

Paint the Aurora with Ice Cubes

Explore the colors of the aurora by painting with ice!

Materials Needed:



Ice cube tray, water, food coloring (red, green, purple), freezer, white paper, paper towels. *Optional:* Short popsicle sticks.

Note: Food coloring will temporarily stain skin and clothing.

Instructions:

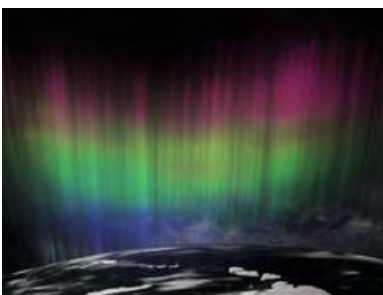
Step 1: Put a few drops of food coloring into each section of an ice cube tray. Fill the tray with water and place in the freezer overnight.

Optional: To create handles for your ice paints, place a short popsicle stick in each section of the tray before freezing.

Step 2: When the ice is completely frozen, remove tray from the freezer. Run water on the underside of the tray, and gently pop each ice cube out.

Step 3: Paint a picture of the northern lights with your ice cubes! Watch the colors melt onto the paper, and experiment with colors and patterns. Can you mix your paints to create different colors of the aurora?

Step 4: If the paper gets too wet, set it aside to dry. Keep painting on a new sheet of paper. How long can you paint until all the ice melts?



[Image: Cultural Connections: The Northern Lights.](#)

Aurora Colors: The aurora is created when charged particles from the Sun get caught in Earth's magnetic field and crash into gases in the atmosphere. This excites the gases, and they give off light like a neon sign. Different gases create different colors:

Red: Oxygen high in the atmosphere

Green: Oxygen in the middle of the atmosphere

Purple: Nitrogen low in the atmosphere