

Frosty the Snowcan!

Have you ever noticed a layer of white frost on blades of grass in winter or on the outside of an ice cream container in the summer? What causes frost to appear on certain objects? Make your own frost to find out.

Materials:

- Empty metal food can
- Masking tape
- Metal or wooden spoon
- Ice
- Salt
- Teaspoon

Procedures:

1. Place 3 heaping teaspoons of salt in the bottom of the can. Fill the can about halfway with ice.
2. Add another 3 heaping teaspoons of salt.
3. Add more ice until the can is almost filled and then add another 3 teaspoons of salt. Hold the can near the top and mix the ice/salt mixture with a spoon for about 1 minute and remove the spoon.



4. Wait about 3-5 minutes and look at the outside of the can. What do you notice?

Think about this ...

In the last activity, you were asked to think about what happens when water vapor goes high into the sky and gets cold. What do you think happens when the temperature gets even colder? How does the activity you just did help you answer this question?

Where's the Chemistry?

In this activity, the water vapor was already in the air and condensed on the outside of the cold can. This made the water vapor change state from a gas to a liquid. But the can was very cold and some of the water changed state from a liquid to a solid (ice).

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