

July 23, 2011 – Salt Pictures

The summer sun is bright! We are going to use some things we learned last week to create some art. Make sure you pick a bright, sunny and warm day to try this experiment!

**\*\*Always ask an adult before completing any science experiments\*\***

Materials:

- Epsom salt
- water
- black construction paper
- paint brushes or cotton swabs
- the sun

Procedure:

1. Make a very saturated saltwater solution by mixing  $\frac{1}{4}$  cup salt with 1 cup of boiling water. Allow the solution to cool before using it.
2. Use the paintbrushes or cotton swabs to draw a picture or write a message with the saltwater solution on the construction paper.
3. Once you are finished, place your construction paper out in the sun. This will help dry out the water faster.
4. Give your art to someone special!

Explanation:

Your artwork should have shown up on the construction paper once the water had evaporated from the paper. As the water evaporated the salt reformed back into crystals and were visible on the paper. The warmer or windier the day, the faster the salt would crystallize (because the water would evaporate faster).

If you have a magnifying glass, try looking at your artwork and the salt crystals up close. You should notice that the crystals are fairly uniform in shape. The “growth” of your crystal artwork is dependent on a few things, including the saturation of your original salt water solution. The more saturated the solution (or the more salt in the water) the easier and faster it will form crystals. Many crystals form in nature, including salt crystals. One example falls from the sky every winter (in our case, a to of crystals fell from the sky this past winter). Did you guess I was talking about snowflakes?!

You can try making different art pieces by using different salt. This experiment used Epsom salt, but you could try using table salt, kosher salt and pickling salt to see if the salt crystal pictures look different. Each salt has unique properties, so each art piece should be a little bit different.

Happy Experimenting!

Praxis – The Science and Technology Hotline