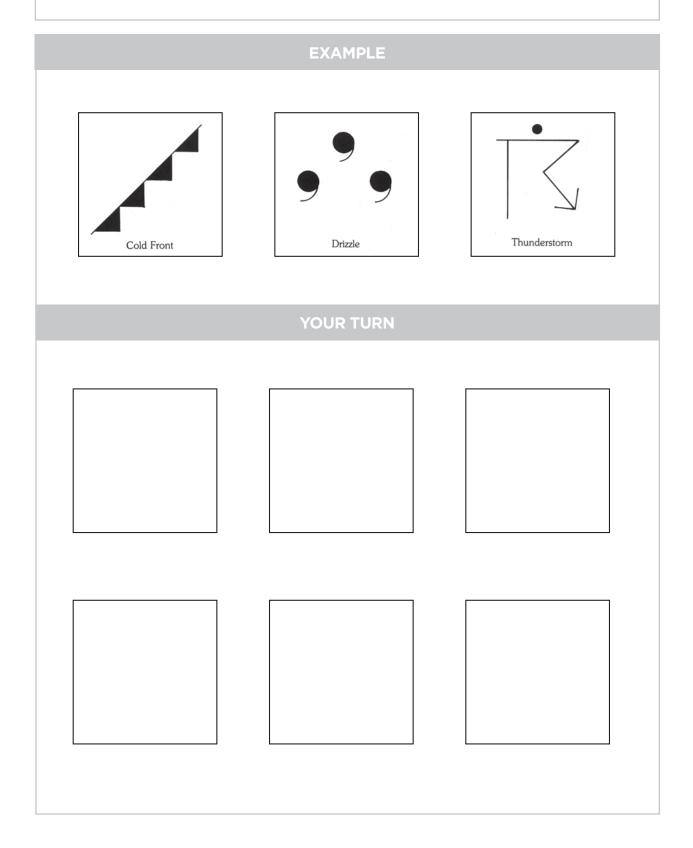
Artists and scientists invent symbols to communicate information in simplified ways. The first book on popular weather called *The Book of Signs* was written in 300 BC by one of Aristotle's students. It contained over 200 rules for predicting weather.

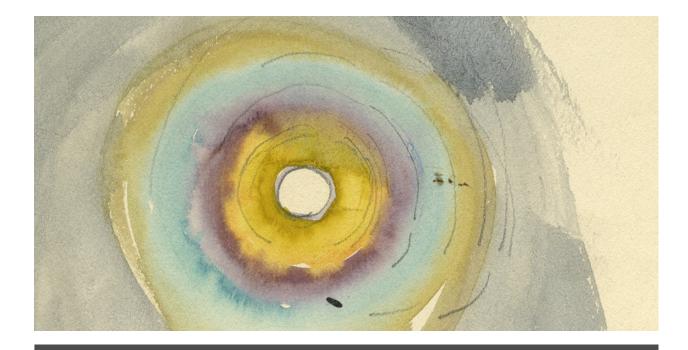
In this exhibition you will find many Weather Maps. Before 1968, they were printed daily and distributed throughout the country.

What do you think the symbols on these Weather Maps mean?

DRAWING EXERCISE

Invent symbols for the weather you see in Burchfield's works.





HALOED MOONS

Circles form around the moon when a thin layer of clouds made of ice crystals bend the light coming from the moon. This bent light forms colorful rings that can be seen in the night sky.

Since thin high clouds can be a sign of an oncoming storm, a ring around the moon is a good clue that bad weather is coming. According to weather folklore, the number of stars within the halo indicated the number of days before the rain would arrive.

Burchfield's haloed moons show us a very interesting weather effect. One old saying about the moon is "The moon with a circle brings water in her beak."

What do you think that means?

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Do you know other weather expressions?

What colors do you see in the rings around Burchfield's moons?



WILD WEATHER: RAIN, SNOW & STORMS

Rain and Snow When the air is warm, it picks up water from lakes, rivers and oceans and forms water vapor that rises high up into the air. As the air rises, it cools and humidifies. Once saturated, clouds form.

As the clouds get large and heavy with cloud droplets, precipitation begins to fall. If the temperature is above freezing, it will rain. If it is below the freezing point of water (32 °F), it will snow.

What is a Thunderstorm and Why Does It Occur?

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Thunderstorms take place when warm moist air rises quickly and forms large cumulonimbus clouds. Inside the clouds air currents create strong up-draughts, causing water droplets and ice particles to rub against each other. They cause a build-up of static electricity (this is the same thing that happens when you rub a balloon against your hair). Lighter, positive charges gather at the top of the cloud and heavier, negatively charged pieces of ice and water accumulate at the base of the cloud. The ground below is also positively charged. Electricity begins to flows between the charges and the difference between the positive and negative charges increases. When the differences get big enough, they are neutralized and electricity is released as a flash of lightning. By counting the seconds in between a lightning flash and the thunder that follows, you can estimate the distance between you and the lightning: about every 5 seconds = 1 mile.

How did Burchfield represent lightning in Haunted Twilight (1954-62)?

How does it compare to the weather in November Storm (1950)?

Would you like to create the phenomenon of lightning in your mouth? Follow the instructions from this link:

http://www.exploratorium.edu/cooking/candy/activity-lightning.html



SUNBURST AND CLOUDBURSTS

A sunburst occurs when there is a brief appearance of full sun from behind the clouds. **Have you ever seen a sunburst?** They look like magical beams of sun pouring down onto the earth. Find the sunburst in Burchfield's oil painting *Sunburst* (1929-31).

When a cloud is saturated to the point where it can no longer hold any more moisture, the result is a sudden rainfall. **Do you also see the cloudburst in the painting above?**

DRAWING EXERCISE

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Draw a sunburst or cloudburst from your memory in the box below:

RESOURCES

This Gallery Guide was written by museum staff Mary Kozub and Alana Ryder with support from Tullis Johnson, Carol Molnar, Jane Stevenson and Stephen Vermette.

RECOMMENDED RESOURCES FOR EDUCATORS

http://docs.lib.noaa.gov/rescue/dwm/data_rescue_daily_weather_maps.html

http://www.weather.gov/om/edures.shtml

http://www.theweatherchannelkids.com/weatherED/

REFERENCES

National Wildlife Federation. *Wild About Weather (Ranger Rick's NatureScope).* New York: McGraw-Hill, 1998.

http://www.sciencebuddies.org/science-fair-projects/project_ideas/Zoo_p055.shtml

http://www.exploratorium.edu/cooking/candy/activity-lightning.html

"Burchfield's lifelong motivation was the desire to communicate the beauty and vitality of nature to those who have ignored it or forgotten how to see it."

-Nancy Weekly, Head of Collections and the Charles Cary Rumsey Curator

THE WORKS BY CHARLES BURCHFIELD IN THIS GALLERY GUIDE

COVER

Charles E. Burchfield (1893–1967), *Fireflies and Lightning*, 1964–65; Watercolor, graphite and white charcoal, 40" x 54" Purchase made possible with funds from M&T Bank, an anonymous donor, William P. and A. Laura Brosnahan, the Vogt Family Foundation and the Margaret L. Wendt Foundation, 1998

PAGE 4

Charles E. Burchfield (1893–1967), Untitled (the life of a wheat field and a day of sun, moon, wind, rain and fog on it), July 2, 1915; Graphite on paper, 11" x 17"; Charles E. Burchfield Foundation Archives Burchfield Penney Art Center, Gift of the Charles E. Burchfield Foundation, 2006

PAGE 6

Charles E. Burchfield (1893–1967), *Windswept Sky*, September 10, 1916; Watercolor, gouache and graphite on paper, 14" x 20"; Gift of Tony Sisti, 1979

PAGE 8

Charles E. Burchfield (1893–1967), Study for *The song of the Katydid* on an August Morning, 1917; Graphite on paper, 11" x 17" Charles E. Burchfield Foundation Archives Burchfield Penney Art Center, Gift of the Charles E. Burchfield Foundation, 2006

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Charles E. Burchfield (1893–1967), Charles E. Burchfield's journal, Volume 51, Oct. 2, 1949–Oct. 16, 1950 Pg. 103, September 24, 1950; Cardboard bound, hand mounted, unlined paper; The Charles E. Burchfield Archives at the Burchfield Penney Art Center, Gift of the Charles E. Burchfield Foundation, 2000

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U.S. Department of Commerce Weather Bureau Daily Weather Map, Wednesday, August 30, 1961; 19" x 24" Collection of Stephen Vermette

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Charles E. Burchfield, (1893-1967), *Untitled (Haloed Moon)*, April, 1916; Watercolor and graphite on paper, 14" x 10" Charles E. Burchfield Foundation Archives Burchfield Penney Art Center, Gift of the Charles E. Burchfield Foundation, 2006

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Charles E. Burchfield, (1893-1967) *Haunted Twilight* 1954-62; Watercolor and charcoal on paper, 32³/₈" x 39⁴/₈" The Charles Rand Penney Collection of Work by Charles E. Burchfield, 1994

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Charles E. Burchfield, (1893-1967) *November Storm*, 1950; Watercolor on paper, 26" x 40" Gift of Mr. and Mrs. Sherlock A. Herrick, Jr., 2001

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Charles E. Burchfield, (1893-1967) *Sunburst*, 1929–31; Oil on canvas, 35½" x 47½" Collection of the Burchfield Penney Art Center; The Charles Rand Penney Collection of Work by Charles E. Burchfield, 1994

CONTACT

If you would like to provide us feedback on this Gallery Guide or receive more information about our education programs or museum tours, please contact Mary Kozub at kozubmm@buffalostate.edu.

We welcome educators from pre-school to college to book tours for their students. Each visit is customized to your needs and areas of study. This Gallery Guide also includes Weather Event art activities and lesson plans for grades k-12.

Thank you for visiting the Burchfield Penney Art Center



The Museum For Western New York Arts

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Gallery Hours

Tuesday, Wednesday, Friday, & Saturday: 10 am — 5 pm Thursday: 10 am — 9 pm Sunday: 1 pm — 5 pm Closed Mondays

The Museum Store and Moura's NY Deli & Cafe

Open during gallery hours