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Aurora Borealis Painting ©

**notes for parents* pre-cut the silhouette depending on the age of the child. Make sure they drip paint onto the salt pattern rather than swipe the lines with their brush. Liquid water color works best for this experiment.*

Supply list

- Piece of plain water color paper; 1/child
- Black paper or pre-cut silhouette; 1/child
- Paint brush; 1/child
- Water colors; green, pink, blue, and yellow
- Baking tray
- White crayon & scissors if they are doing the silhouette.
- Bottle of white glue
- Glue stick
- Container of table salt

Click here to watch our video tutorial: Aurora Borealis Painting

Procedure:

1. If you've pre-cut the silhouette, use the glue stick to glue it to the bottom section of your plain water color paper leaving the upper two-thirds blank.
    a. Otherwise use the white crayon to sketch a silhouette of pine trees and/or mountains and use the scissors to cut it out prior to gluing.
2. Next, in the upper portion of your paper i.e. the "sky", use your bottle of glue to create a wavy line pattern across the sky. Use pictures of aurora borealis to see how the wavy lines could look.
3. Put your paper onto a baking tray and sprinkle salt onto the glue pattern. Shake the excess salt off and onto the tray. You need to cover ALL the glue with salt.
4. Using the liquid water colors, carefully use your brush to drip paint onto the salt. It is very important that you not swipe the salt glue lines. Just drip onto the lines. Observe what happens!
5. Get creative with colors! You can choose whatever color you like, but most aurora borealis patterns have a mixture of green, pink/purple, yellow and blue.
6. Keep dripping until all the salt lines are painted. You can continue to paint the rest of the sky if you wish.

Background info:

The aurora borealis is a natural light display that you can see if you travel to either pole on Earth. The pattern of lights you see is the interaction between Earth's magnetic field, gas elements in the atmosphere and highly charged electrons from solar wind. What you are seeing is the ionization and excitation of particles in the Earth's atmosphere and the colors you see depends on the elements that are reacting. This happens in the Arctic and Antarctic because that is where Earth's magnetic poles are located.

Experiment Conclusion:

You saw the colors spread across the salt just like the light in the sky of the aurora borealis! Nitrogen and oxygen in the lower atmosphere produce the most common aurora borealis color of green, but there are also pink, purple, yellow, and blue patterns depending on where and what is reacting!

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